

**The case of UK Government recommendations on red and processed meat consumption
and cancer prevention. Towards a theory of mediatized food policy?**

Rebecca Wells

Submitted for the degree of Doctor of Philosophy in Food Policy
Centre for Food Policy, Department of Sociology and Department of Journalism,
School of Arts and Social Sciences, City, University of London UK

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DECLARATION

I declare that the work presented in this thesis, except those elements specifically declared, is all my own work carried out and finished at City, University of London.

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Abstract

Bowel cancer accounts for 11% of all new cancer cases and is the fourth most common cancer in the UK. Nutrition science has identified a link between high levels of red and processed meat consumption and incidence of bowel cancer. While the evidence underpinning this link remains uncertain, in 1998 and again in 2011 the UK government recommended that high consumers of red and processed meat should reduce their intake. Despite stable government advice in this area for over a decade, the UK print media have frequently reported on this issue using alarmist headlines, at the same time often attempting to undermine these recommendations. This research aims to understand the apparent mismatch between stable government advice and volatile media reporting in this area of food policy.

The research takes the form of one extended case study, using two periods of policy development as embedded units of analysis: the first, the period 1993-1998 when the first government recommendation on red and processed meat consumption was made. The second, the period 2001-2011 when a further recommendation was made. Data was collected from archived policy documents, print media coverage and semi-structured interviews. Policy documents were analysed using the Health Policy Triangle; media coverage was analysed using content analysis and the semi-structured interviews were analysed using thematic analysis. The results provide evidence of: 1) Limitations in the evidence considered by policymakers. 2) Tensions over transparency in the policymaking process. 3) Consideration of the media and media coverage after the policy had been set. 4) Commercial pressures on the print media industry influencing journalists' reporting. 5) Key stakeholders including government seeking to influence print media coverage. 6) The iconic status of red and processed meat in UK media coverage, where its consumption was presented as a matter of individual choice. 7) Long periods of inaction on the part of policy makers.

Informed by literature on agenda setting and agenda building the research sets out to answer the extent to which UK food policy is affected by media coverage, processes and norms, and goes on to combine agenda setting and mediatization theories to develop a proposed integrated theory of mediatized food policy. This has the potential to explain the interactions between media coverage and food policy and the influence of one on the other. The research also contributes to food policy scholarship by challenging the concept of 'evidence-based policy making' and to journalism studies by further describing the ways in which media processes and key media gatekeepers influence media coverage of food policies.

List of acronyms and abbreviations

AHDB	Agricultural and Horticultural Development Body
BBC	British Broadcasting Corporation
BMJ	British Medical Journal
BPEX	British Pig Executive
BSE	Bovine Spongiform Encephalopathy
CA	Content Analysis
CHD	Coronary Heart Disease
CNN	Cable News Network
COMA	The Committee on Medical Aspects of Food and Nutrition Policy
COPUS	Committee on the Public Understanding of Science
CPD	Chronic Preventable Disease
CRUK	Cancer Research United Kingdom
CVD	Cardio-Vascular Disease
DEFRA	Department for Environment, Food and Rural Affairs
DH	Department of Health
EBLEX	English Beef and Lamb Executive
EPIC	European Prospective Investigation into Cancer and Nutrition
MAFF	Ministry of Agriculture, Fisheries and Food
MP	Member of Parliament
MRC	Medical Research Council
NCD	Non-Communicable Disease
NGO	Non-Governmental Organisation
NHS	National Health Service
nvCJD	new variant Creutzfeldt-Jakob Disease
OFCOM	Office of Communications
PA	Press Association
PD	Public Dialogue
PE	Public Engagement
PHE	Public Health England
PR	Public Relations
PUS	Public Understanding of Science
RPM	Red and Processed Meat
RQ	Research Question
SACN	Scientific Advisory Committee on Nutrition
SSRC	Social Science Research Committee
UK	United Kingdom
USA	United States of America
WCRF	World Cancer Research Fund

Chapter 1. Introduction

This chapter sets out the context in which this research was undertaken and the rationale for the research topic. The research problem and research questions are laid out in brief and the researcher's background and interests are explained – leading to a section describing the epistemological and ontological assumptions on which the thesis is based. The chapter concludes with a section detailing the contribution of this research and explaining the layout of this thesis.

1.1 Introduction

This thesis is interdisciplinary both conceptually; drawing on the theoretical and methodological traditions of both Food Policy and Journalism and physically; having been based both in the Centre for Food Policy and the Department of Journalism at City, University of London. Skinner (2008, p.448) defines interdisciplinary research as research which “*integrates perspectives and methods from two or more disciplines to investigate a topic or an issue*”. This study aims to combine elements of both disciplines to shed new light on an important issue for both food policy and journalism.

The starting point for this research came from concerns about the UK print media's relationship with nutrition and a developing debate over media coverage of science in general. This research began at a time when the UK print media was undergoing intense scrutiny, not least from the Leveson Inquiry into the culture, practice and ethics of the press (Leveson, 2012). Equally, concern over the media's role in reporting dietary advice and studies into nutrition and health was widespread (Goldacre, 2007; Fernandez-Celemin & Jung, 2006; Choices, NHS, 2011). Researchers raised concerns about reports in the UK press linking cancer to diet (Goldacre, 2007), in apparently contradictory headlines such as: ‘Why red meat diet raises risk of bowel cancer by a third’ (Wheldon, 2006); ‘Bangers in new cancer warning’ (The Sun, 2008); ‘A bit of sausage won't kill you.’ (Ursell, 2008); ‘How broccoli helps you combat cancer’ (Daily Mail, 2006); ‘Eating grapefruit can increase the risk of breast cancer by almost a third, a study suggests’ (Koster, 2007); ‘Fruit and veg do little to cut cancer risk, says study’ (Jha, 2010). The research problem for this research project stemmed from this concern about the media coverage of diet and cancer and a desire to use robust research methods and research design to investigate this phenomenon.

1.2 Development of the Research Problem and Research Aims

A preliminary investigation into the UK government's advice on diet and cancer found that it has remained quite stable for almost 20 years (Department of Health, 1998; Department of Health, 2011a; NHS Choices, 2015; NHS, 2017). The nutrition establishment, having relatively recently accepted diet's important role in the prevention of cancer (Doll and Peto, 1981), are engaged in many studies researching the links between diet and cancer. While scientists acknowledge that these links are not yet fully understood; that each study contributes to the growing evidence

base for diet's role in the development and prevention of cancer; and that minor changes have been made to the detail of recommendations on diet and cancer, the overarching advice on nutrition's role in the development of cancer has remained stable since the UK government's COMA report *Nutritional Aspects of the Development of Cancer* (Department of Health, 1998). This recommended maintenance of a healthy body weight, increased intake of a wide variety of fruits and vegetables, increased intake of dietary fibre and limiting of consumption of red and processed meat (pp. 206 and 207). Adoption of these recommendations, the COMA Working Group felt, would significantly reduce the burden resulting from some of the commonest cancers in the UK. Some ten years later, the World Cancer Research Fund's recommendations in their 2007 report *Food Nutrition Physical Activity and the Prevention of Cancer* (WCRF, 2007 pp. xvii-xxi) also included the maintenance of a healthy weight, avoidance of foods and drinks that promote weight gain, eating foods mostly of plant origin, limiting intake of animal foods. They additionally recommended limiting alcoholic drinks, being physically active, breastfeeding and limiting salt and dietary supplements. What has been shown in the more recent academic literature is a refinement of this guidance and confirmation of past research (WCRF, 2007; IARC, 2017). However, the apparent mismatch between incrementally changing government advice on diet and cancer and the repeated appearance of shock headlines in the UK national press linking diet and cancer led to further investigation into the links between media coverage and food policy in this area.

To further explore trends in media coverage and to inform the research design and methods, during the first year of the research a preliminary case study was undertaken on media coverage of research into the influence of dietary factors on the incidence of colorectal cancer (Wells, 2016). This drew attention to the UK government's policy on red and processed meat consumption as a possibility for a case study around which to base this thesis. The initial research questions had been very broad (for more detail see Chapter 4, Methodology) and therefore a more focused case study approach was selected. Yin defines a case study as an empirical study that *'investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident'* (Yin, 2009, p. 18). In other words, a case study method is distinguishable from other methods, such as experiments or surveys because it seeks to investigate a contemporary phenomenon in depth within its context, relying on multiple methods and sources of evidence to provide as rich a study as possible.

The nature of the development of government policy on public consumption of red and processed meat, which has developed over two key periods, 1993-8 and 2001-11 and has generated considerable press interest during both time periods, seemed to fit this definition. The 'contemporary phenomenon' (Yin, 2009, p. 18) in this case being UK print media coverage of government nutrition policy, and the multiple sources of evidence newspaper coverage, policy documents and qualitative interviews. In addition, little existing literature was found on

this policy, its development or media coverage about it – identifying a research gap that this thesis could usefully fill. The research problem was therefore defined as:

“What explains the mismatch between apparently stable government nutrition policy on red and processed meat consumption and cancer prevention over more than a decade, and the repeating cycle of shock headlines in the UK press on this subject?”

With this research problem in mind, and following the preliminary case study (Wells, 2016) a literature review was conducted (see Chapters 2 and 3), which encompassed seven categories of literature:

- 1: literature about policy agenda-setting/building
- 2: literature on nutrition policy agenda-setting/building
- 3: literature on media agenda-setting/building
- 4: literature on media agenda-setting/building in nutrition and health
- 5: literature on government communication
- 6: literature on nutrition policymaking at government level
- 7: literature on red and processed meat

Informed by the literature review and the preliminary case study, three research questions were formulated which aimed to understand both the policy development and the media coverage of it and how the two had interacted:

- | | |
|---------|--|
| RQ1: | How has the UK government’s policy on red and processed meat consumption developed? |
| Method: | Policy analysis of government recommendations on red and processed meat consumption 1993-2011 |
| RQ2: | How do UK newspapers report this issue? |
| Method: | Content analysis of UK newspaper reporting of consumption of red and processed meat and its relationship to the development of bowel cancer, 1993-2011 |
| RQ3: | What role did UK newspapers play in the development of the policy? |
| Method: | Semi-structured interviews with key actors identified from stages 1 and 2, including interviewees from three key groups: stakeholders, media professionals and policy makers. These interviews will explore in detail the findings from the first two stages, investigating the motivations, feelings and views of the interviewees. |

The above mentioned preliminary study undertaken in year 1 of the research project (Wells, 2016) also clarified another aspect of the research, by introducing the concept and theory of mediation and mediatization (Livingstone, 2009; Stromback, 2008) which takes much more account of the interaction between media and politics than the more linear theories and models of media effects or agenda setting have done. This had a considerable influence on the researcher's thinking towards the latter stages of this research project as it corresponded with the preliminary findings: while the media did indeed have an influence on food policy in this case, there was also an interplay between media and food policy – this was not a linear cause and effect process but there were interactions, interdependencies and reciprocities that went beyond the simpler ideas of media effects to a more holistic view of the way media and food policy interact – the mediatization of food policy. This goes beyond the more causal and linear concepts of agenda-setting and agenda-building and this new concept of mediatization was combined with the agenda setting theoretical framework to develop an integrated theory of mediatized food policy, which reflects the interdisciplinary nature of the study. This is explained and explored in more detail in Chapter 9.

1.3 Reflexivity: Researcher's background and interests.

The interest of the researcher in this field comes from her experience of the UK media as a BBC employee from 1991 to 2011 and her experience as a food journalist having worked as a producer of BBC Radio 4's 'The Food Programme' between 1999 and 2010. This typically involved producing a 28-minute documentary-style programme every two weeks. In this case the role of the producer was to initiate programme ideas, pitch and 'sell' them to the programme editor, research them, write and communicate briefs to presenters and reporters, record interviews and location packages, edit the recorded material and add any sound effects, recorded archive or music. The producer then assisted the presenter writing a script around the recorded material. Finally, she would mix the material and edit the programme to the required length in studio with a sound engineer, before the programme was broadcast. From this experience the researcher gained not only experience of media production conventions and processes but also extensive knowledge of the food industry, from nutritionists, chefs, food campaigners, producers and farmers to politicians, academics, journalists and food writers - and was made aware of what might be termed food events from information from these contacts, from other media sources, from press releases and from attending conferences, exhibitions, markets, launches, food festivals etc.

In addition the researcher's experience of the inner workings of the media over a long period of time meant that she was working in the industry during some key periods – the early 1990s and the changes at the BBC towards an "internal market" under Directors General Michael Checkland and John Birt (Born, 2002; Harris and Wegg-Prosser, 2007); the digital revolution which radically changed both the production and the transmission of media output (Dunaway, 2000; Iosifidis, 2005); the rise of the Murdoch empire (Chenoweth, 2001; Wolff, 2010); the

'dodgy dossier' and the Hutton Inquiry of 2003 (Hutton, 2004; Campbell, 2012) ; increasing reliance of the media on PR companies, freelancers and independent production companies (Lewis et al. 2008; Froud et al. 2009; Williams and Clifford, 2009), a continuing programme of funding cuts in the early 2000s (Froud et al. 2009; Lawrence and Warner, 2015) and the beginning of the phone hacking scandal in 2009 (Leveson, 2012).

The current experience of working in an academic environment has also deeply informed this research – a transition from journalism to academic research has given the researcher a clearer understanding of the differences and similarities between the two fields and the difficulties both disciplines encounter when working together. The process of reflection on a background as a food journalist has enabled reflexive practice during this research – in other words an ability to recognize potential biases or assumptions and critically evaluate and act on them during the research process.

1.4 Ontological and Epistemological Assumptions

As noted above, it was important to reflect on the background of the researcher and her experience and self-identity as a journalist since this would inevitably have an impact on the research – the phenomena being studied would not be independent of and unaffected by the research and the behavior of the researcher. In addition, the research design and analysis would inevitably be influenced by the researcher's background and knowledge of journalistic norms and activities. Therefore, much thought was given in the first year of the study to the ontological (according to Bryman, 2012, '*the theory of the nature of social entities*') and epistemological (according to Bryman, 2012, '*a theory of knowledge*') underpinnings and assumptions of the study. These have eventually been identified as social constructionism from an interpretivist perspective.

Social constructionism assumes that reality is constructed and reconstructed in different ways by different actors at different times (Berger and Luckmann, 1966; Denzin and Lincoln, 2000). This is particularly pertinent to the phenomenon under investigation in this study as an early assumption of the study was that media coverage is constructed by different journalists in different ways according to their own backgrounds, assumptions, knowledge and perspectives. In addition, journalists are influenced by other actors both within their organization and outside of it. Furthermore, the ways in which the media construct reality can affect policy and policymakers. Snape and Spencer (2003, p. 11) point out that social constructionists also question whether there can be shared or common social reality or whether all actors independently construct their own realities according to their own perspective, background and the context in which they are situated. For this study, an interesting question arising from this is whether the cultural importance of red and processed meat in the UK comes from a shared social reality and whether this is informed or reinforced by media portrayal and social construction of these foods.

Interpretivists, according to Thomas (2011) argue that there is '*no 'objective' social world 'out there'. Rather it is constructed differently by each person in each situation they face*' (p. 51). Therefore, by taking a qualitative case study approach, this social constructivism with an interpretivist perspective allows the researcher to examine the interaction between policy development and media coverage through the different perspectives of the many actors that played a part in constructing, co-constructing, interpreting and re-interpreting these documents (Green and Thorogood, 2014, p. 183). The interpretivist perspective has led to an inductive approach in which the methods used have been essentially qualitative; have sought to build theories using the data collected (albeit using theories and concepts derived from the literature to inform the research); have tried to seek out the lived experience of participants in the research interviews with an open mind and have tried to minimize the researcher's own assumptions in the structuring of the research design and analysis. This framework has permeated all aspects of this research and thesis and has led to a critical examination of the ways in which nutritional advice from government, the human consumption of red and processed meat and media coverage of both of these are socially constructed in the UK.

1.5 The contribution of this research

As outlined above, little research has been carried out into media coverage of government policies on diet's role in the prevention of cancer – so despite acknowledgment by UK government nutrition committees and civil servants (Department of Health, 1998 and SACN, 2010) of diet's role in the development of cancers, and associated government policies and recommendations that try to address this link, little empirical research exists to explain how or why these policies are reported by the UK news media. This research will go some way to rectifying this through policy analysis, a large-scale content analysis and interviews with key actors – these methods are outlined in Chapter 4.

Media effects are notoriously difficult to prove (McDonald, 2004; McQuail, 2010; Williams, 2010). Despite this, scholars have identified a bias in media research towards media effects (Rogers, 1986 p. 7; Williams, 2010, p. 165; McQuail, 2010, p. 65) often using a linear transmission model (Lasswell, 1948) to try to show cause and effect. A branch of media effects theory is concerned with the 'agenda setting' powers of the media, which stemmed from work by Cohen (1963) in a study of media and foreign policy in the USA. He found that the press

'may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think *about*'
(Cohen, 1963, p. 13).

Work in this area has been characterised by a division between those that believe the media has an agenda-setting role and can influence politicians and policy and those that do not. In the

area of food policy most work has concentrated on the effects of media reporting on the lay audience – for example the effects of television food advertisements on children – or has looked at the framing of an issue in the media – for example studies looking at the coverage of the ‘obesity epidemic’ – without testing the agenda-setting effects of the coverage. Some work has focused on the reporting of risk (in relation to food scares) and its implications for food policy (Reilly, 2003). However, this has by no means filled the gap in the food policy literature on the potential for the media to affect food policy.

This study hopes to address this by investigating the relationship between media coverage and policy on food, nutrition and healthy eating as a means to prevent disease in general and bowel cancer in particular. In addition, because of the bias towards media effects research, McQuail (2010, p.65) identifies a dearth of work looking at influences on media coverage. Having moved away from the linear transmission model of early communication research towards models acknowledging the complex interactive nature of communication, media researchers now understand that those upon whom the media has an effect, also affect the media. To examine this notion further this study aims to reveal the politics of information transfer in this area through in-depth semi-structured interviews with key players and actors identified from the analysis of available news coverage. During the investigation agenda-setting theories were found to be inadequate to explain the complex interaction between food policy and the media. Therefore, as noted above this study discusses the mediatization of food policy – and explores the combination of agenda-setting and mediatization theories to explain the more complex interaction and interdependency of media and food policy and the complex ways in which media and food and nutrition policy interact. It is hoped that this exploration of a new theoretical framework will be tested and expanded upon by future research.

1.6 Layout of this thesis

This thesis is presented in 10 chapters. This, the first chapter serves as an introduction to the research project, outlines the research aims and objectives as well as the underlying ontological and epistemological assumptions of the thesis. The second and third chapters contain reviews of the literature – Chapter 2 of literature on media and agenda setting and agenda building theories, Chapter 3 of literature on government communication and government nutrition policy and policy making. Chapter 4 outlines the research questions and the methods used in this research project, while Chapters 5-8 detail the results of the data analysis and discuss these findings in relation to the reviews of the literature, the research questions and the theoretical framework. Chapter 9 triangulates the findings and discusses them in relation to existing literature, the research questions and the theoretical framework, and then proposes a new integration of theories through which to analyse media’s interaction with food policy. Chapter 10 concludes this thesis and outlines possible future research.

Chapter 2: Literature Review: Agenda setting and the media

This chapter sets out the first section of the literature review undertaken to inform the research questions, research design and discussion of the findings. This first section, in Chapter 2, covers the literature relating to agenda setting and the media. The second section of the literature review, in Chapter 3, will deal with the literature relating to government communication and nutrition policymaking in government.

2.1 Introduction

As outlined in Chapter 1, following the identification of the research problem;

“What explains the mismatch between apparently stable government nutrition policy on red and processed meat consumption and cancer prevention over more than a decade, and the repeating cycle of shock headlines in the UK press on this subject?”

and informed by a preliminary case study (see Wells, 2016), a literature review was undertaken to formulate the three research questions which were briefly identified in Chapter 1. The interdisciplinary nature of this study gave an overarching direction to the inquiry. This has meant that while the general research interest has been the media reporting of policies on diet-related cancer, this study was particularly concerned with the *interaction* between journalism and food policy. Agenda-setting (Cohen, 1963; McCombs and Shaw, 1972; Lang and Lang, 1981) and associated theories were therefore chosen as the most relevant theories for the area of research. Policy agenda-setting theories investigate the links between journalism and policymaking and ask the extent to which journalism influences policy-making and vice versa (McCombs and Shaw, 1972; Berkowitz, 1992; Kennamer, 1994; Baumgartner and Jones, 2009). In addition, several areas of public policy and food policy research were explored, notably literature on government communication and literature on government committees on nutrition policy. The reviews of the literature are presented in two chapters. This chapter lays out the methods used to find literature and reviews the literature on agenda-setting and agenda building; these underpin the theoretical framework of this study. The second literature review chapter (Chapter 3) will review the literature on government communication and government committees on nutrition policy.

2.2 Literature Review Methodology

The literature review was revisited over four years and took a systematic approach (Aveyard, 2010). The systematic process had eight key phases:

2.2.1 Phase 1: Identify relevant types of literature and organize into a hierarchy.

In order to develop and answer the three research questions efforts were made to find relevant academic literature. While this study is concerned with media coverage of government policy on red meat consumption, it is beyond its scope to ascertain the precise mechanism which links

consumption of red and processed meat to bowel cancer. Therefore, searches were primarily for literature in the fields of food policy, journalism and sociology of media. Early in the study, the UK printed press media was identified as the primary focus for the research. This was partly for practical reasons: unlike other media, newspapers are published irreversibly and their content is effectively captured by news databases in an easily searchable format. These databases, while not without their limitations (see Chapter 4, Methodology) also have a methodological advantage over online or broadcast media because they allow comparison between different time periods. This became important for this study which analyses newspaper coverage from two key periods, the late 1990s and the early 2010s. While newspapers have changed in this period it is possible to compare differences in content using newspaper databases – this would not be possible when looking at online media or broadcast media of these periods. Other criteria for the inclusion of literature in this review were that literature should relate to media coverage of nutrition policy or advice. As the focus of the study developed these themes were added to, and searches for literature about government communication, literature about the changing role of government advisory committees on nutrition and literature about the cultural significance of meat in the UK diet were made.

Most of the research found was qualitative in nature although when looking at press coverage there were a number of quantitative studies using content analysis as a method. A hierarchy of literature was developed – the focus for this literature review was academic, peer reviewed empirical research which was subdivided into academic papers published in journals, book chapters and books. A second tier of literature was also peer-reviewed but classified as non-empirical reviews or commentaries and expert opinion. A third tier of literature was academic theses and conference papers.

2.2.2 Phase 2: Develop search terms

Examples of key words used to search for literature include: journalism, media, cancer, policy, government, advisory committee, newspaper, nutrition, press, meat, communication. Searches were first carried out using multiple databases via the City, University of London library gateway – for example Ebscohost, Ovid Online, Web of Science. Further literature was found using these search terms in email alerts from Ebscohost and Sage. These provided an automated daily email detailing new literature found using these search terms. In addition to these structured methods, literature was recommended by a small number of expert academics in the field of journalism and food policy who were able to suggest key authors and key papers or books in this field. Further literature was discovered during relevant conference lectures or from conversations with other researchers at relevant conferences and seminars.

2.2.3 Phase 3: Develop inclusion and exclusion criteria

During reviews of literature searches on the City, University of London Library databases (such as Ebscohost) inclusion and exclusion criteria were developed. Literature included primarily

related to: UK press coverage of nutrition policies and advice; UK government communication 1997-2012; UK scientific advisory committees on nutrition; red meat and its cultural significance in the UK. Unpublished literature and literature that was not in the English language, or which had not appeared in peer-reviewed journals or books was excluded.

2.2.4 Phase 4: Snowball sampling

Recognizing that computerized databases cannot provide all the literature required for this study (Greenhalgh and Peacock, 2005) a wide variety of methods were used to capture as much relevant literature as possible. Having identified the most relevant literature, which met the inclusion criteria from available databases, snowball sampling was used to widen the literature search. This involved reading the literature and checking the reference lists of each paper or book chapter for further relevant papers, articles or books that were then located using City, University of London library search facilities.

2.2.5 Phase 5: Hand searching

Back copies of particularly relevant journals (for example Public Understanding of Science, Social Science and Medicine, Journalism Studies, Journal of Health Communication, Public Health Nutrition) were searched by hand to capture older literature not available via online databases. The relevant City, University of London library shelves were searched by hand to capture relevant books in the area of media sociology, journalism and food policy.

2.2.6 Phase 6: Confirm relevance of finds

As literature was found it was read and its relevance was confirmed. Literature deemed relevant was uploaded to the City, University of London referencing database Refworks. N=356 finds were added to the database, during the writing of the literature review these finds were reappraised for relevance. An iterative approach to the research was adopted (Mills *et al.*, 2009) therefore the Research Questions for this project developed over time according to data collection and analysis. Similarly, as iterations proceeded and the focus of the research sharpened, some literature finds were no longer relevant to the research project and were therefore discarded. This left n=280 finds. During these six preceding processes 7 clear and relevant categories emerged. The literature was divided into these categories:

- 1: literature about policy agenda-setting/building
- 2: literature on nutrition policy agenda-setting/building
- 3: literature on media agenda-setting/building
- 4: literature on media agenda-setting/building in nutrition and health
- 5: literature on government communication
- 6: literature on nutrition policymaking at government level
- 7: literature on red and processed meat

2.2.7 Phase 7: Critically appraise literature

Taking the categories in turn, each was then critically appraised according to a hierarchy of evidence. According to Aveyard (2010) critical appraisal is important during the process of literature review to establish both the relevance and the strengths and limitations of the literature. Literature finds were appraised according to the authors of the work (are they appropriately qualified to undertake the research?); the journal or publication the work was published in; the research questions (are they clearly stated?); the methodology (does it fit the research questions, is the data collection and analysis technique transparent and robust)? 32 finds were discarded at this stage leaving 248 finds making up the body of the literature review.

2.2.8 Phase 8: Develop themes

As noted above the literature was categorized into seven different themes. These seven themes were reviewed in turn.

2.3 Analysis of Literature

2.3.1 Agenda setting theories

Cairney (2012) sums up agenda setting with two key statements:

- ‘1: There is an almost unlimited amount of policy problems that could reach the top of the policy agenda. Yet, very few issues do, while most others do not.
- 2: There is an almost unlimited number of solutions to those policy problems. Yet, few policy solutions will be considered while most others will not.’ (Cairney, 2012, p. 183)

Agenda setting theories, used here by Cairney in a public policy context, have their roots in the fields of journalism and media studies and as such are part of research into ‘media effects’. Media effects examine whether and how the media has an effect on for example, its audience, societal norms or policy-making. This is a much-contested area of research. Media research theorists, such as McQuail (2010) doubt the ability of the mass media to influence any measurable change in policy or public opinion – or at least the ability of scholars to assess the effect. The evidence, says McQuail, is insufficient to show a causal connection between media and public or political opinion. This is due to the large number of confounding variables which can affect research findings; it is very difficult to isolate media messages from other influences in society such as formal education, cultural background or other advertising. Despite the difficulty in proving media effects this has been a very rich area of research over the last fifty years. Indeed, scholars have identified a bias in media research towards media effects (Rogers, 1986; Williams, 2010; McQuail, 2010). Rogers puts this down to the dominance of the transmission model of communication since the late 1940s. The transmission model is a linear model, summed up by Harold Lasswell as ‘*Who Says What In Which Channel To Whom With What Effect*’ (Lasswell 1948, p. 37). Lasswell’s Formula or the Transmission Model has long been seen as simplistic since it is essentially a one-way communication model but as McQuail notes (2010) it has focused academic media research on the effects of the media. So, the

theories and counter-theories about media effects or lack of them has led to the study of the audience and the effects of the media becoming '*the most active and well-supported area of investigation in media studies*' (Williams, 2010, p. 165).

The development of agenda-setting research is generally said (Rogers and Dearing, 1996; Scheufele, 1999; Weiss, 2009) to stem from Bernard Cohen's 1963 book '*The Press and Foreign Policy*' in which he interviewed American journalists and policy makers to examine the relationship between press and government. This gave rise to his famous quote that the press: 'may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think *about*' (Cohen, 1963, p. 13).

McCombs and Shaw took Cohen's lead and formally described agenda setting as a theory in 1972 with their empirical study using media coverage of the 1968 USA Presidential election, and interviews with 100 voters to determine what they called the '*agenda-setting function of the mass media*' (McCombs and Shaw, 1972, p. 176). They showed that the issues the interviewees thought were most important were the same issues that were given space and prominence in the mass media and concluded that the media, in deciding which issues to feature in their newspapers have the power to set the political agenda. According to Weiss (2009) these early forays into agenda-setting suggested that this was a simple, one-way causal relationship and assumed a direct uncomplicated influence from media to audience. As agenda-setting research developed and broadened this was questioned and refined. Rogers and Dearing (1996) proposed three distinct arenas of the agenda-setting process: the public agenda, the media agenda and the policy agenda. They argued that there was a reciprocal relationship between the three and proposed that the term 'agenda building' was a more helpful term than agenda-setting to characterize these three agendas. This imagining of the agenda in three arenas can be a more fruitful way to examine the agenda setting process than the linear model at first proposed by McCombs and Shaw (1972). However, Rogers and Dearing's model (1996) is still linear in the sense that they assume that their three main components do not interact in a complex way but that influence follows on in a linear fashion:

'Our model of the agenda-setting process consists of three main components: (a) the media agenda, which influences (b) the public agenda, which in turn may influence (c) the policy agenda.' (Rogers and Dearing, 1996, p. 22)

Others have developed a more complex model that allows for interaction between these three arenas of public, media and policy agendas. To examine the effects in more depth these studies often take a single issue and examine it over time. For example, Downs' (1972) Issue Attention Cycle takes a longitudinal view of a single issue and examines the levels of attention it gets in different arenas over time and in the context of how the problem is viewed, proposing a common five step cycle. Hilgartner and Bosk's (1988) Public Arenas Model looks at the interaction between various institutional arenas for an issue, and takes into account the

'*carrying capacities*' of the various public arenas – for example the number of pages a newspaper has or the amount of time a Congressional committee can devote to a topic. Baumgartner and Jones's (2009) Punctuated Equilibrium theory places agenda setting and the media's role within a much bigger group of policy concepts (such as bounded rationality and policy monopolies). Again, Baumgartner and Jones (2009) look at single issues and suggest that most policies stay the same for long periods of time but can suddenly undergo periods of change, the media may play a part in this change. Habermas (1996) used and built upon the three agenda building models described by Cobb, Ross and Ross (1976): the inside access model, the mobilization model and the outside initiative model. These three models explain how issues get on to the government's policy agenda. Habermas says that if an issue is initiated inside government and does not achieve or require any attention from outside the government that is called the '*inside access model*'. If the supporters of an issue within government must mobilize the public sphere to get an issue on the policy agenda, that is called the '*mobilization model*', if, alternatively, an issue initiates on the periphery, outside the political system, and receives access to the policy agenda, this is called the '*outside initiative model*'. Habermas says that the first two models are most common as government holds the most power in the agenda building process. However, in the outside initiative model, the media plays a crucial role since it can aid the process of an issue from the periphery to the heart of the political agenda. Nisbet and Huges's (2006) model of Mediated Issue Development takes into account competition from other issues for attention, as well as media lobbying activities of key strategic actors and predicts that media attention rises and the framing of the issue becomes more dramatic as an issue moves from administrative policy arena into an overtly political policy arena. The Policy-Media Interaction Model (Robinson, 2000) predicts media influence when policy is uncertain and a limit to media influence when policy certainty is seen. Most of these models have been developed in the USA and tested using examples of American policy, often foreign policy (for example the so-called CNN effect and the later Al Jazeera effect (Henderson 2000)) or environmental or climate change issues (Nisbet and Huges, 2006; Downs, 1972).

In a further development of agenda setting theories, some have argued that contrary to Cohen's influential quote (see above, Cohen, 1963, p. 13) the media not only tell us what to think about, they also tell us what to think. This is characterized as 'first level' (what issue or event to think about) and 'second level' (what to think about that issue or event) agenda setting or building (Scheufele, 2000; Weiss, 2009). At the second level two media effects models are proposed: priming and framing. Priming is the amount of attention, sometimes called 'salience' an issue or event receives (Iyengar and Kinder, 1987) while framing (Goffman, 1974) examines how problems are defined in the media. Some see this second level of agenda setting as a natural extension of the agenda setting model (Weiss, 2009) while others (Scheufele, 1999; Nisbet, 2008) see these as distinct processes and approaches. Generally, there is a large diversity of theoretical and methodological approaches in the agenda-setting literature but as Nisbet observes (2008) there is a common thread that news is not a reflection of reality but a

construction determined by a hierarchy of social and organizational factors that span levels of analysis.

2.3.2 Literature on nutrition and cancer agenda setting/building

In the area of nutrition policy much research into agenda setting has concentrated on the agenda setting effects of media on the lay audience - for example the effects of television food advertisements on children (Hastings et al. 2006; Connor 2006; Boyland et al. 2012) or the effect of media food scares on food behaviours (Macintyre et al., 1998). However, there is a body of work which has looked at the agenda setting role of the media in the realm of public health nutrition. Macintyre et al. (1998) suggested that the lack of media interest in public health issues played an agenda setting role – that a lack of media articles about a public health concern such as coronary heart disease (when compared to salmonella in eggs or BSE in beef) contributed to the failure of widespread public health issues to appear higher up on the policy agenda.

A feature of the literature around obesity in the media, which mirrors work on the agenda setting function of the media when reporting cancer as a health issue, is the framing of these health issues as the responsibility of the individual as opposed to being the responsibility of the state or of society as a whole (Lupton, 2004; Lawrence, 2004; Hilton et al., 2012). For example, Hilton et al. (2012) have analysed the media discourse around obesity in the UK, mapping a gradual change from obesity being portrayed in the media as a problem for the individual to address, towards the problematisation of the so-called 'obesogenic environment'. The authors see this as an early warning sign for policymakers that regulatory change to address the problem of obesity is needed (Hilton et al., 2012). Similarly, Lawrence (2004) used work by Nathanson (1999) looking at catalysts for policy change not in the realm of food or nutrition but in smoking and gun control in the USA to analyse the media framing of obesity in the USA. Lawrence suggests that for policy change to occur public discourse needs to be 'reframed' – more specifically that who is burdened or blamed in public debate is set on a continuum from individual to systemic. For policy change to occur the burdening or blaming needs to move closer to the systemic pole of the continuum – so further away from individual framing, indicating in the framing of public discourse that this is an issue that requires public policy change. Nathanson (1999, p. 446) identifies three key areas that influence debate over whether public policy change is needed: whether the health risk is portrayed as '*acquired deliberately or involuntarily (and the victim correspondingly as culpable or innocent)*'; whether it is portrayed as '*universal (putting us all at risk) or as particular (only putting them at risk)*'; and whether it is portrayed as '*arising from within the individual or from the environment*'. Using these frames against media coverage of obesity in the US from 1985-2004 Lawrence showed a '*vigorous frame contest*' underway between frames and those that publicly argue their cause. This, she suggested, has resulted in change in only one of Nathanson's frame dimensions (environmental risk) – the implicit conclusion being that without change in all three frame dimensions a window, or opportunity, for

policy change is not opened. Of course, this does not show a causal link between changes in frame dimensions and policy change, but it does offer up a plausible tool for analysing the potential of media discourse to effect health and nutrition policy and has been used by others to examine media framing of food issues (see De Brun et al., 2012 and Henderson et al., 2009).

Lawrence’s analysis echoes Kingdon’s (2011) work and his classic three-stream model of agenda setting which focuses on ‘*policy entrepreneurs*’ inside and outside of government who take advantage of ‘*policy windows*’ to put an issue on the political agenda. Kingdon argues that policies will only be taken seriously by government, i.e. policy windows will only open, when the three streams (problems, policies and politics) converge. However, Kingdon himself was not convinced that the media really were powerful agenda setters. In his study of policy making in the USA federal government in which he drew on interviews with people inside and outside government, though he expected the media to play an important role, he was disappointed. The media was not discussed as being important in the large majority of his interviews, although they were seen to have a lesser effect through short-term sensationalized coverage of health ‘scares’, such as the subject of saccharin or the issue of Medicare and Medicaid fraud, which had received considerable media attention:

‘Congress did pass legislation on both of these subjects, which consumed some of the health committee and agency time. Thus, the subjects were “on the agenda” in some sense, but they were simply not regarded as truly significant issues. They were more like short-term annoyances...than subjects of major importance.’ (Kingdon, 2011, p. 58)

Food scares and their impact on policy may be seen to fall into this ‘*short-term annoyances*’ category. The media sometimes has been seen as the producer of a ‘*news spiral*’, a positive feedback loop when it comes to food scares (Beardsworth and Keil, 1997, p. 165, see figure 2.1).

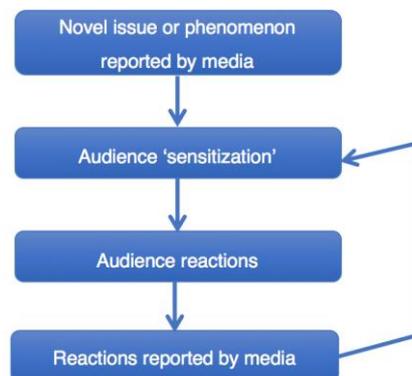


Figure 2.1. A simplified model of the news spiral (source: Beardsworth and Keil, 1997, p. 165)

In a similar model to Downs’ (1972) Issue Attention Cycle and influenced by Hilgartner and

Bosk's (1988) Public Arenas model, Beardsworth and Keil see this as a self-limiting process – i.e the media and public attention to the phenomenon gradually decreases because coverage reaches a saturation point. However, they point out that

'even though such scares are of limited duration, they may well produce enduring effects. Official policies may be changed, new legislation may be introduced and long-term alterations in the public's activities and attitudes may be produced.' (Beardsworth and Keil 1997, p. 166).

They go on to argue, citing Smith (1991) that public anxiety about food and food safety have politicized food issues so that decisions relating to food quality and food safety can no longer be made within an elite policy community but have to take into account the views of what they call an *'issue network'*. In her work on BSE Reilly (2003) also sees a deep influence of the media on policy and policymakers. In her interviews with policymaking experts, they commented that media coverage influenced the topics that were given research and policy priority. For example, media attention affected the research questions that were asked by policymakers and the perceived value of research among funders and peers. Reilly also views media coverage itself as a spectre or risk factor: policymakers she spoke to referred to media coverage as a risk to the economy, feeling that they had to make decisions with that potential risk in mind. In addition, Reilly argues that media coverage could be seen by policymakers (rightly or wrongly) as an indicator of public opinion, which in itself has an indirect impact on policy:

'...perceptions of the public as irrational but powerful consumers have heavily influenced government responses to BSE. 'Public opinion', then, is rarely directly canvassed, but is the spectre at the table of many decision-making, implementation and publicity processes.' (Reilly, 2003, p. 87)

Generally, the literature suggests that the agenda setting function of media reporting is more direct when it comes to food scares than its agenda setting function in the area of public health nutrition. So, a model of public health nutrition reporting's agenda setting function seems to fit Kingdon's observations of media reporting's ability to affect policy, which he saw in three, more subtle, almost peripheral ways:

1. It can act as communicator within large, diffuse policymaking groups,
 2. It can structure, magnify or shape an issue that has originated elsewhere (Kingdon saw leaking by government employees as part of this)
 3. It can have an indirect influence via constituents – for example MPs might want to act on an issue that has been raised in the media and then raised with them by their constituents.
- (Kingdon, 2003, pp. 59-61).

These observations chime with the more nuanced agenda-building model as discussed above (Rogers and Dearing, 1996).

Similarly, others see media coverage as having a more latent, long-term effect on public health – acting in the realm of public debate rather than a distinct and direct, pin-pointable effect. For example, cancer coverage, like media coverage of obesity, has been shown to be framed in an overtly individualistic way, as opposed to taking a community perspective (Clarke and van Amerom, 2008; Clarke and Everest, 2006). Clarke et al.'s work looked at depictions of cancer in the mass print media in Canada and the USA – and as well as a predominantly individualistic perspective she found that cancer coverage focussed on medical treatment and cure:

‘This portrayal forecloses on broader understandings of causation, prevention and possibilities for the promotion of health. It tends to minimize the possibilities of examining links to the environment, culture, gender, ethnicity and other components of the social structure and culture.’ (Clarke and Everest, 2006, p. 2598)

The implication is that the media's individualistic framing of cancer is not only showing a tendency to imply a 'magic bullet' effect of individual ingredients or of an individual's ability to treat themselves, but it is stifling public debate about wider issues of social determinants of health and opportunities to prevent ill health. Therefore, the opportunities for the media to hold accountable those responsible for promoting prevention or preventing social inequality are minimised. Again, and as outlined by Williams (2010, p. 183) this latent effect of media on policy was studied by Lang and Lang (1981) and characterized as an '*agenda building*' role, rather than an '*agenda setting*' role, with key variables which influence whether an issue is taken up: the framing of an issue, the language used to describe it and the use of credible people to describe the issue are all deemed crucial factors.

In terms of nutrition policy, Lang et al. (2009, p. 118) identify three traditions which shape how nutrition is conceived: life science nutrition, social nutrition and eco-nutrition. These differ conceptually and promote different policy solutions. This is echoed by the work of Gollust and Lantz (2009) in their study of print news media coverage in the USA of type 2 diabetes between 2005 and 2006. They argue that type 2 diabetes is influenced by health behaviours, in turn shaped by environmental and social factors. As a result, different policy solutions are offered depending on which level of intervention is focussed on. '*Which types of policies the public and policymakers will support may hinge on their understanding of diabetes.*' (Gollust and Lantz, 2009, p. 1091). Like those studying obesity or cardiovascular disease coverage, Gollust and Lantz (2009) discovered that media coverage of type 2 diabetes tended to emphasize individualized causes and approaches far more than they mentioned social determinants. However, they recognized that further designs were necessary to test '*whether these news messages might boost policy support, or alternatively, reduce support by activating negative stereotypes*' (p. 1097) but concluded that their results bore implications '*for the public's likelihood of supporting interventions to reduce the population health burden of diabetes.*' (Gollust and Lantz, 2009, p. 1097). In other words, the ability of the media to build public policy agendas around public health issues such as diabetes is not only uncertain, if the media do

change the framing of an issue there is also a possibility that this might have an unintended consequence of activating negative stereotypes and therefore undermining support for health interventions. This has been shown by Greiner et al. (2010) in their study on news media presentation of fish consumption guidelines. They found that the bulk of messages concentrated on risk rather than benefits of fish consumption, so that the benefits of fish consumption may be lost to consumers.

Generally, when looking at both public health nutrition and food risks, the literature on food and nutrition in the media and its impact on food policies has tended to follow the increasingly complex models of agenda-building described by media theorists and outlined above (Habermas, 1996; Hilgartner and Bosk, 1998; Jones and Baumgartner, 2003). For example, in Miller's work on the relationship between the media and policy-making in the realm of risk communication, in which he uses BSE and the salmonella in eggs food scares as case studies (Miller, 1999; Miller and Macintyre, 1998). Miller and Macintyre point out:

'We cannot understand the actual behaviour of experts, the media, or the public in isolation from each other. Instead these need to be examined in the context of their interactions.' (Miller and Macintyre, 1998, p. 230)

In this work (Miller, 1999; Miller and Macintyre, 1998) the authors outline the complex interaction between policymakers, politicians, scientific researchers and journalists in what they, following Habermas (1996), call a circuit of communication. Miller is critical of research that assumes a linear model and imagines the media as a mirror to reality:

'The media do not simply reflect controversy or help to "shape its portrayal" in the public sphere (Goodell, 1987, p. 595). The media coverage is an integral part of the controversy. Media reporting, public responses and specialist opinion are the context in which policy making functions and are part of the formula calculated by all participants in policy processes.' (Miller, 1999, p. 1246)

2.3.3 Literature on media agenda setting/building

As noted above, Dearing and Rogers (1996) outline three arenas of agenda building: public, policy and media. They argue that early agenda setting research neglected the arena of the media agenda – concentrating on the influence of the media on the public or policy agendas. But who sets the media's agenda? Who is influencing journalists? Since the 1980s many more studies have appeared to address this problem, looking at the personal, social and organizational ways in which journalists are influenced. There are several theories which have arisen in this field, including but not limited to: News Values, Media Templates, Gatekeepers and Intermedia Agenda Setting.

2.3.3.1 News Values

The media have been shown to filter information through the use of 'news values' which determine what is newsworthy, i.e. what characteristics merit inclusion in the news (Galtung and Ruge, 1965; Harcup and O'Neill, 2010). Galtung and Ruge's (1965) study into foreign news came up with twelve News Factors, which, if satisfied, would increase the likelihood of an event becoming news. These included unexpectedness, negativity, concerning elite nations or elite people. Many have revisited and updated this list including Schlesinger (1987) and Harcup and O'Neill (2001).

2.3.3.2 Media Templates

In a development of this theory, Kitzinger (2000) proposes and defines the concept of media templates – what she calls patterns of association and the reconstruction of meaning over time. Her work demonstrates how template events, for example food scares, can help to shape news narratives and guide thinking not only about the past but also of the present and the future.

2.3.3.3 Gatekeepers

Research has also documented the use of 'gatekeepers' – key actors who influence the inclusion of news items or the framing of information. These might be sources, journalists themselves or other influential actors inside or outside the media organization (Shoemaker and Reese, 1996). Research on gatekeeping in the media has evolved from initial studies which showed the power of gatekeepers within the media production process – early studies assessed the way journalists chose the stories that appeared in their newspapers (White, 1950) leading later to a more complex understanding of the politics of information flow with work by Shoemaker, Schlesinger and Tumber and others (Shoemaker, 1991; Schlesinger and Tumber 1995). These showed that there are many key internal and external actors affecting the information flow – for example internal media managers/editors, advertisers and competitors; externally, sources, PR companies, pressure groups and audiences. Influential models from media theorists to explain this gatekeeping process have included this hierarchical model by Shoemaker and Reese (1996, p. 64) (Figure 2.2) which examines the influences on individual journalists:

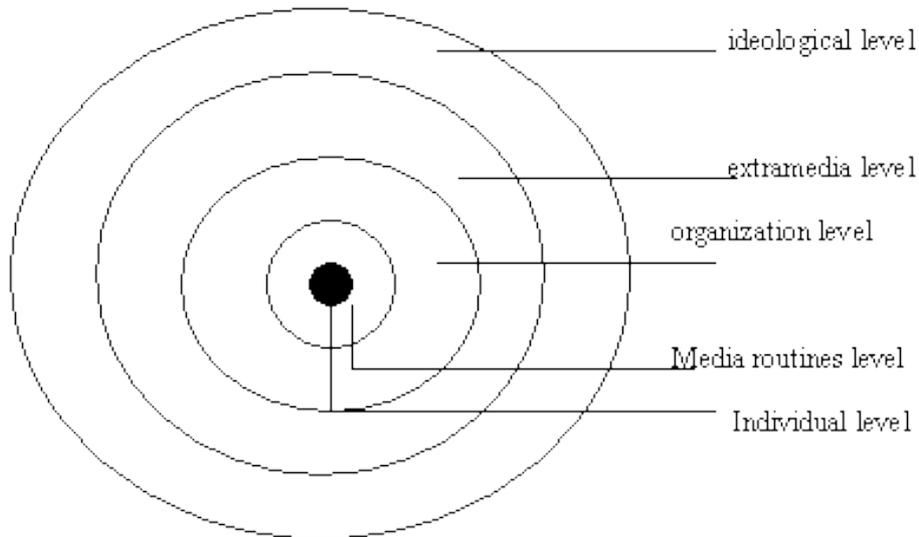


Figure 2.2 Individual influences on media content in the hierarchical model (source: Shoemaker and Reese, 1996, p. 64)

McManus's model (McManus, 1994) of commercial influences on news (Figure 2.3)

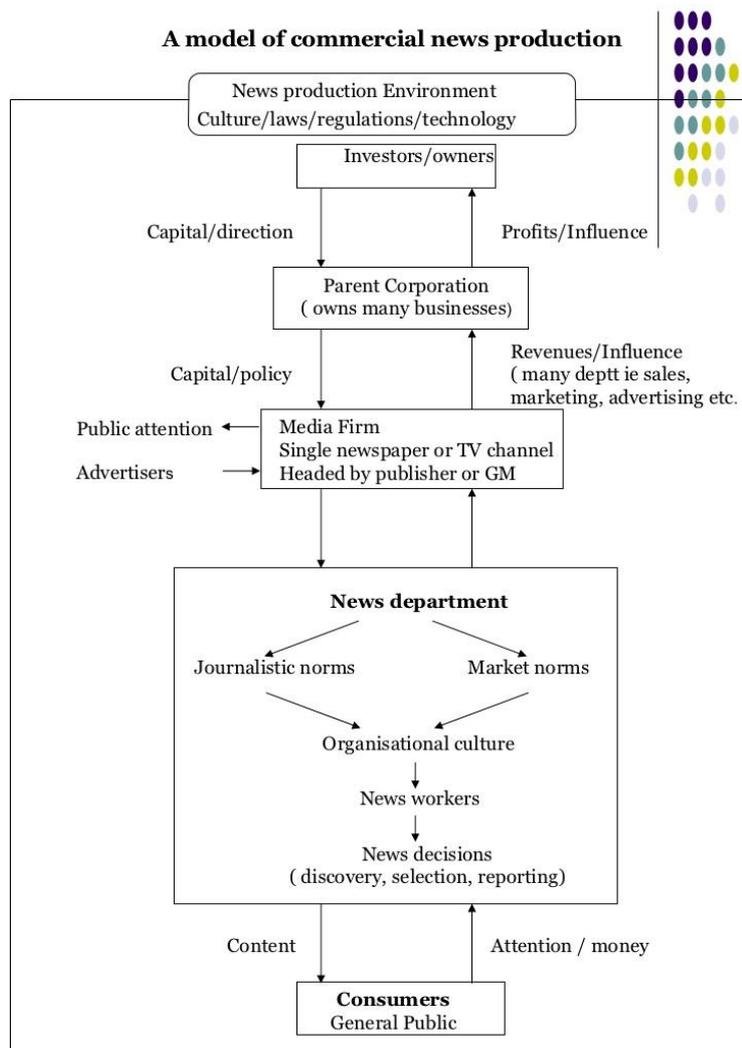


Figure 2.3 A model of commercial news production (source: McManus, 1994, p. 182)

And McQuail's media organization schematic (McQuail, 2010, p. 281) (See Figure 2.4):



Figure 2.4 The media organization in a field of social forces (source: McQuail, 2010, p. 281)

2.3.3.4 Intermedia agenda setting

Research into 'inter-media agenda setting', in which media outlets report a story that has previously been covered by another outlet, shows that another influence on the media might be that an event has already been covered by a rival news outlet (Protess and McCombs, 1991; Walgrave and Van Aelst, 2006; Shoemaker and Reese, 2014). Reese and Danielian (1989), in one of the first studies to examine what they term 'intermedia convergence' raise concern that:

'Although perhaps functional for the organizations themselves, such a tendency to follow the leader and each other could have serious societal implications. Too much sameness in media conflicts with a key value of American pluralistic society, that the press should present a diverse set of views and voices.' (Reese and Danielian, 1989, pp. 30/31)

There is a long-established concept of the media as a '4th estate' – a concept that has been attributed to Edmund Burke and dated to the late 18th century (Chandler and Munday, 2011) – which conceives of the press as an extra estate joining the medieval three estates of the realm and performing a legitimate watchdog function, holding the government to account. This has manifested itself in a long tradition of investigative print and broadcast journalism in the UK with consumer journalists for example on the BBC Radio 4 Programme 'Face the Facts' investigating, among other things, food issues such as BSE 'on behalf' of the consumer or listener. However, there have, in recent years, been concerns among media scholars about the ability of journalists to maintain this independent investigative edge, particularly citing the reliance of journalists on public relations professionals and news agencies (Lewis et al. 2008). Lewis et al. (2008) found that the UK press were far more dependent on copy from press agencies such as the Press Association (PA) than they made out: only 1 per cent of stories in their sample were directly attributed to PA or other agency services but 30 per cent of stories in the sample replicated agency copy almost verbatim with a further 19 per cent being largely dependent on such copy. As Lewis et al. point out (2008) this challenges the UK press's claims to journalistic independence and the role of journalists as a fourth estate; calling into question their ability to hold policymakers to account. Because of changes in news production processes (many due to technological change, for example the use of the internet and emails) research has shown that time in the newsroom is shorter and resources are stretched (Lewis et al., 2008). Journalists have become increasingly reliant on press releases to write their copy (Bartlett et al., 2002, Lewis et al. 2008) and this has caused concern about the independence of the British media and its ability to interrogate or investigate information presented to it by external sources (Lewis et al., 2008; Davies, 2009; Williams and Clifford, 2009).

2.3.4 Literature on media agenda setting/building in nutrition and health

As noted above, there is increasing academic interest in media coverage of nutrition (Cooper et al., 2011; Hilton et al., 2012; Riesch and Spiegelhalter, 2011; Hellyer and Haddock-Fraser, 2011). Many of these newer studies into food reporting in the media focus on nutrition-related chronic preventable diseases (CPDs) such as diabetes or heart disease and their causes such as obesity, rather than the food safety scares studied by the Glasgow Media Group and others in the 1990s and early 2000s. However, while many of them analyse the media coverage, few investigate how the media's agenda is being set in an empirical way, through for example interviews with journalists, ethnographic studies of media environments or comparisons of source material (e.g. press releases) with press coverage. This section focuses on the studies that have assessed how the media's agenda is set in the area of nutrition and health since while there are similarities between media processes and norms across all subject areas, media coverage of nutrition and health have a particular focus on the following theories: news values, media templates, gatekeepers and intermedia agenda setting.

2.3.4.1 News Values

During their earlier research (as noted above), the Glasgow Media Group had compared coverage of food scares like BSE and salmonella in eggs with coverage of a chronic diet related disease, coronary heart disease (CHD). They found that food safety received more media attention than dietary risks for CHD and outlined five 'news values' that seemed to be relevant to the appearance of stories on health and diet. These were '*scientific advances*', '*divisions among experts*', '*matters of state*', '*division in the government*' and '*government suppression*' (Macintyre et al. 1998, p. 236). They argued that Salmonella and BSE fit all of these criteria and so received much more news coverage. CHD, by contrast, rarely fulfilled the criteria but made it into the news media if associated with '*scientific advancement*', '*government suppression*' or '*disagreement among experts*'. Similarly, Hilton et al. (2012) examined coverage of obesity in UK newspapers between 1996 and 2010. While there was a large increase in stories (less than 40 per year before 2000 rising to 287 in 2004), less than 4% of the articles were printed on the front page. In addition, they considered 64% of the articles to be short (fewer than 500 words, compared to the longest article of 4,402 words).

As Macintyre, et al. (1998) have noted,

'Neither media coverage of, nor public concern about, public health risks mirrors the incidence of disease or the severity of the health problem. While widely recognized, the reasons for this apparent mismatch remain poorly explained.' (Macintyre et al., 1998, p. 230)

Within media reporting of cancer research there also seems to be a disease hierarchy at play that is not linked to disease burden. To start with science coverage has been shown to have a bias towards medicine and health-related topics (Weitkamp, 2003; Hansen, 1994). Bartlett et al. (2002) in a study which took all research articles from the Lancet or the BMJ during 1999 and 2000 and analysed which were reported in The Sun or The Times newspaper, found that studies on women's health, reproduction and cancer were more likely to be press released and covered in newspapers. Within that research on cancer, Lewison et al. (2008) showed that more than a third of cancer research featured on the BBC mentioned breast cancer (compared to a disease burden of 13%) with the next most covered cancer sites being lung and prostate cancer – noting that lung cancer was much less covered than its disease burden of almost 20% would have suggested. Both these studies reflect a fascination with cancer in the press and a particular interest in breast cancer, which has been supported by other studies in the USA (Jensen et al., 2010) and Canada (Clarke and Everest, 2006). This may reflect a media bias towards breast cancer, or it may reflect the number of studies on breast cancer: since there is a predominance of breast cancer charities in the UK this may therefore influence the amount of research being funded by breast cancer charities and therefore its coverage in the media. Clarke and Everest (2006) cite Lantz and Booth (1998) and argue that the predominance of stories about breast cancer in the media may reflect the '*highly vocal and political breast cancer*

movement that became increasingly mobilized over the 1990s' (Clarke and Everest, 2006, p. 2594). In the case of bowel cancer, the media have been shown to shy away from covering this topic, perhaps due to prurience about discussing bowels or bowel cancer symptoms, with bowel cancer receiving disproportionate coverage compared to its disease burden (Gerlach et al. 1997; Lewison et al. 2008). Williamson et al. (2011) also found a particular under-representation of bowel cancer in UK newspapers that they in part attributed to the taboo associated with the disease.

Lang et al. (2009) argue that nutrition is often criticised for an inability to produce consistent advice by producing contradictory research. This apparent inconsistency in nutritional advice is also reflected in the newspaper reporting and could be seen as a 'news value' in the sense that newspapers are more likely to relate contradictory information or disagreements among experts (Macintyre et al., 1998; Nagler, 2014; Basu and Hogard, 2008; Greiner et al., 2010).

Beardsworth (1990) relates this to Weinberg's notion of 'trans-scientific' questions – questions that can be asked but not answered by science (Weinberg, 1972) – and argues, that nutrition exhibits many trans-scientific traits in that it is constantly evolving and that the data related to it, being often based on recall or food diaries, is inherently uncertain. Beardsworth argues that this uncertainty is amplified by the media and causes anxiety among the public, while Bufton, Smith and Berridge (2003) argue that when there is no scientific consensus, opportunities arise for interested parties to make claims and contest policy in accordance with their own views.

2.3.4.2 Media Templates

Kitzinger built on her own model of 'media templates' (2000) in work with Jacquie Reilly on BSE (Kitzinger and Reilly, 1997; Reilly, 2003).

'...media interest was already primed to the notion of 'food crises'. The BSE story followed in the wake of concern about Listeria and Salmonella. There was thus a clear 'media template' for framing the story. Just as 'false memory syndrome' could be presented as another example of 'parent abuse' and build on concerns generated by previous 'scandals', so BSE could be reported as further evidence of a crisis in the management of food risks and another reason to distrust government policy.' (Kitzinger and Reilly, 1997, p. 339).

Diack and Smith (2004) recognized similar media templates at play in their study of media coverage of the Aberdeen typhoid outbreak of 1964: this was the latest in a succession of typhoid outbreaks, there were plenty of accounts of personal suffering as well as political revelations.

Another media template identified by Riesch and Spiegelhalter (2011) in the realm of public health nutrition is that of the 'nanny state'. In their paper looking at media coverage of new WCRF guidelines on red and processed meat consumption they noted how some journalists fell

back on familiar media templates such as arguing the medical establishment were like a 'nanny state' who were trying to stop readers from eating the foods most dear to them (in this case bacon, sausages or other cured meats). This 'nanny state' template has also been found by others when looking at polarised media discourse on proposals to regulate fast food advertising in Australia (Udell, 2008; Henderson et al. 2009).

Goldacre (2007) has noted that the media tend to report diet-related research simplistically, often without contextualisation (see also Weitkamp and Eidsvaag, 2014, on 'superfoods' in the media). This means that food items are often taken out of context - overall diet is less likely to be mentioned. This reflects a trend (Scrinis 2012; Dixon, 2009) in which 'real food' (as coined by Michael Pollan, 2008) is replaced by 'nutrients'. Scrinis calls this '*nutritional reductionism*', while Dixon terms it '*nutritionalisation*'. Both chart the recent history of nutrition's development as a science. In nutritional reductionism functional foods, individual ingredients or nutritional elements are the focus of research and subsequently dietary advice. This seems to be particularly prevalent in the media's coverage of research relating to diet's role in the prevention of cancer – of course the media may be merely reporting studies produced by the scientific community, commissioned by governments, charities, research organisations who are themselves prone to this tendency to view food as isolated nutrients in a similar way to the media's reflection of a bias towards breast cancer research outlined by Lewison et al. (2008).

2.3.4.3 Gatekeepers and Churnalism

An important area in research into who influences or sets the health media's agenda is the study of gatekeepers and gatekeeping. In a study of medical coverage in the press, Entwistle (1995) interviewed health and medical journalists and conducted a content analysis of medical stories in four broadsheet newspapers. Through her interviews, Entwistle found that the working practices and preconceptions of journalists played a crucial part in the selection of stories appearing in their newspapers. The journalists relied on a few journals as sources of medical research news, so the research that appeared in these journals largely determined the pool of information from which stories were selected. The organization and timetable of the newsroom played an important part in the gatekeeping process. The BMJ and The Lancet reached newsrooms by Thursday lunchtime and then decisions were made as to which stories in the journals would be covered in Friday's newspapers. Stories for Friday editions had to be submitted by Thursday evening. The broadsheet papers she studied each published an average of 1.25 stories from the Lancet and the BMJ every Friday – therefore it seems those journals were almost guaranteed at least one story in the broadsheet newspapers every week. Entwistle outlines how journalists told her they based their stories on the full research article and not the journals' press releases, though press releases were valued as early information. However, many studies have shown a heavy reliance by journalists on pre-packaged news sources, such as press releases (Lewis et al., 2008; Bartlett et al., 2002; Tanner, 2004) while other studies

have shown the considerable influence of press releases on related media reporting (Riesch and Spiegelhalter 2011; Weitkamp and Eidsvaag, 2014).

As well as the use of pre-packaged press material, research has investigated the use of media sources or interviewees in health and nutrition reporting. Entwistle (1995) found that:

‘Journalists preferred to quote recognised leaders in the field and trusted contacts who had previously supplied lively comments. Many approached medical research charity press offices to identify suitable experts for them, giving these organisations a chance to shape media reporting.’
(Entwistle 1995, p. 921)

Lewison et al. (2008) in their study of BBC online reporting of cancer research found that the BBC were keen on getting ‘experts’ to comment on research, and by far the most likely organisation to be asked to comment was Cancer Research UK, with the next two most likely organisations also from cancer charities. Lewison et al. (2008) pointed out that while the Wellcome Trust and the MRC are active in cancer research, the Wellcome Trust did not appear as commentators at all while the MRC only appeared in 1% of stories. The authors do not attempt to explain this finding, but there could be a link with the size of press and PR team associated with these organisations. Studies in the USA of cancer research reporting (Moriarty et al., 2010) have discovered that sources they expected to play a prominent role in newspaper reporting were not as visible in print as they had thought. They carried out a content analysis of cancer news coverage in top newspapers in the USA for the year 2003 to discover the most frequently cited sources. They expected pharmaceutical companies to be quoted as sources frequently; ‘*It seemed logical that pharmaceutical companies would utilize their considerable monetary resources to shape coverage*’ (Moriarty et al., 2010, p. 46). However, they discovered a lack of ‘explicit citations’ of pharmaceutical companies in most cancer stories, while there was more evidence that research institutions influenced stories in this way. Of course, a lack of explicit citations does not mean that pharmaceutical companies were not exerting influence in other ways.

Riesch and Spiegelhalter (2011) raised concerns about the role of the press release in media coverage, to some extent blaming the press release for the resulting coverage. Their paper is one of the few that has looked at representations of diet and cancer research in the media, they looked at coverage of a report from the World Cancer Research Fund. They concluded that information in the report, the press release and the website was contradictory. The resulting negative coverage was not only a factor of the conflicting advice presented but, argue Riesch and Spiegelhalter (2011), was also due to essentially opposing perspectives on the part of the authors of the research and the readership of the newspapers in which the media coverage appeared. The WCRF are presenting an unpopular message - their research shows that alcohol

and red and processed meats increase cancer risk and they recommend a reduction in consumption of these. Riesch and Spiegelhalter (2011) quote The Sun's health columnist Dr. Keith Hopcroft to illustrate their point: *'I'd rather shave a few years off my life with the occasional bacon sarnie than be 100 and dribbling into my All Bran'* (Riesch and Spiegelhalter, 2011, p. 61). They found that the media took a largely negative review of the WCRF's recommendations – with commentators perhaps taking up the perceived/predicted concerns of their readers. This highlights another pressure on journalists which can be seen from McQuail's (2010, p. 281) model of media organization (figure 2.4) – the demands of the audience.

2.3.4.4 Intermedia agenda setting

While there have been several studies on intermedia agenda setting in media coverage of the climate change debate (for example Djerf-Pierre, 2012), and much research into intermedia agenda setting in the realm of political journalism (Noelle-Neumann and Mathes, 1987; Vliegthart and Walgrave, 2008) no references to intermedia agenda setting in the literature on health or nutrition reporting were found during this review.

2.4 Summary

The media's role in food policymaking is explained to some extent by agenda setting and associated theories. While the agenda setting powers of the media are notoriously difficult to pinpoint because of a wide variety of confounding factors, a number of associated theories have been developed to expand and improve research in this area. Agenda building theories have recognized that the role of the media is not best explained by a linear model, nor can the media's role in policymaking be viewed in isolation from other actors such as government advisers or industry experts. The media are one part of a complex set of actors that should be analysed within their interactions. Research in the area of agenda building has focused on how the media set the agenda and neglected models that analyse how the media's agenda is itself set.

Academic research into media coverage of food scares has been joined by a growing body of work looking at how nutritional science is represented in the media. This literature reflects concern with the role of the press release, accuracy in reporting of scientific research, the role of the media in an age of chronic and preventable diet related illness and overt and covert influences on media reports. The media operate within a complex structure of forces from both inside and outside their organization. These forces exert influences both on the articles that appear in the media and the way they are framed. In many areas of food and health reporting prevention of ill-health and social determinants of health are overpowered by coverage which frames health and diet in an individualistic way – as a problem of lifestyle, personal choice or individual behaviour as opposed to socially determined or treatable with public policy solutions. The extent to which this has an influence on food policy and policy makers is unclear.

Chapter 3: Literature Review: Food Policy: Government communication and nutrition policymaking at government level.

3.1 Introduction

This chapter continues the literature review from Chapter 2, and describes categories 5, 6 and 7 of the categories emerging from the eight-phase process of the literature review (for full details of this process see section 2.2: Literature Review Methods):

- 5: literature on government communication
- 6: literature on nutrition policymaking at government level
- 7: literature on red and processed meat

These are set out in turn below.

3.2 Literature on government communication

3.2.1 Government Communications policy

Canel and Sanders (2013) note that government communication is complex and operates at multiple levels and layers. Introducing their book which takes an international and multi-level perspective, they define government communication as:

‘The role, practice, aims and achievements of communication as it takes place in and on behalf of public institution(s) whose primary end is executive in the service of a political rationale, and that are constituted on the basis of the people’s indirect or direct consent and charged to enact their will.’ (Canel and Sanders, 2013, p. 4)

This thesis is concerned with government communication at a national level and specifically within the UK, so literature searches were confined to this area. In addition, since this thesis is concerned with the period from the mid-1990s to the early 2010s, the majority of the literature reviewed in this area focused on this time period which covered the end of a long period of Conservative rule in the UK, the beginning of a 13-year period when the Labour party were in government (1997-2010) and a period of coalition government between the right of centre Conservative party and the centrist Liberal Democrats (2010-2015). For context, several histories of government communication in the UK were consulted (Tulloch, 1993; Grant, 1999; Curran, 2002; Gaber, 2007; McNair, 2007; Sanders, 2008; Campbell, 2011; Gregory, 2012).

Gregory (2012) outlines the structure of UK government, a parliamentary democracy in which MPs (Members of Parliament) from different political parties are elected by their local constituents to represent them. Parliament is the highest legislative authority in the UK. It is responsible for holding the government to account and debating and approving new laws. A political party that wins an overall majority of MPs in the House of Commons at a general election forms a government and the leader of that party becomes Prime Minister. If no party

wins a majority then the largest party may form a minority government or there may be a coalition government of two or more parties. The Prime Minister appoints ministers to lead and work in government departments (Departments of State) which have a large amount of autonomy. Each department employs members of the Civil Service who do the practical and administrative work of the government. They are coordinated and managed by the Prime Minister in his role as Minister for The Civil Service, but they are obliged to be politically impartial and independent of government. The Civil Service are accountable to the public for the work that they do and this political impartiality is considered a crucial part of their work and is enshrined in various professional codes of conduct. (see also <https://www.gov.uk/government/organisations/civil-service/about>, <https://www.gov.uk/government/how-government-works> <http://www.parliament.uk/about/how/role/parliament-government/>) (UK Government, 2015; Civil Service, 2015; Gregory, 2012).

Gregory (2012) and Ogilvy-Webb (1965) date the origins of organized government communications back to 1854 while conceding that it was not until the First World War that a formal government department, the Department of Information was set up to coordinate propaganda for the war effort. After the First World War the Department of Information was disbanded (Sanders, 2008) and many more government departments introduced their own publicity machinery (Grant, 1999). They were reluctant to give up this function during the Second World War (1939-45) although again a central Ministry of Information was introduced to handle propaganda for the war effort. Grant (1999) documents the tensions that accompanied the introduction of the postwar Central Office of Information. Government Departments were keen to retain their power to decide publicity policy, and to dismantle the Ministry of Information which had played a central role in war-time propaganda. In addition, there were political objections that:

‘...under Party Government it is wrong for the party in power to use the taxpayers’ money to persuade the voter to adhere to the party line in matters of political controversy.’ (Grant, 1999, p. 58).

In other words, government communication should not be party political. The Ministry of Information was dissolved in 1946, to be replaced by the Central Office for Information, a demotion in rank from ministry to office. (Grant, 1999; Tulloch, 1993). This non-ministerial department and the information officers working for each Department of State formed the Government Information Service (GIS) which was renamed the Government Information and Communication Service in 1997 after an internal review (Sanders, 2008; Gregory, 2012), the Government Communication Network in 2004 after the Phillis Review (Phillis 2004) and after another review instigated by the new Coalition government in 2010 was again renamed the Government Communication Service (UK Govt., 2013 see <https://www.gov.uk/government/news/new-central-government-communication-service-to-save->

[money-and-raise-standards](#)). These changes in the way government communications are run since 1997 have broadly come about after reviews instigated by new administrations coming into office after a general election. This has to do with our party-political model of democracy which, over the last 50 years has seen a flip-flopping of control between left-leaning Labour governments and right-leaning Conservative governments. In very broad terms Labour favours an enlarged role for the state while the Conservative doctrine leans towards a smaller government. Different approaches to government are seen as different administrations take control and take a doctrinaire approach to government communication (Sanders 2008). As can be seen from the description above, the structure of UK government communications is ever-changing, however, a useful snapshot is made by Sanders (2008) and replicated in figure 3.1.

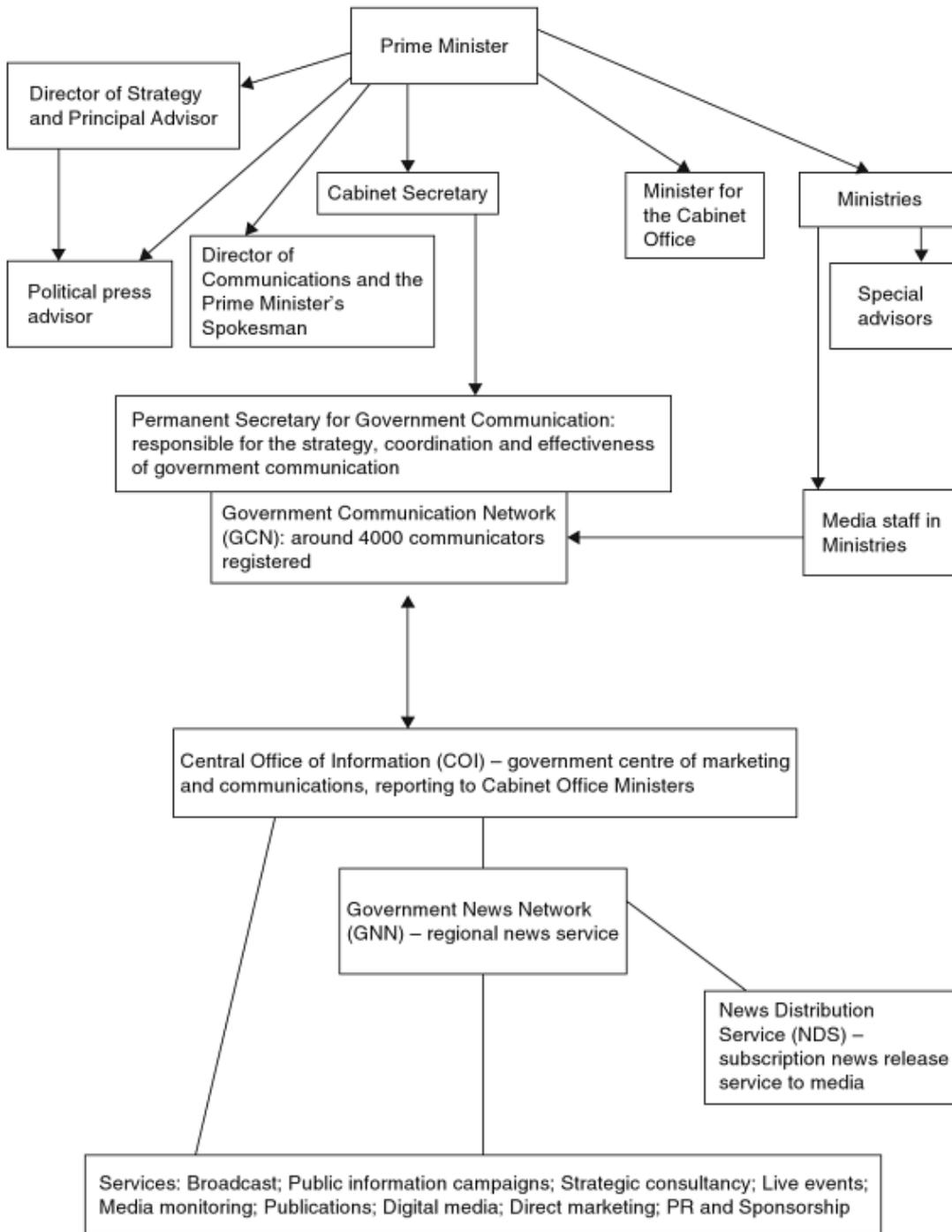


Figure 3.1 British Government Communication 2008 (source: Sanders, 2008, p.87)

Despite continued government promises to reduce the size of government departments and cut waste and inefficiency (Hood et al., 2009), the literature documents a general and sustained increase in the size of government communications divisions and the amount of information these officers were generating. Davis (2003) documents an increase in information officers across seven government departments from 160 in 1979 to 370 in 2001 (Davis, 2003, p. 29). Gaber (2007) reveals that in 1995 government departments issued an average of 476 news releases per month. In 2004, the monthly average was 807 (Gaber, 2007, p.222). In an

indication of the amount of press inquiries these departments were dealing with, Gaber and Underwood (1999), cited in Gaber (2007) found that on average in any one day each press officer in the Home Office was handling more than 40 calls.

Much of the literature in this area is concerned with the extent to which government communications have remained (and should not be) propaganda machines (Tulloch, 1993; Gaber, 2007) and the extent to which UK governments have tried to ameliorate party political influence in government communications (McNair, 2004; Sanders, 2008; Gregory, 2012). As noted by Gaber (2007) there are many contradictions, problems and paradoxes inherent in political communications in a mass media democracy. This is to do with two paradoxes which become apparent from the literature on this subject. Firstly, the structure and mechanisms of the UK's political system, as outlined above, in which each Department of State (for example the Department of Health, the Treasury, The Home Office) has a formal communication function made up of civil servants, including press officers, whose job is to present and promote the policies of the department but who are bound by their professional code of conduct to remain impartial. For the press officers, as outlined by Gaber (2007) this is a complicated juggling act:

'...career civil servants (mindful of the demands of the code, the wishes of their ministers and their own careers) are being asked to make daily judgments of Solomon. For surely it is problematic, at the very least, to urge government press officers to justify the thinking behind government policy and help the public – by helping journalists – to understand the politics of the government of the day, without appearing to be cheerleaders for the government.' (Gaber, 2007, p. 223)

This situation has been muddied by the introduction of Special Advisers under Harold Wilson's Labour government in 1974 (Gregory, 2012). These Special Advisers (who may or may not have a communications role) are party political appointees, made temporary civil servants and appointed by Ministers to advise on policy. They are not required to carry out their duties with objectivity or impartiality (Gregory, 2012). While some special advisers are drawn from the ranks of the civil service, other special advisers on press communication have been drawn from the ranks of newspaper journalists, notably the former journalist, Alastair Campbell whose appointment as the Labour Prime Minister Tony Blair's chief press secretary was political but who had powers (granted by a special order in council) over civil servants (Sanders 2012). A body of the recent UK literature in the area of government communication focuses on the period of the Blair administration (1997-2007) when the lines between impartial government communication and political propaganda were seen to be blurring leading to the government being accused of manipulating or politicizing communication or 'spinning' (Moloney, 2001; Franklin, 2003; McNair 2007; Schlesinger 2009; Sanders, 2013). In addition, civil servant communicators were said to be coming under increasing political pressure from special advisers (Gregory 2012). While Gaber (2007) argues that the normative model of impartial government

communications is impossible to maintain under any government and Tulloch (1993) that government communication has long been politicized, some fierce critics of government communication under Tony Blair suggest this 'spin' damaged the perception of the government's integrity and therefore public trust in government (Ingham, 2003; Jones, 2001 cited in Sanders, 2008).

The second paradox in government communication in the UK concerns the 'informed consent' model. The UK's representative democratic system assumes that in order to carry out their electoral duty, citizens need to be informed of both government policies and activities as well as the policies and activities of the opposition parties (Gaber, 2007, Gregory 2012). So, the transparency and accountability of the political system is a pre-requisite for a functioning representative democracy. As Florini (2007) puts it:

'The essence of representative democracy is informed consent, which requires that information about government practices and policies be disclosed. And in democracies, by definition, information about government belongs to the people, not the government.'
(Florini, 2007, p. 3)

However, the incumbent party have a vested interest in promoting their own policies over those of the opposition so as to keep themselves in government. This conflict of interest makes informed consent more difficult to achieve (Gaber, 2007).

There are of course arguments against transparency – Florini (2007) neatly pinpoints some of these by pitting arguments for 'transparency' and 'the right to know' against 'privacy' and 'national security'. In the case of trade, commercial sensitivities also play a part, as do wider considerations of data protection and concerns about privacy have grown in the era of big data and WikiLeaks. Florini (2007) comments that the arguments for greater transparency were dominant in the early 2000s, with the UK's Freedom of Information Act (2000) giving the right to access information from public sector organisations. In addition, the UK government has used increased threats to national security from terrorism as a reason to introduce legislation (the so-called 'Snooper's Charter' or Investigatory Powers Act 2016) requiring web and phone companies to store call and browsing histories for 12 months and give access to it to the police and security services (Travis, 2016). Florini (2007) also points out that there are practical limits to the desire for transparency – we elect representatives and expect them to govern on our behalf. We delegate duties to them since it is not practical for all citizens to know about or carry out policy making decisions. Florini's (2007) argument is that there needs to be a balance struck between openness and transparency and here is where an interesting question lies for food policy. Particular pertinent to this study is the formulation by the UK government of the Food Standards Agency (FSA) in 2000, as an open and transparent body, operating at arms-length from government, which aimed to be fully accountable to both civil society, industry and

government. Using the FSA as a case study, Hajer et al. (2009) describe what they term the process of 'deliberative governance'. This commitment to transparency made by the FSA means that all policy decisions are taken in public, and the FSA are committed to publishing many of their policymaking documents including advice to Ministers. Hajer et al. (2009) go on to describe how this was performed to achieve public accountability. A raft of literature examining this process of deliberative governance has appeared (Hendriks, 2009) which outlines its goals: to include members of the public as well as experts and officials in policymaking through a process in which these actors are informed about a policy and debate and discuss its pros and cons, so as to improve or decide on an outcome. In addition, this literature describes how well attempts at deliberative democracy have performed with some authors indicating that it can be successful under some contexts and conditions while others argue that such processes can foster conflict and are difficult to achieve in reality (Hendriks, 2009). Hajer et al. (2009) contrast deliberative governance with authoritative governance – and both Hajer et al. and Hendriks make the point that these processes deserve further investigation from public policy scholars.

3.2.2 Government Communication on health and food

The food scare stories in the UK of the late 1980s and the early 1990s (listeria, BSE, salmonella and genetically modified foods) both heightened the media's interest in food and health (Smith, 1991; Beardsworth, 1997) and set new challenges for scientists and government in communicating the science of food. These new challenges were being addressed in tandem with the changes in UK government communications as outlined above. Of these food safety issues the one that had the most far-reaching consequences was BSE, which caused a 'Media Quake' (Bauer et al. 2006) in 1996/97 with the sudden announcement by the British government of the link between bovine spongiform encephalopathy, BSE (a disease of cattle which the government had previously maintained, in the face of great media speculation, had no effect on human health) and new variant Creutzfeld-Jakob disease, nvCJD, a new disease of the human nervous system.

Journalists were outraged at what veteran food broadcaster and writer Derek Cooper called a 'conspiracy of silence' (Cooper, 2000, p.204). During the period before the link to nvCJD was announced, he wrote:

'In a democracy is it defensible that so much of the truth should be willfully withheld from public scrutiny or doctored to make it less politically explosive? At the time of writing the government is still sitting on a report prepared by Professor Richard Southwood of Oxford University's zoology department revealing the true extent of the danger to humans from eating meat infected by bovine spongiform encephalopathy. How long will we have to wait to be told what to do about this new and terrifying threat to our health?' (Cooper, 2000, p. 207)

Government, at least with hindsight, saw it more as a 'fiasco' than a conspiracy (Great Britain. Parliament, House of Lords, 2000) but this 'quake' caused a change in both the way food is represented by the UK news media and a debate over how government should communicate risk. Reilly argues (2003, p. 81) that science was at the centre of this issue.

'Had more been known about the BSE agent, clearer statements about diagnosis and treatment could have been made. But, what became clear quickly was that until scientific uncertainties about mad cow disease were cleared up, reassurances about the safety of British beef were not entirely convincing, and no firm resolution to the problem could be reached.' (Reilly, 2003, p. 81)

This argument refutes the widely-held media view that the BSE crisis was a 'conspiracy of silence' (Cooper 2000, p. 204) – blaming instead 'scientific uncertainties' or an inability of science and government to come up with answers. Seale (2002, p. 75) sees this as a tendency in the media – a desire to simplify complex scientific information to create '*unambiguous storylines*'. Others in the scientific community saw this rather as a failure of communication on the part of government or a misunderstanding of science and scientific processes (that science and its processes are inherently uncertain) by either the press or the public. To understand this better it is useful to examine the history of the long-standing debate on media coverage of scientific research.

The developing debate on media coverage of scientific research emanates largely from those concerned with the Public Understanding of Science – a movement in the UK that started with the publication of the so-called Bodmer Report in 1985 (Royal Society (Great Britain) & Bodmer, 1985). The Bodmer Report ('The Public Understanding of Science') was a report of a Royal Society ad hoc group, chaired by Sir Walter Bodmer, a prominent geneticist and at the time of writing Head of the Cancer and Immunogenetics Laboratory in the Weatherall Institute of Molecular Medicine at the University of Oxford. Although it is commonly documented that the Bodmer Report was commissioned in response to the threat of funding cuts for science, a fear among scientists that they were not valued by the public and a period of retreat into academia by UK scientists (Miller 2001; Sturgis and Allum 2004) this is refuted by Bodmer himself (Bodmer, 2010) who maintains that there was no evidence of public disaffection with science nor was it a primary aim of the report to illicit public support for science. The main thrust of the report, Bodmer says, was for scientists to learn how to communicate with the public and to consider it a duty to do so. In the report itself, which it should be noted was published before the first case of BSE in cattle in the UK in 1986 or the eggs and salmonella scare of 1988/9, Bodmer mentions diet at the very beginning of his report:

'Many personal decisions, for example about diet, vaccination, personal hygiene or safety at home and at work, would be helped by some understanding of the underlying science. Understanding includes not just the facts of science, but also the method and its limitations as well as an appreciation of the practical and social implications.' (Royal Society and Bodmer, 1985, p. 6)

The report had a wide influence leading to the setting up of COPUS (the Committee on the Public Understanding of Science) that awarded grants for research into PUS and promoted it through initiatives such as science writing competitions and National Science Week, as well as the founding of the journal 'Public Understanding of Science' and university courses on science communication.

The Public Understanding of Science movement continued through the late 1980s and 1990s to encourage scientists to communicate more effectively with the public. However, as discussed above, the BSE/CJD crisis of 1996 and onwards caused government and science to re-examine its relationship with the public. It spawned a huge body of literature on risk communication (Lofstedt and Frewer, 1998; Bennett and Calman, 1999; Bennett et al., 2010) some of which affected policy inside the Department of Health, as documented by Peter Bennett and colleagues (1999), then a principal analyst in the Department of Health who gave a guide to good practice including the Department of Health's 'Risk Communication Checklist' (Bennett et al., 1999). This checklist highlights how aware policymakers within government were of media agenda setting concepts such as news values and framing, see for example an extract on Media Triggers, at Figure 3.2.

Box 6: Media Triggers

A possible risk to public health is more likely to become a major story if the following are prominent or can readily be made to become so:

1. Questions of **blame**
2. Alleged **secrets and attempted "cover-ups"**
3. **"Human interest"** through identifiable heroes, villains, dupes, etc. (as well as victims)
4. Links with **existing high-profile issues or personalities**
5. **Conflict**
6. **Signal value:** the story as a portent of further ills (*"What next?"*)
7. **Many people exposed** to the risk, even if at low levels (*"It could be you!"*).
8. Strong **visual impact** (e.g. pictures of suffering)
9. Links to **sex and/or crime**

Figure 3.2 Extract from Risk Communication checklist, Department of Health (source: Bennett et al., 1999, p. 211)

In 2000, the House of Lords Select Committee on Science and Technology produced a report 'Science and Society' which saw a 'crisis of trust' between government, scientists and the public:

'Society's relationship with science is in a critical phase. Science today is exciting, and full of opportunities. Yet public confidence in scientific advice to Government has been rocked by BSE; and many people are uneasy about the rapid advance of areas such as biotechnology and IT - even though for everyday purposes they take science and technology for granted.' (Great Britain. Parliament, House of Lords, 2000, Summary 1.)

BSE was not the only food issue to influence the Science and Society report. Having condemned the BSE crisis as a 'fiasco' it discussed at length media reporting, particularly of the latest food scare: genetically modified foods. It identified a circulation war between The Express and the Daily Mail (Great Britain. Parliament, House of Lords, 2000, Chapter 7, 7.22), newspapers that, the report said, had both begun a campaign against GM foods. The Express's headline 'Mutant Crops Could Kill You' (Daily Express, 1999, 18th February) received

particular attention – the report used it as an example of the media’s inability to communicate uncertainty (Great Britain. Parliament, House of Lords, 2000, Chapter 1, 1.18). It also raised the issues of risk communication (criticising the media for perpetuating an assumption that absolute safety is achievable) and the responsibility of journalists to represent and deal fairly with scientists.

Although the Science and Society report recognised the work of the Public Understanding of Science movement, it also saw the public debates around BSE and GM as emblematic of a problem with PUS itself. The report characterized this as an inability of science and scientists to understand the public –

‘Despite all this activity and commitment, we have been told from several quarters that the expression "public understanding of science" may not be the most appropriate label. Sir Robert May called it a "rather backward-looking vision" (Q 28). It is argued that the words imply a condescending assumption that any difficulties in the relationship between science and society are due entirely to ignorance and misunderstanding on the part of the public; and that, with enough public-understanding activity, the public can be brought to greater knowledge, whereupon all will be well. This approach [27] is felt by many of our witnesses to be inadequate; the British Council went so far as to call it "outmoded and potentially disastrous" (p 140). (Great Britain. Parliament, House of Lords, 2000, Chapter 3, 3.9)

This criticism came to be known in the literature around science communication as the deficit model (Gross, 1994) and has parallels both in mass media and communication theory (e.g. the ‘hypodermic needle’ model of communication in which the audience are unquestioning and isolated receivers of information (Williams, 2003, p. 28)) and in food policy in the realm of public health nutrition (the ‘empty vessel’ model of nutrition education in which the public need only receive better information to achieve a better diet (Lang et al., 2009, p. 227)). Debates around all three theoretical models are on-going but there is now an acceptance among researchers in these fields that communication is not a linear model. The Science and Society report of 2000 advocated more ‘Public Engagement’ with science. Its recommendations were taken up by the then Government whose Chief Scientific Adviser, Sir David King said in 2003 ‘*The old approach to the public understanding of science is now well left behind. The new approach is public engagement with science and technology, which recognises the need for a dialogue in which both scientists and the public can contribute to the debate.*’ (quoted in Bodmer 2010, S158).

Pieczka and Escobar (2012) see a shift in thinking from a public engagement model to a ‘public dialogue’ model, in a third phase of science communications theory (Figure 3.3)

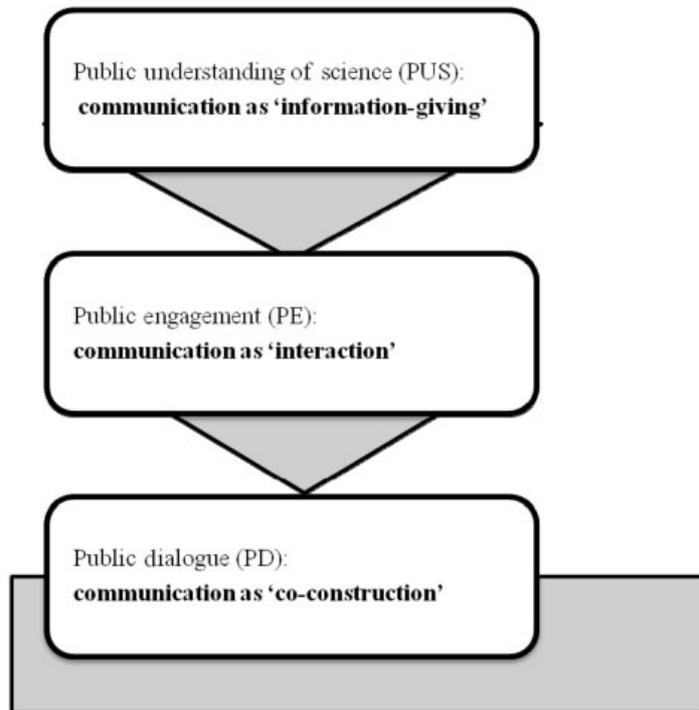


Figure 3.3 Communication modes within science and society models (source: Pieczka and Escobar 2012, p. 122)

It could be argued that advances in new media herald a new era of participatory media which includes public dialogue – for example interactive commentary for readers of online newspapers, embedded Twitter commentary on media reports or the contribution of science blogs. Media theories are evolving to incorporate this. McQuail (2010, p. 546) charts a move away from mass communication as the dominant model, seeing it as a *'transitional phase of industrial mass public communication'* which is giving way to a new more flexible and diffuse model. However, in 2012 Pieczka and Escobar see the current media as a barrier to Public Dialogue in science and society. They interviewed 28 science and technology Public Engagement professionals about public engagement with science. They found that while the shift from public understanding of science to public engagement had been well understood, this did not appear to be the case with Public Dialogue (PD):

'The majority of our interviewees showed real difficulty in understanding the PD model. Very few saw the relationship between scientists, citizens and policy-makers as a socio-political issue with implications for democratic governance. Instead, mistrust was mostly framed as public misunderstanding, aggravated by the media.' (Pieczka and Escobar, 2012, p. 122)

In contrast government has recently shown itself ready to embrace social media as a way of communicating directly with citizens as well as using the mass media as a conduit (see

<https://gdssocialmedia.blog.gov.uk/playbook/> and <https://www.gov.uk/government/publications/social-media-guidance-for-civil-servants/social-media-guidance-for-civil-servants>). Although cautious in their approach, civil servants are encouraged to use social and other digital media:

‘There are many benefits to using social media. It helps government to communicate with the public; to consult and engage; and to be more transparent and accountable. As civil servants, we are becoming increasingly digital in the way we operate. Alongside all the benefits that this brings we need to be aware of the responsibilities that come with it, and ensure we maintain the highest level of propriety.’ (Maude, 2014)

However, the extent to which this encouragement has, in practice, involved anything more than one-way communication (i.e. has embraced a PD model) seems to be limited (Graham et al., 2013). In addition, some have criticized the tardiness of the government in taking up the opportunities social media offers to communicate directly with the public (Jackson and Lilleker, 2011; Dunleavy, 2012).

3.3 Literature on nutrition policymaking at government level

3.3.1 Food policy context

This thesis is concerned with a policy developed, influenced and made by the Department of Health over an 18-year period (1993-2011). This policy was developed with evidence gathered by government advisory committees on nutrition, therefore the literature reviewed for this section deals with such committees and their role in the making of food policy in the UK. However, it is worth noting at this point the general political context in which these committees operated, as seen from a food policy perspective. A fundamental disjunct in food policy is the separation in the UK of those parts of government that make food production policy and those parts which control nutrition and consumption policies (Lang et al. 2001; Barling et al. 2002). In addition, key corporate players in the food production system have become important in the market economy and so have been included into government systems of food regulation (Flynn and Marsden, 1992; Panjwani and Caraher 2014) leading to concern about the marginalization of public health nutrition in public policy (Hastings, 2012; Rayner and Lang 2012). These authors argue that this has happened in the context of a dominant post-war neo-liberal productionist food policy designed to ensure food security and support the agricultural and food processing industries in both the UK and latterly the EU (Barling et al. 2002). Furthermore, this ‘productionist paradigm’ has failed to address pressing concerns about sustainability in the food chain and mounting public health issues such as obesity, cancer and cardiovascular disease (Rayner and Lang, 2012). Steps have been taken to address this lack of integration and lack of joined-up policy in the UK (van Zwanenberg and Millstone, 2005) but these are hampered by the bounded remits or persistent silo mentalities within departments (Barling et al. 2002) as well

as repeated reorganization in the wake of changing administrations (van Zwanenberg and Millstone, 2005; Jones et al. 2010).

Prior to the Blair government of 1997, responsibility for food and farming was held by MAFF (the Ministry of Agriculture Fisheries and Food) while responsibility for nutrition was held by the Department of Health. After 1997 and in the wake of crises such as BSE in farming and food safety, the new Labour government instituted the Food Standards Agency (in 2000), a non-ministerial departmental body, in an attempt to integrate food policies and put responsibility for them at arm's length from government interference (van Zwanenberg and Millstone 2005). The Food Standards Agency (FSA) had been conceived by Professor Philip James in a report for Tony Blair (James, 1997) and would take responsibility for nutrition away from the Department of Health and off-farm food production and food safety away from MAFF (van Zwanenberg and Millstone, 2005). MAFF was replaced by a new ministry, the Department of the Environment, Food and Rural Affairs (DEFRA). Lang et al. (2001) argue that this hasty policy response in the wake of crises was ill-conceived as it left central government without core nutrition advice and fragmented further the already disjointed machinery of food policy. After a general election in 2010, the new coalition (Conservative/Liberal Democrat) government broke up the FSA, taking responsibility for nutrition back into the Department of Health and responsibility for nutrition and labeling back to DEFRA, leaving the FSA with responsibility for food safety, hygiene and food law enforcement. The ongoing process of devolution within the UK as Scotland, Wales and Northern Ireland gain governing powers has further complicated responsibilities, as can be seen from Figure 3.4, which details responsibility for food-related policies in 2015.

FSA responsibilities	
Food safety and hygiene	FSA UK
Labelling (safety, allergy)	FSA UK
Food law enforcement	FSA UK and local authorities

Split responsibilities	England	Wales	Scotland	Northern Ireland
Nutrition and Nutrition labelling	Department of Health	Welsh Government	FSA in Scotland	FSA in Northern Ireland
Labelling (other)	Defra	FSA in Wales	FSA in Scotland	FSA in Northern Ireland

Responsibility of other departments	England	Wales	Scotland	Northern Ireland
Animal welfare	Defra	Welsh Government	Scottish Government	

Figure 3.4 Responsibilities for food-related policies (source: Food Standards Agency, 2015)

3.3.2 Government Advisory Committees on Nutrition

Since this thesis is concerned with government policy made following advice from scientific advisory committees on nutrition (COMA in 1998 and SACN in 2011), it was appropriate to consult the literature on such committees. Advisory committees on nutrition have been giving government advice since the Ministry of Health was established in 1918 (Smith 1998) and their contribution has been characterized by tensions between nutritional science and political pragmatism (Smith, 1997; Bufton and Berridge, 2000; Bufton, 2005; Packer, 2006). In addition, the policymaking process has been distinguished by uncertainty over scientific evidence and friction between government departments, advisory bodies and external actors (Smith, 1997; van Zwanenberg and Millstone, 2005). Reflecting on this, Smith (2000) notes that there is an idealistic view of the link between science and food policy in the literature (Bufton and Berridge, 2000), which argues a normative model would be a direct link between the two. In practice this is rarely the case:

‘...the links between science and food policy can rarely be straightforward. Policy making and implementation involve processes of negotiation between among others scientists, administrators, politicians, and industrial interests. The public play a role as voters and consumers, and the media is frequently an important influence.’ (Smith, 2000, p. 101)

Smith's comments are echoed by both Miller (1999) and Berridge and Stanton (1999), who point out similarities between this normative model and that around evidence-based policy: both often overlook the complexity of food and nutrition policy making. Berridge and Stanton (1999) characterize these simplistic linear models as essentially positivist in outlook and note that the Public Understanding of Science (PUS) movement is based on similar assumptions.

Literature in this area reveals two views on the role of experts in society. Typically, some (for example Schudson, 2006) see expertise as speaking 'truth to power' – or taking a stand by using their expertise – and clarifying debate while others (such as Schlesinger, 2009) warn that experts can create barriers between those with know-how and those without, noting that power can be seductive for those given privileged access to policymaking tables by virtue of their expertise. Experts can use evidence to muddy the policy waters. Schlesinger (2009) documents the institutionalisation of expertise as governments mobilise experts to win public policy arguments. Jasanoff (1997, p. 228) uses BSE to argue that UK expert reports are rarely backed up by records of arguments or dissent and concludes that they operate through a consensual approach. Furthermore, she argues that members of UK scientific advisory committees are chosen from the '*great and the good*'; expertise is a lesser consideration than status. Bufton (2001) disagrees, pointing out that his research into COMA reveals Jasanoff's generalisations do not always hold true – the COMA meetings on diet and cardiovascular disease he studied were marked by dissent and this was reflected in the findings they produced. In addition, Bufton (2001) found that COMA members were recruited precisely because of their expertise in the subject area.

A raft of the literature looks at conflict of interest on scientific advisory committees.

McCambridge et al. (2013) and Moodie et al. (2013) show how the alcohol and food industry have used evidence in submissions to government to influence policy. They argue the potential for corporations with vested interests to '*interfere with the evaluation of scientific evidence by policymakers*' (McCambridge et al., 2013, p. 2) should be restricted. In addition, there have been concerns about influence on members of scientific committees and their links with industry (Gornall, 2015). Governments have sought to minimise this by producing guidelines for expert committees (for example asking members to declare any interests see <https://www.gov.uk/government/publications/scientific-advisory-committees-code-of-practice> (Government Office for Science, 2011)). Rowe et al. (2013) from a North American perspective offer a set of principles for dealing with conflict of interest on advisory panels, including disclosure of relevant financial interests, eligibility criteria, and an inclusive approach. They point out that some bias is inherent and raise concerns that exclusion of scientists deemed to have financial conflicts risks a diminution of industry-academia interactions. (Rowe et al., 2013, p. 174). Timotijevic et al. (2013) outline the growing expectations put upon Scientific Advisory Bodies to democratise the scientific decision making process by inviting consultation from outside organisations and individuals as part of a stakeholder consultation process. They examine this through the lens of the Post Normal Science (PNS) framework (Funtowicz &

Ravetz, 1993) and point out the inherent contradiction of 'independent' scientific advice being formulated in consultation with industry bodies, NGOs and other stakeholders (Timotijevic, 2013, p. 85).

Buften, Smith & Berridge (2003) drawing on Weinberg's (1972) notion of 'trans-science' (scientific questions that can be asked but cannot be answered) argue that when there is no scientific consensus in nutrition policy making committees, opportunities arise for interested parties to make claims and contest policy in accordance with their politics: '*Interpretations of ambiguous data are often conditioned by broader, quasi-political interests*' (Buften et al. 2003, p. 488). Political interests are also shown to be at play in the setting up, recruitment and maintenance of a successful advisory committee (Smith 2007, p. 107; Packer, 2006). Smith (2007) outlines counter-briefing at committee meetings by opposing ministries and interdepartmental wrangling leading to one advisory committee gaining prominence over another (Smith 2000, pp. 107, 108, 110).

3.4 Literature on red meat

3.4.1 Cultural significance of red meat in the UK

This thesis is concerned with a policy relating to red and processed meat. Red meat in general and beef in particular has a cultural and political significance in the UK that cannot be overlooked when discussing the policy development and media discourse in this area.

Red meat is generally defined as meat which is red when raw and not white when cooked. The US Department of Agriculture defines red meat by the amount of myoglobin (a protein) held in the muscles of the animal. They define beef, pork, lamb and veal as red meat because they have more myoglobin than poultry or fish (USDA, 2017). In addition, they define all livestock as red meat. In the UK the Department of Health defines red meat as beef, lamb, pork, veal, venison and goat. They do not define turkey, duck, goose, game birds, chicken or rabbit as red meat (NHS Choices, n.d).

Many have written about the place of meat in the British diet as well as its symbolic power (Fiddes, 1994; Beardsworth and Keil, 1997; Lang et al., 2001; Rogers, 2003). This forms part of a wider literature on the sociology of food and eating in the UK. Fiddes (1994) outlines how research on the sociology and anthropology of our own eating habits (as opposed to earlier work looking at the eating habits of 'others') flourished in the 1960s, 1970s and 1980s. Citing Douglas, Levi Strauss and Barthes, Fiddes notes their realization that the study of food habits cannot be divorced from the study of their social context. This is echoed by Bourdieu (2013) who included research into food in his influential study of French culture, 'Distinction':

'It is clear that tastes in food cannot be considered in complete independence of the other dimensions of the relationship to the world, to others and to one's own body,

through which the practical philosophy of each class is enacted.' (Bourdieu, 2013, p. 191)

Many (Beardsworth and Keil, 1997; Lang et al., 2001; Mintz, 1996; Mintz and Schlettwein-Gsell, 2001; Rogers, 2003; Maurer, 1995) have looked at the significance of meat in the Western diet and investigated its symbolic place. Mintz (1996) argues that traditional agrarian societies around the world ate meals that had three elements – a core food item such as rice, a fringe item such as a sauce and a legume. Meat was rarely eaten (see also Mennell, 1996, p. 42). Lang et al. (2001) argue that Mintz's three elements; core, fringe, legume model has changed in contemporary Western societies to meat, plus a staple, plus two vegetables. Meat has become a central part of the meal as opposed to a treat or a flavouring.

Beardsworth and Keil (1997) point out that while Western diet and culinary tradition has developed around the central meat or fish element, there are actually relatively few meats commonly eaten in the Western diet (chicken, pig, cow, sheep) and speculate why these should have been given such symbolic potency that they underpin Western culinary and nutritional culture. They cite Twigg (1979) who locates red meat near the top of a food hierarchy of status and potency, arguing that the high blood content which gives it its colour also gives it power and appeal (Beardsworth and Keil, 1997, p. 210). In addition, they note that there is ambivalence in this hierarchy in that while red meat is desirable, there are some 'too potent' items at the top of the hierarchy considered taboo in Western culture, for example raw meat, meat of carnivorous animals, the meat of uncastrated male domesticated animals (see figure 3.5.)

<p><i>TOO STRONG:</i> (TABOO)</p> <p><i>DOMINANT CULTURE BOUNDARY</i></p>	<p>Uncastrated animals Carnivorous animals Raw meat</p>
<p><i>STRONG:</i> POWERFUL/BLOOD LESS POWERFUL/NON-BLOOD</p> <p><i>VEGETARIAN BOUNDARY</i></p>	<p>Red meat Chicken Fish</p>
<p><i>LESS STRONG:</i></p> <p><i>VEGAN BOUNDARY</i></p>	<p>Eggs Dairy products</p>
<p><i>TOO WEAK</i></p>	<p>Fruit Cereals Root vegetables Leaf vegetables</p>

Figure 3.5 The conventional hierarchy of food status and potency (source: Beardsworth and Keil, 1997, p.211, adapted from Twigg, 1979, p. 18)

Bourdieu (2013) makes a model of a 'food space' (see figure 3.6) which is based on his notions of cultural capital (based on for example knowledge and education) and economic capital (based on wealth). In his model those with both economic and cultural capital favour beef, which he sees as lighter and more refined than pork or charcuterie:

'In cultural consumption, the main opposition, by overall capital value, is between the practices designated by their rarity as distinguished, those of the fractions richest in both economic and cultural capital, and the practices socially defined as vulgar because they are both easy and common, those of the fractions poorest in both these respects. In the intermediate position are the practices which are perceived as pretentious, because of the manifest discrepancy between ambition and possibilities.' (Bourdieu, 2013, p. 171).

Bourdieu's model was certainly influential but has been criticized by some as too rigid a model of food choice and preferences, as choices and preferences can change over time. Bourdieu's work in this case, should rather be seen as a snapshot of French culture (Mennell, 1996). This is also a factor in Twigg's (1979) model; consider the current widespread acceptance in the UK of raw fish (sushi) as well as beef cooked rare or steak tartar, although this has been the subject

of some press controversy (Leach, 2012; Food Standards Agency, 2013).

Figure 9 The food space.

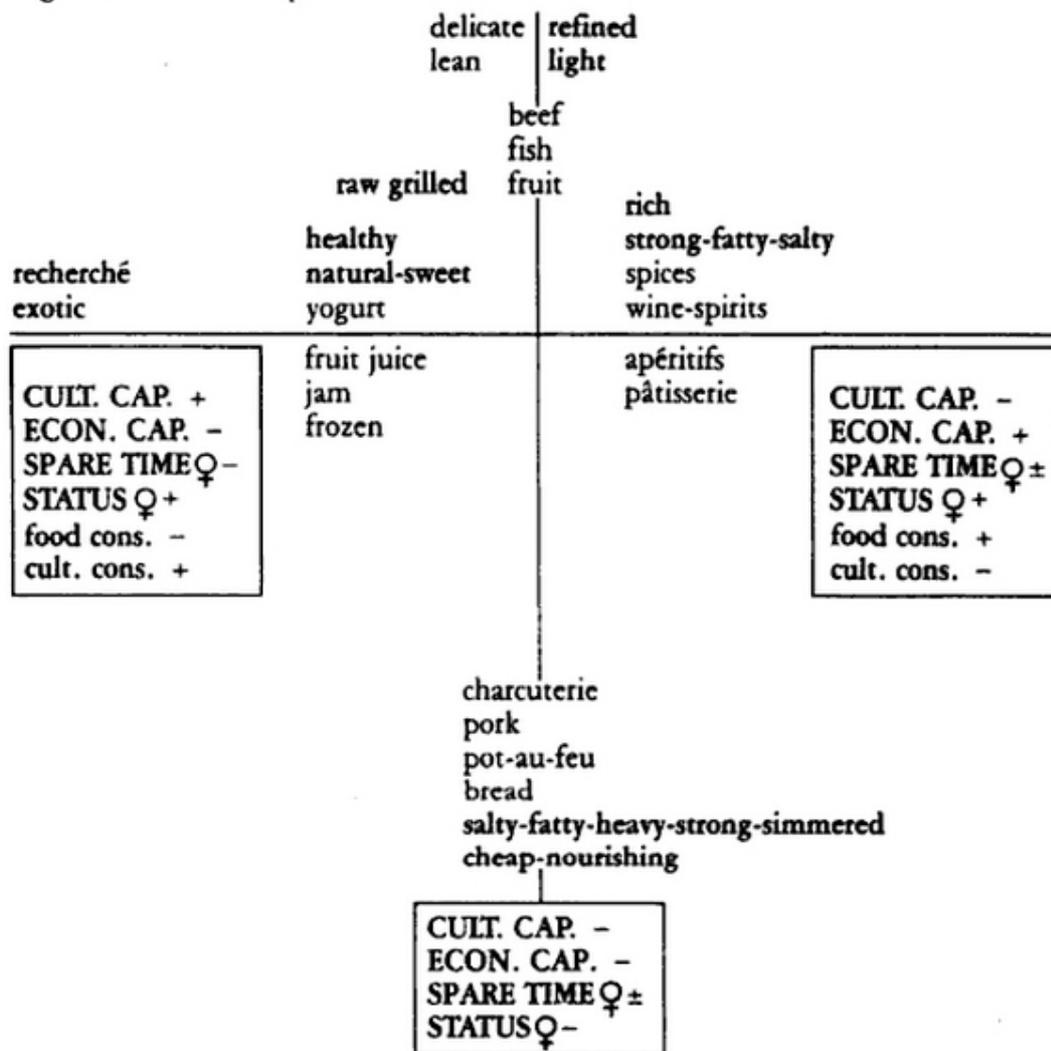


Figure 3.6 The Food Space (source: Bourdieu, 2013, p. 182)

Bourdieu understood that food choices were not only linked to price, but also to preferences of taste which could be influenced by culture or upbringing, and body image:

‘Taste in food also depends on the idea each class has of the body and of the effects of food on the body, that is, on its strength, health and beauty; and on the categories it uses to evaluate these effects, some of which may be important for one class and ignored by another, and which the different classes may rank in very different ways.’ (Bourdieu, 2013, p. 187)

Bourdieu also noted gendered differences in food tastes apparent in his data – arguing that biological differences were underlined and symbolically accentuated:

'Meat, the nourishing food par excellence, strong and strong-making, giving vigour, blood, and health, is the dish for the men, who take a second helping, whereas the women are satisfied with a small portion. It is not that they are stinting themselves; they really don't want what others might need, especially the men, the natural meat eaters, and they derive a sort of authority from what they do not see as a privation. Besides, they don't have a taste for men's food, which is reputed to be harmful when eaten to excess (for example, a surfeit of meat can 'turn the blood', over-excite, bring you out in spots etc.) and may even arouse a sort of disgust.' (Bourdieu, 2013, p. 190)

In common with Bourdieu and Fiddes, Beardsworth and Keil (1997) note the traditional association of red meat with men and masculine power. They note some sections of the literature that go further than this and suggest that meat plays a part in the patriarchal domination of men and the subordination of women as they are traditionally the domestic cooks required to prepare and cook the meat for the menfolk.

Fiddes (1994) goes on to address deeper cultural connections with meat – arguing that the high value traditionally placed on meat (and particularly red meat) by Western society reflects the power we have long had over animals and the environment in which we live. This, argues Fiddes, is changing, as environmental concerns suggest that our power over our habitat is damaging our chance of survival. In support of this Maurer (1995) documents increasing acceptance of vegetarianism in US society along with increasing claims made by vegetarian groups establishing a coherent set of arguments and motives in the social discourse. This is balanced by counterclaims from meat industry figures and their supporters, echoing earlier times when the meat industry championed meat as a healthy food: Fiddes (1994) notes that in the 19th century Liebig popularized the notion of meat as an essential material to replace muscle strength and the view that muscle was destroyed by exercise and could only be replaced by protein, a superior source of which was meat (see Fig. 3.7)



Figure 3.7 Advert for Liebig's Beef Wine prepared by S. Stephens, Chemist and Opticians, Milnsbridge (Source: Wellcome Library, 2006) Licensed under a [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/) license.

Meat also has cultural associations with national identity, particularly for England (Beardsworth and Keil, 1997; Rogers, 2003; Lang et al. 2009). Rogers traces the emergence of roast beef as a patriotic emblem for England back to at least the 17th century, quoting French traveller Henri Misson:

'It is common Practice, even among People of good Substance, to have a huge Piece of Roast-Beef on Sundays, of which they stuff till they can swallow no more, and eat the rest cold without any other Victuals, the other six Days of the Week.' (Rogers, 2003, pp. 13/14)

and notes the early (17th century) nickname of the King's Yeoman of the Guard as 'Beef-eaters' and the French nickname for the English of 'les rosbifs'. Rogers (2003) argues that this has penetrated through to modern times, with the European ban on British beef (1996) because of BSE provoking, he says, shame and anger. He writes that in the mid-1990s English farmers marched on the Houses of Parliament with pigs and cows, one even dressed as John Bull (Rogers, 2003, p.1), an English archetype dating from 18th century commonly depicted as a farmer, and often associated with roast beef, bull dogs and anti-French sentiment (see Figure 3.8).



Figure 3.8: Mr and Mrs Bull giving Buonaparte a Christmas Treat! (Source: Holland, W. (1803) Trustees of the British Museum. Creative Commons License: [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/)).

The EU ban on imports of British beef lasted until 1999, when 12 of the 14 other EU member states confirmed they had no barrier in place, however, France and Germany held out for longer, and the EU did not approve the lifting of the worldwide ban on British beef exports until 2006. This caused a lot of political controversy and negative publicity for the Labour government coming into power in 1997 and the previous Conservative government under Prime Minister John Major. Often portrayed (in contrast to his predecessor Margaret Thatcher) as rather weak or grey in character, Major promised in 1996 to fightback in Europe and get the beef ban lifted. When German Chancellor Helmut Kohl visited 10 Downing Street in 1996 he was fed British beef at a specially prepared lunch, to no avail. British politicians were accused of favouring European interests above British interests (Robertson, 1996) (see figure 3.9).



"I think he's WEAKENING!...."

Figure 3.9 'I think he's WEAKENING!...' Cartoon of Prime Minister John Major feeding German Chancellor Helmut Kohl British beef. (Source: Bright, 1996)

It is within this cultural context that meat in general and red meat in particular has become a hot policy issue. As Lang et al. (2009) point out, reducing meat production is often seen as politically explosive because of both its economic power as an industry and its symbolic power (Bourdieu, 2013; Rogers, 2003; Fiddes, 1994) as well as consumer objections to perceived restrictions on the right to choose one's diet (Lang et al., 2009). Popkin (1993) described the 'nutrition transition' model, in which developing countries, as they undergo economic, demographic and epidemiological shifts move from a traditional diet based on cereals and high fibre towards a more Westernised diet high in sugars fat and animal sourced foods (Popkin, 1993). Lang et al. (2009) argue that the dominant political ethos in developed Western countries is to support the meat industry, since meat consumption has become a proxy for economic, social and cultural progress.

3.4.2 Red meat: patterns of consumption

Beardsworth and Keil (1997) note that while meat has traditionally been central to the British diet, and beef is given a pre-eminence in terms of status and symbolic value, patterns of meat consumption are not static, fluctuating with supply (for example during wartime) and some notable food scares (BSE). Overall Beardsworth and Keil (1997) show a steady decline in meat consumption, the peak year for beef and veal consumption in the post-war period being 1957.

However more recent data show a leveling off of beef and veal consumption, a decline in sheep and lamb consumption, a slight increase in pork consumption and a large increase in chicken consumption (see Chart 3.1). European figures (see Chart 3.2) predict a continuation of these trends to 2022. Higgs (2000) relates this to the 'lipid hypothesis' which changed the image of red meat from a highly nutritious food associated with good health and prosperity to one associated with coronary heart disease. She pinpoints the turning point as the UK Government's Committee on Medical Aspects of Food and Nutrition (COMA) report on coronary heart disease of 1984, which identified meat as a major source of saturated fatty acids, associated with heart disease. Higgs goes on to argue that coronary heart disease risk is now acknowledged to be multifactorial but that red meat has retained a 'tarnished' image. Therefore, the meat industry has used breeding and feeding techniques and modern butchery to reduce the fat content of red meat, achieving significant results (Higgs and Pratt, 1998; Higgs, 2000). Maurer (1995) similarly, although from a US perspective, describes the beef and pork industries' marketing campaigns to combat an increasing number of vegetarians in the United States and the practice of cutting down on red meat as a common health choice. Maurer (1995) notes that this is more of an 'anti fat' attitude than 'anti meat' – meat is still a central component of the American diet, with consumers replacing red meat with poultry or seafood. The British meat industry engaged in a large marketing campaign (a 're-launch') during the BSE crisis and the EU British beef ban to restore public confidence in British beef (Baines and Harris, 2000), after a noticeable drop in sales during the BSE crisis in 1996 (see Chart 3.1).

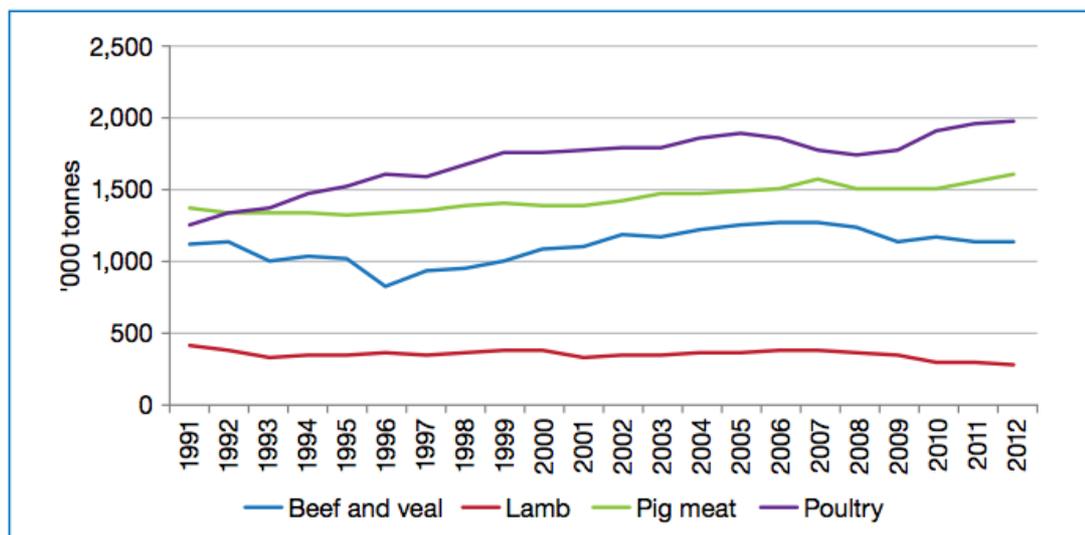


Chart 3.1 Trends in meat consumption, UK, 1991-2012 (source: AHDB, 2013)

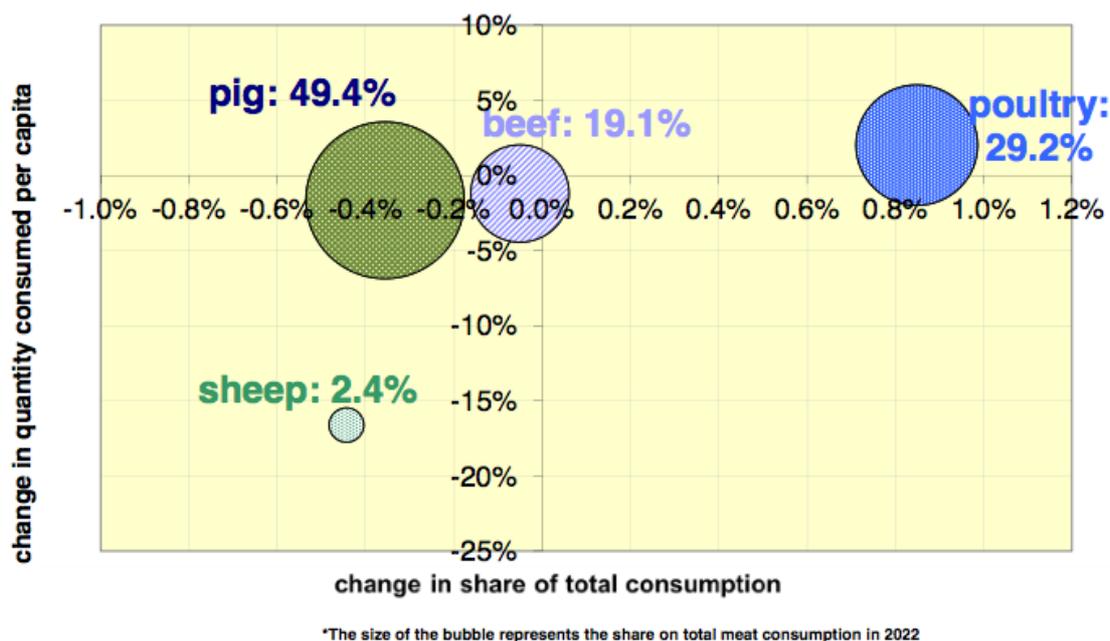


Chart 3.2 EU meat consumption in 2022 compared to 2011 (Source: Directorate-General for Agriculture and Rural Development, European Commission, 2012, p. 40)

3.4.3 Red meat's association with bowel cancer

As we have seen above, there is an interaction between the way red meat is perceived in health terms and its overall symbolic power and cultural significance. As well as an association between red meat and coronary heart disease due to the saturated fat content of red meat (Higgs, 2000), red meat has been implicated in another 'health scare', linking high levels of consumption with bowel cancer.

Armstrong and Doll (1975) noted the variation in cancer incidence between countries and attributed this to meat and fat consumption. They found a high correlation between meat consumption and cancer of the colon, breast, uterus, prostate and kidney. As Bingham (1999) notes, their findings could have been due to confounding factors but this led to further investigation of the association between bowel cancer and meat.

An association between red and processed meat and bowel cancer was first reported in prospective studies by Willett et al. in 1990 from an analysis of 150 colorectal cancer patients in the Nurses' Health Study (Bingham, 1999). Later studies supported this finding (WCRF, 1997; Norat, et al., 2002; Sandhu et al. 2001; Norat et al., 2005) however others have either found a weaker association (Wei et al., 2004), or no evidence of an association (Flood et al., 2003). In addition, studies have suggested that vegetarians do not have decreased risk of colon cancer compared to meat eaters (Key et al. 1998) and Bingham (1999) points out that relatively crude measurements of food intake (such as shortlists of food or food questionnaires), are more likely in earlier studies. The 1998 COMA report (Department of Health, 1998) classified the evidence as 'moderately consistent', a further government report (SACN 2010) concluded the association

was probable (SACN, 2010), so we see there is still a degree of uncertainty in the data. In addition, the underlying mechanisms of the association remain unclear, for example Department of Health recommendations note that in their report the Scientific Advisory Committee on Nutrition:

‘...could not identify the amount of red and processed meat that may increase the risk of bowel cancer because of inconsistencies in the data.’ (NHS Choices, no date).

Importantly, studies in the literature have looked at an association between both red and ‘processed meat’ and bowel cancer. However, there are discrepancies in the definitions of these foods. The UK Department of Health defines red meat as beef, lamb, pork, veal, venison and goat (NHS Choices, no date) ‘Processed meat’ according to the UK Department of Health refers to meat that has been preserved by smoking, salting or adding preservatives, for example sausages, bacon, ham and salami. The World Cancer Research Fund (WCRF, 2007) define red meat as beef, pork, lamb and goat from domesticated animals. For processed meat in addition to meat preserved by smoking, curing or salting they also include meat that has chemical preservatives added to it, including that contained in processed foods (WCRF, 2007, p. xix). As noted above, some studies have found a stronger association between processed meat and bowel cancer, leading to, for example, the World Cancer Research Fund recommendation to **avoid** processed meat in our diets, but a recommendation to **limit** the amount of red meat we eat (WCRF, 2007). In contrast the UK Department of Health’s SACN report made no distinction between red and processed meat, putting them together under the banner ‘red meat’ (SACN, 2010). So, there is some confusion still over the precise definitions of red and processed meat which has made it difficult to advance national and international dietary guidelines in this area.

3.5 Summary

This literature review presented in Chapters 2 and 3 has been systematic in approach and has analysed the literature in seven key areas related to the research problem.

Red meat has a particular cultural significance and symbolism in the UK; red meat in general and beef in particular had, during the 17th to mid-20th centuries occupied a central place in the British diet. However, while beef still holds some symbolic power due to its cultural position in recent years there has been a leveling off in consumption patterns due at least in part to health concerns. These health concerns have been characterized by scientific uncertainty and have developed in the context of an overall political climate that has tried to support an ailing British meat industry.

At the same time, there has been developing concern over the independence and role of government’s nutritional advisory committees within a body of literature that has recognized the complex nature of science communication and its relationship to policymaking. In addition, the

ability of government communication departments to impart government policy in an impartial way, as has been required by professional codes of conduct for civil servants, has been called into question.

Chapter 4: Methodology

4.1 Introduction

This chapter outlines the methodology and methods used for this study and the rationale for their inclusion. It explains the development of the research questions; summarises the potential methods considered for the study and outlines the reasons the methods chosen were felt to be appropriate for this research. The methods used are then itemised fully and finally the conceptual framework for the study is described.

4.2 Developing the Research Problem and Research Questions

The concerns over the way emerging nutritional research about cancer prevention is covered in the UK news media and the lack of available research into this coverage led to an early formulation of a research problem: 'Emerging research on food, nutrition and cancer prevention – how and why it is reported by the UK news media'.

Early formulations of the research questions concentrated on this interaction between scientific research and media coverage, focusing less on food policy and more on print media coverage of nutrition research and the effect this might have on newspaper readership. During the initial phase of the research (early literature review and preliminary case study) these research questions were refined and re-focused. In the second iteration they became less concerned with the effects of media on the lay audience and more interested in the potential of media coverage to impact food policy – this was reflected in the title of this thesis proposal (transfer paper): *'Emerging research on food, nutrition and cancer prevention – how and why it is reported by the UK news media and the implications for food policy.'* During this time, a number of key and interesting themes started to emerge from the literature:

1. The politics of information flow in the UK news media coverage of emerging nutritional research into diet's role in the prevention of cancer.
2. The framing of diet as a means of preventing disease, specifically cancer, in the UK news media
3. The ability of the UK news media to impact policy, particularly policies around diet and cancer prevention.

This first revision of the research questions can be seen in Table 4.1.

RESEARCH PROBLEM	RESEARCH QUESTIONS	RESEARCH OBJECTIVES	POSSIBLE METHODS
How nutritional science about the role of diet in the prevention of cancer is reported in the UK news media and the implications for food policy.	Which research is “picked up” by the UK news media?	Analyse media reporting to assess whether peer reviewed research is covered by the press.	Large-scale newspaper content analysis of diet and cancer reporting levels 2006-2012
	How is the research that is reported “framed”?	Analyse media reports to find out how they are “framed” within themselves, then assess what is the “food context” in which they are reported. How does this compare across social class and different media types	Case studies Analyse social media response to online reports (comment pages) to find out how they are viewed.
	What are the processes by which diet and cancer prevention research is reported by the popular UK national news media?	Analyse the processes of newsgathering.	Analysis of news databases (Nexis) and online sources (online journals, press releases, news sources) Interviews with journalists, cancer charities and academics
	Who are the key players influencing the research that appears in the popular UK national news media?	Map the key players influencing media reporting of academic research into diet and cancer prevention.	Content analysis of news reports. Interviews with key players: funding bodies, cancer charities, academics, journalists, editors proprietors, advertisers.
	How does media coverage facilitate or impede public health food policy?	Analyse media reporting and map against policy change. Interviews with key actors: policy makers, journalists,	Use policy analysis to identify potential window for policy change.

Table 4.1 Early Research Questions, revision 1 (source: author)

At the beginning of the second year of study, further work on the preliminary and exploratory case study (‘Mediating the spaces of diet and health: A critical analysis of reporting on nutrition and colorectal cancer in the UK.’ (Wells, 2016)) was undertaken. This examined UK print media coverage of a BMJ paper on dietary fibre and colorectal cancer by analyzing the academic

paper itself, the press release and the associated coverage including reader contributions from online message boards. This examination of media coverage of nutrition research into diet and cancer drew the researcher's attention away from general nutrition research and towards specific government policy on diet's role in cancer prevention. At this time, interest in the existing literature on interaction between food and nutrition policy and media coverage led to the decision to focus the study on a specific government policy on diet and cancer and examine the interaction between this policy and its media coverage. Bryman (2012) outlines a range of sources for possible research questions, including the identification of a gap between different versions of reality, or the counter-intuitive '*for example when common sense seems to fly in the face of social scientific truths*' (p.86). Examination of government policy on diet and cancer led to the Committee on Medical Aspects of Food and Nutrition Policy (COMA) report on Diet and Cancer of 1998 (Department of Health, 1998) which formed the first policy recommendations on diet and cancer by the UK government. Investigation of the media coverage of this government report and its recommendations revealed a striking mismatch between government policy and media coverage, which led to the final formulation of the research problem. The media coverage focused almost entirely on the recommendations about red and processed meat consumption and emphasized tensions in the policymaking process. Similar shock headlines accompanied a second phase of policymaking in this area, with the publication of the government's Scientific Advisory Committee on Nutrition (SACN) Iron and Health Report (SACN, 2010). The report was a wide-ranging review of the evidence on iron and health but the press coverage again focused almost entirely on the recommendations regarding red and processed meat and cancer, and were sensational in nature. This led to the final iteration of the research problem:

'What explains the mismatch between apparently stable government nutrition policy on red and processed meat consumption and cancer prevention over more than a decade, and the repeating cycle of shock headlines in the UK press on this subject?'

In common with Bryman (2012), Lewis (2003) gives pre-requisites for good research questions. They should be 1) clear and unambiguous 2) focussed but not too narrow 3) able to be researched through data collection 4) relevant and useful 5) informed by existing research and theory, but designed to fill a research gap 6) feasible 7) of interest to the researcher. Despite some misgivings about the narrowness of the government policy on red and processed meat that had been chosen, the researcher felt that the lack of existing research on this policy, the possibilities for charting the development of a specific policy over a long period of time and the possibilities afforded by the subject area of three interesting data sources (newspaper articles, policy documents, interview transcripts) which could illuminate a long-running theoretical conundrum in both the media and policy agenda setting literature as to the effect of media coverage on public policy, made together a convincing argument for formulating the research questions around this policy and media coverage of it.

The final research questions were:

- RQ1: How has the UK government's policy on RPM consumption developed?
- RQ2: How did UK newspapers report this issue?
- RQ3: What role did UK newspapers play in the development of the policy?

4.3 Conceptual Framework

This section sets out the conceptual framework for this study. Ravitch and Riggan (2017) in common with Saldana and Omasta (2018) identify the conceptual framework as an important element underpinning research design. However, both caution that conceptual frameworks are poorly defined in the literature, often being cited as interchangeable with theoretical frameworks or as a visual representation of the organisation of a study. This study takes Saldana and Omasta's (2018, Chapter 7, p. 184) view that the conceptual framework is:

'a narrative that consists primarily of the epistemological, theoretical and methodological premises about a project. It explains to readers the researcher's assumptions about how knowledge is constructed, what major theories drive the study and why a particular qualitative genre for the research design was selected.'

Below are set out the epistemological, theoretical and methodological premises for this study, along with a diagrammatic representation of the research design (see figure 4.1).

4.3.1 Epistemological Premises

It was one of the aims and objectives of the research to explore this topic in both breadth and depth, without a priori development of hypotheses but using an inductive approach, in which the researcher remains open to emerging themes and concepts, albeit informed by existing literature and theories. In this way, the research questions were designed to understand as well as observe the data gathered. In addition, the research aimed to explore the experiences of the actors involved, the interaction between them and the language they used. Therefore, a qualitative approach was adopted. Qualitative research has been described as '*a form of social inquiry that focuses on the way people interpret and make sense of their experiences and the world in which they live*' (Holloway and Wheeler 2002, p. 3). Using an essentially interpretative approach, which tries to understand and interpret people's experiences of the world, assuming they are essentially complex, constructed and unpredictable rather than, as in the positivist tradition, observable as stable realities (Green and Thorogood, 2014), the research questions were designed to uncover the motivations, goals and intentions of the actors involved through looking both at documentary data including press coverage and policy documents and interview data. They are designed to show how the media coverage and the policy in this case were constructed and how they interacted – as well as exploring the motivations, goals and intentions of the actors involved.

While many researchers have maintained that quantitative and qualitative research methods are inherently incompatible (Denzin and Lincoln, 2000; Guba, 1990; Johnson and Onwuegbuzie,

2004), some writers on social research methods warn against the traditionally conflicting quantitative and qualitative paradigms (Bryman, 2012, Spicer, 2012, Holloway and Wheeler 2002). These latter authors suggest that there is more common ground between quantitative and qualitative methods than is traditionally admitted. They find a simplistic polarization between the two approaches unhelpful suggesting it can restrict rather than extend knowledge. They also point out that both positivists and interpretivists can become entrenched in their views making self-criticism difficult. For the purposes of this thesis the author has tried to be driven by the research questions in the research design and use these in an iterative reflexive way. While acknowledging the role her own skills, experience and background have played in the development of the research questions, a qualitative, or interpretive approach is the most appropriate way to answer these questions since they seek to understand a single case in depth and breadth. This is not to deny the place of quantitative methods in research, but to acknowledge that some research questions require a qualitative approach. In this case, the research acknowledges the subjectivity of participants, focuses on context, interaction and language and seeks to explore and represent the participants' perspectives within the context of their lives. The qualitative approach is further justified by some of the common characteristics of qualitative research as outlined by Holloway and Wheeler (2002, pp. 10-14): the primacy of data; the importance of contextualizing the data both within the participants' experience and more broadly within the economic, political and cultural framework; immersion in the setting of the research; a non-judgmental stance and allowing participants to give their own perspective or explanation; use of 'thick description' (Geertz, 1973) describing, analyzing and contextualizing in deep detail.

Holloway and Wheeler (2002) describe how some early attempts at qualitative research in the 1920s were unsystematic and 'journalistic' – and have since been criticized for a lack of rigour in their methods and a lack of transparency (and therefore replicability) in their reporting. As qualitative methods have become more popular and integrated into diverse fields including health research (see for example Greenhalgh and Hurwitz, 1998) and perhaps as an attempt to counteract their perceived 'second-best' status, more rigorous methods have been encouraged and adopted (Holloway and Wheeler, 2002). Following this, attempts have been made to be systematic, rigorous, thorough and detailed in the approach to methodology and reporting of this research. The researcher has tried to remain open-minded whilst being reflexive (see Chapter 1). In short, as Holloway and Wheeler (2002) put it:

'Qualitative researchers claim that the experiences of people are essentially context-bound, that is, they cannot be free from time and location or the mind of the human actor. Researchers must understand the socially constructed nature of the world and realise that values and interests become part of the research process. Complete objectivity and neutrality are impossible to achieve; the values of researchers and participants can become an integral part of the research' (Holloway and Wheeler, 2002,

4.3.2 Theoretical Premises

As already outlined in some depth in the literature review (Chapter 2, sections 2.3.1-2.3.4) the theoretical underpinnings of this study are largely drawn from the literature on agenda setting; both media agenda setting and political agenda setting. These were identified as important premises for this study because they represent the main body of literature in which policy making and media coverage are linked (McCombs, 2004; Cairney, 2012; Walgrave and Van Aelst, 2016).

Agenda setting theories assume that there are many potential priorities competing for political attention and not enough time to attend to them all (Cairney 2012). Research (Jones and Baumgartner, 2005; Walgrave and Van Aelst 2016) has shown that the scarcity of political attention makes political attention to a topic or issue an important precondition for policy change. What agenda setting (and associated e.g. agenda building) theories seek to explore is the processes, actors, contexts and drivers of political attention – what puts issues or concerns on the political agenda? What or who moves them up, down or off the agenda? A large and diverse literature exists examining this area, a substantial raft of which is devoted to media agenda setting – the ability of the media to set the political agenda.

Ravitch and Riggan (2017) argue that conceptual frameworks and their elements should not be seen as static. Citing Maxwell (2012) they contend that these frameworks will change and develop during the course of the research because the inductive research process itself may lead the researcher to become aware of or question parts of the framework they started with. This was indeed the case with the current study. By the end of this study, as the researcher was triangulating the findings and writing the final chapters it became apparent that the previously identified dominant theoretical underpinnings using agenda setting and associated theories were insufficient on their own to explain the findings of the study. Further exploration of the literature revealed research in the realm of both journalism studies and policy making had drawn similar conclusions (Singer, 2016; Van Aelst et al., 2014) and pointed to the novel theories of mediatization, which had already been identified as part of preliminary case study work and literature review as potentially important for the study. Other authors encourage investigation into the potential for these mediatization theories to be integrated with agenda setting theories (Van Aelst et al., 2014) to formulate possible robust new theories, for example mediatized food policy. As outlined in Chapter 9 this has been attempted to, as Singer (2016, p. 1) puts it, find a “*more richly theorized concept of relationship effects suitable to an immersive, iterative, and interconnected environment of news producers and products.*”

4.3.3 Methodological Premises

To answer the research questions the research was divided into three phases, each research

question had an associated method:

RQ1: How has the UK government’s policy on RPM consumption developed?

Method: Policy analysis of government recommendations on red and processed meat consumption 1993-2011 using Walt and Gilson’s Health Policy Triangle (1994).

RQ2: How do UK newspapers report this issue?

Method: Content Analysis of UK newspaper reporting of consumption of red and processed meat and its relationship to the development of bowel cancer, 1993-2011

RQ3: What role did UK newspapers play in the shaping of the policy?

Method: Semi-structured interviews with key actors identified from stages 1 and 2, including interviewees from three key groups: stakeholders, media professionals and policy makers. These interviews will explore in detail the findings from the first two stages, investigating the motivations, feelings and views of the interviewees.

The results of the research are presented in 4 findings chapters. Chapters 5 and Chapter 6 address the first research question, Chapter 5 presents the results of the analysis of policy documents from the first embedded unit of analysis (1993-1998), Chapter 6 presents the results of the analysis of policy documents from the second embedded unit of analysis (2001-2011). Chapter 7 addresses the second research question, and presents the findings of a content analysis of UK national newspapers’ coverage of this issue. Chapter 8 addresses the third research question and presents the findings of the analysis of 27 semi-structured interviews with policy makers, journalists and stakeholders involved in this policy and media coverage of it.

RESEARCH PROBLEM	RESEARCH QUESTIONS	RESEARCH OBJECTIVES	METHODS
What explains the mismatch between apparently stable government guidance in the area of cancer risk and red and processed meat consumption and the apparently contradictory coverage in much of	1: How has the UK government’s policy on RPM consumption developed?	To explore the context, content, process and actors involved in the policy development.	Walt and Gilson’s Health Policy Triangle (1994)

the UK print media?			
	2. How do UK newspapers report this issue?	Assess the levels of reporting. Who are the sources quoted? Analyse media reports to find out how they are “framed”	Newspaper content analysis of diet and cancer reporting levels 1993-2012
	3. What role did UK newspapers play in the development of the policy?	Understand the motivation, actions and experiences of the actors involved.	Semi-structured interviews with media professionals, policymakers, stakeholders (from academia, NGOs, industry)

Table 4.2 Research Questions (final version) (source: author)

The methods outlined in column 4 in table 4.2 were chosen as they were identified as suitable methods considering the available data, the potential contributors to the research, the research questions, the qualitative nature of the research and the theoretical framework chosen, as well as the resources and time available for the study. Early in the study an ethnography or a participant observation was considered but this idea was discarded because of the focus of the research questions. While an interesting avenue for study, it would not have been likely that an ethnographic study in a newsroom could capture media coverage of the government’s policy on red and processed meat and cancer prevention as this is not a topic covered by newspapers on a daily basis and is dependent on external events which are unpredictable e.g. a further policy announcement, which in any case was not forecast. A study of a newsroom of a particular media outlet would not have given a rich picture of all the actors involved in both policy- and news- making nor would it provide insight into how this has changed over the period of time during which the policy has developed.

Discourse Analysis or Critical Discourse Analysis were considered as alternatives to Content Analysis but the number of articles in the dataset; the research aim of uncovering reporting trends with descriptive statistics as well as meaning through qualitative analysis of the print media texts meant that Content Analysis was chosen over these other forms of text analysis. The decision to use semi-structured interviews in order to gather the lived experience of actors involved in the nutrition policy making process and the media coverage of it was an obvious

choice of method as alternatives such as surveys did not present themselves as providing the rich recollections and perspectives of those involved, while unstructured interviews or oral histories seemed to offer too wide ranging data to capture the focus of the research questions on the specific policy recommendations around red and processed meat and bowel cancer.

The research design was further developed with a final stage of analysis, during which the results from each phase are compared against each other using a framework technique, a method of triangulating case study data from diverse sources (Cox and Hassard, 2010; Green and Thorogood, 2014). The objective of this was to triangulate the data, aid the discussion process and inform the development of a proposed new theory and conclusions for food policy and journalism. The overall research process framework is mapped at figure 4.1.

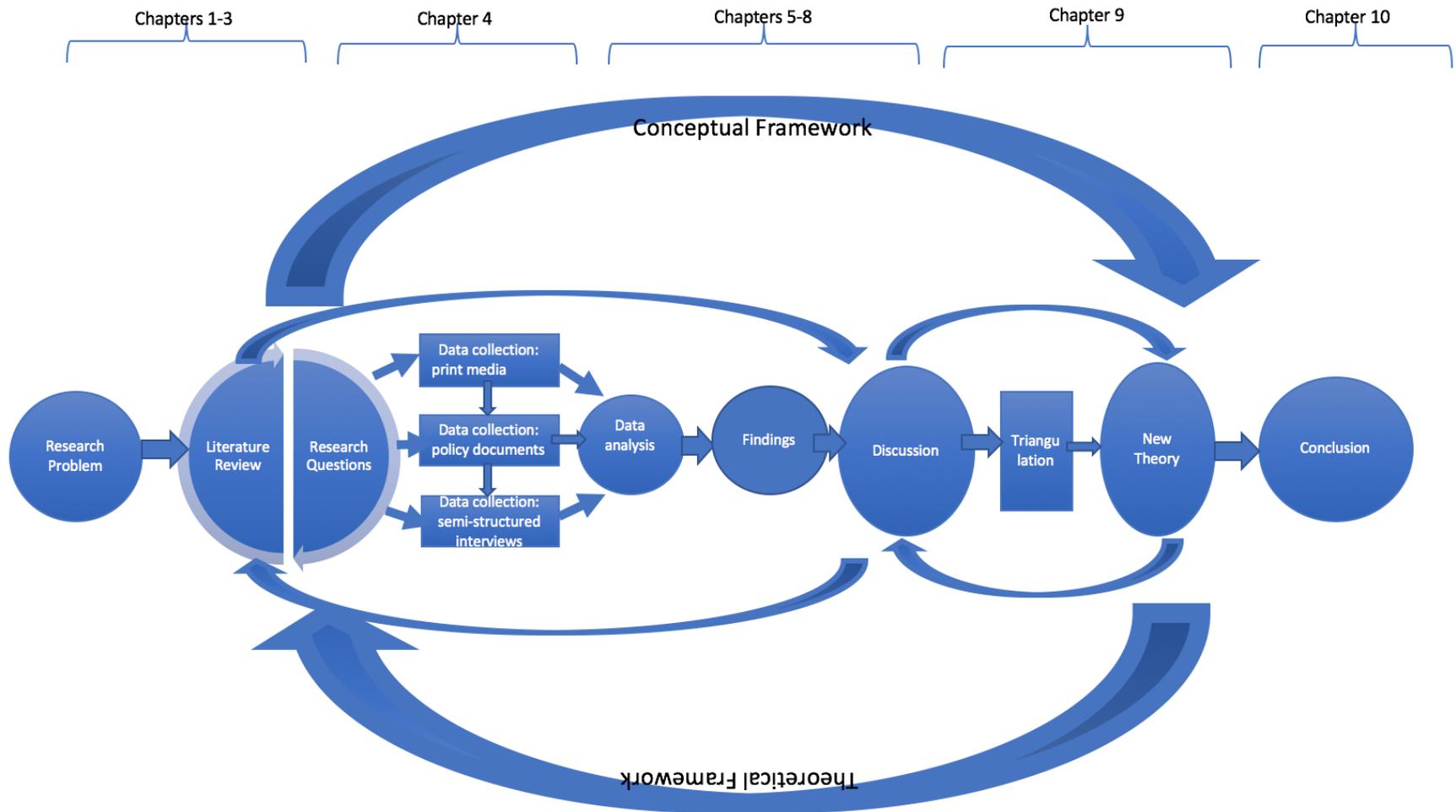


Figure 4.1 Research process framework (source: author)

4.4 Case Study Approach

Yin (2009, p. 3) says that a case study approach is the preferred method when:

'(a) "how" or "why" questions are being posed (b) the investigator has little control over events, and (c) the focus is on contemporary phenomenon within a real-life context.'

The research problem and research questions for the current thesis fulfil these three criteria and this was a reason for the case study approach being chosen. The depth of analysis possible from this qualitative case study approach allows a range of methodologies to be employed and data to be examined from several perspectives. Furthermore, Yin (2009) argues that the case study is more than an approach, it is a methodology in its own right. He defines case studies in a two-point classification:

'1. A case study is an empirical inquiry that

- Investigates a contemporary phenomenon in depth and within its real-life context, especially when
- The boundaries between phenomenon and context are not clearly evident.'

'2. The case study inquiry

- copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result
- relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result
- benefits from the prior development of theoretical propositions to guide data collection and analysis.' (Yin, 2009, p. 18)

The case chosen for this thesis investigates a contemporary phenomenon (media coverage of government dietary guidelines) in depth and in its real-life context. The boundaries between the phenomenon and context are not clearly evident without further investigation. Therefore, the research design is relying on multiple sources of evidence (content analysis, policy analysis, interviews) and triangulation of data and has benefitted from prior development of theoretical propositions to guide the data collection (see literature review, Chapter 2).

In addition, this is a kind of longitudinal case study, following the policy development and media coverage of it over a period of almost twenty years (1993-2011). It is a retrospective case study, which, according to Street and Ward (2010) have three common factors. Firstly, the data are collected after events have occurred, secondly, the researcher has access to both archive material and first-person accounts and thirdly the final outcomes of the processes under research are already known when the research takes place. Street and Ward (2010) argue that this design is particularly appropriate when examining the time line of events in a recurring process in a single organization, such as the interaction between the UK print media and the UK government Department of Health and the recurring recommendations on red and processed

meat consumption (1997-98 and 2010-2011). They further argue that this approach is appropriate for investigating experiential effects, such as how individuals within an organization change routines and practices over time. An interesting feature of the case under current study is the change of government during the period under study and the changes in governance and constitution of the scientific advisory committee being studied (it changed from COMA, the Committee on Medical Aspects of Nutrition Policy in 1998 to SACN, the Scientific Advisory Committee on Nutrition in 2011). There are obvious limitations to this kind of retrospective research, for example research participants may have imperfect recall of historical events or the researcher may experience a 'spoiler effect' (Street and Ward, 2010) in which prior knowledge of the outcome of the process under study may skew results. The researcher was aware of the need to demonstrate rigour and thoroughness in research methods because of these limitations. However, the advantages of this kind of retrospective case study design are, according to Street and Ward, (2010) that it boosts data triangulation because first-person accounts can add rich context and understanding to historical documents, at the same time, participant accounts can be checked against historical documents. In addition, because of the long period of time between events in this study and the research questions for the study, the retrospective case study is the most appropriate.

Yin (2009, p. 46) describes four basic types of design for case studies. The one chosen for this research is the single case study with multiple embedded units of analysis (see figure 4.2). This design involves a single case study within which are multiple units of analysis – in this case the multiple units of analysis are the two recommendations published by the UK government Department of Health's nutrition advisory committee on red and processed meat consumption (Department of Health, 1998; SACN, 2010). Yin (2009) cautions that given choices and resources, multiple case study design will normally be preferable to single-case study design. However, one of the rationales given for single-case study design is the longitudinal case, studying the same single case at two or more points of time. This, says Yin (2009, p. 52) can add '*significant opportunities for extensive analysis, enhancing the insights into the single case.*'

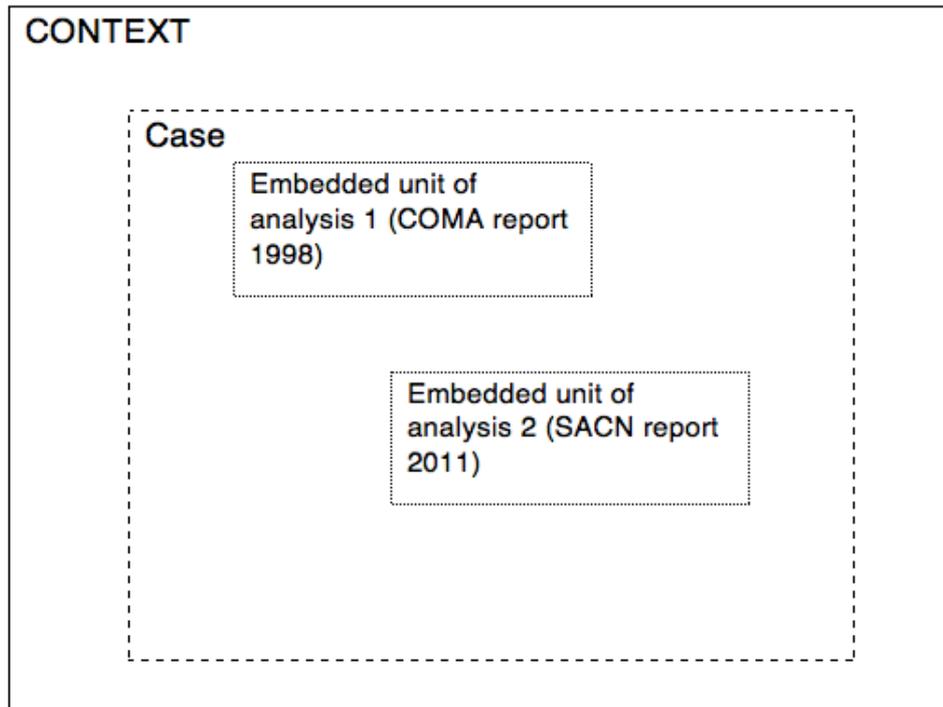


Figure 4.2 Single-case (embedded) case study design (source: Yin 2009, p. 46)

Each of these two embedded units of analysis was subjected to the same research processes and methodologies. McGinn (2010) and Yin (2009) note the benefits of using an extensive and varied range of data sources to encourage a depth of understanding in a clearly bounded, narrowly focused case. McGinn (2010) argues that the triangulation of this data can contribute to the credibility of the findings and their potential applicability in other contexts. Yin (2009) argues that multiple sources of evidence should be used, for example documentary evidence, archives, interviews and that this is a major strength of the case study method. In the following sections the three sources of data that made up the research design are set out: Policy Analysis, Media Content Analysis, Semi-Structured Interviews. The first two phases of the research, policy analysis and media content analysis were used to identify the participants of the third phase of the research, the semi-structured interviews.

4.5 Policy Analysis

The two embedded units of analysis within the case study were subjected to policy analysis. Buse, Mays and Walt (2005) note that there are two types of policy analysis: analysis *of* policy and analysis *for* policy in which analysis of policy tends to be retrospective and descriptive while analysis for policy tends to be prospective, for example taking place during the formulation of a policy. The current study, being retrospective in nature, used analysis *of* policy, using the Walt and Gilson (1994) Health Policy Triangle.

4.5.1 Health Policy Triangle

Walt and Gilson's (1994) Health Policy Triangle was developed in the early 1990s as a simple

analytical model to analyze health reform in developing countries. Walt and Gilson argued that too much health policy analysis focused on content and neglected the actors, the processes and the context involved. Their triangular model remedied this and encouraged researchers to look beyond a linear policy process while also providing a framework for several aspects of policy development (see figure 4.3)

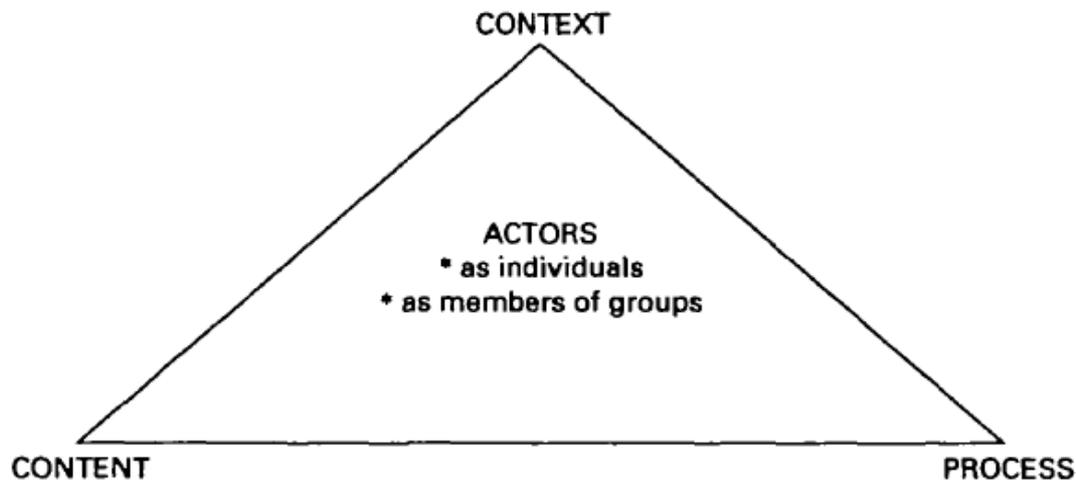


Figure 4.3 Health Policy Triangle (source: Walt and Gilson, 1994, p. 354)

In addition, both Walt and Gilson (1994) and Buse et al. (2005) point out that while the model is simple it represents very complex inter-relationships and the four elements (context, content, process, actors) should not be considered individually since they are all intertwined. Despite being developed for health policy analysis in developing countries, the Health Policy Triangle has been used extensively in health research (for examples see Walt et al., 2008) as well as food policy work (for example Caraher et al., 2013).

For the policy documents, data was collected separately for each embedded unit of analysis. The methodology for this is presented separately below, first for the first embedded unit of analysis concerning the COMA report on Nutritional Aspects of the Development of Cancer, and secondly for the second embedded unit of analysis, concerning the SACN Iron and Health report.

4.5.2 Policy Analysis: COMA Nutritional Aspects of the Development of Cancer report (Department of Health, 1998)

This section sets out the methods for the collection and analysis of the policy data relating to the first embedded unit of analysis.

4.5.2.1 Data collection: COMA Nutritional Aspects of the Development of Cancer report (Department of Health, 1998)

Efforts were made to retrieve core documents from official sources relating to the Committee on

Medical Aspects of Nutrition Policy (COMA) report on Nutritional Aspects of the Development of Cancer (Department of Health, 1998). While the Committee on Medical Aspects of Nutrition Policy (COMA) report (Department of Health, 1998) was readily available, the Department of Health website for this time period had been archived and was no longer available online. Neither were minutes of COMA meetings publicly available in the British Library or elsewhere. The National Archive was contacted by email to request to see the official COMA documents for this period (see Appendix 1 for this email exchange). The response received informed that the transfer of records from government departments to The National Archives is governed by the 30-year rule (Public Records Act, 1958, s.3.4) and as a result records from the 1990s remained with the responsible department, in this case the Department of Health. The National Archives suggested contacting the Departmental Record Officer for the Department of Health.

The Department of Health Departmental Record Officer was contacted by email. The request was forwarded to the Department of Health Records and Information Services Officer in Burnley, Lancashire. She emailed me three spreadsheet files containing details of files containing COMA documents from the 1990s. An extract from one of these spreadsheets can be found below (table 4.3). The data contained in these spreadsheets is brief and does not say which documents are held in which files. It was not obvious in which files the minutes of the COMA meetings were held. (see Table 4.3 for an extract)

██████ ██	██████ ██████	███ ███	██████	██████ ██████	███ ██████	████████████████████
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Table 4.3: Extract from Department of Health Records Office spreadsheet, detailing holdings relating to COMA. (source: Department of Health Records Office, personal email)

A visit to Burnley to look at these files was arranged with the Department of Health Records Officer in January 2014 (see figures 4.4 and 4.5). The files were read through and copies of the most relevant documents were taken. The files were rich in data but were neither comprehensive, sequential nor chronological. Some documents were included more than once in separate files. Some documents in a sequence (e.g. of meeting minutes) were missing. As noted by both Yin (2009) and Stan (2010), archival records are an important source of data for case study research since they can provide information on the activities and goals of organizations as well as providing an insight into the concerns and aspirations of individuals. However, they can be subject to limitations. While the authenticity of the Department of Health archives in this case was not in question, it was obvious that the documents in the files had not been systematically collected, nor did they contain all the documents in question and they had not been systematically catalogued. This made searching this archive difficult. In addition, Stan (2010, p. 30) notes that it is important to remember that *'the reality as reflected in the archived records might differ from the reality as experienced by the people who lived it'*. However, both Stan (2010) and Yin (2009) note that archival records, used carefully, in context and in conjunction with other sources of data can shed light on the past and its relationship with the present.

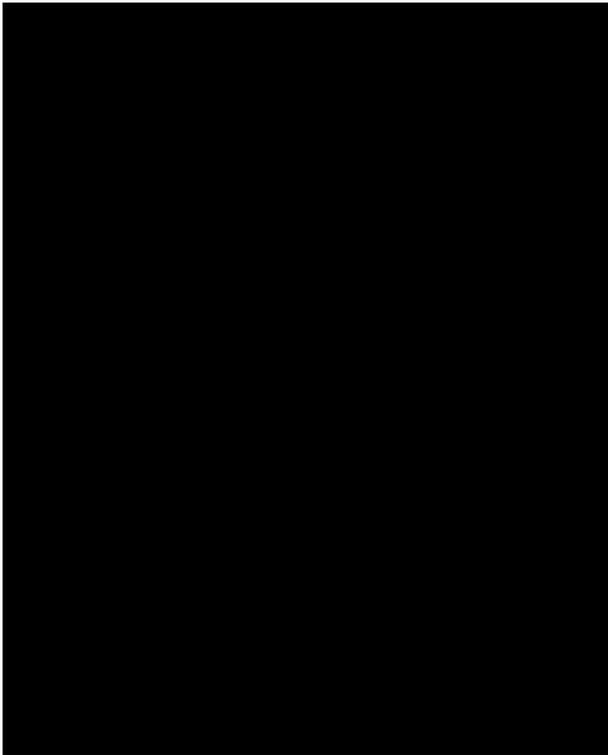


Figure 4.4 Trolley of COMA files at the Department of Health Records centre (source: author).

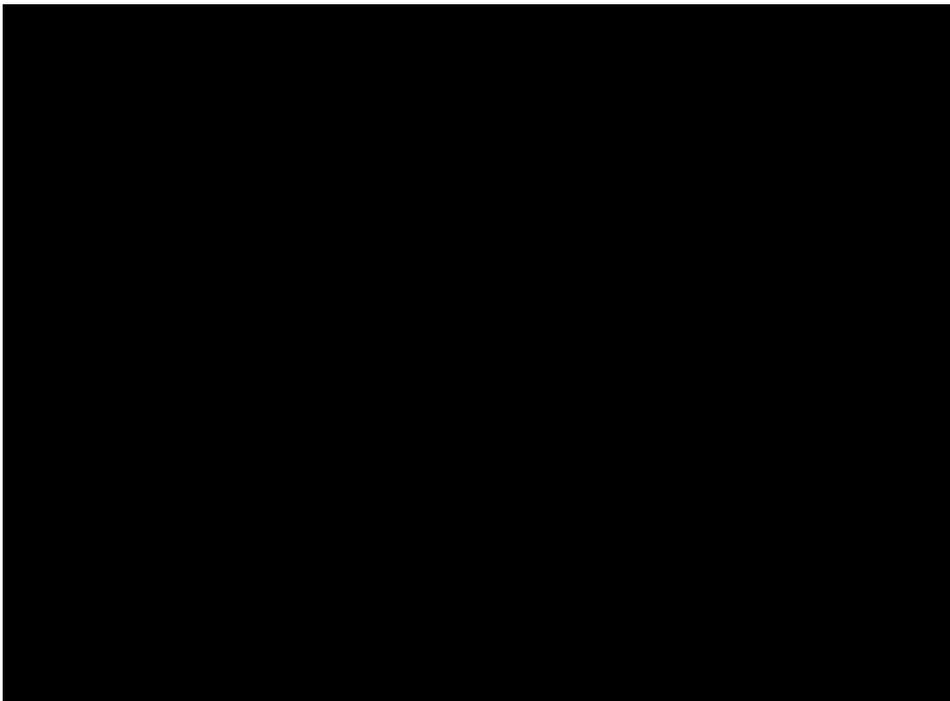


Figure 4.5 Files containing COMA documents at the Department of Health Records centre (source: author)

Some items were incomplete, some were duplicated and some missing. It is important to acknowledge that the reality presented in these documents may not reflect the reality of those involved, and that the documents have been selectively archived by partial individuals – many other documents may exist or have existed that have not been placed in the archive or kept by

the archivist. Unlike the SACN documents relating to the later period of policy development (see below for methodology and Chapter 6 for findings of the SACN dataset), these COMA files included memos, emails and faxes from Department of Health and other government officials as well as more formal documents such as minutes of COMA meetings or COMA annual reports. However, some of the main COMA committee meeting minutes were missing, and importantly the dataset contained very few minutes of the meetings of the Working Group that drafted the COMA report. There are few documents before 1996, the majority of documents concern the period between September 1997 and March 1998 (see Table 4.3).

Year	Number of documents
1993	1
1994	0
1995	1
1996	5
1997	59
1998	30
Total	96

Table 4.4 Distribution of COMA documents in the sample (source: author)

The archive documents provided were read several times. The dataset was made up of copies of documents that were relevant to either:

- the development of recommendations relating to red and processed meat
- media handling of the report
- regulations and guidance surrounding advisory committees on nutrition

These documents were copied again, catalogued according to the file they originated from, given a unique ID (then ID of the file the document originated from and an additional sequential number according to the order they were copied by the researcher at the archive). The documents were then organised into chronological order. Duplicate documents were discarded from the dataset. These documents were then read and re-read, and subjected to analysis using the Health Policy Triangle (Walt and Gilson 1994). Each document was analysed according to the four elements of the Health Policy Triangle (context, process, content, actors). Following Saldana (2013), each document was colour coded with post-it notes and passages were highlighted according to the element of the Health Policy Triangle they corresponded to. Context was coded orange, Content was coded pink, Process was coded yellow and Actors were coded green. Codes emerged under each colour, these were categorised and grouped under common themes. Redundant codes were discarded. These coded passages were entered into a separate document under the four headings of the Health Policy Triangle. For the Context section of the reporting it was necessary to consult further documents such as news

reports and parliamentary records to verify references to events, actors and documents, for example the BSE Inquiry. These are cited in the conventional way in the text. These themes that emerged from the coding by each element of the Health Policy Triangle made up the findings for this section of data and are presented in Chapter 5.

4.5.3 Policy Analysis: SACN Iron and Health Report (2001-2011)

This section sets out the methods for the collection and analysis of the policy data relating to the second embedded unit of analysis.

4.5.3.1 Data collection: Documents from the second embedded unit of analysis (SACN, 2001-2011)

Efforts were made to retrieve core documents from official sources relating to the Scientific Advisory Committee on Nutrition (SACN) report on Iron (SACN, 2010). These fell into two categories:

- Core documents (n=44): official documents from SACN. These included agendas and minutes of the main SACN meetings, as well as minutes of the SACN Working Group on Iron, the draft version of the report, documents relating to the consultation process with stakeholders and the final version of the report.
- Other government documents (n=10): other documents relevant to the report which were issued by government bodies and included Department of Health press releases, Food Standards Agency (FSA) documents and Hansard reports.

These documents were in the main available from the SACN website and/or the relevant government agency websites. There were two missing documents from the SACN website relating to a) the final committee meeting of the SACN Working Group on Iron which was held on the 11th November, 2009 and b) a table summarizing the stakeholder responses to the consultation on the report, including the actions agreed by the Working Group. The SACN secretariat was contacted by email to ask for these documents, they made the minutes of the working group meeting available on the website, but the researcher did not receive a response to the request for the table summarizing the consultation process (see Appendix 1 for copies of these emails). Therefore, a Freedom of Information request was submitted (see Appendix 2) and the researcher duly received a copy of the table.

These 54 documents made up the dataset for this section of the thesis. They were copied, and organised into chronological order. Duplicate documents were discarded from the dataset. These documents were then read and re-read, and subjected to analysis using the Health Policy Triangle framework (Walt and Gilson 1994). Each document was analysed according to the four elements of the Health Policy Triangle (context, process, content, actors). Following

Saldana (2013), each document was colour coded with post-it notes and passages were highlighted according to the element of the Health Policy Triangle they corresponded to. Context was coded orange, Content was coded pink, Process was coded yellow and Actors were coded green. Codes emerged under each colour, these were categorised and grouped under common themes. Redundant codes were discarded. For the Context section of the reporting it was necessary to consult further documents such as news reports and parliamentary records to verify references to events, actors and documents, for example the relocation of SACN from the Food Standards Agency to the Department of Health in 2010. These themes that emerged from the coding by each element of the Health Policy Triangle made up the findings for this section of data and are presented in Chapter 6.

4.6 Content Analysis

The second phase of research, designed to address the second research question ('How did UK newspapers report this issue?') was a quantitative and qualitative content analysis. Content Analysis (CA) began as a quantitative tool for analysing texts. Its methods have been developed and refined over time to increasingly satisfy concerns of statistical validity and reliability (Krippendorff 2013 pp. 82-184). CA has gained popularity as a research method because of technological developments such as computer databases and internet search engines which now allow researchers to analyse large volumes of texts with greater ease. But content analysis has also increasingly been adapted to embrace qualitative techniques by researchers who have sought to retain the benefits of a quantitative approach while recognising that its limitations could be offset by the use of additional, qualitative methods. Krippendorff (2013, p.22-23) outlines some of these methods such as Discourse Analysis, Social Constructivist Analysis, Rhetorical Analysis and Ethnographic Content Analysis and sees content analysis as both a quantitative and a qualitative methodology:

'I question the validity and usefulness of the distinction between quantitative and qualitative content analyses. Ultimately, all reading of texts is qualitative, even when certain characteristics of a text are later converted into numbers.' (Krippendorff 2013, p. 22)

As outlined in the literature review in Chapter 2 many content analyses of both cancer reporting (for example Clarke and Everest (2006) on cancer framing in the Canadian press) and nutritional reporting (for example Hilton et al. (2012) on obesity coverage in the UK) now include both quantitative and qualitative techniques. They analyse both 'manifest' (explicitly stated) and 'latent' (deeper and not necessarily explicitly stated) themes. Seale and Tonkiss (2012) similarly describe how quantitative content analysis can be used together with a more qualitative interpretive analysis in which not only are mentions of key words or phrases counted by the investigator, the ways in which they are talked about are also analysed.

The content analysis of the current research largely follows this model. One of the objectives of the content analysis phase of this research was to identify journalists, stakeholders and policymakers to participate in the third phase of the research, the interview phase. However, while the literature review outlined in Chapter 2 has established some media agenda setting theories to be tested, the basis for this content analysis recognises the iterative nature of qualitative research and is also inductive in approach – i.e. it recognises that since no survey of UK news reporting has been carried out in this area it is not possible to predict the theories and concepts which may arise from such an analysis. Seale and Tonkiss (2012) warn against over interpretation of the results of content analysis. The data from such a method, based on the analysis of observable features and facts, can tell you what is stated by the media but not necessarily why it is stated. In the case of the current research, efforts were made by the researcher to only analyse observable features of the texts, and to guard against supposition or guesswork as to why for example, a certain framing was used. Seale and Tonkiss (2012) recommend that Content Analysis be used in conjunction with other sources of data (for example interviews, as has been the case with this current research) or by using it as a framework for the more interpretive analysis of texts.

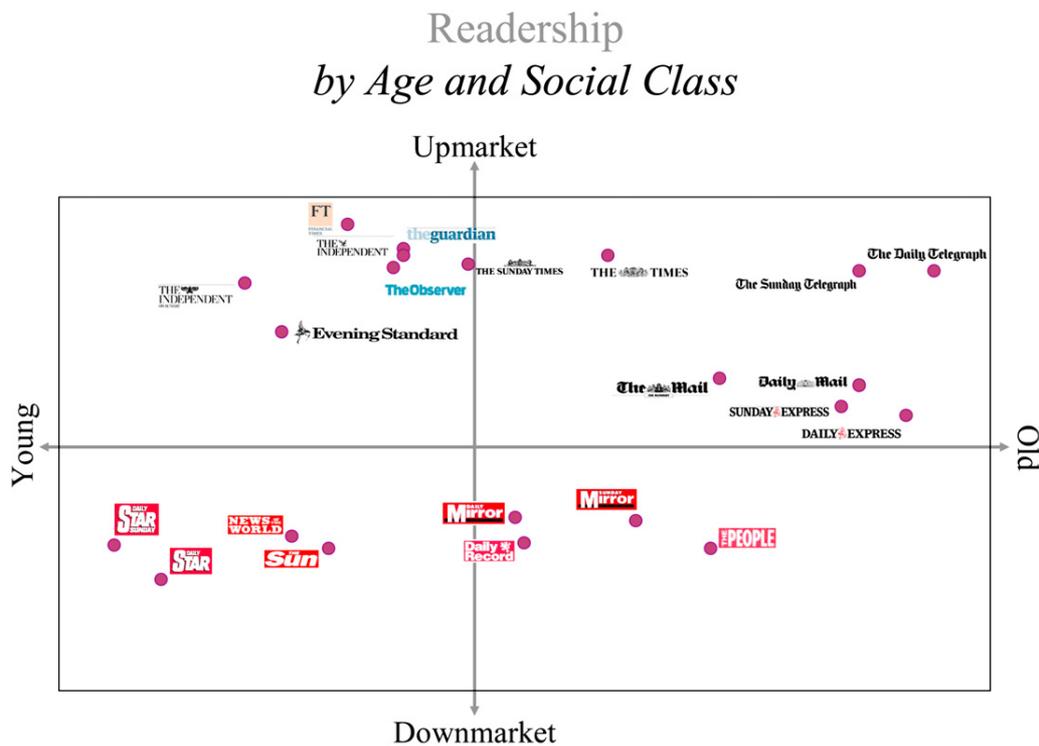
4.6.1 Data collection

Many content analysis guides make clear the importance of clarity in the rationale for the selection of texts, inclusion and exclusion criteria and date range (Neuendorff, 2002; Seale and Tonkiss, 2012; Bryman, 2012; Krippendorff, 2013). In addition, these authors stress the need to produce a sample that is relevant to the research questions, representative, and manageable for the researcher to analyse.

The database LexisNexis, an online resource allowing the content of local, national and international print and online media titles to be searched, was used to locate media coverage. While such databases have good coverage of a wide range of sources over a long period of time and are easily searchable, they are not fully comprehensive (due to some copyright restrictions) and can therefore only provide an indication of coverage (Fowler et al., 2012). However, they remain the best tool available for news presented in searchable text form.

UK print media titles were chosen for the sample, since newspapers, despite intense competition from other sectors of the media marketplace are still cited as one of the main sources of science information (Castell et al., 2014), ranking second only to television as a source of science information among adults (aged 16+) surveyed (Castell et al., 2014, p. 48). They also, unlike online news, are published irreversibly and, unlike television and radio broadcasts, are accessible in an easily compiled and searchable form. Since this case study compares newspaper coverage over a long period of time it was also important to choose a news medium that existed in similar and searchable form in 1998 as it did in 2012. In addition, this sampling strategy has been used by others to explore newspapers with a range of

readership profiles and political orientations (Seale et al. 2007; Hilton et al. 2010). UK newspapers are divided into tabloid (sometimes called 'populist') and broadsheet (sometimes called 'serious') newspapers with distinct readership profiles. (National Readership Survey, 2017). For example, as shown in Chart 4.1 'The Guardian' has a high proportion of middle-aged ABC1 (high income/third level education) readers while the tabloid 'The Sun' has a high proportion of younger C2DE readers (low to middle income/second level or no formal education qualifications) (Hilton et al., 2010).



NMA Marketplace Charts – September 2008

Source: NRS Jan 08 – Jun 08

NMA NEWSPAPER MARKETING AGENCY

Chart 4.1 Newspaper readership by age and social class (source: Newspaper Marketing Agency 2008, cited in Hilton et al., 2010, p. 945)

In addition, the UK press operates across a partisan or polarized model (Rowbottom, 2010) in which a range of views are provided by a number of media outlets. During election periods, some newspapers openly support a particular party and this can change from one election to another. However, some newspapers are staunch supporters of the right-wing Conservative party (Daily Mail, Daily Telegraph) while others consistently support the left-wing Labour party (Daily Mirror) or are left leaning and support either the left-wing Labour party or a liberal party (The Guardian, The Independent) (Butler and Butler, 2000; 2006).

The sources were 11 national daily newspapers with their Sunday counterparts: The Daily Express and Sunday Express, The Daily Mail and Mail on Sunday, Daily Star and Daily Star Sunday, The Daily Telegraph and Sunday Telegraph, The Financial Times, The Guardian and the Observer, The Independent, the Independent on Sunday, The Mirror and The Sunday

Mirror, The News of the World, The Sun, The Times and The Sunday Times. The i-Independent was excluded as it only began to be published in 2010. The News of the World which ceased publication in 2011, was included, since it was published for the majority of the search period. Also included was the mid-market tabloid the Daily and Sunday Express even though coverage of this title in the database is patchy. There is little coverage between 2006-2008, but articles from the key periods of the policy development are important in this research.

Neuendorf (2002) recommends 'screening' in order to define the variables for the study. Initial screening of available content from the newspaper database Nexis was carried out to define the search terms, dates and newspapers selected. This was carried out to formulate search terms that best capture the relevant articles. For example, the search terms "red meat and cancer and bowel or colorectal or colon" were used. However, there is a chance an article could be about red meat consumption and cancer risk without including the term "meat" but only using "sausage" or "bacon" instead. Or, for example this section of an article that appeared in The Sun:

'This week, the Government's top scientists announced that anyone who eats more than 70 grams of red meat a day will soon need to have their bottoms amputated. Seventy grams? I know rock stars who put that much cocaine up their noses every day and they're all right. So how can it be possible that a juicy lamb chop is going to give us all cancer of the poo shoot?' (Clarkson, J. 2011, p. 11)

This extract does not mention bowel or colorectal at all. However, experimenting with widening the search terms did return more articles, but this difference was eliminated when the other inclusion criteria (must make two or more mentions of the search terms, repeat articles were removed) were taken into account.

The search terms were "red meat" OR "processed meat" AND cancer AND bowel OR colorectal OR colon OR rectal" within the period 01/01/1993-01/01/2012. The search returned articles with mentions of the search term anywhere in the text. This search returned 747 results. These were scanned to identify duplicates and letters. In the event of repeated articles, the latest edition only was used. In the event of regional editions these were included, unless they were repeat articles in which case the English edition was used. Letters were excluded.

After duplicate articles (n=143), letters (n=10) and online articles (n=16) were removed, 578 articles remained. A ten per cent portion of these (n=59) were used as a pilot study. These were not randomly chosen articles but a block from the middle of the sample in order to test the content analysis methodology and the ability to track trends in coverage. The date range for the pilot study was April 09 2005 to February 01 2006 (n=59).

These 59 articles were read through several times for relevance. Inclusion criteria were that the article had to include at least 2 (two) separate mentions of a link between red and/or processed meat and bowel cancer. Twenty-nine articles were removed as they did not include at least 2 mentions of the links between red and/or processed meat and bowel cancer (n=30). These 30 articles formed the sample for the pilot study. During the pilot study a test of intercoder reliability was performed to check the reliability of the inclusion criteria. The test returned 100% agreement.

The process used for the pilot study was then repeated for the full sample. The full sample (n=578) of articles were read through several times for relevance. Using the list of numbered article titles provided by Nexis, each article was coded according to a colour coding guide to track included and excluded articles (duplicates were highlighted in grey, letters in blue, those containing no mentions of the link between red and/or processed meat and bowel cancer were highlighted in yellow and those which contained one mention of the link between red and/or processed meat and bowel cancer were highlighted in green (n=200), articles which contained two or more mentions of the link between red and/or processed meat and bowel cancer were not highlighted (n=157)). These 157 articles formed the main data source for analysis. The manifest or explicit data (headline, date, publication title, section, page number, word count, author, author designation) from these 157 articles was then entered into a spreadsheet and analysed.

Both the manifest (explicit) and the latent (implicit) content of the texts was then analysed (Altheide, 2002; Neuendorf, 2002; Hilton et al., 2010) in the pilot study. In this case, the manifest content was defined as identifying information about the newspaper articles, for example the date of publication, the title of the newspaper they appeared in, the length in words and the author. Articles within the pilot study with two or more mentions of the link between red and/or processed meat and bowel cancer (n=30) were analysed for their manifest data in order to identify trends in reporting. The manifest data from the articles (title, author, date, publication, length etc.) were exported into an excel file using an automated process developed in order to minimise input from the researcher and therefore minimise bias or error (see Appendix 7). By using this system manifest data from the articles was extracted and entered into a table (Table 4.5). Using the pivot table function in Excel, trends were identified in the reporting based on the data for example average length of article, number of articles published in each newspaper, number of articles published over time. Pivot tables were used to create basic, unweighted, cross tabulations.

Article ID	Title	Newspaper	Date	page no.	length	author
218	Our love of bangers, burgers and barbies 'raises cancer risks'	Daily Mail	21/04/2005	ED_SC1_04; Pg. 4	555	JULIE WHELDON
219	Observer Magazine: Life NUTRITION: Carnal pleasures: A recent report links eating red meat with an increased risk of colon cancer. But, as Dr John Briffa explains, there's a body of evidence to the contrary	The Observer	01/05/2005	Observer Magazine Pages pg 58	435	Dr John Briffa
223	120,000 MEAL SERVICE	The Sun	09/06/2005	HAYNES MANUAL FOR FAT BLOKES; HEALTH	956	Henry Biggs
226	How daily diet of red meat raises bowel cancer threat	Daily Mail	15/06/2005	ED_3RD; Pg. 6	345	JULIE WHELDON
227	Red meat linked to increased risk of bowel cancer	The Daily Telegraph	15/06/2005		557	By Celia Hall Medical Editor
228	Big study links red meat diet to cancer	The Guardian	15/06/2005	Guardian Home Pages, pg.1	502	Sarah Boseley Health Editor
229	RED MEAT 'RAISES RISK OF BOWEL CANCER'	The Independent	15/06/2005	Wednesday Final Edition; NEWS; pg 10	226	BY LYNDAY MOSS
230	Diet rich in red meat is linked with bowel cancer	The Times	15/06/2005	Home news; 26	551	Nigel Hawkes Health Editor
231	MEAT CANCER SHOCK	Daily Star	16/06/2005	U.K. 1st Edition; NEWS; Pg. 2	96	
233	NEW MEAT WARNING MAKES ME SEE RED	The Express	16/06/2005	U.K. 1st Edition; COLUMNS; Pg. 16	698	Clarissa Dickson Wright
237	The painful condition usually affects people who are aged between 20 and 40	The Times	20/06/2005	Features; Times2; 8	798	Dr Thomas Stuttaford
240	Don't panic - God-fearing folk give the lie to the latest red meat scare stories Doctor's Diary	The Daily Telegraph	21/06/2005	Tuesday	608	By James Le Fanu
244	HEALTH: RED ALERT; YET ANOTHER STUDY HAS FOUND THAT EATING STEAK SAUSAGES AND BACON	The Independent	19/07/2005	Tuesday First Edition; NEWS; Pg. 37	919	JEREMY LAURANCE
249	HEALTH: THE TRUTH ABOUT YOUR FOOD FEARS; WORRIED AND CONFUSED ABOUT THE CONTENTS OF YOUR FRIDGE? WE ASKED	Sunday Mirror	04/09/2005	3-Star Edition; FEATURES	1329	WORDS: RHIANNON VIVIAN.
257	DR MIRIAM: HEALTH AT STEAK The Mirror	The Mirror	02/12/2005	FEATURES; Pg. 56	198	MIRIAM STOPPARD
258	Fibre diet 'doesn't prevent cancer'	The Times	14/12/2005	HOME NEWS; Pg. 14	563	Nigel Hawkes
263	Cancer diet link	The Times	31/01/2006	HOME NEWS; Pg. 27	51	
264	Why red meat diet raises risk of bowel cancer by a third	Daily Mail	01/02/2006	ED 1ST; Pg. 16	703	JULIE WHELDON
265	Science: DNA damage from eating red meat linked to cancer: Harmful compounds raise risk of bowel disease: Volunteers fed diet heavy in beef and pork	The Guardian	01/02/2006	GUARDIAN HOME PAGES; Pg. 11	650	Sarah Hall, Health correspondent
266	HOME NEWS IN BRIEF: Whv red meat can cause cancer	The Independent	01/02/2006	NEWS: Pg. 8	51	

Table 4.5 Manifest data: Extract from pilot study (source author)

4.6.2 Coding and Analysis: Latent Themes or Frames

The coding frame is an important part of the content analysis process. Seale and Tonkiss (2012) say that coding categories may be defined in advance or may be based on an initial reading of the data. They acknowledge that often both these approaches are used together; pre-defined categories are set out to reflect the theoretical aims of the research while inductive categories are set in response to the data. To minimize ambiguity and overlap a pilot test was carried out on a smaller sample of articles. These had the same sample criteria except the date range was 01/08/2010-01/08/2011. This returned 24 articles.

When coding, content analysts look for both 'manifest' and 'latent' themes or frames (Altheide 2002, pp. 35-36) – with manifest data being that that is explicitly stated while latent themes are deeper and can be measured by one or more indicators Neuendorf (2002, p. 23). Broadly speaking manifest themes can be analysed quantitatively while latent themes require a more qualitative approach. One of the main purposes of this content analysis is to identify trends in reporting across different newspapers to both inform the final interview stage of the research, therefore in this case manifest content was defined as identifying information about the newspaper articles for example the date of publication, the title of the newspaper they appeared in, the length in words and the author. As explained above, this information was put into an Excel spreadsheet and analysed for trends in reporting.

As noted above, content analysis can be broadly placed in the quantitative tradition of inquiry, where observable features are analysed in an 'objective' way. In the literature about content analysis one of the main issues that arises is the question of whether a 'scientific' model can be appropriate to the study of texts and speech and the production and reproduction of meaning (Seale and Tonkiss, 2012; Krippendorff, 2013). Mellor et al. (2011) caution that even with the most tightly controlled coding frame, content analysis is an inherently subjective method:

'...even when a high rate of intercoder reliability is achieved, content analysis remains a subjective form of analysis. Coding all but the most uninteresting of features of media output involves a judgement on the part of the coder. A well-defined coding frame helps minimise differences between coders, but the definitions set out in the coding frame themselves embody a set of decisions about where to draw boundaries around categories that, in reality, do not constitute naturally bounded entities. It is entirely possible that coders working with a different set of criteria would generate a different set of figures.' (Mellor et al., 2011, p. 12)

With this in mind, the latent content was defined as themes, frames and discourses that emerged from the coding process and was qualitatively analysed.

4.6.3 Analysis

4.6.3.2 Analysis of latent data

Latent themes were analysed using thematic content analysis. The data was used to generate themes. (Altheide and Schneider, 2013; Saldana, 2013). All the newspaper articles were re-read several times to identify initial codes (Altheide and Schneider, 2013; Saldana, 2013). These were noted using the track changes facility in Word, in which each comment has a unique numerical identifier. The comments in the track changes 'markup' pane of the document were then imported into Excel. Similar codes were clustered together to form categories, while redundant codes were removed. These categories were then analysed thematically and are reported in Chapter 7.

4.7 Semi structured interviews

The third phase of the research was a group of semi-structured in depth interviews with key actors drawn from phases 1 and 2. These interviews were designed to complement the two other research methods outlined in this chapter.

Byrne (2012) notes that qualitative interviewing can be particularly useful to access individuals' values and attitudes. However, she notes that when conducting or reading qualitative interviews we need to be aware of the many different variables that can affect the process and the outcome including the interviewer and their background, the environment in which the interview is conducted, the mood of both participants during the interview and the form of questioning. Denzin and Lincoln (2000, p. 646) also stress the interactive nature of qualitative research interviews:

'Increasingly, qualitative researchers are realizing that interviews are not neutral tools of data gathering but active interactions between two (or more) people leading to negotiated, contextually based results. Thus, the focus of interviews is moving to encompass the *hows* of people's lives (the constructive work involved in producing order in everyday life) as well as the traditional *whats* (the activities of everyday life).' (Denzin and Lincoln, 2000, p. 646)

The interviews were semi-structured (i.e. the interviewer had a number of question areas or prompts to guide the interview but the interviewee was expected to 'drive' the line of questioning). The purpose of the interviews was to give insight into the processes of news gathering and framing of news items, the interactions between key players in the information chain, including stakeholders (for example from the meat industry), the opinions of policymakers as to media influence and the opinions of journalists as to the influence of media on policymakers.

The semi-structured interview format was chosen for a number of reasons. Firstly, some of the interviewees were journalists, others food policymakers, some campaigners, and other scientists. As a former food journalist currently engaged in PhD research and who is used to carrying out journalistic interviews, the researcher felt this qualitative approach would allow a reflexive position that took these circumstances into account. Secondly, this phase of the research was designed to be flexible and responsive in order to reveal rich detailed answers associated with qualitative interviewing techniques (Bryman 2012, p. 470). Thirdly it would allow the interviewees to give their insights and opinions freely without being constrained or 'pigeon-holed' by fixed questions. An attempt was made to acknowledge and address questions of reflexivity – for example the impact of the researcher's age, gender, class, background and professional experience on the interview process - by being self-critical and making field notes after every interview (Byrne, 2012). The physical, social and psychological well-being of research participants in the ethical approval application was also considered. (see Appendix 6).

4.7.1 Ethical considerations

Ethical approval for this part of the study was obtained from the Department of Sociology, City University London (see ethical approval letter at Appendix 6) and approved before interviewees were approached. Participation in the study was voluntary and participants could withdraw at any time during the interview process. Anonymity was offered to all participants; this guaranteed that participants' names would not be used in the study or reports emanating from it and will not be published or shared with any other organisation. Recordings, transcripts and notes about the interviews or interviewees are kept securely for a period of 5 years. Only the researcher and her two supervisors have access to the research data.

4.7.2 Data collection

Research design for this phase was largely driven by the results from Phases 1 and 2. The interviewees were drawn from three key actor groups: 1) journalists 2) stakeholders 3) policymakers across both time periods under study (COMA report 1997-8 and SACN report 2010-11). Some participants were equally relevant to both time periods. Attempts were made to achieve an equal number of participants in each group (see Figures 24 and 25). The total number of interviewees was 27.

	Journalists	Policymakers	Stakeholders	Total
Approached	26	27	17	70
Secured	10	8	9	27

Table 4.6: Table of potential participants (source: author)

Response, positive	27
Response, negative	13
Response, positive, then negative	6
No response	24
Total	70

Table 4.7: Table of responses from participants (source: author)

The invitation to interview and information sheet was sent to interviewees in advance. Interviews were carried out face to face in a location of the interviewee's choosing, or if this was not possible over the telephone or by Skype. The interviews varied in length from 30 minutes to 1 hour and 30 minutes. Interviews were recorded on a digital audio recording device. A consent form was taken to the interview and signed by the interviewee, or sent and returned by post or email if the interview was conducted remotely. Attempts were made to be non-judgemental during interviews and to allow the interviewee to lead the conversation, while using the prompts in the interview guide to provide an overall structure. However, a skeleton topic guide was used to ensure some focus and to allow comparison between interviews (see Appendix 9). This was devised with the Research Questions in mind but also bearing in mind two theoretical models which had informed the research design. The first of these is Baumgartner and Jones' Punctuated Equilibrium (Baumgartner and Jones, 2009). Punctuated Equilibrium Theory suggests that over long periods of time policy issues tend to stay the same but these long periods of continuity, where a policy remains stable, are punctuated by more intense periods of change and policymaking activity. The media may play a part in putting issues on the policy making agenda.

The other theory that informed the research design and the interview topic guide was Nisbet and Huges' model of Mediated Issue Development (see figure 4.6) which develops Downs' (1972) Issue Attention Cycle and Baumgartner and Jones' (2009) Punctuated Equilibrium Theory.

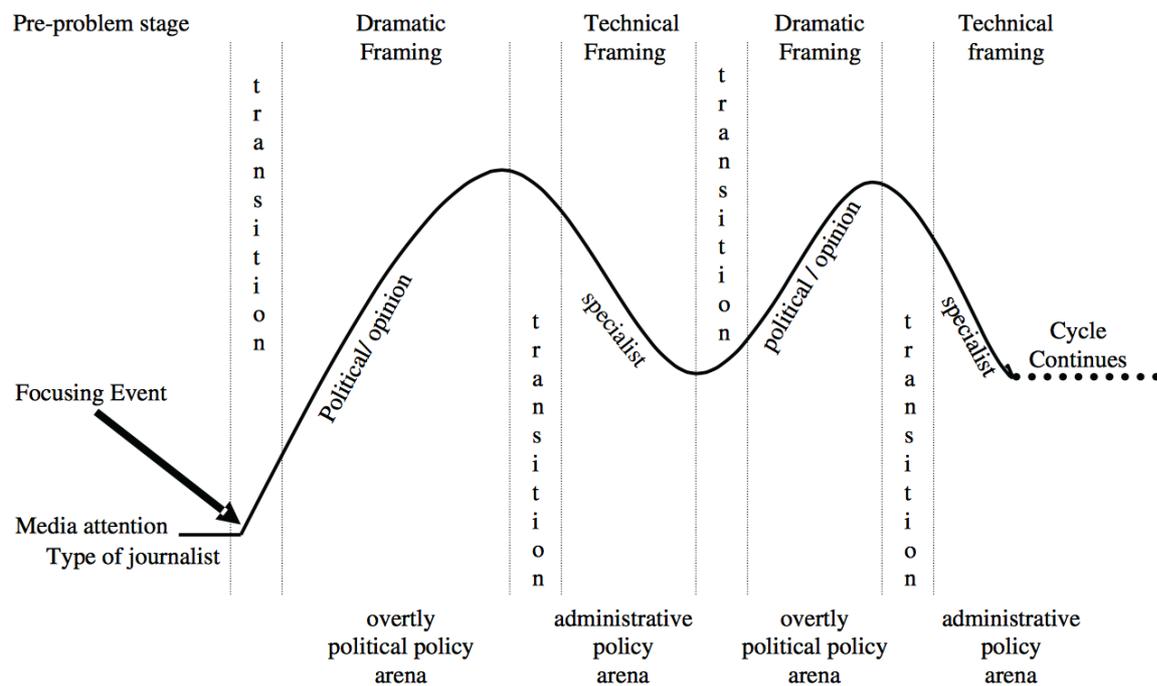


Figure 4.6 Model of Mediated Issue Development (source: Nisbet and Huge, 2006, p.8).

Nisbet and Huge develop the punctuated equilibrium model and specifically looked at how media attention interacts with policy development. This model shows several interesting trends:

- 1: Media attention to a policy issue goes in cycles, following an initial focusing event.
- 2: During a cycle of attention, media attention rises to a peak and then falls back to lower levels.
- 3: Increasing and high levels of media attention correspond to growing overtly political interest in an issue. As media attention declines this corresponds to the policy moving to the administrative policy making arena.
- 4: Higher levels of media attention are accompanied by more dramatic framing of the issue. When media attention is lower, the framing of the issue is more technical.
- 5: When media levels of attention are high, the issue is covered by political journalists and opinion columns. When media levels of attention are lower, the issue is covered by specialists.

Following these two models, the interview topic guide had four areas expressed in 6 topic areas (see Appendix 9):

- 1 The policy making process
- 2 The media: role, process and influence
- 3 Interaction between actors
- 4 Framing in the media and in the policymaking arena
- 5 Where this issue appeared on the policy agenda
- 6 Where this issue appeared on the media agenda

4.7.3 Coding and Analysis

Each interview was transcribed verbatim. Parts of the transcription system developed by Gail Jefferson (cited in Rapley, 2012, p.426) were used to try to record in detail what was said – this includes use of colons to indicate sound stretching, underlining to indicate speaker’s emphasis or stress, capitals to indicate a marked rise in volume.

Some interviewees had a greater degree of involvement than others, these were identified as ‘key interviewees’. Key interviewees within each grouping (government policy makers, journalists, external actors) were identified (see Table 4.7).

	Key interviewees	Remaining interviewees
Govt. Policymakers (COMA, SACN members, government Ministers, politicians, civil servants)	6	2
Journalists (Freelance print journalists, print journalists working on national newspapers, editorial staff)	5	5
Other stakeholders (Meat industry representatives, MLC representatives, cancer charity representatives, NGO representatives)	7	2

Table 4.8 Interviewees (source: author)

These 18 key interviews were read through again a number of times. The interviews were coded according to the research questions. Emerging codes were identified and similar codes were clustered together to form categories, redundant codes were removed (Saldana 2013). From these categories, major themes were identified for each policy development period or embedded unit of analysis of the case study. These codes were made in the transcripts of the interviews using Word’s ‘track changes’ facility. The codes were then imported into separate documents and clustered together to form categories – these were then thematically grouped. The remaining 9 interview transcripts were then re-examined and listened to again to identify further codes relating to the already identified major themes. These themes were then reported and the findings can be found in Chapter 8.

4.8 Triangulation of methods and analysis

Spicer (2012) and Yin (2009) advocate triangulation as a way of ‘*combining more than one method in looking at a particular research question to cross-check results for consistency and enhance confidence in the research findings*’ (Spicer, 2012, p. 480). Some researchers have

argued that triangulation is inherently positivist, since it assumes a knowable truth objective of the researcher, and is therefore incompatible with an interpretivist approach (Cox and Hassard, 2012). However, others have argued that triangulation plays an important role in qualitative research since claims about reality should be scrutinized from as many different angles as possible (Guba and Lincoln, 2000).

Denzin (cited in Cox and Hassard, 2010) and Yin (2009) identified 4 types of triangulation: data triangulation, where data are collected from different data sources; investigator triangulation, where different researchers or investigators independently collect data on the same phenomenon and compare results; methodological triangulation, where multiple methods of data collection are used and theory triangulation, where different theories are used to explain one set of data. Yin (2009) argues that data triangulation can address the problems of construct validity (the research design meets the needs of the research questions) because multiple data sources essentially provide multiple measures of the same phenomenon. Cox and Hassard (2010) point out that convergent findings can give the researcher more confidence in the validity and reliability of the results of the study. The triangulation approach in this case is both data triangulation (data from three different sources was used: policy documents, newspaper coverage, interviews) and methodological triangulation (three different methodologies were used: content analysis, policy analysis, semi-structured interviews). Triangulation was based on the framework technique outlined by both Green and Thorogood (2014) and Cox and Hassard (2010) who suggest analyzing multiple sources of data for recurrent patterns across different sources of information. This is further developed by Green and Thorogood (2014) who suggest a technique they call 'framework analysis' in which codes are applied across data sets using 'indexing': comparing themes within and between cases by putting those themes in charts or tables so the themes can easily be tracked between and within cases. To do this the latent themes arising out of the content analysis of media coverage were compared with the themes arising from the interview analysis and the results of the policy analysis, building a chart to aid analysis. For full details and the results of this see Chapter 9.

4.9 Development of new theoretical model using triangulation of data

It is important for the reader to note that discussion on each of the findings chapters is presented within each chapter, so discussion on the findings from the policy analysis of the first embedded unit of analysis (COMA, 1993-1998) is presented at the end of Chapter 5, discussion on the findings from the policy analysis of the second embedded unit of analysis (SACN, 2001-2011) is presented at the end of Chapter 6, discussion on the findings from the content analysis of newspaper reporting of this issue is presented at the end of Chapter 7 and discussion on the findings from the 27 semi-structured interviews is presented at the end of Chapter 8. These findings are then triangulated as outlined above using a framework analysis and tabulation and the results of this are then reflected on in the light of the theoretical framework of agenda setting and associated theories. In addition, a theory of mediatized food policy development which

attempts to integrate theories of punctuated equilibrium and the concept of mediatization is formulated and proposed in Chapter 9.

4.10 Summary

This research was designed to find out how UK government nutrition policy and UK print media interacted in the case of recommendations on red and processed meat consumption. The conceptual framework underpinning the research design used essentially qualitative research methods with an interpretive perspective. The research was inductive and findings were drawn from the data but informed by a literature review and theoretical framework based on agenda setting and associated theories – the inductive qualitative and interpretive approach led to the development of the theoretical framework to include and integrate novel theories of mediatization. The research design for this study adopted a retrospective case study approach in which two units of analysis were embedded in one single case. The two units of analysis were 1: the Committee on Medical Aspects of Nutrition Policy report on diet and cancer (COMA 1998) and 2: the Scientific Advisory Committee's report on Iron (SACN, 2010). This research progressed in three separate but interlinked phases. For each embedded unit of analysis, data was gathered from three different sources: policy documents on government recommendations on red and processed meat consumption between 1993 and 2012; UK print media coverage of the same issue over the same period and semi-structured interviews with actors identified from phases 1 and 2 of the research. There were three different methods involved: policy analysis using Walt and Gilson's (1994) Health Policy Triangle; quantitative and qualitative content analysis and semi-structured in-depth interviews with actors, there were then thematically analysed. In addition, a framework analysis was carried out to triangulate the three different data sources and methodologies. The research has been broadly qualitative in approach, although there were some quantitative aspects to the content analysis.

Chapter 5: Research Findings, Research Question 1: Policy Analysis: 1993-1998

5.1 Introduction

As noted in Chapter 4 (Methodology) the approach taken in this research is a case study in which there are two embedded units of analysis. These two units analyse and compare two periods of policy development. The first is the period 1993-1998 during which time the government Committee on Medical Aspects of Food and Nutrition Policy (COMA) developed and produced a report, 'Nutritional Aspects of the Development of Cancer' (Department of Health, 1998). The recommendations in this report led directly to the government recommendation that individuals' consumption of red and processed meat should not rise, and that higher consumers should consider a reduction. However, the planned publication of the report in September 1997 was delayed by the Secretary of State for Health at the last minute over the recommendation on red and processed meat. This was widely covered in the press and questions about it were raised in the House of Commons. The first version of the publication was recalled and pulped, the second was published in March 1998. (Laurance 1997; Mihill, 1997; HC, 1997).

The second embedded unit of analysis concerns the period 2001-2011 during which time the UK government's Scientific Advisory Committee on Nutrition (SACN) again considered evidence on the links between red and processed meat consumption and bowel cancer as part of a substantial report into iron and health which was published in 2010. This Iron and Health (SACN, 2010) report covered a wide range of issues relating to iron – including iron deficiency and excess as well as the adequacy of iron nutrition in the UK population. As part of this review, recommendations on red and processed meat consumption were revised, leading to further government advice on this issue. This policy development will be considered in detail in Chapter 6.

This chapter, Chapter 5, lays out the research findings of the first part of the policy analysis undertaken to answer the first part of the first research question:

RQ1: How has the UK government's policy on RPM consumption developed?

Method: Policy analysis of government recommendations on red and processed meat consumption 1993-1998 and 2001-2011

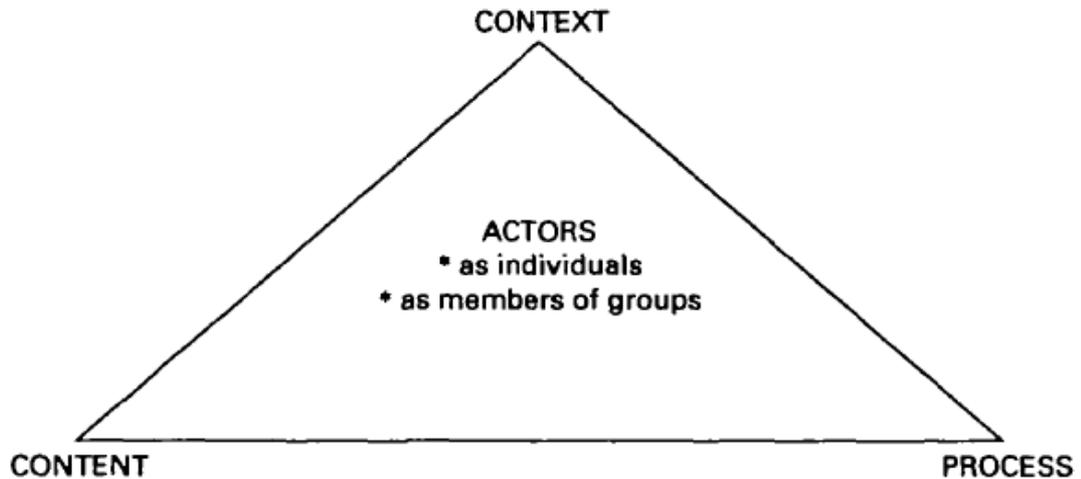


Figure 5.1 Walt and Gilson's (1994) Health Policy Triangle (source: Walt and Gilson, 1994, p. 354)

As set out in the Chapter 4 (Methodology) the analysis was conducted using Walt and Gilson's (1994) Health Policy Triangle (see fig 5.1) using the COMA report itself and documents from the Department of Health archives (n=96). These were obtained after attempts had been made to retrieve COMA committee meeting minutes from the National Archives, who had directed me to the Department of Health archives. As outlined in Chapter 4 (Methodology) the documents in the files provided were neither comprehensive, sequential or chronological. Some items were incomplete, some were duplicated and there were some obvious gaps (e.g. of minutes from COMA Working Groups). It is important to acknowledge that the reality presented in these documents may not reflect the reality of those involved, and that the documents have been selectively archived by partial individuals – many other documents may exist or have existed that have not been placed in the archive or kept by the archivist. Unlike the SACN documents relating to the later period of policy development (see Chapter 6), these COMA files included memos, emails and faxes from Department of Health and other government officials as well as more formal documents such as minutes of COMA meetings or COMA annual reports. However, some of the main COMA committee meeting minutes were missing, and importantly the dataset contained very few minutes of the meetings of the Working Group that drafted the COMA report. There are few documents before 1996, the majority of documents concern the period between September 1997 and March 1998 (see Table 5.1)

Year	Number of documents
1993	1
1994	0
1995	1
1996	5
1997	59
1998	30
Total	96

Table 5.1 Sample and distribution of documents in the selection (source: author)

The archive documents provided were read several times. The dataset was made up of documents that were relevant to either:

- the development of recommendations relating to red and processed meat
- media handling of the report
- regulations and guidance surrounding advisory committees on nutrition

These documents were copied again and given a unique ID. This was made up of the number of the file that the document originated from e.g. 248/MXO:53/2 appended by the number in sequence of documents from that file, e.g. the seventeenth document copied from file 248/MXO:53/2 was numbered 248/MXO:53/2/17. The documents were then organised into chronological order. Duplicate documents were discarded from the dataset. These documents were then read and re-read, and subjected to analysis using the Health Policy Triangle framework (Walt and Gilson 1994). Each document was analysed using the four elements of the Health Policy Triangle (context, process, content, actors). Each document was colour coded with post-it notes and passages were highlighted according to the element of the Policy Analysis Triangle they corresponded to. Context was coded orange, Content was coded pink, Process was coded yellow and Actors were coded green. Sub-codes emerged under each colour, these were categorised and grouped under common themes. Redundant codes were discarded. These coded passages were entered into a separate document under the four headings of the Health Policy Triangle. For the Context section of the reporting it was necessary to consult further documents such as news reports and parliamentary records to verify references to events, actors and documents, for example the BSE Inquiry. These are cited in the conventional way in the text.

For ease of reporting the findings are set out under the four elements of the Health Policy Triangle: context, process, content, and actors. Where several themes emerged under each element, these are presented as subheadings. While the findings are reported separately under these four main headings it is important to recognize that the four elements of the Health Policy Triangle represent complex inter-relationships, connections, alliances, oppositions and contests

(Walt and Gilson, 1994; Buse et al., 2005) and that there is some overlapping between the four elements due to this.

To protect the identity of those named in private documents (emails, memos and faxes and including meeting agendas and minutes), actors are anonymized, and these documents are cited in the text only, using the unique ID given to each document at the time of analysis, along with their date.

5.2 Context

This section sets out the context in which UK government recommendations on red and processed meat consumption of 1998 were formulated. A skeleton timeline of the main events surrounding the publication of the report is provided below, at Table 5.2 to enable the reader to relate the main sequence of events during the formulation of the report and its recommendations to the context in which they were happening, as described in section 5.2 below.

Date	Action
1993	COMA convenes Working Group on Diet and Cancer (Department of Health 1998)

21/06/93	Submissions of evidence invited via press release (Department of Health 1998)
19/07/93	First meeting of COMA's Working Group to "examine the evidence relating aspects of diet to specific cancers". (Department of Health 1998)
04/04/97	COMA Secretariat recommends consultation about the report with key stakeholders (e.g. meat industry and WCRF) over "contentious" meat issue (836/MOO/8/8/1/1)
29/04/97	COMA considers draft report (248/MXO:53/1/7)
30/05/97	Amendments sent to COMA members (248/MXO:53/2/33)
13/09/97	Daily Mail reports COMA's meat recommendations (Hope, 1997)
19/09/97	Working Group lay member complains about consultation process with meat industry, claims they have leaked report information. (179/CMA2/5/2)
24/09/97	Extraordinary COMA meeting to discuss meat recommendations. (179/CMA2/5/2)
25/09/97	WCRF (1997) first expert report published, COMA report also due. However, Secretary of State for Health issues press release including meat recommendations agreed at COMA meeting the day before. The full report is not released. (248/MXO:53/2/33)
21/10/97	COMA meeting to clarify meat recommendations – some Working Group members complain that they had not agreed the recommendations released by Secretary of State for Health on 25/09/97. (248/MXO:53/2/1)
17/11/97	Questions in House of Commons about the report, including the cost of pulping it and reprinting it. (248/MXO:53/2/37)
21/11/97	Chief Medical Officer requests approval by ministers of reworded report. (248/MXO:53/2/35)
12/02/97	Meeting between ministers from MAFF, DH and the Chief Medical Officer to consider report. (248/MXO:53/3/26)
05/03/98	Revised report is published. (248/MXO:53/4/2)

Table 5.2 Skeleton timeline of events 1993-1998 (source: author)

5.2.1 Context: Food Scares

This period (1993-1998) saw public concern over food safety in the UK. The late 1980s and early 1990s had seen a number of 'food scares' – salmonella in eggs, listeria in paté and alar in apples - as well as a continuing crisis in the British beef industry brought about by the disease in cattle, BSE, which had started in 1986/7 and continued until the late 1990s. These food safety crises were repeatedly reported by the UK media. The 'food scare' had become a commonly recognizable 'media template' (Kitzinger, 2000), with a pattern of association and meaning along with a similar format, framing and cast of actors and actor groups. Repeated food scares became a media phenomenon, with a new generation of food activists and food journalists drawing attention to them as examples of endemic failures in the food system (Lang, 1997).

Investigative 'consumer' journalism was growing, along with another branch of consumer journalism, 'lifestyle' journalism, which, while not a new phenomenon (Lonsdale, 2014) was perhaps newly placing an emphasis on personal responsibility for health in the face of growing recognition of the chronic health problems linked with poor diets (Lee, 2009; Hanusch, 2012). This growing recognition of the important role of diet in protecting good health and preventing NCDs was one of reasons cited by COMA in their introduction to the COMA report (Department of Health, 1998):

"Public and professional interest in the possible links between diet and cancer is increasing. Influential commentators have estimated that diet might contribute to the development of around one third of all cancers. Work on possible mechanisms for an influence of diet on the development of cancers has led to a perception that diet can play an important role in influencing risk of a number of common cancers in Europe, and in the UK. This Working Group was convened to examine the evidence for specific nutritional links underlying this perception." (Department of Health, 1998, p. 1)

This growing awareness of diet's role in the prevention of disease, along with the growing concern over food safety and food scares is an important contextualizing factor in the development of this policy. A particularly important food scare, in relation to the recommendation that COMA was to make on red and processed meat consumption in 1998, was Bovine Spongiform Encephalopathy (BSE). This had come to a head in March 1996 when the then Conservative government announced a link between the cattle disease BSE and the human disease vCJD (BBC News, 2005). The worldwide export of British beef was banned later in the same month. As has been outlined in Chapters 2/3 (Literature Review) the BSE crisis had been seen as a failure of communication by the scientific community but as a cover-up by journalists. It had reportedly cost Britain £1.5bn (Arthur and Brown, 1997) and British beef farmers, already suffering under the beef export ban, had staged widespread protests in December 1997 (Campbell, 2011; Watson-Smyth, 1997) including at the British European presidency launch in London (Campbell, 2011, p. 224). In early December 1997, the BSE crisis continued with the Minister of Agriculture banning beef on the bone from all shops, supermarkets, butchers and restaurants in light of further recommendations by another scientific advisory committee, SEAC, the Spongiform Encephalopathy Advisory Committee (Arthur and Brown, 1997). In order to address these concerns over scientific communication and government cover ups, the new Labour government had announced a public inquiry (the 'BSE Inquiry') in Parliament on 22 December 1997, which began in January 1998, to:

'establish and review the history of the emergence and identification of BSE and new variant CJD in the United Kingdom, and of the action taken in response to it up to 20 March 1996; to reach conclusions on the adequacy of that response, taking into account the state of knowledge at the time; and to report on these matters to the Minister of Agriculture, Fisheries and Food,

the Secretary of State for Health and the Secretaries of State for Scotland, Wales and Northern Ireland.’ (BSE Inquiry, 2000)

The data from the current study shows the impact this perceived crisis in confidence around food had on food policy making. The new Labour government were keen to distance themselves from the food safety crises associated with the previous administration and to “see a change in the culture in Whitehall” (248/MXO:53/2/23 – Ministerial Q&A). The data contain a number of references to the new Food Standards Agency which had been proposed by Prime Minister Tony Blair. The role and initial function and structure of the Food Standards Agency had been set out in a paper by Professor Phillip James, Director of the Rowett Research Institute and a member of COMA (James, 1997) in 1997, shortly after the election of the new Labour government. This report had been commissioned by Tony Blair when he was Leader of the Opposition (Labour) party in March 1997 (James, 1997). Directly responding to the BSE crisis, it proposed an independent organization, putting nutrition and food safety at arm’s length from government. During 1997, when COMA was planning to publish their report (Department of Health, 1998), the government were in a process of consultation about the new Agency and were preparing a White Paper setting out proposals for an “*independent Food Standards Agency, which would be powerful, open and dedicated to the interests of consumers.*” (Ministry of Agriculture, Fisheries and Food, 1998). This White Paper was published in January 1998, while COMA were still waiting for Ministerial approval for the reworded ‘Nutritional Aspects of the Development of Cancer’ report.

The data, mainly from minutes of meetings and civil servants’ correspondence, show various references to the role of COMA in relation to the new Food Standards Agency and evidence of some nervousness about the role of COMA under this new structure of food policy governance. The White Paper on the formation of the Food Standards Agency had proposed moving COMA’s Secretariat and governance from the Department of Health to the new FSA. In a letter from the Secretary of State for Health to the Minister Without Portfolio the “difficulties” associated with the publication of COMA’s (Department of Health, 1998) Diet and Cancer report were cited as one of the main reasons for moving the committee to the FSA:

“On the specific issue of COMA (the Committee on Medical Aspects of Food and Nutrition Policy) we decided that, in view of recent difficulties, public confidence in the independence and rigour of its advice would be best regained by placing the secretariat with the FSA.” (248/MXO:53/2/17)

In a memo regarding this letter, the Chief Medical Officer, at the time the chairman of COMA, strongly refutes any suggestion of a lack of public confidence in the independence and rigour of the committee (248/MXO:53/2/18). In addition, the possible move of COMA to the FSA made both COMA members and the COMA Secretariat nervous. When the Minister for Food Safety,

then based in MAFF, asked to attend a COMA meeting in September 1997, members of the Secretariat sought clarification of the purpose of his meeting:

“2. He confirms that this visit is merely part of the Minister’s series of visits to MAFF committees and that the ‘role of COMA’ relates to its present role and work programme and not to any discussion on its possible relationship to the FSA.” (248/MXO:53/2/2)

And when the possible move to the FSA was discussed at COMA meetings, members resisted the move, concerned that there would be “*conflicting messages*” on nutrition coming from DH and the FSA and that the FSA “*would be driven by aspects of food safety which would outweigh the advice given to patients and the community on food and nutrition issues which have a much longer-term perspective than food safety issues.*” (179/CMA2/5/3, 27 April, 1998, pp. 3,4).

The FSA White Paper (Ministry of Agriculture, Fisheries and Food, 1998) had been presented by MAFF but sought to address a key criticism of the role the Ministry of Agriculture Fisheries and Food had played in food policy up until this point.

“1.11 The Government’s proposals have been drawn up in the light of Professor Philip James’s report and the responses to the consultation exercise carried out in May and June 1997 (described in Annex 1 of this White Paper). They are designed to address the key factors which Professor James identified as contributing to the erosion of public and producer confidence in the current system of food controls:

- the potential for conflicts of interest within MAFF arising from its dual responsibility for protecting public health and for sponsoring the agriculture and food industries
- fragmentation and lack of co-ordination between the various government bodies involved in food safety
- uneven enforcement of food law.

1.12 The Government agrees that a clear separation is needed between promoting safe food and wider consumer interests on the one hand and promoting the interests of business on the other.” (Ministry of Agriculture Fisheries and Food, 1998).

An indication from the data under analysis that the government were keen to separate food production from public health nutrition, is evidence of a threat to MAFF’s contribution to COMA. At the beginning of this policymaking period (1993) both the main COMA committee and the Working Group on Diet and Cancer included at least one MAFF representative. In January 1998, a review of COMA took place and “*ex-officio*” members including those from MAFF were notified by the Chief Medical Officer of a change to their membership:

“The Workings and membership of the Committee on Medical Aspects of Food and Nutrition are currently under review. An outcome of this review is that I have decided to ask you to become an assessor rather than an ex-officio member. This will bring COMA in line with my other advisory committees. As an assessor, although you will be able to participate in discussions at meetings, any decisions will be taken only by the independent members. Members of COMA will be limited to external, independent experts and this will be reflected in subsequent documentation such as the COMA Annual Report.”
(248/MXO:53/3/19)

In this way government departments were working together during most of this period 1993-1998, but towards the end of the period there is evidence to show that they were starting to try to disentangle some of the governance structures that had embedded MAFF and agricultural policy makers within public health policymaking structures, by extracting MAFF officials from the COMA committee and by moving COMA to the newly formed and independent Food Standards Agency.

5.2.2 Context: New Government

In 1993 when the Working Group on Diet and Cancer was convened, the Conservative government was led by Prime Minister John Major. Major's period in office was characterized by a series of scandals over the personal behavior of members of the Government related to sex and financial impropriety, as well as repeated 'food scares' as outlined above. When the new, Labour, government came to power in May 1997 under Tony Blair, there were, as noted above, proposals to improve food safety with the introduction of the FSA and by making changes to MAFF and the Department of Health. As well as uncertainty over the future of COMA under these new structures around food safety, there were two other important developments in the workings of government that affected the policymaking process in this case.

A Committee on Standards in Public Life had been set up by John Major in 1994 after the so-called 'cash for questions' scandal in which Conservative ministers had been accused of being paid by lobbyists to ask questions in Parliament. This had prompted public concern over the proper conduct of officials and in its first report of 1995 had established the '7 principles of public life' known as the Nolan Principles (see Figure 5.2) which applied to 'all who serve the public in any way' including government committees or quangos or Non-Departmental Public Bodies (NDPBs).



Figure 5.2 The Nolan Principles of Public Life (source: Nolan, 1995)

These principles were part of a package of guidance or code of practice sent to COMA members with a memo from the Secretariat shortly after the failed first publication of the original ‘Nutritional Aspects of the Development of Cancer’ report:

- “3. The guidance takes into account:
- the recommendations in the First Report of the Committee on Standards in Public Life (the Nolan Committee);
 - the Government’s response to that report
 - the consultation paper published subsequently by the Government (Spending Public Money: Governance and Audit Issues) and the response to that paper.
4. Although COMA is not an executive NDPB it is proposed that members of COMA, its Panels, Working Groups and Subgroups receive a copy of this guidance so they are aware of the principles underpinning their contribution to formulating Government policy.” (248/MXO:53/3/8, 22 December 1997)

This may have formed part of the review of workings and membership of COMA as mentioned above and taken together with a report on 'Opening Up Quangos' sent to the Chief Medical Officer at around the same time reflects a government commitment to greater openness, accountability and transparency in government.

In addition, the new Labour government, interested in the ways in which their government communicated with the press and members of the public, had commissioned a review by Sir Robin Mountfield of the Government Information Service (HC Deb 1997), a non-ministerial department which comprised information officers working for each Department of State, and which the government felt needed updating to bring it in line with the demands of 24-hour media. Prime Minister Tony Blair said:

"The Report is about modernising the Government's communications with the media to make them more effective and authoritative--an integral part of a democratic Government's duty to govern with consent."

(HC 1997a)

The report proposed a new central Strategic Communications Unit which would improve co-ordination between government departments. The Strategic Communications Unit, launched in January 1998 (HL 1998) plotted government communications on a grid against key internal and external events. This was used by the information heads from each department to plan public announcements in a way that would minimise duplications or clashes. It also meant that Prime Minister Tony Blair's Chief Press Secretary and official spokesman, Alistair Campbell and his team could check the government's position against the grid and make sure that Campbell was properly briefed for his daily meetings with the press lobby. A common criticism of the Labour government during its period of office was that it was heavy on 'spin' and 'spin doctors' (Moloney, 2001; Franklin, 2004) and that this was at odds with the civil servants' professional code of conduct in which they are required to remain politically impartial. Presenting the report to the House of Commons Blair had been at pains to point out that while the new Government Information and Communication Service (GICS) would

"bring the practice and procedures of all Government press offices up to the standards of the best, geared to quick responses round the clock with help from a new central media monitoring unit."

This centrally managed system would still:

"retain a politically impartial service and to sustain the trusted values of the service embodied in its rules of guidance" (HC 1997a)

This emphasis on government communication strategy and '*handling*' of policy announcements and public relations is reflected in the data for the current research in a number of memos and consideration given to 'handling issues' around the COMA report (for example: memo, 4 April 1997, 836/MOO/8/8/1/1; memo, 5 December 1997, 248/MXO:53/3/1; memo, 15 December 1997, 248/MXO:53/3/4) along with memos outlining '*the line to take*' in interviews or when dealing with press inquiries (memo, 4 November 1997, 248/MXO:52/2/21; memo, 3 February 1998, 248/MXO:53/3/25). These memos consider how government policy is likely to be portrayed by the press in particular and the media in general; the best timing to release information or the report and responses to potential questions asked by the press. Memos show that the department monitored and analysed press coverage of the COMA report (248/MXO:53/4/2 11 March 1998) and the extent to which it was critical of government recommendations (248/MXO:53/4/2 11 March 1998). In addition, memos in the dataset show disagreements between Department of Health officials and communications officials from the Press Office on the '*line to take*' (memo, 6 November 1997, 248/MXO:53/2/24) and in one instance an email from the press office passes on a message from one of the Prime Minister's Special Advisers stating that:

"The PM is said to be relatively happy but is anxious that there should be no anti meat industry slant to any of it and has asked particularly that colleagues in PPD [Press and Publicity Departments] liaise closely with Alistair Campbell on the handling aspects."
(248/MXO:53/4/1, 13 February 1998)

The intense concern about media reporting of government policy associated with the Labour Government meant that concerns over media reporting played a key role in the policymaking process during the period late 1997-early 1998 when the COMA report and recommendations were being released.

5.3 Process

This section outlines the findings of the policy analysis under the 'process' heading of the policy analysis triangle. Several separate themes emerged under this heading and they are reported under three subheadings.

5.3.1 Process: Committee membership and policy processes

The main COMA committee was chaired by the Chief Medical Officer of the Department of Health and comprised 18 members, including one consumer member and 8 'ex-officio' (by right of office) members. During the period under analysis (1993-1998) ex-officio members, including the Chief Medical Officers from Wales, Scotland and Northern Ireland as well as from the Ministry of Agriculture, Fisheries and Food, the Medical Research Council and the Health Education Authority, were able to comment, participate in discussion and take part in the

decision-making process. As noted above, this was changed in January 1998 (248/MXO:53/3/19, 12 January 98) in a review of COMA's processes, when ex-officio members became assessors which meant that they could comment at meetings but they would not be part of the decision-making process. The majority of the other COMA members were academics based at Universities, Medical Colleges or Research Institutes. One member was based at Nestle UK, one other member was a representative 'of the public interest' (248/MXO:53/3/6), from the Scottish Consumer Council. The data show that the Chairman of the main COMA committee along with Department of Health officials and the COMA Secretariat played a role in the day to day running and processes of COMA, for example deciding how frequently meetings should be held and how reports should be 'handled' in terms of how they were released to the press and the wider public.

COMA commissioned reports on areas of food and nutrition policy that they felt warranted the Committee's attention. In the case of the Nutritional Aspects of the Development of Cancer (Department of Health, 1998) report, the introduction to the report outlines how the media played a role in this case:

"The European Code Against Cancer, first published in 1987 and revised in 1995, advises that certain cancers might be avoided and general health improved if a healthier lifestyle were adopted.....These and related public statements have received wide media attention and there is a perceived wisdom that there is now a causal link established between particular aspects of diet and the development of some cancers. In the light of these developments and of increasing public awareness of the possible benefits of dietary changes as well as the growing interest in the role of possible "protective" components of plant foods, in 1993 COMA convened a Working Group to examine the evidence relating aspects of diet to specific cancers." (Department of Health, 1998, p. 13)

As indicated in the above quote the process followed by COMA in this case was to convene a Working Group of experts in the particular area under examination and commission them to produce a report examining the evidence in this area. The Chairman, again along with Department of Health officials played a role in choosing the members of the Working Group on Diet and Cancer (248/MXO:53/1/5). The Working Group was Chaired by Professor A. Jackson, of the University of Southampton who was also a member of the main COMA committee. There were 8 other main members of the Working Group, one of which, Dr Sheila Bingham, was also a member of the main COMA committee. These members were academics drawn from either universities, research institutes or medical colleges. Members of COMA were appointed by the Chairman of the committee, the Chief Medical Officer with advice from the Secretariat. (248/MXO/53/3/6, memo, 17 December 1997).

In addition, there were 11 observers. Five of these were from the Department of Health, one from MAFF, one each from the departments of health in Wales, Scotland and Northern Ireland, one from the Medical Research Council in London and one from the International Agency for Research into Cancer. There was also a Secretariat of five drawn from the Department of Health.

As mentioned above, there are few minutes of the Working Group on Diet and Cancer in the dataset. However, the Nutritional Aspects of the Development of Cancer (Department of Health, 1998) report makes clear that they met 12 times in total, the first meeting was held on the 19th July 1993. A press release, published before the first meeting of the Working Group on 21 June 1993 invited '*submissions of evidence from individuals and organisations engaged in research in this area*' (Department of Health, 1998, p. 13). The report lists those who made submissions in response to this open invitation, as well as those who were personally invited by the Working Group to contribute. Eight respondents submitted to the Working Group following an open invitation in the press and a press release. Three of these were industry bodies or companies (the Food and Drink Federation, the National Dairy Council and Unilever), two were charities (the Cancer Research Campaign and the World Cancer Research Fund) and three were individuals. Nineteen individuals were invited to contribute to the Working Group's deliberations, the majority of these were academics from research institutes or universities. Few consumer groups or food campaigning organisations were either invited to give or offered formal submissions to the committee. However, the data shows that as the Secretariat considered the handling options for the report in April 1997, they considered approaching some external organisations for their comments:

"The only topics thought likely to be contentious are the recommendation on meat consumption and the criticism of supplements. It was felt desirable to alert organisations who might be expected to comment in advance of final publication." (836/MOO/8/8/1/1, 4 April, 1997)

"We therefore, plan to visit the following key players before publication: World Cancer Research fund (WCRF), who are expecting to publish a report on a similar topic, but with a global emphasis at the end of September 1997, Meat and Livestock Commission (MLC), Food & Drink Federation (FDF), National Farmers Union (NFU), National Food Alliance (NFA), and possibly the Consumers Association (CA), National Consumer Council (NCC) and the British Retail Consortium. We also propose to have a prebriefing meeting with interested parties i.e. those listed above, and cancer charities, Royal Colleges, PAGB and HFMA. In addition we propose a press briefing on the day of the launch." (836/MOO/8/8/1/1, 4 April, 1997)

This shows that the Secretariat and Department of Health officials pre-empted controversy over the red and processed meat recommendation and sought to ameliorate this by involving key stakeholders in this area. There were no formal records of these meetings in the dataset, of how these stakeholders were consulted, or of the contribution of these organisations in the final report.

The Working Group sent the draft report to the main COMA committee for consideration in April 1997. While the agenda for this COMA meeting (COMA, 1997) appeared in the archive, and makes clear that the report was due for discussion (248/MXO:53/1/7, 29 April, 1997), the minutes of this meeting were not available in the files the researcher had access to. Later documents make it clear that amendments to the report were sent to COMA members on 30th May 1997 (248/MXO:53/2/33) with requests for comments by August 1997 (248/MXO:53/2/33). However, on the 13th September 1997 the Daily Mail published a front page report about the forthcoming COMA report on Diet and Cancer, focusing specifically on the recommendation to eat less red meat and the concerns of the food industry, particularly meat producers who were *'already suffering the effects of the BSE crisis'* (Hope, 1997).

A week later, a member of the main COMA committee wrote to the Chief Medical Officer and ministers in MAFF and the Department of Health expressing concern over the meat industry's interpretation of the report. This led to an extraordinary COMA meeting being called at short notice. At this meeting, which did not include members of the Working Group, concerns were raised about the public health implications if the information in the report was misinterpreted by the public. Copies of an MLC Industry Briefing and an article in the Meat Trades Journal of the 17 September were tabled:

“These items misinterpreted the recommendations implying that an increase in average meat consumption would be acceptable.”
(179/CMA2/5/2, 24 September 1997, p. 4)

Some members of the committee objected to this disruption to normal COMA processes and raised concern and disappointment that:

“the process that had occurred would make COMA appear inefficient and expressed concern that the recommendation of the Working Group had been changed.” (179/CMA2/5/2, 24 September 1997, p. 7)

In addition, the COMA chairman explained that:

“...officials had met with representatives of the MLC and FDF to discuss the meat recommendation. The leaks to the media had been an abuse of this privilege.” (179/CMA2/5/1, 24 September 1997, p. 4)

However, the committee came to a decision at the end of this meeting:

“It was agreed that, subject to Ministerial approval, the summary and recommendations should be issued at the Press Conference and that a statement should be made about the delay along the lines that the Committee had felt it important to clarify the red meat recommendation in the light of inaccurate press speculation.” (179/CMA2/5/2, 24 September 1997, p. 7)

The concerns revolved around the decision not to attach a quantity to the red and processed meat recommendation since the Working Group had not felt there was enough evidence to quantify the amount of red and processed meat which would increase the risk of bowel cancer and so

“COMA had concluded by asking the Secretariat to draft a sentence recommending high consumers of red and processed meat to cut down.” (179/CMA2/5/2, 24 September 1997, p. 3)

However, it was felt that this lack of quantitation had allowed the meat industry in particular to make assumptions about ‘high consumers’ of red and processed meat which may leave the public mistakenly assuming they should eat more red meat.

A press release was issued the following day at the Press Conference along with a statement detailing the delay in publication of the report, these were widely reported in the press (see Chapter 7 for a full discussion of these reports) however neither of these documents were found in the archive files and so could not be included in the data for this study.

This confusion and the withdrawal of the report led to much activity, discussion and debate among the COMA Secretariat, Department of Health officials and the Chief Medical Officer, along with meetings called between ministers and questions from the opposition party in the House of Commons (248/MXO:53/2/37, 24 November 1997). In addition, a number of press reports criticizing the government were published and these led to tensions between ministerial offices and the Department of Health officials, who were then put under pressure by increased government scrutiny and requests for clarification and responses to press reporting. (for example: 248/MXO:53/3/25, 3 February 1998).

At the next main COMA meeting in October 1997, members were joined by members of the Working Group who complained about the process and how the release of the report had been handled. In a memo to the committee, signed by 4 members of the Working Group, they set out their view that clarification of the policymaking processes around COMA reports would be useful:

“This debacle has highlighted an urgent need to delineate the various processes that are involved in providing scientific advice to the Government via COMA, translating that advice into public health policy, and communicating that advice to the public. These different processes must be clearly separated one from another, and participants in each process should be kept informed of the activities of all the others. The failure to do this, and mistaking wishful thinking for sound scientific evidence, has led to the present highly unsatisfactory position.”, (248/MXO:53/2/1, October 21 1997)

This consideration of how policy should be made and communicated, and COMA’s role in the development of policy was further taken up at COMA meetings the following year in response to a review of COMA in light of the development of the Food Standards Agency. As the minutes show, in an item headed “*Future role of COMA*” the Secretariat noted that:

“the review was set up for two main reasons:

- To consider the way COMA would work prior to and after the establishment of the FSA;
- To consider the relationship of COMA to policy formation. Detailed comments to be sent to the Secretariat by 30 October”

(179/CMA2/5/3, 22 October 1998, p. 3)

The committee considered the role of the Working Groups and their relationship to policymaking:

“Members discussed the relationship of the Working Group/Subgroups to the main committee. The Working Groups have a very specific remit within which they weigh the available evidence, produce a technical report, evaluate policy options and make recommendations for research. Working groups cannot be expected to go beyond that remit. It should be the responsibility of the main committee to identify the policy implications/options/recommendations based on the weight of evidence put into a broader framework e.g. considering issues of social relevance. A range of options can then be given to Ministers. The committee agreed that there were four main steps in the process of developing policy:

- The Working Group consider the science;
- COMA recommends a series of options;
- Department of Health develop policy advice based on COMA’s scientific assessment;
- Ministers decide on the appropriate policy.

Each stage in the process needs to be more clearly defined.”

(179/CMA2/5/3, 22 October 1998, p. 5)

In addition, there were questions raised among the committee members about the role of the Chairman of COMA and whether this role should be taken by the Chief Medical Officer or whether CMO's close relationship to the Department of Health compromised this position.

The data show that in this case the concern over the 'handling' of the report and pre-briefing meetings with stakeholders led to press speculation about government recommendations. This in turn led to a media storm which put pressure on government ministers and policymakers to make decisions public. In addition, this, and discussions about proposals for new governance arrangements of COMA under the Food Standards Agency led to a review of COMA's policy making processes.

5.3.2 Process: Openness

As is noted above, from 1997 onwards there was an increased commitment to openness and transparency by the incoming Labour government. This was tied to concerns around standards in public life and improvements in the communication of scientific advice. The COMA report and the 'difficulties' around its release late in 1997, had contributed to the desire for more open and transparent processes. The data show that the Chief Medical Officer, at that time the chair of COMA, supported this:

'As you know I have thought about this particularly in relation to our specialist committees. Many of them already have membership of a non-scientific nature, and this has generally been extremely beneficial. I would however like to take it a stage further and have suggested that committees such as COMA might well be open to the public. This would send a very important signal that there was nothing to be hidden, and that the debates and discussion were valid and at times difficult. That scientific uncertainty was certainly there in the meeting itself and that people were able to express independent opinions on particular matters. I hope this might be reflected in some of the discussions around the paper.' (248/MXO:53/3/5, 18 December 1997)

COMA members agreed at the 68th COMA meeting that the committee "*should move towards greater openness*" and that meeting minutes would be made public, and that there should be a COMA website (179/CMA2/5/3, 22 October 1998, p. 2). However, they stopped short of complete transparency, deciding that:

'minutes should be written in a non-attributable manner in preparation for them being made publicly available in the future' (179/CMA2/5/3, 22 October 1998, p. 2)

Members also resisted the idea of completely open meetings. In a meeting attended by a Minister from MAFF who favoured open meetings, some members said that '*people will play to the gallery and different decisions may be made because the meeting is open to the public*'. Others felt that opening up meetings '*would mean a greatly increased workload for the*

Secretariat and this could result in reduced achievements because of the increased administrative load. Members were concerned that opening up meetings would lay the committee open to lobbying, for example from the food industry. In the end, members agreed that *'moving to a more open way of working should occur gradually'* (179/CMA2/5/4, 27 April 1998, p. 7).

5.3.3 Process: Handling issues

The data show particular awareness of media reporting, with concern over 'handling issues' as well as a sensitivity to the meat industry in terms of consulting with them (among others) before producing the report. Department of Health officials, when considering the 'handling' of the report recognized that the recommendation on meat consumption was 'likely to be contentious' (836/MOO/8/8/1/1, 4 April 1997) and later, when the report was due to finally be published in March 1998 a memo from the Prime Minister's office expresses concern that there should be no "anti-meat industry slant" when presenting the report (248/MXO:53/4/1, 13 February 1998). The press coverage of the release of the report in March 1998 is monitored (248/MXO:53/4/2, 11 March 1998) for comments that are critical of government and there is evidence in the data of discussions among Department of Health officials about the 'line to take' when responding to journalists' questions.

The papers from the archive show that Ministers and Department of Health officials were well aware of press reports, especially after the first problematic release of the report in September 1997. Ministers requested comments or clarification regarding media reports from officials in the Department of Health. For example, in a memo dated 10th November 1997 headed "Financial Times Monday 10 November 1997: Meaty Issues – COMA report on diet and cancer" an official in the Department of Health reports that "*SofS's [Secretary of State's] office has requested a comment on the above article.*" (248/MXO:53/2/26, 10 November 1997). The data show Department of Health officials were contacted by the press office with requests for interviews, as shown in a memo dated 4th November 1997:

'Win Griffiths – Radio Interview

1. Our advice, and that of DH Press Office, is that the Minister Win Griffiths should not proceed with this interview. The COMA report Nutritional Aspects of the Development of Cancer is not due for publication until November or December 1997.
2. Below are one line answers to the questions posed.'

(248/MXO:52/2/21, 4 November 1997)

Department of Health officials were pressing for the report to be published as soon as possible after its original problematic release, to minimize further criticism of the process in the press. Care was taken by the Secretariat to secure both the Working Group and the main COMA committee's agreement of the final wording of the report and this slowed down the process considerably. The publication of the report was further slowed by a delayed meeting to discuss

its publication between the Secretary of State for Health, the Minister for Agriculture, Fisheries and Food, junior ministers from both departments as well as the Chief Medical Officer. This was delayed several times and was eventually held in February 1998 (248/MXO:53/3/26). By this time several press reports had been published questioning the report's delay and suggesting either a cover up or a disagreement between government departments. These press reports added to tensions between departments and the pressure on the COMA secretariat to publish the report.

However, Department officials made a recommendation in early December recommending that *'publication should take place in the week beginning 12 January 1998'* and that *'an announcement of the publication is made through a press release issued by CMO with the possibility of CMO briefing some sympathetic journalists'*. They had decided against a pre-Christmas publication to minimise negative media coverage:

'...it might also give the media the opportunity to be more mischievous in covering the story over the Christmas and New Year period when there is usually little for them to cover. There is also, of course, the question of whether the festive season is the right time to be sending out public health messages about the links between red and processed meat consumption and colorectal cancer, compounded by the recent announcement relating to beef on the bone.' (248/MXO:53/3/1, 5 December 1997)

In summary, the archive papers used in this analysis show that a high level of importance was attached to media reporting by civil servants and government politicians. High level concern over negative media coverage of the government's impact on the British meat industry was apparent in the documents. Department officials were at pains to present unity between the government departments of Agriculture Fisheries and Food, and Health.

5.4 Content

Most of the documents in the sample detailed the process and context in which the policy and recommendations were made. There were fewer documents relating to the content of the policy. Those documents that did relate to content were concerned with debates and discussion among committee members and officials about the precise quantification of the amount of red and processed meat that should be referred to in the recommendation. This could have been due to the small number of meeting minutes of the Working Group in the dataset – these would perhaps have given details of the discussions among the Working Group which drafted the Diet and Cancer Report.

COMA had undertaken some work to try to develop a scoring system to judge the scientific quality of research evidence and nutrition studies to introduce a more robust system of evidence assessment (Department of Health, 1998). This period of tightening of what was 'good'

evidence, led them to conclude that despite a large volume of literature on meat and cancer risk there were relatively few studies that scored highly on their scoring system. This raises questions about the quality of evidence available to the committee on which to base a set of policy recommendations. The lack of robust data is also perhaps one of the reasons why COMA meeting minutes and memos relating to the recommendation specifying the amount of red and processed meat the population should consume show so much discussion around this topic.

Expressions of concern over the precise wording of the red and processed meat recommendation were more prevalent after the first publication of the report. There were discussions at the Emergency COMA meeting of September 1997 relating to this point. Some members point out that *'the mean would change in a mathematical sense as a result of the decrease in consumption at the upper end of the distribution.'* While others contend that *'the reason for the recommendation that the mean intake should not change was that if intakes decreased overall consumers with low intakes might incur new health risks due to lowering their intakes.'* One member points out that *'if there was a graded response then there is increased risk with increased intake.'* While another argues *'that the available evidence was not conclusive.'* (179/CMA2/5/2, 24 September 1997, p. 6)

The discussions continue at the following COMA meeting. One member says *'if some consumers above the mean were reducing their intake and there was no change in consumption for those below the mean then the overall mean would fall.'* While another asks if the Working Group *'were convinced that a reduction in red and processed meat would reduce the risk of colon cancer.'* A member of the Working Group responded that *'it was impossible to be certain on the basis of the available data, but it was probable.'* (248/MXO:53/2/9, 21 October 1997)

The quantification of the amount of red and processed meat that people should eat caused unease among members of the Working Group, who, in a memo to the main COMA committee, complained that:

'...we have grave doubts about accepting the recommendations agreed on 24 September by COMA, and made public by Mr Frank Dobson in his press release the following day.....we do not feel that the evidence reviewed by the Working Group can justify the recommendation that average consumption of red and processed meat should fall.' (248/MXO:53/2/1, 21 October 1997)

With tension and disagreement among COMA members, with some having threatened before the October 1997 meeting to resign (248/MXO:53/2/6, 29 September 1997), and with Working Group members unhappy over the level at which the red and processed meat recommendation should be set, the Chief Medical Officer and Department of Health officials were careful to make

sure they had the agreement of all COMA members and Working Group members before re-publishing the report. Further minutes and memos were circulated among the group to clarify this, for example:

'2. CMO is grateful for the work which has taken place on the draft and is broadly content. However, a revision is suggested for consideration in paragraphs (4) and (5) which is to insert the word "current" before "average" in the two underlined sections.

These would then read:

(4) It is not recommended that adults with intakes below the current average, and

(5) Adults with intakes of red and processed meats greater than the current average.'

(248/MXO:53/2/12, 24 October 1997)

And this from a member of the Secretariat

'CMO says that it is absolutely essential that the amended version is recirculated to all COMA members once again. Given previous problems it is absolutely unthinkable not to take this step – process is all and we must be seen to have done all that is necessary to clear the final text with members.' (248/MXO:53/2/28, 12 November 1997)

This frustrated some civil servants as they were aware that this would delay the publication of the COMA report further.

Another influence on the content of the COMA report was the World Cancer Research Fund's report into Diet and Cancer which was also due to be published in 1997. Several COMA members were also contributing to this report and a memo from the dataset shows the Working Group were aware of it and were concerned about differences between the two reports:

'A major concern of the subgroup...was that the Report might be at odds with another expert Report nearing completion under the auspices of the World Cancer Research Fund (WCRF).... Unfortunately, the Working Group had not had the opportunity to see their confidential drafts.' (248/MXO:53/1/2, 11 September 1996)

The COMA Secretariat made efforts to make sure WCRF recommendations and COMA recommendations aligned in order to minimize public confusion:

'We have now negotiated a process with WCRF, with the agreement of the Chairman, to ensure that we have a common understanding of each other's process. Understandably both the WG and WCRF are not currently looking to negotiate conclusions, but rather to explore the potential for unhelpful apparent inconsistencies, and minimise the chance of needless public confusion.' (248/MXO:53/1/2, 11 September 1996)

While there are no details in the available documents giving further information of any meetings between COMA and the WCRF at this time, or of any inconsistencies identified by the Working Group or the Secretariat, a memo from the Chief Medical Officer following the initial publication of the COMA (1998) report and the WCRF (1997) report suggests a desire to distance COMA from the WCRF recommendations on red and processed meat, which advised limiting intake of red meat '*If eaten at all, red meat to provide less than 10% total energy*' (WCRF, 1997, p.522). On 29th September 1997, four days after the WCRF report was published, The CMO recommended in a memo:

- 'b) now that we have seen the WCRF Report and the press comments ("meat used as a flavouring or a garnish") we distance ourselves from that Report,
- c) the difference between the two Reports in relation to meat is highlighted, backed by science, rather than minimised' (248/MXO:53/2/6, 29 September 1997)

The heightened concern over the precise quantitation of the red and processed meat recommendation not only reflects the uncertainties in the evidence used by the committee and the Working Group but also the challenges associated with translating such evidence and COMA's recommendations into public health advice. In the end, the recommendation on this area in the final published report was long, convoluted and difficult to interpret. This was perhaps as a result of having been redrafted by many authors many times:

'The Working Group recommend for adults that individuals' consumption of red and processed meat should not rise; that higher consumers should consider a reduction and as a consequence of this the population average will fall. Adults with intakes of red and processed meats greater than the current average, especially those in the upper reaches of the distribution of intakes where the scientific data are more robust, might benefit from, and should consider, a reduction in intake. It is not recommended that adults with intakes below the current average, should reduce their intakes. The wider nutritional implications of any reduction should be assessed. As a guide to help identify where people's patterns of consumption lie in the distribution of intakes, the current average consumption of red and processed meats in the UK is around 90g/day cooked weight (8-10 portions per week), and consumers in the upper reaches of the distribution of intakes about 140g/day cooked weight (12-14 portions per week). This latter figure represents one standard deviation above the mean. 15% of consumers eat more than this amount. These recommendations should be followed in the context of COMA's wider recommendations for a balanced diet rich in cereals, fruits and vegetables.'

Department of Health (1998) p. 197.

In the Preface to the report the Chief Medical Officer refers to the '*uncertainties in the data*', and comments on the recommendations:

'The recommendations are generally set in the context of the public health, and provide a challenge to health professionals, including health educators, as well as the professional and lay media, to translate them into meaningful advice for individuals.'
Department of Health (1998) p. iii

Here the CMO clearly puts some responsibility for translating policy and recommendations with the media as well as with health educators. However other documents in the dataset show some frustration at the lack of clarity on this process on the part of other members of COMA and the Working Group on Diet and Cancer. In a memo to the main COMA committee in October 1997, shortly after the withdrawal of the first Diet and Cancer report, members of the Working Group expressed their frustration:

'9. This debacle has highlighted an urgent need to delineate the various processes that are involved in providing scientific advice to the Government via COMA, translating that advice into public health policy, and communicating that advice to the public. These different processes must be clearly separated one from another, and participants in each process should be kept informed of the activities of all the others. The failure to do this, and mistaking wishful thinking for sound scientific evidence, has led to the present highly unsatisfactory position.' (248/MXO:53/2/1, 21 October 1997)

This was returned to in a later COMA meeting:

'15. Members discussed the relationship of the Working Group/Subgroups to the main committee. The Working Groups have a very specific remit within which they weigh the available evidence, produce a technical report evaluate policy options and make recommendations for research. Working groups cannot be expected to go beyond that remit. It should be the responsibility of the main committee to identify the policy implications/options/recommendations based on the weight of evidence put into a broader framework e.g. considering issues of social relevance. A range of options can then be given to Ministers. The committee agreed that there were four main steps in the process of developing policy:

- The Working Group consider the science;
- COMA recommends a series of options;
- Department of Health develop policy advice based on COMA's scientific assessment;
- Ministers decide on the appropriate policy.

Each stage in the process needs to be more clearly defined.'

(179/CMA2/5/3, 22 October 1998, p. 5)

It is clear from these discussions that members of COMA were confused about their role in the process that they were following and felt a need for clarification. The data show little clarification

of their remit in terms of its relationship to the policymaking process. Were they being asked by government to provide scientific assessment of the evidence only, or also to provide policy options for ministers? In providing recommendations in the eventually published report the Committee were providing clear policy to government. Clearly, ministers could either accept or reject these recommendations but the Committee were providing them with a policy on red and processed meat consumption that the government eventually adopted.

Further confusion is evident in the discussions around the 'translation' of COMA's recommendations into advice for the public and who bears responsibility for communicating the recommendations. The data show that the Committee, including its Chair, the Chief Medical Officer, did not consider that the communication or translation of these recommendations was their responsibility, rather this should be the responsibility of health professionals and the 'professional and lay media'. The data show that at Secretariat and Civil Service level, for example among the press team at the Department of Health, there was concern about how the recommendations were translated by the media and how they were communicated to the public. However, this does not appear to have led to proposals to include the communication of the recommendations in the deliberations of the Working Group or the main COMA committee.

5.5 Actors

Actor groups emerging from the data can be grouped into four categories: government, industry, NGOs, academics and media.

Actor	Description	Sector
COMA	Committee on Medical Aspects of Food and Nutrition Policy	Government
DH officials	Department of Health officials, COMA Secretariat	Government
MAFF officials	Ministry of Agriculture Fisheries and Food officials	Government
Ministers (DH)	Secretary of State, Ministers	Government
Ministers (MAFF)	Minister for Agriculture, Fisheries and Food	Government
Number 10	Prime Minister, Press Secretary, Minister without Portfolio	Government
MLC	Meat and Livestock Commission	Industry
NFU	National Farmers Union	Industry
FDF	Food and Drink Federation	Industry
BRC	British Retail Consortium	Industry
NDC	National Dairy Council	Industry

Unilever	Unilever	Industry
WCRF	World Cancer Research Fund	NGO
NFA	National Food Alliance	NGO
CA	Consumers Association	NGO
NCC	National Consumer Council	NGO
Academics	E.g.: from the Rowett Research Institute, University of Surrey, Nutrition Society, University of Dublin.	Academia
National Press	E.g.: The Times, The Daily Mail, The Guardian	Media
National Broadcasters	E.g.: BBC Radio 4, ITV	Media
Trade Press	E.g.: Meat Trades Journal	Media

Table 5.3 Actor groups, first embedded unit of analysis, policy making period 1993-1998 (source: author)

The research found that in some cases these groups overlapped: for example, some members of COMA and the Working Group were also advisers to the World Cancer Research Fund; the Prime Minister’s Press Secretary and some of his communications staff at Number Ten had previously worked for national newspapers; The Meat and Livestock Commission, while an independent Non-Departmental public body had links to government through its sponsoring department, the Ministry of Agriculture, Fisheries and Food. The research found evidence of alliances between these actors – for example: the COMA Diet and Cancer Working Group planned to consult with WCRF to compare findings as WCRF were preparing a similar report – some members contributed to both reports; Department of Health officials considered briefing some “sympathetic journalists” prior to the publication of the COMA report; Department of Health officials sought to minimize ‘contentious’ issues around the red and processed meat recommendations by contacting industry bodies and NGOs ahead of the publication of the report.

There is also evidence of tensions between and within actor groups. Within the government group of actors there were tensions between the COMA Diet and Cancer Working Group and the main COMA committee, with members of the Working Group complaining about the way their recommendations were presented. Departmentalism was evident as Ministers from the Department of Health proposed moving COMA from the Department of Health to the newly proposed Food Standards Agency – a move COMA members resisted. There were tensions between COMA and the meat industry, with COMA members feeling the meat industry had

abused their trust in leaking information about the report. Government press officers strove to control and limit press coverage by turning down interviews with the press, planning 'lines to take' and planning the optimum time to publish the report. In addition, there was evidence of a change in the actor groups present in the policymaking process, with MAFF officials role on COMA being downgraded as it was reformed in preparation for a move to the Food Standards Agency.

Industry groups, cancer charities and individual academics made submissions to the COMA Diet and Cancer Working Group following an open invitation. Further academics and academic institutions were invited by the Working Group to contribute either in writing or in person. Details of these submissions were not available as part of the dataset for the current research. Since COMA meetings and Working Group meetings were held behind closed doors with minutes not made publicly available, there is a lack of transparency and openness about the views of these groups or their contribution to the nutrition policy making process.

While the media is clearly present in the data as an actor group its presence is largely limited to the latter stages of the policymaking process, once the report has already been written. The implication here is that the press can play little part in the formulation of policy. In addition, while COMA has a lay/consumer member, there is little evidence of consumer involvement or attempts at public engagement as part of the policy formulation or communication.

5.6 Discussion

The analysis of the data in this chapter has shown that policymaking in this case was conducted in the context of two successive governments struggling to contain and deal with a number of food safety crises along with a crisis in beef farming and dissatisfaction among rural communities. This intensified after the election of the new Labour government in 1997 and as the COMA report and recommendations on red and processed meat were first released in September of that year. At the same time, there was a growing recognition both in government and in public discourse (e.g. media features) of the links between diet and non-communicable diseases and this had also antagonized relationships between the meat industry and government. Some of the anxiety appearing in the data over handling issues in relation to meat may be explained by an awareness on the part of the new Blair government of its reputation as part of a metropolitan elite, with little understanding of rural issues or rural life (BBC News, 2005a). The Labour party had come to power on a manifesto which had promised a free vote in Parliament on whether hunting with hounds should be banned. This, along with concerns among landowners about government proposals to increase public access to the countryside (the so-called 'right to roam' legislation) had led to the formation of the Countryside Alliance in 1997, an alliance of the British Field Sports Society, the Countryside Business Group and the Countryside movement (Anderson, 2006). The Countryside Alliance was formed to promote and defend the British countryside and rural life. This was also linked to dissatisfaction within the

rural farming community over livelihood issues such as milk prices and the continuing British beef export ban which continued from March 1996 to July 1999.

Another explanation for the high level of interest in media coverage of this issue in government was the New Labour Government's interest in press and media handling, and in how government was portrayed. The data and this analysis of it supports research which suggests a preoccupation on the part of the Blair administration with media monitoring and media management. Documents suggest media coverage of this issue at this time was regularly monitored and had an influence on policymakers and policymaking timetables. This chimes with literature on government communication strategies and how they were operating at this time (Moloney, 2001; Franklin, 2004; McNair 2007; Schlesinger 2009; Sanders, 2013). In addition, the evidence which shows the involvement of special advisers putting pressure on civil servant communicators echoes research from Gregory (2012) and others. Some fierce critics of government communication under Tony Blair suggest this 'spin' damaged the perception of the government's integrity and therefore public trust in government (Ingham, 2003; Jones, 2001 cited in Sanders, 2008). The evidence in this case certainly suggests a desire on the part of government to manage media coverage, however it also suggests a desire to move towards more open and transparent government processes and there are obviously tensions arising from these conflicting approaches. There were moves to make the policymaking process more transparent and open it up to public scrutiny, for example by holding open meetings. However, the documents suggest that the media were generally mistrusted by government officials, who sought to manage them at a particular point in the policy making process rather than involve them or include them in the formulation of policy, public discussion and debate about food policy making.

This nervousness may be explained by the context of food scares which framed this period of government. Reilly (2003) outlines a period of deep mistrust during the salmonella and BSE crises between the UK media and a UK civil service who felt pressured not to be open with them. Reilly (2003) quotes a Department of Health civil servant about the BSE crisis before 1997:

'We learnt that we had to be ultra-careful about what people said. Word came from the top that care had to be taken in all aspects of the job. There was no way another fiasco was going to be allowed to happen' (Reilly, 2003, p. 77)

Lang (1997) identifies two waves of food scares in 1980s – first, on food's impact on health (citing the 1983 NACNE, National Advisory Committee on Nutrition Education report scandal, in which the government were accused of covering up independent advice on nutrition – for more on this see Keane, 1997) second, on food contamination, adulteration, and safety (citing successive food safety scares including salmonella in eggs and listeria in paté). The Oxford

English Dictionary defines 'food scare' as '*An instance of widespread public anxiety about the food supply, especially concerning contamination or shortages*' with its origin in the late 19th century (Oxford Dictionaries, 2017), though some have claimed the term 'food scare' first appeared in the late 1980s (Fitzgerald and Campbell, 2001). While the term may not have originated in the 1980s, several authors have shown a marked rise in the number of food scares appearing in the media worldwide (Fitzgerald and Campbell, 2001; Mitchell and Greator, 1990; Knowles et al., 2007) at this time. At the same time there was a growth in consumer or lifestyle journalism, which began to emerge in the 1950s and 60s alongside the concept of consumer culture. Hanusch, 2012, links this to the increased size of newspapers and an increased airtime on television (Cole, 2005) – both of which needed content to fill them. While Hanusch (2012) argues that 'lifestyle journalism' is seen as soft journalism, as such is not taken as seriously as 'serious' journalism (such as news or political analysis) and does not fulfil the 'watchdog' or public interest remit, there is an argument that that a strand of consumer journalism in the UK (including magazines like the London Food Commission's Food Magazine http://www.foodcomm.org.uk/secure/Food_Magazine_37.pdf) exemplified a strand of British investigative consumer journalism in which journalists campaigned on behalf of the public to put wrongs right in the domestic sphere (see De Burgh, 2008 for further details).

The burgeoning health pages in national newspapers and Health Editors to fill them reflects the rise of lifestyle journalism and an emphasis, also identified in food policy (Lang, 1997; Department of Health, 1998) on individual lifestyles, risk-focused public health and public health advocacy organisations to promote this cause (for examples see UK Department of Health and Social Services documents "Prevention and Health: Everybody's Business" 1976 and Prevention and Health: Eating for Health 1978). This mirrors a rising emphasis on personal responsibility for health, which some have noted is likely to be less threatening for the growing food industry (Bufton and Berridge, 2000) than regulation. The data in the current study also reflect this rising emphasis on personal responsibility for health and diet and individualism – and research which pinpoints a concurrent lack of political interest in regulatory solutions to diet related disease (Lawrence, 2004; Lupton 2004; Hilton et al., 2012). For example, given one of the recommendations of COMA was to reduce levels of red and processed meat consumption among high consumers, there is no evidence in the data of government addressing the role that the Department of Health or MAFF could play in scaling back meat production or even that this was considered as a policy option. It is clear from the data that the government, at the highest level, were keen to protect the meat industry from criticism and from further damage. This shows a maintenance of the status quo post-war food policy landscape in which MAFF and the food production sector were particularly powerful at one level, despite the proposed introduction of the Food Standards Agency.

But there is evidence of a change in the policymaking networks. Lang (1997) identifies a coming together of a 'new generation' of food activists, starting in the 1960s and 1970s but continuing in

the 1980s and 1990s with the London Food Commission building an alliance including Action and Information on Sugar, Coronary Prevention Group, Friends of the Earth, Vegetarian Society and the National Food Alliance. This is described in the literature as a strong, independent voluntary sector (Bufton and Berridge, 2000; Lang, 1997) and the data from the current study shows the beginnings of a potential new policy network emerging with the inclusion of the National Food Alliance (now Sustain) in the list of potential consultees considered by the COMA Secretariat when publishing the COMA report. This, along with the distancing of MAFF from food policymaking arenas such as COMA, supports research which identifies a greater involvement for consumer groups in food policy making during this period (Smith 1991; Lang, 1997). However, civil society and consumer groups still play only a small role in the policy making process compared to other actors who come predominantly from government, academia or industry.

There are signs, too, of attempts, from the change of administration in 1997, to make government more open and democratic as a response to BSE. The data show attempts to include the public in the democratic and policymaking process but in the period under consideration (1993-1998) this was not really achieved, with COMA members repeatedly kicking full openness and transparency into the long grass. There is no evidence of interest on the government's part in using the media as a means of public debate, only in using them as a 'translator' of government policy. The data showed that in this case the government had the most power in the agenda building process (Habermas, 1996) but the media played a part in the development of the policy. The government in this case pre-empted what they predicted would become a 'contentious issue' – the issue of red and processed meat consumption – and in attempting to manage the handling of the report, they inadvertently inflamed it. Of course, the government's interaction with the media in this case did not occur in a vacuum and in this case it is useful to consult Baumgartner and Jones's (2009) Punctuated Equilibrium theory, which sets agenda setting and the media's role within a much bigger group of policy concepts (such as bounded rationality and policy monopolies). Looking at single issues they suggest that while most policies remain the same for long periods of time, they can suddenly undergo periods of change and the media may play a part in this.

In general, the relationship between the media and government policy makers suggests that as Kingdon (2003) argues in this case the media caused policymakers 'short-term annoyances' and because of this were seen as a 'risk' or spectre by government (Reilly, 1997). As explained above, the data suggest a tension between government moves towards transparency and openness in food and nutrition policy making but a desire on its behalf to take more control over media coverage, leading to tensions in the relationship between media and government. In this case, the data suggests that this antagonistic relationship was inflamed by external actors (for example the meat industry and the WCRF) and a hot policy topic in the shape of red meat, the cultural significance of which put it high on the media agenda.

5.7 Summary

The analysis of the data relating to the Government recommendations on red and processed meat, published in 1998, shows that these recommendations were made in the context of repeated food scares linked to a crisis in farming, particularly beef farming in the UK.

At the same time a growing interest by policy makers in non-communicable diseases, the 'diseases of affluence' such as cancer and heart disease, was being reflected in the media by a greater proportion of 'lifestyle' and consumer journalism, including features devoted to food and drink, and diet and health. There was a tendency for these to focus on individual responsibility for health and fitness and for diet.

The policymaking process in this case was influenced by a change in government, with the new government keen to distance itself from previous food crises with the creation of a new body, the Food Standards Agency. This began a process of trying to dismantle the once close links between policymakers responsible for food production and those responsible for diet and health, and a move towards more open and transparent policy making processes. Alongside this desire for openness and transparency was a move on the part of government to take more interest in managing media coverage. The new government had a heightened awareness of media coverage and media portrayal of government business. They sought to monitor and manage this from the highest level – this influenced the timetable of the policymaking process and the focus of those working on the recommendations. At the same time the tension caused by these two approaches – media management and control on the one hand and openness and transparency on the other – was evident in the data.

Inherent uncertainties in the evidence on which recommendations were based caused tension among the actors involved in making these recommendations on red and processed meat. They struggled to quantify the precise amount of red and processed meat that it was safe to eat. This led to tensions between internal government policy makers and external actors who sought to influence the policymaking process, sometimes using the media to put their concerns in the public domain.

Chapter 6: Research Findings, Research Question 1: Policy Analysis: 2001-2011

6.1 Introduction

This chapter lays out the research findings of the second part of the policy analysis undertaken to answer the first research question:

RQ1: How has the UK government's policy on RPM consumption developed?

Method: Policy analysis of government recommendations on red and processed meat consumption 1993-2011

As noted in Chapter 4 (Methodology) the overall approach taken in this research is a case study in which there are two embedded units of analysis. These two units chart and compare two periods of policy development. The first is the period 1993-1998 during which time the government Committee on Medical Aspects of Food and Nutrition Policy (COMA) developed and produced a report, 'Nutritional Aspects of the Development of Cancer' (Department of Health, 1998). The recommendations in this report led directly to the government recommendation that individuals' consumption of red and processed meat should not rise, adding that higher consumers should consider a reduction – this policy development has already been considered in detail in Chapter 5.

The second embedded unit of analysis concerns the period 2001-2011 during which time the UK government's Scientific Advisory Committee on Nutrition (SACN) again considered evidence on the links between red and processed meat consumption and bowel cancer as part of a substantial report into iron and health which was published in 2010. This Iron and Health report (SACN, 2011) covered a wide range of issues relating to iron – including iron deficiency and excess as well as the adequacy of iron nutrition in the UK population. As part of this review, recommendations on red and processed meat consumption were revised, leading to further government advice on this issue. This chapter lays out the research findings of the policy analysis of this second period of policy development.

As set out in the Chapter 4 (Methodology) the analysis was conducted using Walt and Gilson's (1994) Health Policy Triangle (see figure 6.1) using documents from official sources relating to the Scientific Advisory Committee on Nutrition (SACN) report on Iron and Health (Department of Health, 2011).

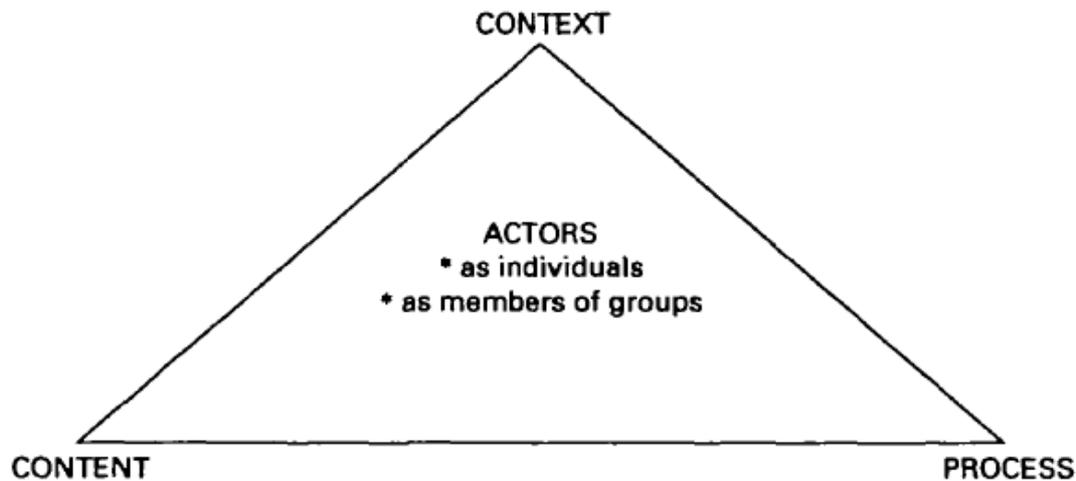


Figure 6.1 Walt and Gilson's (1994) Health Policy Triangle (source: Walt and Gilson, 1994, p. 354)

The documents fell into two categories:

- Core documents (n=44): official documents from SACN. These included agendas and minutes of the main SACN meetings, as well as minutes of the SACN Working Group on Iron, the draft version of the report, documents relating to the consultation process with stakeholders and the final version of the report.
- Other government documents (n=10): other documents relevant to the report which were issued by government bodies and included Department of Health press releases, Food Standards Agency (FSA) documents and Hansard reports.

These documents were in the main available from the SACN website and/or the relevant government agency websites. Those not available on the website were obtained from the SACN Secretariat.

The documents were read and re-read, and subjected to analysis using the Health Policy Triangle (Walt and Gilson, 1994). The analysis focused on sections of the documents that referred to red and processed meat (for further details on the methodology see Chapter 4, section 4.5.3). Documents were coded according to the four categories of the Health Policy Triangle, (Context, Content, Process, Actors) similar codes in each category were clustered together to form themes.

The findings are set out under headings taken from the Policy Analysis Triangle (Walt and Gilson, 1994) of context, process, content, and actors; under each heading themes emerged – where this is the case, these are presented as subheadings. While the findings are reported separately under these four main headings it is important to recognize that the four elements of

the Policy Triangle represent complex inter-relationships, connections, alliances, oppositions and contests (Walt and Gilson, 1994; Buse et al., 2005) and that there is some overlapping between the four elements due to this.

6.2 Context

This section sets out the context in which UK government recommendations on red and processed meat consumption of 2011 were formulated. The previous COMA (Department of Health, 1998) report is briefly revisited here as part of the analysis of the context in which the later recommendations were made.

6.2.1 Context: COMA report 1998

Prior to the left-of-centre Labour government being elected in the UK in 1997, responsibility for food and farming, including food safety, was held by MAFF (the Ministry of Agriculture Fisheries and Food) while responsibility for nutrition was held by the Department of Health. Advice on nutrition was given to the government by the Committee on Medical Aspects of Food and Nutrition Policy (COMA) which had been set up in 1963 (SACN, 2001).

In 1998, COMA published a report, *Nutritional Aspects of the Development of Cancer* (Department of Health, 1998) which led to controversy. The report had been first launched and printed in the autumn of 1997 but with reported disagreement both among members of the committee and between ministers at the Department of Health and the Ministry of Agriculture Fisheries and Food over the recommendation on red and processed meat (Laurance, 1997; Elliott, 1997) it was recalled days before it was due to be launched. Copies of the report were pulped (House of Commons, Hansard, HC Deb 25 November 1997 vol. 301 cc517-9W) and the committee agreed to rework the recommendations on red and processed meat for publication at a later date. In the resulting press coverage as well as questions in the House of Commons (House of Commons, Hansard, HC Deb 06 November 1997 vol. 300 cc387-9 387) the meat recommendations overshadowed other recommendations on diet and cancer in the media (Laurance, 1997; Elliott, 1997).

6.2.2 Context: New governance structures

At the same time the crisis in farming and food safety caused by the cattle disease BSE (bovine spongiform encephalopathy) and the linked disease in humans vCJD (variant Creutzfeldt Jakob Disease) was continuing with the BSE Inquiry (also known as the Phillips Inquiry) being announced in Parliament on 22 December 1997 and set up on 12 January 1998 (BSE Inquiry, 2000). At the beginning of December 1997, the sale of British beef on the bone was banned and the government faced opposition from rural communities and groups representing them, to their plans to introduce a ban on fox hunting. In the wake of these farming and food safety crises the new Labour government were developing plans for a new Food Standards Agency, a non-ministerial departmental body, which would attempt to integrate food policies and put

responsibility for them at arm's length from government interference (van Zwanenberg and Millstone, 2005). The Food Standards Agency (FSA) had been conceived by Professor Philip James in a report for Prime Minister Tony Blair (James, 1997) and would take responsibility for nutrition away from the Department of Health and off-farm food production and food safety away from MAFF, the Ministry for Agriculture, Fisheries and Food (van Zwanenberg and Millstone, 2005). In 2001 MAFF was replaced by a new ministry, the Department for Environment, Food and Rural Affairs (DEFRA).

As part of these changes in governance, the Committee on Medical Aspects of Food and Nutrition Policy (COMA) was disbanded in 2000 and was replaced by the new Scientific Advisory Committee on Nutrition (SACN), as noted in a press release dated 22 February 2001:

'The Committee's establishment follows the setting up of the Food Standards Agency and the consequent need to review existing arrangements for scientific advice on nutrition. The Committee will advise The Agency and Health Departments and will be supported by a joint secretariat from The Agency and the Department of Health.' (SACN, 2001)

In a marked change to the function of this advisory committee, unlike COMA, the Committee on Medical Aspects of Food and Nutrition Policy) SACN, as set out in the James report on the FSA (James, 1997) was not responsible for making nutrition policy, only for presenting scientific evidence and risk assessment. At the first SACN meeting (SACN 2001) the post-BSE, evidence-based context in which this new committee was operating was highlighted as the minutes show:

'The committee were informed that the findings of the Phillips Inquiry had highlighted a lack of public confidence in Government expert advisory committees. The importance of recognizing and communicating uncertainty in the scientific evidence was noted.' (SACN, 2001a)

Among various Working Groups set up by the new committee was the SACN Working Group on Iron, which had its first meeting on the 8th March 2002 (SACN, 2002), '*in order to assess the possible adverse nutritional implications of a reduction in red and processed meat intakes*' (SACN 2010, p. iii) due to the COMA recommendations of 1998. The SACN Working Group on Iron took eight years to report their findings. In the meantime, the World Cancer Research Fund (WCRF) bought out their second major report on diet and cancer prevention (WCRF, 2007), which advised limiting red meat consumption to 500g/week and avoiding processed meat altogether. At the same time the British meat industry faced continuing problems, with an outbreak of Foot and Mouth Disease in 2001 and an ailing pig industry - despite UK pork and

processed pig meat consumption rising, the national pig herd decreased by 40% between 1999 and 2007 (House of Commons, 2008).

6.2.3 Context: New Government

By the time SACN's draft Iron and Health Report was sent out for consultation in June 2009, the Labour Government, which had been in power since 1997, was in the final year of its administration. The then leader of the opposition Conservative party, David Cameron outlined in a speech his plans to make cutbacks to government bodies known as quangos or quasi-autonomous non-governmental organisations. This was dubbed a '*bonfire of the quangos*' in the press (Wooding, 2009) who pointed the finger at costly, '*bloated quangos*'. The Food Standards Agency (Hall, 2009) and SACN (Watson, 2010). After the May 2010 general election when a new coalition government was formed between the Conservative and Liberal Democrat parties, as predicted, the new government dismantled the Food Standards Agency, moving responsibility for some food labelling to the Department for the Environment Food and Rural Affairs in September 2010 and responsibility for nutrition policy, including SACN, back to the Department of Health in October 2010. This atmosphere of uncertainty about UK nutrition policy and the role and existence of SACN affected the policy making process as discussed below.

6.3 Process

This section lays out the findings in relation to the process of developing the UK government's recommendation on red and processed meat consumption and bowel cancer. For the purposes of this research the process is defined as beginning with the commissioning of the SACN report on Iron and Health in 2001 and ending with the Department of Health's recommendation on red and processed meat consumption in February 2011 (Department of Health, 2011).

6.3.1 Process: Timetable

As noted above the Iron and Health report took eight years to complete. The Chair of SACN, Professor Alan Jackson, acknowledged this in his preface to the report:

'Completion of this report has been a lengthy process and has taken longer than originally envisaged. In part, this is because work on the report (which commenced in 2002) was suspended from 2006 due to other SACN priorities, but also because of the innate complexity of the topic.' (SACN, 2010, p. iv)

SACN were expecting the report to be finished much sooner; work had begun on a draft report early in 2004:

'Timetable

43. Members were asked to send updated drafts to the Secretariat by the beginning of August....The aim will be to get a final draft of the Working Group's report on Iron to the

main SACN committee by February 2004 before sending it for public consultation.’
(SACN, 2003)

However, the minutes of the Working Group on Iron’s meetings show repeated delays to the completion of the draft report (SACN 2004; SACN 2005) and a long period of almost three years when the Working Group on Iron did not meet at all (SACN 2008). A draft report was finally presented to the main SACN committee in February 2009, after which it was put out for “scientific consultation” (on the 17th June 2009). A further and important delay came with the change of government in 2010. The intention had been for the FSA Board to discuss the report’s recommendations and then formally advise health ministers (SACN, 2009a). However, with the change in government after the general election in May 2010 the report’s publication was delayed again ‘*Due to the current uncertainty surrounding the future direction of Nutrition Policy associated with the change of Government*’ (SACN, 2010a, p. 18).

When the Iron Report was finally published on 25th February 2011, the Nutrition Division had been transferred from the Food Standards Agency to the Department of Health along with SACN’s secretariat. The nutrition policy making process itself then also changed. SACN had been an Advisory Non-Departmental Public Body (ANDPB), as it transferred to the Department of Health it was no longer classified as a public body but as a Departmental Advisory Expert Committee. This was explained to members in October 2010 when they were told that SACN

‘...therefore will not report directly to Ministers but to senior Department of Health officials. The Committee will retain its independence and its working relationship with the Devolved Administrations and its membership will continue to consist of independent experts appointed through open competition’ (SACN, 2010c)

Under this process it is not clear from the available documentation what other considerations were taken into account when the Department of Health made their recommendations on red and processed meat on the 25th February 2011 (Department of Health, 2011). Clearly the senior Department of Health officials involved with SACN have a key role in communicating SACN’s recommendations, but it is not clear whether officials or Ministers from other departments (for example DEFRA, who may have been interested in a reduction in meat consumption) were consulted, or who was involved in drawing up the advice that is given to the public. While SACN fell under the Food Standards Agency’s remit it was proposed that after the consultation process the FSA would discuss the report in their May 2010 Board meeting, which is held and webcast in public. However, as outlined above by the time the report was published, the Nutrition Division including the SACN Secretariat had been transferred from the Food Standards Agency back to the Department of Health, so no such public discussion took place.

The recommendations as laid out by the Department of Health follow the recommendations made by SACN in that they advise:

- 'people who eat a lot of red or processed meat – around 90g or more of cooked weight per day – are at greater risk of getting bowel cancer;
- cutting down to the UK average of 70g a day can help reduce the risk; and
- this can be achieved by eating smaller portions or by eating red and processed meat less often' (Department of Health, 2011)

The SACN Secretariat played a key role throughout the policymaking process, since members of the Secretariat (made up of FSA and/or Department of Health officials) attend all meetings and provide information, advice and briefing documents to the committee. This blurs the lines of responsibility and the relationship between SACN as an independent advisory body and the government Department of Health.

6.3.2 Process: Transparency, openness and consultation.

6.3.2.1 Committee Openness

As well as consulting the evidence, it is a requirement under their code of practice (Code of Practice for Scientific Advisory Committees, 2011; Government Office for Science, 2011), that SACN and other government scientific advisory committees communicate with the public and other interested parties:

'Communication with the public

95.SACs should have a policy for the communication of their outputs to the public and other interested parties and for receiving feedback.

Possible mechanisms include the internet, open meetings, public consultation, dialogue with interested parties and the calling of outside experts to attend meetings.

96.SACs should consider identifying interested parties and maintaining an open register of relevant stakeholders. They should consult on issues that generate widespread public concern or raise significant ethical questions. Particular attention should be paid to the communication of risk assessments.

Open meetings

97.Open Meetings allow transparency of committee activity, making it easier to maintain independence. Unless there is a specific sensitivity requiring 'closed' (unobserved) meeting then it is desirable to aim for openness. SACs should aim to hold open meetings when possible or at least provide some specific opportunities for direct public access.

(Government Office for Science, 2011, pp.21/22)

At the first meeting of the SACN Working Group on Iron, Agenda Item 2 was a paper for discussion: 'Openness of Committee Proceedings – Revised' (SACN, 2002). This made clear the Government's then new policy on transparency and openness:

'4.1 In accordance with the Government policy on transparency in working procedures, SACN should operate from a presumption of openness. The proceedings should be as open as possible and should maintain high levels of transparency during routine business.'

SACN (2002)

This approach was in marked contrast to SACN's predecessor COMA which had met behind closed doors and had not made the minutes of its meetings public (see further detail on p.122). However, while the Working Group agreed to publish meeting agendas and minutes in advance, they agreed to hold only one open meeting per year. In addition, the Group agreed that while the minutes should accurately reflect proceedings comments or views would be recorded on a non-attributable basis. The concerns raised by members about attributed comments were set out in the minutes of the first SACN meeting:

- 'the impartiality of discussions might be compromised
- there is a danger that comments may be taken out of context
- although members are independent, they also represent the interests of others in their field
- quality of the advice may be compromised
- individuals might be subject to excessive lobbying.' (SACN, 2001a)

Perhaps because of this attitude, the 12 meeting minutes of the Working Group on Iron are rather sparse and substantive discussions including the views of members are not reported in any detail. The issue of committee openness was discussed again during the 30th main SACN meeting in February 2010 (SACN, 2010b). Here some members sought to increase the openness of committee procedures: '*some members considered that holding all deliberations in open session might help public understanding about the uncertainties around evidence on nutrition issues.*' However, other members were not convinced and members agreed that the status quo should be maintained for main meetings, so that main meetings were held in open session with items that were considered pre-consultation or included confidential information being held in closed session. Similarly, at this meeting some members argued that it could be beneficial for external observers to attend Working Group meetings, others thought that '*discussions could be constrained and that individual member's opinions may be captured and used inappropriately.*' (SACN, 2010b, p. 9) and so it was agreed that the discussions of Working Groups should remain in closed session.

While the committee made a clear commitment to openness the practical application of this was resisted by committee members and full openness and transparency was rejected after several discussions over a number of years.

6.3.2.2 Consultation

The Code of Practice for scientific advisory committees (Government Office for Science, 2011) also permits public consultation, with some provisos:

Public consultation

98. Public consultations should accord with the Government's Code of Practice on Consultation (see Annex D). Consultations will generally be designed to enable the SAC to reach a view on the advice it should offer, rather than the policy options to be offered to the sponsor department(s). Any consultation on policy options will generally be for the sponsoring department. A committee may however wish to advise government on where it thinks public consultation on policy might be necessary.

99. Secretariats should ensure that relevant parties, including academics/ experts, centres of scientific excellence and learned societies are made aware of consultation exercises. Records should be kept of responses.' (Government Office for Science, 2011, pp.21/22)

In the case of the SACN report on Iron and Health (2010) a three-month process of consultation took place once a draft report had been published:

'The draft report was posted on the SACN website on 17 June 2009. Interested parties were invited to submit comments relating to the science of the report by 23 September 2009' (SACN 2010, p. 208).

The documents relating to the consultation (SACN 2009b) show that comments were received from 15 respondents. These were made up of 5 responses from government bodies, 4 from industry bodies, 3 from academics or academic institutions, 2 from NGOs and 1 from an individual (see table 6.1). However, it's not clear how many were specifically invited to respond, how many responded via the press release or open call for consultation.

Name	Sector
Committee on Carcinogenicity	Govt body
Committee on Toxicology	Govt body

Safefood ¹	Govt body
Scottish Food Advisory Committee	Govt body
Northern Ireland Food Advisory Committee	Govt body
ADHB on behalf of BPEX (representing pork industry) and EBLEX (representing the beef and lamb industry)	Food industry
Quality Meat Scotland (promotional and development body for Scotland's red meat industry)	Food industry
Food and Drink Federation	Food industry
Health Food Manufacturers' Association	Food industry
MRC Human Nutrition Research	Academia
McArdle, Professor Harry J, University of Aberdeen	Academia
Rushton, Dr H, University of Portsmouth	Academia
Vegetarian Society UK, Friends of the Earth, Sustain, the Food for Life Partnership	NGO
British Nutrition Foundation	NGO
Dean, Jennifer	Individual

Table 6.1 respondents to the SACN Iron and Health report consultation (source: author)

This analysis of the responses to the consultation process (SACN, 2009b) shows that this process was dominated by government bodies (principally other advisory committees) and industry bodies. There were no responses from some groups who could be considered stakeholders, for example cancer charities such as WCRF or Cancer Research UK or Beating Bowel Cancer, indeed the NGO sector was not well represented with only two respondents, one of which was a single response from an alliance of food campaigning NGOs which carried less weight because it was a joint response. It is possible that membership groups such as Sustain and the Food and Drink Federation may have consulted with their members so this process may reflect a broader consultation than indicated by the data. This will be discussed further in the Actors section of the findings (see section 6.5 below).

6.3.2.3 The press

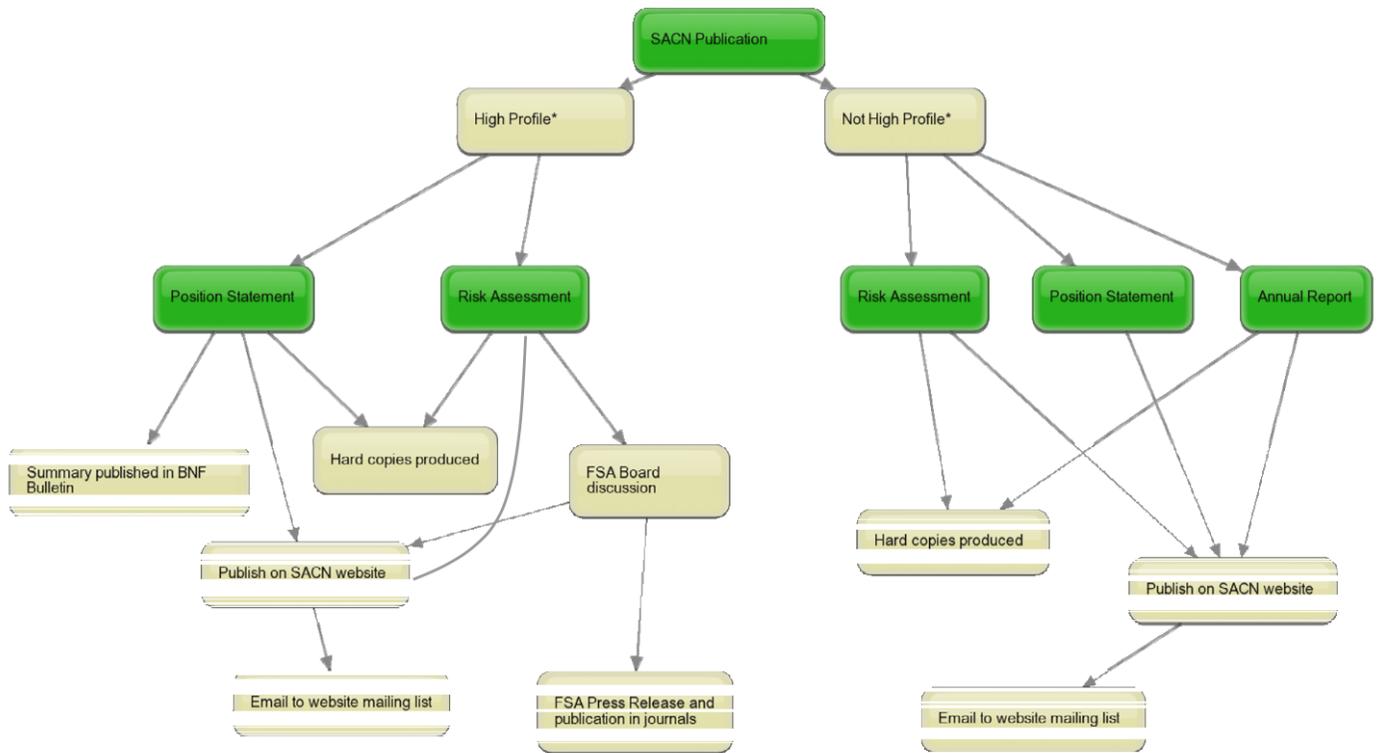
In 2009 at the 27th main SACN meeting a communications strategy was tabled, with an associated communications strategy paper. Issued to the committee as an appendix (SACN, 2009c) the paper outlines an approach to disseminating SACN risk assessments and position statements in response to concerns raised by members at a lack of formal guidance in this

¹ Safefood: an all Ireland body set up under the British-Irish agreement to promote food safety and nutrition issues in Ireland.

area. According to this paper, at this time (2009) SACN publications and position statements were published on the SACN website and promoted as a News Story on the SACN homepage. Press releases for each report were issued as standard practice by the Department of Health and on an ad hoc basis by the FSA. There was little discussion in the paper about SACN's approach to public engagement or public dialogue or how engagement with the media or the press should be handled. An accompanying interested parties/stakeholder list gives details of suggested organisations to notify of the publication of SACN reports. These are mainly FSA officials, Department of Health officials, other government departments, professional bodies, industry bodies, international organisations and academic bodies. NGOs are represented on the list but limited to The Consumers' Association and The National Heart Forum (SACN, 2009c).

In addition, a flow diagram was produced outlining the handling of SACN publications (see figure 6.2). The strategy paper and this diagram suggest that handling of SACN publications at this time was dependent on whether the publication was considered high profile or not. If a publication was considered high profile a press release would be prepared, if not, no press release would be sent out. There was little provision or discussion about public or press engagement with or dialogue about SACN recommendations or position statements. In general, the COMs strategy as outlined is very much focused on disseminating SACN publications and recommendations within an expert community of government officials, professional health, food industry and academic bodies and international organisations. Beyond emailing copies of reports to these interested stakeholders, posting reports on the SACN website and issuing a press release, little consideration is given in this document as to how to appropriately engage these stakeholders in SACN publications or activities. In addition, little attention is given to the consideration of public understanding, engagement or dialogue with SACN publications or position statements.

ANNEX B – FLOW DIAGRAM FOR HANDLING OF SACN PUBLICATIONS



* Discussion with FSA communications team/senior FSA officials to decide whether or not a publication is high profile

Figure 6.2 Flow diagram for handling of SACN publications (source: SACN 2009c, p. 7)

Discussing this paper in the meeting (SACN, 2009d), SACN members requested further discussions on how SACN wished to handle reports and the committee agreed to hold further discussions on this issue at a later date, however, further discussions in available minutes on the SACN website were not found.

According to the press release archive on the SACN website, a press release was made concerning the publication of the draft Iron and Health report and detailing the consultation process (SACN, 2009a). This document invites respondents to comment on the scientific content of the draft report only:

'The 14-week consultation will run until 23 September 2009 and respondents are asked to comment on the scientific content of the report only and not on the risk management aspects of the recommendations, as these are outside SACN's remit.' (SACN, 2009a).

However, this press release outlines three key recommendations made by the report which clearly address risk management – for example the recommendation on red and processed meat:

'Lower consumption of red and processed meat would probably reduce the risk of colorectal cancer. Although the evidence is not conclusive, as a precaution, it may be advisable for intakes of red and processed meat not to increase above the current average (70g/day) and for high consumers of red and processed meat (100g/day or more) to reduce their intakes' (SACN, 2009a).

SACN has a narrowly defined remit to independently evaluate scientific evidence in order to provide evidence-based risk assessment. However, in practice this research suggests that the structure of this report, which included consideration of the implications of the evidence on public health as well as their final recommendations to government, strayed into the territory of risk management and policy recommendations. These distinctions were further blurred by the consultation process which, as outlined above, invited responses to draft reports from stakeholder organisations such as industry and consumer bodies. These stakeholder responses are an important source of evidence when it came to SACN's recommendations on red and processed meat as is discussed below.

A further press release was issued about the SACN Iron and Health (2010) report. This came from the Department of Health and explicitly outlines the government recommendations on red and processed meat. As mentioned above, SACN's communications strategy paper (SACN, 2009c) dictates that press releases would be prepared and issued only for reports considered high profile. This may be the reason why the press release only discusses the

recommendations on red and processed meat, without mentioning the other aspects of SACN's Iron and Health report. In this way, the press release assumes media interest in this specific area of the report. The first two lines of the press release frame the news in a dramatic way:

'Red meat link to bowel cancer

People who eat a lot of red and processed meat are being advised for the first time to consider cutting down to help reduce the risk of bowel cancer, the Department of Health announced today.' (Department of Health, 2011)

The assertion that this is the first time high consumers have been advised to cut down on red and processed meat is not strictly accurate given that the same recommendation was made after the COMA report in 1998. This sheen of novelty may have attracted journalists to this story. The press release includes quotes provided for journalists to use. The advice is said to come particularly from the Department of Health, not from a specific minister or Secretary of State. The Interim Chief Medical Officer is quoted who emphasizes the health benefits of red meat as part of a '*heathy balanced diet*' while suggesting that '*people who eat a lot of red and processed meat should consider cutting down.*' Also quoted in the press release are Mark Flannagan, the Chief Executive of the charity Beating Bowel Cancer and Peter Baker, the Chief Executive of Men's Health Forum. Their quotes in the press release give an independent endorsement to the government recommendation. However, their quotes are careful to include caveats (could, may, might) that suggest the uncertainty of the evidence in this case:

'The occasional steak or extra few slices of lamb is fine but regularly eating a lot could increase your risk of cancer'

'The evidence suggests that a diet high in red and processed meat may increase your risk of developing bowel cancer'

'Men who enjoy regular breakfast fry-ups or roast beef dinners will be surprised to learn that eating too much red or processed meat might increase their risk of cancer'

(Department of Health, 2011)

The press release also contains 'practical tips' on cutting down on red and processed meat including cooked weight of red and processed meat items such as a rasher of grilled back bacon, a standard scotch egg, a pork pie or a doner kebab.

The press release is very much framed in terms of what individuals might do to reduce their consumption of red meat rather than suggesting how government, industry or civil society might take action to reduce the amount of red and processed meat in the food chain. In this way, the Department of Health places responsibility for health firmly with individuals.

6.4 Content

This section sets out the analysis of the policy development in terms of its content.

The Working Group on Iron faced two main challenges in formulating their recommendations in the area of red and processed meat. Firstly, the uncertainty of available scientific evidence. It was noted that the majority of studies may not have been large enough to detect a significant association; that there were methodological inconsistencies such as dietary assessment methods and inconsistencies in categorization of red and processed meat; they also found a variability in adjustments made for confounding factors in the studies for example genetic predisposition, fruit and vegetable intake and physical activity (SACN 2010, pp. 110 7.62-7.70). Secondly the limitations and insecurities in existing data on diet and meat consumption made it difficult for both SACN and the Department of Health to give a clear-cut recommendation to the public, as to how much red meat they should eat. The Working Group found the most recent National Diet and Nutrition Survey data of 2008/9 had a sample size that was too small, that diet was assessed by estimates of foods (SACN, 2010, p. 142, note 80). They looked at the NDNS data from 2000/1, which was also problematic, because here '*composite meat dishes (eg lasagna, pies), which also contain non-meat components, are reported as total amount of meat consumed, resulting in an overestimation of meat consumption.*' (SACN, 2010, p. 143). In light of this, the Working Group commissioned a remodeling exercise disaggregating composite dishes, and found that the estimate of average red meat consumption (upon which COMA's 1998 recommendations were made) was an overestimate by about 20g and was revised down by SACN from 90g to 70g per day, the level at which they set their recommendation. They concluded that it was '*not possible to quantify the amount of red and processed meat that may be associated with increased colorectal cancer risk.*' (SACN 2010, pp. 162-3). The intention of the committee may be to reduce high level consumption at population level down to the average of 70g a day, however in practical terms this is quite a complex and confusing message and may be difficult for consumers to manage.

Attempts were made by the Working Group on Iron to systematize their review of scientific evidence and evaluate existing literature in a robust way (see reference to a Framework for Evaluation of Evidence that Relates Food and Nutrition to Health, SACN 2002a, pp8-9). However, the uncertainty of the evidence and the data in this case allowed actors in the consultation process (see Table 6.1) to make claims and contest the recommendations in accordance with their own interests and views. Considering the actions agreed by the SACN Working Group on Iron in response to comments from respondents to the consultation process (SACN 2009b) several findings emerge: As mentioned above a consortium of food campaigning NGOs responded as one, with a short and general overall endorsement of the report which particularly welcomed the advice to restrict consumption of red and processed meat. This single relatively brief response meant these four organisations played little part in the process of consultation. It is not surprising that BPEX/EBLEX (the British Pork Executive and the British Beef and Lamb Executive) along with QMS (Quality Meat Scotland) who represent the meat industry were vocal on the issue of red and processed meat and cancer. They seek to undermine the evidence base used for the report (SACN, 2009b, p. 9, p. 15) and argue with the

terms of the modelling exercise undertaken (p. 12). On these counts the Working Group are firm in resisting their complaints. In common with other respondents, food industry respondents (including meat industry respondents) stress a lack of a causal link in the evidence on red and processed meat and bowel cancer. This results in further language of uncertainty being introduced into the report (SACN, 2009b, p. 3, p. 15). Importantly, respondents' comments on the Recommendations section of the report resulted in a major re-working of the recommendations including the recommendation on red and processed meat, which resulted in the Working Group agreeing to caveats including uncertainty on linear dose response as well as uncertainty on the impact of a reduction in red and processed meat on iron status (SACN, 2009b, pp. 15,16).

6.5 Actors

From the data, key actor groups emerge that can be grouped into three categories: government, industry and civil society (see Table 6.2)

Actor	Description	Sector
SACN	Scientific Advisory Committee on Nutrition	Government body
COC	Committee on Carcinogenicity	Government body
FSA	Food Standards Agency	Government body
NIFAC	Northern Ireland Food Advisory Committee	Government body
SFAC	Scottish Food Advisory Committee	Government body
DH officials	Department of Health officials	Civil service
Ministers	Ministers of Health	Politician
BPEX/EBLEX	British Pig Executive & English Beef and Lamb Executive	Industry
QMS	Quality Meat Scotland	Industry
FDF	Food and Drink Federation	Industry
WCRF	World Cancer Research Fund	NGO
BNF	British Nutrition Foundation	NGO

Table 6.2 Key actor groups in categories (source: author)

The research found that key actor groups overlap in some cases, for example BPEX/EBLEX in principal represents the British meat industry but the Scottish industry body Quality Meat Scotland were also represented, along with an overarching food industry body the Food and Drink Federation. The NGO the British Nutrition Foundation is partly funded by donations from the food industry (BNF, 2015) and so has some overlap with the Food and Drink Federation. BPEX and EBLEX are part of a wider organization called the Agriculture and Horticulture

Development Body which is funded by a levy set by government and paid by farmers, growers and others in the food supply chain. The AHDB is itself a Non-Departmental Public Body which although at arms-length from Ministers, report to a sponsoring department, in this case DEFRA, so has links to government.

Some actors were clearly present in the nutrition policy making process without apparently being present at meetings or taking part in the consultation process – for example research funded by cancer research charities e.g. Cancer Research UK or the World Cancer Research Fund played a role in the evidence considered but these groups did not take part in the consultation process. In addition, it is not clear from available documents which ministers were involved in making the final recommendations from the Department of Health or the political considerations taken into account when making these recommendations. Another ‘hidden actor’ is the press. The media were clearly considered in the policy making process as a press release was prepared and issued (Department of Health, 2011) and the media were briefly considered as part of a communications strategy. However, this formal involvement was limited to the final stage of the policymaking process, the implication being that the press or the media play no role in the more formative stages of the report or its development.

Some actors were absent from the policymaking process. Although SACN includes a lay representative on its main committee as well as a Consumer Expert member, and a process of public consultation was undertaken, there was little evident involvement in the data with representatives of the public or from consumer groups.

6.6 Discussion

A fundamental division in UK food policy is the separation of those parts of government that make food production policy and those parts which control nutrition policy (Barling et al., 2002; Lang et al., 2001). In addition, key corporate players in the food production system have become important in the market economy and so have been included into government consultations of food regulation (Flynn and Marsden, 1992; Panjwani and Caraher, 2014) leading to concern about the marginalization of public health nutrition in public policy (Hastings, 2012; Rayner and Lang, 2012). Some (Lang et al., 2001; Flynn and Marsden, 1992; Rayner and Lang, 2012) suggest that this dominant ‘productionist paradigm’ has failed to address pressing concerns about sustainability in the food chain and mounting public health issues such as obesity, cancer and cardiovascular disease (Rayner and Lang, 2012).

The recommendations on red and processed meat consumption that were examined in this chapter were found to have been prepared in the context of a long period of crisis in the UK meat industry which was linked to shifting governance of food safety and nutrition policy in the UK. There was evidence of tension between production and public health in the documents examined, when friction between health and food production was at a peak. In addition, policy

making within silos allowed narrow consultation with interested parties to take priority. Previous research shows that steps have been taken to address the lack of integration and joined-up policy in the UK (van Zwanenberg and Millstone, 2005) but these are hampered by the bounded remits or persistent silo mentalities within departments (Barling et al., 2002) as well as repeated reorganization in the wake of changing administrations (van Zwanenberg and Millstone, 2005; Jones et al., 2010). This latter point is supported by this research which shows the destabilizing effect reorganization in the wake of changing administration can have on the food policy making process. The analysis showed that the SACN committee was initially set up as part of a move to shift responsibility for nutrition and food safety away from central government to an arms-length organization: the Food Standards Agency in 2000. SACN was moved back to the Department of Health in 2010 and this had an impact on the policy-making process, it could be argued that this both slowed the progress of recommendations and changed the way in which eventual policy recommendations were made. Overall this research has shown that policy around meat consumption in the UK continues to be a 'hot policy topic' (Lang et al., 2009) with the cultural and economic place of red meat still impacting on the debate.

SACN maintains that its remit is risk assessment rather than risk management, however their commitment to providing recommendations in this report, in particular clear recommendations on levels of public consumption of red and processed meat (SACN, 2010), which were then adopted by the government is at odds with this. This has been noted by others in the examination of SACN's work (Timotijevic et al., 2013, p. 85), who argue that *'the risk management and communication elements of the issue are inextricably linked with the science/risk assessment as they provide context and bound science to political realities'*. These authors also note the inherent contradiction in an 'independent' advisory committee using consultation with industry, NGOs and members of the public to inform their reporting (Timotijevic et al., 2013). This research found that the public consultation process (with contributions from industry bodies, other government bodies and civil society organisations) had an impact on the recommendations made by SACN and this could call into question the impartiality and independence of the committee. The efforts made by meat industry bodies to influence the recommendations made by SACN during the consultation process echo the findings of McCambridge et al. (2013) and Moodie et al. (2013) who showed how the alcohol and food industry have used evidence in submissions to government to influence policy. While these authors argue the potential for corporations with vested interests to *'interfere with the evaluation of scientific evidence by policymakers'* (McCambridge et al., 2013, p. 2) should be restricted, others point out that a process of open consultation with stakeholders is recognised by most countries as an important part of setting nutritional recommendations and policy (Irwin and Michael, 2003; Timotijevic et al. 2010). Timotijevic et al. argue that stakeholder and consumer involvement may contribute in several ways: they can scrutinize frameworks for debate and widen the range of knowledge used to inform decision making. They can also increase the credibility of decisions and help maintain public trust. They praise SACN for their

inclusion of a lay representative on the committee as well as their commitment to public consultation which they have found lacking in nutrition advisory committees in other countries. However, they find a wider inclusion of public engagement with the process is lacking. This research has supported their findings in that although SACN does include a consumer representative and a lay member, there was a lack of open public fora during the formulation of the recommendations and general public involvement in the stakeholder consultation exercise was also lacking. Timotijevic et al. (2010) further argue that stakeholder and consumer involvement in policy recommendation and formulation can help achieve a greater link between micronutrient recommendations and behaviour change. The opposing views from the literature and the findings of this research raise important questions about the extent to which public and stakeholder engagement should form part of the process of formulating nutritional guidelines.

Key actors in this area are government communication departments and the mass media. As outlined in Chapter 2 (Literature Review, section 2.3.5.1) the literature reveals two paradoxes inherent in political communication in a representative democratic system such as that which operates in the UK (Gaber, 2007). Firstly, government departments have press officers whose job it is to promote and publicise government policies. However, they also have a duty to remain impartial and not subject to party political influence. Secondly, representative democracies require a model of 'informed consent' in order to operate – however the public need to be informed about both government and opposition policies and clearly the government have a vested interest in promoting their own policies over those of the opposition in order to keep themselves in power. Gaber (2007) sees two problems with the 'informed consent' model. 1: The media, as a so-called 'fourth estate', sees itself as a watchdog, with one role being to hold government to account. Government communications teams, particularly in health and science communication, have tended to view themselves as transmitters of information in a one-way linear model of communication which has been described by many as a 'deficit model'. Furthermore, this 'informed consent' model assumes that the public not only absorb but also trust the information they are receiving. However, we know from the literature that nutrition advice provided in the media is little trusted by readers (Lupton and Chapman, 1995; Regan et al., 2014) and this top-down model of health communication tends to disproportionately place responsibility with the individual, creating '*biological citizens*' (Greenhough, 2010) who are required to engage in a lonely life of '*endless self-improvement*' (Dixon, 2009). This perception could be avoided and perhaps greater links between nutritional advice and behaviour change could be achieved with better attempts to include consumers or the public in the formulation of dietary advice. This may be achievable with greater use of social media.

In common with the work of Jasanoff (1997) this research found that there was little evidence of dissent or debate during the deliberations of the SACN Working Group on Iron. This was despite a commitment to openness and transparency by the committee under both the Code of Practice for Scientific Advisory Committees and the SACN Working Group on Iron's own

guidelines. Jasanoff (1997) appears to conclude that a lack of evidence of dissent equates to a consensual approach by the committee. However, it could be argued that this does not necessarily mean dissent or debate was absent during these meetings, rather that in this case dissent was not recorded in the minutes of those meetings. Unlike Food Standards Agency board meetings, neither SACN meetings nor the meetings of SACN working groups are video recorded and posted online so the full deliberations around nutrition policy or recommendations are not available on public record. This raises questions about the committee's commitment to transparency – it could be argued that they are not following their own guidelines when they say SACN meetings should be '*as open as possible*' (SACN, 2002). Similarly, the process by which the Department of Health formulated their recommendations to the public is not clear from the available government documents, therefore it is not clear what other considerations were taken into account when formulating national dietary guidelines on this issue. As outlined in the introduction to this paper, research suggests that policymaking is often a complex process and not based on evidence alone but a web of negotiation (Smith, 2000; Miller, 1999; Berridge and Stanton 1999) but without transparency in the nutrition policy making process it is not possible to understand the complex negotiations that have taken place and the actors involved. Public trust in nutritional recommendations may increase if transparency and openness in the process were increased.

6.7 Summary

The findings outlined in this chapter found that insecurities in red and processed meat consumption data as well as uncertainties in the scientific evidence around its link to colorectal cancer have made solid recommendations by the UK government difficult. Policy choices have therefore been contested between actors, with stakeholders able to make representations according to their own interests. There was a clear 'framing contest' underway during the consultation process between actors trying to portray or describe red meat as a more or less healthy food. The nutrition policy making process is nominally transparent in that minutes of meetings are published but these are sparse and include little record of discussion or debate. In addition, influential actors such as the media, internal government officials and ministers are not apparent in the available policy documents and this lack of transparency makes it difficult to fully understand the policymaking process. The development of national nutritional guidelines has taken place in the context of uncertainty about the role of scientific advice within government, linked to multiple crises in the British meat industry – these crises and the place of red meat in British culture have led to red meat being seen as a 'hot' policy issue and this is borne out by this research. There is little evidence of the public voice in the policy making process. This is despite the presence of a lay representative on the SACN main committee and the Working Group on Iron. The eventual recommendations to consumers are complex and difficult to implement. The literature suggests that further public involvement with policymaking could play a role in helping to formulate practical nutritional guidelines for the public.

Chapter 7: Research Findings 3: Content analysis

7.1 Introduction

As noted in Chapter 4 (Methodology), the research was designed in three phases in order to address the three research questions:

RQ1: How has the UK government's policy on RPM consumption developed?

Method: Policy analysis of government recommendations on red and processed meat consumption 1993-2012

RQ2: How do UK newspapers report this issue?

Method: Content analysis of UK newspaper reporting of consumption of red and processed meat and its relationship to the development of bowel cancer, 1993-2012

RQ3: What role did UK newspapers play in the development of the policy?

Method: Semi-structured interviews with key actors identified from stages 1 and 2, including interviewees from three key groups: stakeholders, media professionals and policy makers. These interviews will explore in detail the findings from the first two stages, investigating the motivations, feelings and views of the interviewees.

This chapter lays out the research findings of the quantitative and qualitative Content Analysis conducted on UK national newspapers, 1993-2012 to address the second research question above. The methods used are briefly presented below (full methodology can be found in Chapter 4, section 4.6) then the results of the analysis are presented in two parts: first the trends in reporting are described. These were quantitatively analysed and are presented using descriptive statistics and basic unweighted cross tabulations. Then a qualitative analysis of the texts is presented. These were coded according to themes arising from the data, similar codes were clustered together to form categories and these were then analysed thematically.

The eleven UK national newspapers and their Sunday counterparts that made up the sample were in this case as defined by the newspaper database Nexis (Daily Mail and Mail on Sunday, The Mirror and The Sunday Mirror, The Times and Sunday Times (London), The Sun and the News of the World (England), The Guardian and The Observer, The Express and The Sunday Express, The Daily Telegraph and The Sunday Telegraph (London), The Independent and the Independent on Sunday (London), Financial Times (London), i - Independent Print Ltd, The People, Daily Star, Morning Star between 01/01/1993 and 01/01/2012. It is important to note that newspaper databases such as Nexis give an indication of coverage but do not provide

exhaustive records of media coverage and this should be taken into account.

The search terms were “red meat” OR “processed meat” AND cancer AND bowel OR colorectal OR colon OR rectal’ within the period 01/01/1993-01/01/2012. The search returned articles with mentions of the search term anywhere in the text. This search returned 747 results. These were scanned to identify duplicates and letters. In the event of repeated articles, the latest edition only was used. In the event of regional editions these were included, unless they were repeat articles in which case the English edition was used. Letters were excluded.

After duplicate articles (n=143), letters (n=10) and online articles (n=16) were removed, 578 articles remained. A ten per cent portion of these (n=59) were used as a pilot study. These were not randomly chosen articles but a block from the middle of the sample in order to test the content analysis methodology and the ability to track trends in coverage. The date range for the pilot study was April 09 2005 to February 01 2006 (n=59).

These 59 articles were read through several times for relevance. Inclusion criteria were that the article had to include at least 2 (two) separate mentions of a link between red and/or processed meat and bowel cancer. Twenty-nine articles were removed as they did not include at least 2 mentions of the links between red and/or processed meat and bowel cancer (n=30). These 30 articles formed the sample for the pilot study. During the pilot study a test of intercoder reliability was performed to check the reliability of the inclusion criteria. The test returned 100% agreement.

Both the manifest (explicit) and the latent (implicit) content of the texts (Altheide, 2002; Neuendorf, 2002; Hilton et al., 2010) were analysed in the pilot study. In this case, the manifest content was defined as identifying information about the newspaper articles, for example the date of publication, the title of the newspaper they appeared in, the length in words and the author. Articles within the pilot study with two or more mentions of the link between red and/or processed meat and bowel cancer (n=30) were analysed for their manifest data to identify trends in reporting. The manifest data from the articles (title, author, date, publication, length etc) were exported into an excel file using an automated process which was developed to minimise input from the researcher and therefore minimise bias or error (see Appendix 7). By using this system manifest data from the articles was extracted and entered into a table (see Table 7.1). Using the pivot table function in Excel, trends in the reporting were charted based on the data for example average length of article, number of articles published in each newspaper, number of articles published over time. Pivot tables were used to create basic, unweighted, cross tabulations.

Article ID	Title	Newspaper	Date	page no.	length	author
218	Our love of bangers, burgers and barbies 'raises cancer risks'	Daily Mail	21/04/2005	ED_SC1_04; Pg. 4	555	JULIE WHELDON
219	Observer Magazine: Life NUTRITION: Carnal pleasures: A recent report links eating red meat with an increased risk of colon cancer. But, as Dr John Briffa explains, there's a body of evidence to the contrary	The Observer	01/05/2005	Observer Magazine Pages pg 58	435	Dr John Briffa
223	120,000 MEAL SERVICE	The Sun	09/06/2005	HAYNES MANUAL FOR FAT BLOKES; HEALTH	956	Henry Biggs
226	How daily diet of red meat raises bowel cancer threat	Daily Mail	15/06/2005	ED_3RD; Pg. 6	345	JULIE WHELDON
227	Red meat linked to increased risk of bowel cancer	The Daily Telegraph	15/06/2005		557	By Celia Hall Medical Editor
228	Big study links red meat diet to cancer	The Guardian	15/06/2005	Guardian Home Pages, pg.1	502	Sarah Boseley Health Editor
229	RED MEAT 'RAISES RISK OF BOWEL CANCER'	The Independent	15/06/2005	Wednesday Final Edition; NEWS; pg 10	226	BY LYNDASAY MOSS
230	Diet rich in red meat is linked with bowel cancer	The Times	15/06/2005	Home news; 26	551	Nigel Hawkes Health Editor
231	MEAT CANCER SHOCK	Daily Star	16/06/2005	U.K. 1st Edition; NEWS; Pg. 2	96	
233	NEW MEAT WARNING MAKES ME SEE RED	The Express	16/06/2005	U.K. 1st Edition; COLUMNS; Pg. 16	698	Clarissa Dickson Wright
237	The painful condition usually affects people who are aged between 20 and 40	The Times	20/06/2005	Features; Times2; 8	798	Dr Thomas Stuttaford
240	Don't panic - God-fearing folk give the lie to the latest red meat scare stories Doctor's Diary	The Daily Telegraph	21/06/2005	Tuesday	608	By James Le Fanu
244	HEALTH: RED ALERT; YET ANOTHER STUDY HAS FOUND THAT EATING STEAK SAUSAGES AND BACON	The Independent	19/07/2005	Tuesday First Edition; NEWS; Pg. 37	919	JEREMY LAURANCE
249	HEALTH: THE TRUTH ABOUT YOUR FOOD FEARS; WORRIED AND CONFUSED ABOUT THE CONTENTS OF YOUR FRIDGE? WE ASKED	Sunday Mirror	04/09/2005	3-Star Edition; FEATURES	1329	WORDS: RHIANNON VIVIAN.
257	DR MIRIAM: HEALTH AT STEAK	The Mirror	02/12/2005	FEATURES; Pg. 56	198	MIRIAM STOPPARD
258	Fibre diet 'doesn't prevent cancer'	The Times	14/12/2005	HOME NEWS; Pg. 14	563	Nigel Hawkes
263	Cancer diet link	The Times	31/01/2006	HOME NEWS; Pg. 27	51	
264	Why red meat diet raises risk of bowel cancer by a third	Daily Mail	01/02/2006	ED 1ST; Pg. 16	703	JULIE WHELDON
265	Science: DNA damage from eating red meat linked to cancer: Harmful compounds raise risk of bowel disease: Volunteers fed diet heavy in beef and pork	The Guardian	01/02/2006	GUARDIAN HOME PAGES; Pg. 11	650	Sarah Hall, Health correspondent
266	HOME NEWS IN BRIEF: Whv red meat can cause cancer	The Independent	01/02/2006	NEWS; Pg. 8	51	

Table 7.1 Manifest data: Extract from pilot study (source: author)

The process used for the pilot study was then repeated for the full sample. The full sample (n=578) of articles were read through several times for relevance. Using the list of numbered article titles provided by Nexis, each article was coded according to a colour coding guide to track included and excluded articles (duplicates were highlighted in grey, letters in blue, those containing no mentions of the link between red and/or processed meat and bowel cancer were highlighted in yellow and those which contained one mention of the link between red and/or processed meat and bowel cancer were highlighted in green (n=200), articles which contained two or more mentions of the link between red and/or processed meat and bowel cancer were not highlighted (n=157). These 157 articles formed the main data source for analysis. The manifest or explicit data (headline, date, publication title, section, page number, word count, author, author designation) from these 157 articles was then entered into a spreadsheet and trends in reporting were analysed quantitatively using basic unweighted pivot tables. These are presented below.

7.2 Manifest Data – Trends in Reporting

7.2.1 Volume of coverage over time

There were no articles in the sample in the years 1993, 1994 or 1995, or for the years 2002 and 2003. As can be seen in chart 7.1. there were peaks and troughs in coverage.

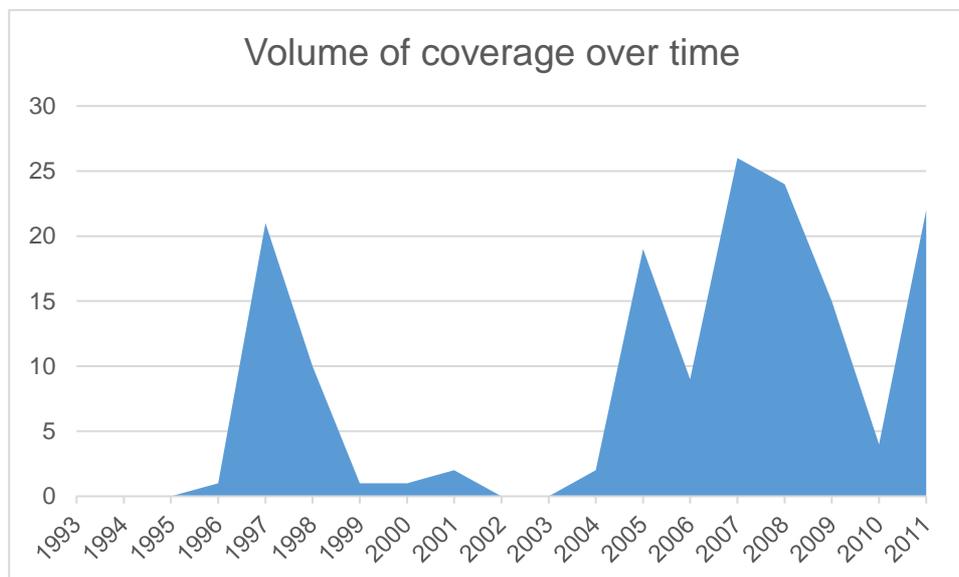


Chart 7.1 Number of articles over time (source: author, see Appendix 8 for source data)

There were no more than 26 articles in any one year of publication.

These clusters of peaks in reporting can be linked to a particular 'triggering event'. For example, the first peak in reporting occurs in 1997. Of the 21 articles published in 1997, 18 (86%) were published in September or October, coinciding with the original publication date of the COMA report on diet and cancer (first published by the Department of Health in September 1997).

There were few articles between 1999 and 2005, when numbers of articles start to increase in volume and frequency. Of the 19 articles published in 2005, 13 (68%) of them were published in May or June, coinciding with the publication of a report of the European Prospective Investigation into Cancer and Nutrition. Similarly, of the 26 articles published in 2007, 21 (81%) of them appeared in November and December when the World Cancer Research Fund published its latest report and advocated a reduction in consumption of red meat and the avoidance of processed meat altogether (WCRF, 2007). The final peak in reporting in 2011 coincides with the publication of the SACN report on Iron and Health (SACN, 2010) which led to the government's recommendation on red and processed meat consumption.

Most of the articles in the sample are classified as news articles (n=75, 47.8%) with fewer in other categories for example features (n=27, 17.1%) health (n=8, 5.1%) comment (n=4, 2.5%). 39 articles (24.9%) were not classified under any section. 5.7% (n=9) of the 157 articles in the sample appeared on the front page, although 37 (23.6%) were not allocated a page number by Nexis.

7.2.2 Articles by title of publication

The Daily Mail or Mail on Sunday published the most articles in the sample (n=31, 19.7%) followed by the Guardian/Observer (n=23, 14.7%) the Mirror/Sunday Mirror (n=18, 11.5%) and the Daily/Sunday Telegraph (n=15, 9.6%) (see chart 7.2).

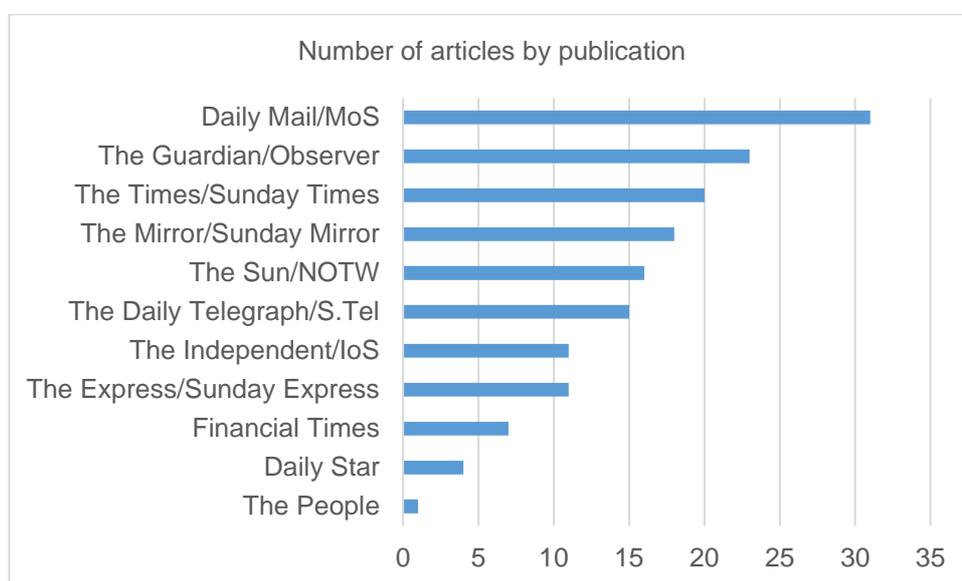


Chart 7.2 Number of articles by publication (source: author, see Appendix 8 for source data)

Some publications published articles consistently over the sample period, whereas others did not cover the story until later in the period, for example The Sun and The Express did not have any articles in the sample until 2005 and the Daily/Sunday Telegraph until 2001, or only had

articles at the beginning of the sample period, for example the Financial Times.

There were a similar proportion of articles by tabloid newspapers (n=81, 51.6%) and broadsheet newspapers (n=76, 48.4%) with tabloids publishing slightly more articles. However, as chart 7.3 shows the broadsheet newspapers published more articles in the earlier period, while the tabloids published more in the later period.

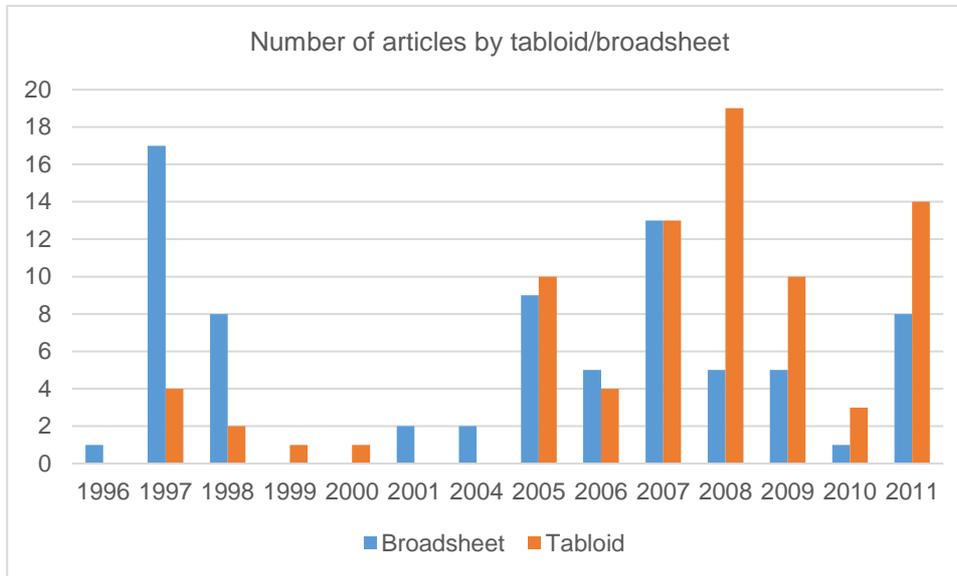


Chart 7.3 Number of articles by tabloid / broadsheet (source: author, see Appendix 8 for source data)

7.2.3 Key Journalists

The majority of the articles in the sample were written by different journalists (n=85, 54.1%), with 27 (17.2%) articles carrying no byline (the name and sometimes the job title of the journalist who wrote the article). Twenty journalists wrote more than one article in the sample, with 4 key journalists writing 5 or 6 times on this subject, a total of 22 articles (14%). These 4 key journalists were specialists in their fields, designated as either Health or Medical Correspondent or Health Editor. Their work appeared in 4 different newspapers, The Times, The Daily Mail, The Guardian and the Express. Articles in the sample often announced reports, research or government policies before they had been officially announced. For example, both the COMA report of 1997/8 (Department of Health 1998) and the SACN report Iron and Health (SACN, 2010) were reported pre-publication by weekend newspapers (the Daily Mail (Saturday), 13/09/1997 and The Sunday Telegraph, 20/02/2011, the Sunday Mirror, 20/02/2011). 42 articles (26.8%) were written by journalists with a designated position. Apart from one article written by a Consumer Affairs Correspondent, these were all written by health, medical or science reporters, correspondents or editors (see table 7.2)

Reporter designation	Number of articles
Consumer Affairs Correspondent	1

Health Reporter	1
Health and Science Editor	1
Health correspondent	11
Health Editor	12
Medical Correspondent	8
Medical Editor	4
Science correspondent	1
Science Editor	2
Science Reporter	1
(blank)	115
Grand Total	157

Table 7.2 Number of articles by journalist's job title (source: author, see Appendix 8 for source data)

There were a number of articles (n=14, 8.9%) written by health experts or columnists for example Dr. Thomas Stuttaford, Dr. Vernon Coleman, Dr. Miriam Stoppard, nutritionists Jane Clarke and Amanda Ursell, Dr. John Briffa, Dr. Ellie Cannon, Professor Karol Sikora, Dr. James Le Fanu and one author designated 'top GP' Dr. Martin Scurr. This shows a trend in the reporting for health or science correspondents to cover this story, or for guest medical columnists to comment on the issue.

7.3 Latent Data

All 157 articles in the sample were re-read several times to identify the 'latent' or implicit content such as themes or frames. These emerged from the coding process and were qualitatively analyzed (Altheide and Schneider, 2013; Saldana, 2013). Initial codes were noted using the track changes facility in Word, in which each comment, or in this case code, has a unique numerical identifier. The codes in the track changes 'markup' pane of the document were then imported into Excel. Similar codes were clustered together to form categories, while redundant codes were removed. These categories were then further organised into themes. The main themes arising from the coding process are presented below. Articles are cited by surname of the author, followed by the newspaper it appeared in and the date on which it appeared. These are not cited in the references, but the full list of articles can be seen in the source data at Appendix 8.

7.3.1 Major Themes

7.3.1.1 Triggering Events

There were no articles in the sample before 1996, despite an association between red and processed meat and bowel cancer first being reported in 1990 (Willett et al., 1990). As noted

above coverage coincides with 'triggering events'. Chart 7.1 shows the first 'triggering event' occurs in 1997 corresponding to the publication of the COMA report 'Nutritional Aspects of the Development of Cancer' (Department of Health, 1998). There is an emphasis in the articles in this early part of the sample (1997-1998) on the 'official' nature of this new public health advice/dietary recommendations from government. Many of the articles use dramatic framing to express shock, surprise or alarm at the link between red and processed meat and cancer. For example: 'Big Meat Eaters Cancer Warning' (Daily Mail September 13 1997) 'How we're eating our way to an early grave' (The Mirror, September 16 1997) 'Even one burger a day can increase your risk of cancer' (The Independent, September 26 1997) 'Shock 'danger diet' report' (The Mirror, September 26 1997). Much of the coverage mentions the scientific advisory committee that drew up the report (COMA, the Committee on Medical Aspects of Food Policy), but ministers and politicians associated with the report and its implications are also mentioned, sometimes by name:

'Ministers triggered a storm of protest yesterday by issuing new scientific advice that most eaters of red and processed meat should cut consumption to reduce the risk of cancer.' (Laurance, The Independent, 26 September 1997)

'Health Secretary Frank Dobson said many cancer cases could be prevented if we improved our diet.' (Palmer, The Mirror, 26 September 1997)

In addition, much of the coverage in this period reports the dramatic political events surrounding the publication of the report (as noted in Chapter 5). It focuses on the dramatic withdrawal of the report amid media speculation about its contents. This more political framing focuses on political controversy and arguments rather than the health implications of the report. There are references to disagreements between both government ministers in opposing ministries (for example Frank Dobson, the then Secretary of State for Health and Jack Cunningham, the then Secretary of State for Agriculture) in the context of previous policy failures around food safety (e.g. BSE):

'Mr Dobson said: "We are determined to change the culture in Whitehall when it comes to food safety and standards and I have the full support of Dr Jack Cunningham . . . for the decisions I have taken. At no time has there been any difference of opinion between Jack Cunningham and myself or between our departments on how this matter should be dealt with.'" (Elliott, The Guardian, September 26 1997).

There are also references to disagreements between government and opposition ministers:

'Last September Frank Dobson couldn't wait to publish recommendations before the report came out,' said Shadow agriculture minister Michael Jack. 'Now that the report has been published there are no ministers to be seen.' It's a complete reversal of Frank Dobson's statement five months ago.' Peter Luff, Tory chairman of the agriculture select committee' (Hope, Daily Mail, March 6 1998)

The political embarrassment of the withdrawal of the report and a perceived 'U-turn' in policy was dramatically framed:

'Dobson accused of U-turn on red meat cancer risk'
(Hope, Daily Mail, March 6 1998)

'Ministers 'reverse' red meat warning'
(Urry and Parker, Financial Times, March 6 1998)

'U-turn claims on meat report'
(Boseley and Meikle, The Guardian, March 6 1998)

'U-turn on how much red meat you can eat; call for probe as government sparks cancer fury'
(Palmer, The Mirror, March 6 1998)

During this early period of the sample, as the reporting focused on the politics surrounding the report rather than the content, reports appeared in the news pages rather than the science or health pages. More dramatic framing is generally used in the news reporting, while more moderate technical language is used in science and health reporting.

Further 'triggering events' (Cobb and Elder, 1983; Downs, 1972; Kingdon, 2003; Wolfe, Jones and Baumgartner 2013) lead to peaks in coverage seen in chart 7.1. These 'triggering events' included publication of scientific research, government policy announcements or reports by cancer charities. These triggering events were the main focus of articles, were often similarly covered by a number of different newspaper titles, and were presented as new, alarming and surprising discoveries, even though these newspapers had previously covered this issue. For example, headlines in The Express:

'Red meat in cancer link; a burger a day dramatically increases the risk of colon disease, say doctors' (The Express, 13 January 2005)

'Meat Link to Bowel Cancer' (The Express, 15 June 2005)

'New Cancer Alert on Red Meat' (The Express, 15 June 2005)

'Cancer Risk in Your Fry Up' (The Express, 23 May 2011)

'Cancer Alert on Red Meat' (The Express, 04 November 2011)

in The Daily Telegraph:

'Red meat linked to increased risk of bowel cancer' (The Daily Telegraph, 15 June 2005)

'Cancer alert over meat and alcohol' (The Daily Telegraph, 01 November 2007)

'Eat less meat 'to prevent cancer' (The Daily Telegraph, 11 December 2007)

'One sausage a day can increase the risk of bowel cancer' (The Daily Telegraph, 13 March 2008)

'Fry-ups 'increase bowel cancer risk' (The Daily Telegraph, 26 June 2008)

'Eat less red meat to lower cancer risk' (The Daily Telegraph 21 February 2011)

and in The Daily Star:

'Meat Cancer Shock' (Daily Star, 16 June 2005)

'Bacon butty is a 'cancer killer"' (Daily Star, 01 November 2007)

'Killer fry-ups; fave brekkie 'can give you cancer"' (Daily Star, 31 March 2008)

'Killer fry-up; Cooked brekkie can give you cancer', (Daily Star, 26 August 2008)

As can be seen from these examples, these articles are often presented in a dramatic way, using alarming, frightening or lurid language – for example referring to '*killer fry-ups*' and '*food fears*' or asking '*Are you gambling with your life?*' (Hammett, 2008, The Sun, 11 September 2008) in which '*death odds*' are given for eating a fry up (90-1 for women, 70-1 for men). In the reporting on these triggering events, the fact that diet and cancer are linked tended to be presented as surprising across all newspapers in the sample, even when they had previously reported the issue.

These triggering events were often reported on by multiple newspapers on the same day, indicating that information about them came from a common source. In some cases, triggering events were published as 'exclusives' when, for example, news of the SACN report (2011) was printed in both the Sunday Telegraph (Hennessy and Donnelly, The Sunday Telegraph, 20 February 2011) and Sunday Mirror (Moss, The Sunday Mirror, 20 February 2011) ahead of its publication the following week. This pre-publication reporting heightened the sense of novelty, giving the impression of a 'scoop'.

However, at the same time as reports covering these 'triggering events', in which red and processed meat's link to bowel cancer was the main focus of the article, the links between bowel cancer and red and processed meat and the government's advice to limit consumption of it were simultaneously incorporated into more general reporting on bowel cancer and health. This is further examined below in section 7.3.1.3.

7.3.1.2 Backlash and the Nanny State

While triggering events tended to be presented initially without disagreement, later, (often after a period of a few days) a 'backlash' frame appeared in which articles began to question the evidence presented, the dietary recommendations themselves and the right of government, nutritionists or others to intervene in our diets. These articles included opinion or information provided by those opposed to the advice, for example meat or food industry representatives or nutritionists, scientists or health experts who disagreed with the advice or recommendations given. These articles were also frequently either written by or included comment from celebrity columnists such as Clarissa Dixon Wright ('New Meat Warning Makes Me See Red', The Express, 16 June 2005), Rod Liddle ('A Tale of Lies, Damned Lies and Bacon Sandwiches' The Sunday Times, 04 November 2007) Amanda Ursell ('A bit of sausage won't kill you' The Sun 03 April 2008) Jan Moir ('These Ham-Fisted Food Fascists Are Just Pig Ignorant' Daily Mail, 18 August 2009) and Jeremy Clarkson ('Swap meat for leaves...and die bored aged 28' The Sun 26 February 2011).

In the early period of the data the 'backlash' frame is expressed through sympathy for the meat industry and British farmers in the context of an industry still affected by the BSE crisis. For example:

'One food consultant describes the forthcoming COMA report as another "death-knell" for the industry.' (Maitland, Financial Times, 19 September 1997)

'The food industry - with some support from the scientists involved - is outraged that advice should be issued on such flimsy grounds. In practice, the alarm may be unnecessary since most consumers appear to be switching off from such pronouncements - consumption of beef, for example, is back above pre-BSE levels.' (Financial Times Leader, 10 November 1997)

The meat industry themselves are also quoted disagreeing with the government advice:

'Colin Maclean, director-general of the Meat and Livestock Commission, said: "It simply isn't true that science supports the case for a link between red meat and colon cancer."' (Timmins and Urry, Financial Times, 26 September 1997)

'Organisations representing the meat industry, reeling from the BSE and E coli scares, reacted with disbelief. The Food and Drink Federation said the advice was "totally unjustified" and the Meat and Livestock Commission accused ministers of frightening people unnecessarily.' (Laurance, Independent, 26 September 1997)

In addition, other scientists are quoted in articles expressing uncertainty about the evidence for the recommendation:

'Professor Sir Richard Doll, who first linked smoking and cancer, has spoken before about 'inconclusive' evidence on meat eating and cancer and said last night the jury was still out on many aspects of the theory.' (Hope, Daily Mail, 26 September 1997)

As noted above this 'backlash' from meat industry representatives and academics commonly follows the first triggering event. Another common feature following the triggering event is a 'nanny state' frame in which columnists express frustration at being told how to behave by health professionals. These are variously described as 'the health police' (Moir, Daily Mail 18 August 2009) 'the food police' (Street-Porter, The Independent, 03 April 2008) 'the plate police' (Lawson, The Guardian, 02 November 2007) 'the nutrition police' or 'the rasher bashers' (Gordon, Sunday Times 18 November 2007). In addition, columnists pointed out what they saw as the killjoy attitude of these health professionals:

'Have a long, healthy...and miserable life; experts: avoid cancer, cut out everything you enjoy.' (Cook, The Mirror, 01 November 2007)

'You just knew the bastards would start having a go at bacon, didn't you? One by one the pleasures in life are chipped away -about the only thing you can be sure won't kill you is pomegranate.' (Liddle, The Sunday Times, 04 November 2007)

'Beware, mums, dads and big hams everywhere. Just when you thought it was safe to go all organic again, or even chance a Ginster's pasty and a plate of prosciutto when no one was looking, the health police are out in force once more.' (Moir, Daily Mail, 18 September 2009)

'Nobody has ever said on their deathbed, "What I really regret is not eating enough broccoli", but you might just wish for one more pork pie.' (Gill, The Sunday Times, 13 March 2011)

In addition, these columnists argue that either they themselves or people they know eat red and processed meat and have suffered no ill effects from it; that they would rather have a shorter life and eat as they please; and/or that they intend to ignore the advice:

'I have therefore decided to completely ignore the Government scientists and eat beef, steak, bacon, lamb and ham whenever the mood takes me....Honestly, I really wish that the powers that be would understand that we are all adults.' (Clarkson, The Sun, 26 February 2011)

'I'm sorry, but swapping a sausage for a tuna sandwich doesn't ring my bell.....although I'm sure that we could all eat a little more healthily, the food police and their doom-laden press releases have become a daily occurrence. Food makes us happy - and I haven't noticed the population of Paris or Barcelona suffering ill-effects from their diet.' (Street-Porter, The Independent, 03 April 2008)

'I refuse to believe it, but if eating a bacon butty DOES rob me of a few moments of my life - it's worth it.' (Malone, Sunday Mirror, 04 November 2007).

7.3.1.3 Integration of the message into lifestyle reporting

As noted above and as shown by chart 7.1, there are clear peaks in coverage, each followed by a decline in reporting. However, from 2004 there are a number of articles each year which mention the association between red and processed meat and bowel cancer as part of general reporting on bowel cancer and on food and health. A key feature of these articles is that many of them are concerned with lifestyle and self-improvement, using specialist columnists such as nutritionists or health professionals which suggest 'anti-cancer foods' or diets to combat particular cancers. For example: 'Cancer: How much do you know?; your health' (Freeman, The Express 04 April 2005); 'Your life: What's on the anti-cancer menu?' (Dowden, The Mirror 05 June 2007); 'Know your body and stop bowel cancer' (Cannon, Mail on Sunday, 05 April 2009); '5 lifestyle changes that would slash bowel cancer toll' (Fletcher, The Express, 27 October 2010). In this group of articles, the link between bowel cancer and red and processed meat consumption tended to be presented as fact – they did not include mentions of uncertainty or words like 'probably' or 'could'. For example:

'Cut down on red meat and top up your fibre intake -it keeps everything moving.'
(Biggs, The Sun, 09 June 2005)

'However, your diet can also affect your risk. A fibre-rich diet will reduce it but eating lots of red or processed meat will increase it.' (Freeman, The Express, 04 October 2005)

'The Germans eat a lot of red processed meat which increases the risk of colon cancer' (Epstein, Daily Mail, 07 November 2006)

'Eating a poor diet, with too much red and processed meats and excessive alcohol, increases risk.' (Cannon, Mail on Sunday, 05 April 2009)

'Taking more exercise, eating more fruit and vegetables and less red meat, reducing alcohol intake, staying slim and not smoking can reduce the risk by almost a quarter.'
(Fletcher, The Express, 27 October 2010)

In this way, the health message that less red and processed meat should be eaten in order to reduce the risk of bowel cancer is incorporated into general media discourse about bowel cancer and health over the sample period. These articles continue to appear year on year and are distinct from the peaks in reporting which follow a unique 'triggering event'.

7.3.1.4 Threat to Culture? Bacon Butties, the full English breakfast and the roast beef of Old England.

Bacon, pork and beef and traditional British dishes associated with them were a major theme arising from the analysis. There are frequent references to bacon butties, full English breakfasts, fry-ups and bangers (sausages) as well as the Roast Beef of Old England. The food item that was most frequently mentioned was bacon, although this was mentioned more in the later part of the sample period, when it was particularly singled out for attention by headline writers, particularly in the tabloids:

'Bacon butty is a 'cancer killer'' (Daily Star 01 November 2007)

'Why we won't banish bacon' (The Sun, 08 November 2007)

'Bacon and eggs-it' (The Sun, 26 August 2008)

'Call to 'ration' rashers' (The Sun, 25 February 2011)

This was most often in reference to articles about research by the World Cancer Research Fund, and its recommendation to avoid processed meat altogether to reduce bowel cancer risk.

Dietary advice was often presented as an assault on nationally symbolic foodstuffs:

'Britain was sizzling with anger last night after cancer experts declared war on bacon.'
(Daily Star, 01 November 2007)

The Sun exhorted its readers to 'Save Our Bacon' and under the headline 'Careless Pork Costs Lives' (a pun on a patriotic World War 2 slogan) warned: '*Last night it was seen as a threat to some of our favourite dishes -including the traditional English breakfast fry-up and hot dogs.*' (Morton, The Sun, 01 November 2007). In an article headlined '*Why we won't banish bacon*' (Symons, The Sun 08 November 2007) The Sun featured interviews with six health professionals who all professed their love for bacon:

'Rachel Cooke, spokesman for the British Dietetic Association, says: "There's no way I'd give bacon butties up. I wouldn't eat them every day -and would make sure they

were part of a balanced and varied diet that included wholegrains and five portions of fruit and veg a day."

'Sun Health columnist Dr Keith Hopcroft says: "I won't be giving up bacon -I enjoy it and a little bit of what you fancy does you good....Most people are concerned about quality rather than quantity of life -I'd rather shave a few years off my life with the occasional bacon sarnie than be 110 and dribbling into my All Bran."'

(Symons, The Sun, 08 July 2011)

Alongside this support for red and processed meat are a number of negative references to vegetarians and vegetarian diets:

'I don't know what the rationale is behind eating only white meat but I suspect it is a vegetarian plot to whittle away at our meat consumption little by little.' (Dickson Wright, The Express, 16 June 2005)

'Celebrity chef Antony Worrall Thompson branded the findings "just another scare". He blasted: "There's nothing wrong with eating bacon sarnies once a week. "If they have their way we'll all turn into vegetarians."' (Daily Star, 01 November 2007)

'You know where they're going with this, don't you? And you're right. They want us all to become vegetablists.' (Clarkson, The Sun, 26 February 2011)

These implied a secretive, insidious vegetarian plot, or conspiracy to stop the consumption of meat altogether, or 'turn' people into vegetarians.

The restricted amounts of bacon, burgers or sausages are presented as shocking, surprising new limits on our diets in article headlines:

'Even one burger a day can increase your risk of cancer' (Independent, 26 September 1997)

'A burger a day dramatically increased the risk of colon disease, say doctors' (The Express, 13 January 2005)

'Eating one sausage a day raises cancer risk by 20pc' (Daily Mail 13 March 2008)

'One sausage a day can increase the risk of bowel cancer' (The Daily Telegraph, 31 March 2008)

'Just one sausage could kill' (The Mirror, 31 March 2008)

'Half a sausage a day! Study urges limit on meat to save lives and planet' (The Guardian, 19 October 2010)

These headlines at times exaggerated the risks of consuming these foods, implying small amounts of sausage or bacon can do immediate harm.

7.3.1.5 Nutricentrism vs balanced diet

Two competing themes appeared in the data. One of them was the concept of the 'balanced diet' or sometimes a 'healthy balanced diet' which was used often in general terms, without specifying what a 'balanced diet' is. This contrasted with a focus on specific foods or foodstuffs and their nutritional makeup or (dis)benefits. This focus on individual ingredients or nutrients has been variously outlined in the literature as 'nutritionalism' 'nutritionalisation' or 'nutricentrism' (Dixon, 2009) in which an increased focus on nutritional values exacerbates public anxiety about food. Many of the articles focused on individual kinds of red and processed meat such as bacon or sausages and gave specific recommendations for the amounts of these that could safely be eaten, without talking about the wider diet or intake of, for example fruit and vegetables. There were a number of articles listing individual foods to eat and foods to avoid in an 'anti-cancer' diet with the implication that certain ingredients cause cancer, while other 'superfoods' contain special properties that can prevent cancer. In contrast, some public health professionals were quoted trying to emphasize a more rounded view of diet than one that focuses on specific ingredients. For example:

'A spokesman for charity Beating Bowel Cancer said: 'A third of all cancers are linked to what we eat and we must not underestimate the importance of a well-balanced diet in the prevention of bowel cancer....As with all dietary advice, moderation is key, as we already know that a diet high in fat and red meat yet low in fibre, fruit and vegetables can increase the risk of developing this disease.' (Wheldon, Daily Mail, 01 February 2006)

'Ed Yong, of Cancer Research UK, said the study emphasised the need for a healthy, balanced diet with plenty of fibre, fruit and vegetables and reduced levels of red and processed meat.' (Hall, The Guardian, 01 February 2006)

In addition, the term 'balanced diet' was used by those emphasizing the role red and processed meat could play in a 'balanced diet' – for example:

"The danger is that people will take the message from this that red meat is unsafe," said the [Meat and Livestock] commission's spokesman, Guy Attenborough. "But they're talking about giving people the equivalent of two 8oz steaks a day, seven days a week. Anyone whose diet is that unbalanced is going to have problems." (Hall, The Guardian, 01 February 2006)

'Chris Lamb, consumer marketing manager at the British Pig Executive, said that people should continue to eat bacon "in a responsible way as part of a

balanced diet". Cancer was a "complicated subject" and could not be prevented simply by reducing intake of meat.' (Hawkes, The Times, 01 November 2007)

In this way, the notion of a 'balanced diet' was appropriated by different actors to support and promote their own views of what constitutes a 'balanced diet'.

7.3.1.6 Uncertainty and contradiction

Another main theme emerging from the data was that of uncertainty and confusion, disagreement and contradiction. This manifested itself in two different categories – Uncertainty and Confusion; Disagreement and Contradiction.

7.3.1.6.1 Uncertainty and Confusion

Media coverage often highlighted the uncertainty in the available scientific evidence about the links between red and processed meat and cancer:

'Nations where meat-eating is part of the culture tend to have higher rates of colon cancer, and some studies have suggested that the risk is linked to red meat. The reason for this association has, however, never been clear.' (Hawkes, The Times, 6 May 1996)

'The report...said that generally, "no causal links between diet and cancers were established with confidence." Further research should lead to firmer conclusions "in a few years".' (Urry and Parker, Financial Times, 06 March 1998)

'The role of red meats in the development of cancer remains unclear, although other studies have suggested that intake should be limited. However, evidence that some foods are harmful is continuing to build up.' (Rogers, Sunday Times, 24 June 2001)

'It is worthwhile viewing these findings in the context of the wider evidence: a review in the European Journal of Clinical Nutrition found that of 44 relevant studies, 31 found no apparent association between red-meat intake and colon-cancer risk. Despite the assertion of the BMJ, it is clear that the link between red meat and colon cancer is anything but 'confirmed'.' (Briffa, The Observer, 01 May 2005)

"Bowel cancer was higher in vegetarians than in meat-eaters. This is a bit surprising, and could be chance. It highlights that we don't fully understand whether

meat really does increase the risk for bowel cancer and this study is not definitive.’
(Gray, The Daily Telegraph, 17 March 2009)

‘It added: "Although the evidence is not conclusive, as a precaution, it may be advisable for intakes of red and processed meat not to increase above the current average (70g a day) and for high consumers of red and processed meat (100g a day or more) to reduce their intakes."’ (Beckford, The Daily Telegraph, 21 February 2011)

This uncertainty was reported frequently in the sample, but was notably absent (as outlined above in section 7.3.1.3) in some of the ‘lifestyle’ feature articles in which information about red and processed meat’s association with bowel cancer had become part of more general health and dietary advice.

In addition, journalists commented that messages coming from government, scientists and medical professionals were confusing for consumers:

‘Young men have the highest daily consumption of red meat, a survey showed yesterday, as consumers struggled to interpret a controversial Government warning that too much can cause cancer.’ (Moyes and Kelly, The Independent, 27 September, 1997)

‘Frank Dobson was yesterday accused of confusing consumers and further damaging the livestock industry after being forced to backtrack on warnings that red meat causes cancer.’ (Hope, Daily Mail, 6 March 1998)

‘The confusion about how much red meat is safe to eat intensified last night as Britons were warned they should cut down to reduce the risk of cancer.’ (Borland, Daily Mail, 21 February 2011)

‘Given the confusion about the health risks of red meat, Dr Derbyshire believes we need guidelines on its consumption ‘just as we have about fish — saying we need a minimum of two portions a week’. (Waters, Daily Mail, 22 February 2011)

‘In fact, recent messages about red meat have been confusing: just last week a British Nutrition Foundation study claimed that most adults ate ‘healthy amounts’ of red meat and the link to cancer was ‘inconclusive’. Then this week new guidelines drawn up by the Department of Health warned that while red meat is a valuable source of iron, eating too much can lead to cancer and heart disease.’ (Waters, Daily Mail, 22 February 2011)

Media articles often reported or mentioned the risks associated with consumption of red and processed meat but infrequently explained or examined these risks in any detail. As outlined in section 7.3.1.5, reports often focused on single ingredients or nutrients without putting them in the context of the whole diet. In addition, the absolute risk of being diagnosed with bowel cancer was rarely mentioned, while the increased risk associated with consuming red and processed meat was presented out of context, for example:

'Eating one burger a day can increase the risk of cancer by a third, research shows.' (Fletcher, The Express, 13 January 2005)

'The link between burgers and colon cancer is stronger than ever. Eating one a day boosts your risk of the disease by a third in just a decade, the American Cancer Society said last week.' (Morton, The Sun, 18 January 2005)

'Eating one sausage a day raises cancer risk by 20pc' (MacRae, Daily Mail 31 March 2008)

In this way, the coverage perpetuated the assumption that absolute safety in diets is possible, rather than putting foods within the context of overall diet and health.

7.3.1.6.2 Disagreement and Contradiction

Newspaper reporting often highlighted disagreements and tensions. Articles appearing in the early part of the sample, during reporting on the COMA report into Nutritional Aspects of the Development of Cancer (1998), emphasized political disagreements between both government ministers and government advisers. This underlined the uncertainty of the scientific evidence, but was framed as a 'row', an 'argument', a 'clash' or a 'U-turn' rather than a normal and expected part of the scientific process.

Similarly, disagreements between experts were often referred to in terms of 'contradictory messages', rather than a necessary part of the scientific process or method:

'Most days there is media advice on what you should and should not eat and drink. Much of it is contradictory and therefore exasperating (only last week the private Wellman clinic said men who ate little or no meat were prone to fatigue and looked pale)' (Dillner, The Guardian, 16 September 1997)

'She [Nicola Sturgeon] insisted that it is safe to eat bacon and said the public were being confused by contradictory health messages. The deputy first minister came to the defence of the bacon butty following a study that advised people not to eat any

processed meat because it carried an increased risk of bowel cancer.’ (Gordon, The Sunday Times, 18 November 2007)

‘Confused by health advice? Then read on: It kills you; no, it does you good.’
(Campbell, The Observer, 05 August 2007)

In this way reporting suggested that nutritional advice is contradictory and therefore there is little point in following it or it cannot be trusted.

7.3.1.7 Responsibility

News media can explicitly or implicitly assign responsibility for the causes and solutions to social problems – these can in turn inform judgement and action on the part of citizens and policymakers (Iyengar, 1996; Kim and Willis, 2007; Baumgartner and Jones, 2009). In this case reporting most often assigned responsibility for managing health risks associated with consumption of red and processed meat to the individual. Personal responsibility for diet and health was emphasized in ‘self-improvement’ articles which advised readers to:

‘Stay trim and stop eating bacon, cancer report declares: Diet could prevent third of cases, says five-year study: Regular exercise urged, and not much alcohol’ (Boseley, The Guardian, 1 November 2007).

This article from the Guardian was representative of those which gave readers advice on what they could do to reduce their risk of cancer, ‘prevent cancer’ or keep healthy. This was part of a more general trend towards features or services offered by newspapers which were focused on ‘self-improvement’ – this Guardian article included a link to ‘Eat right: Get a personalised healthy eating plan by joining our online community’ (Boseley, The Guardian, 1 November 2007).

Articles in the sample frequently emphasized the personal responsibility of the reader to eat healthily to reduce their risk of cancer:

‘Cancer rates are on the rise because of our unhealthy lifestyles, including lack of exercise, excessive drinking, poor diet and smoking.

As many as one in three of us can expect to suffer from a form of cancer at some point in our lives so it's time to start reducing your risk today...’ (Stoppard, The Mirror, 13 May 2008)

This responsabilisation of individuals left little room to mention the social determinants of health and gave the impression that individuals rather than government or industry bear most responsibility for health and diets. A development of this theme was the responsabilisation of

parents during a campaign by the WCRF, in which parents were urged to stop feeding ham to their children in packed lunches ('Cancer alarm for mums over ham in lunchboxes', Willey, The Express, 15 June 2009). Red and processed meat were often framed in terms of personal restraint for example being talked about as 'guilty' or a treat.

'Don't feel guilty about eating meat; Britain's leading nutritionist on how to eat your way to health' (Clarke, Daily Mail, 16 September 2008)

'People have been told they can't eat it and they feel guilty when they do, but given that current intakes, on average, are well within health targets, there is no reason to eat less red meat if you enjoy it.' (Hope, Daily Mail, 19 February 2011)

'Sun doctor Carol Cooper said: "Bacon is fine as an occasional treat and brings enjoyment to many people.'" (Morton, The Sun, 01 November 2007)

'The answer is not to regard red meat as harmful, but to consider it as a treat, rather than a necessity. Which is what our ancestors did.'" (Parry, The Times, 04 February 2006).

The impact of dietary change on the meat industry was mentioned at the beginning of the sample but in terms of sympathy for an already beleaguered industry (post-BSE) rather than as an industry which could bear some responsibility for making change in national diets (for example: 'Meat industry faces worrying week ahead', Financial Times, 1997). Similarly, other organisations such as restaurant chains, public institutions (such as schools or hospitals), or food retailers were rarely mentioned as being a possible cause of levels of meat consumption or offering possible solutions.

7.3.2 Key actors

The most commonly mentioned actors were the World Cancer Research Fund (WCRF) or their associated spokespeople, who were much more frequently mentioned than other cancer research charities such as Cancer Research UK or Beating Bowel Cancer. Representatives of the meat industry for example the Meat and Livestock Commission or its replacements the British Pig Executive (BPEX) and the English Beef and Lamb Executive (EBLEX) were also commonly referred to or quoted, while other food industry bodies such as the Food and Drink Federation were less frequently mentioned or quoted. Later in the sample a new meat industry actor appears, the Meat Advisory Panel, a board funded by the meat industry which uses dieticians for example Dr Carrie Ruxton as spokespeople. Food campaigners such as the Vegetarian Society were occasionally mentioned or quoted. Individual academics working in this area such as Professor Tim Key or Professor Sheila Bingham were mentioned in connection with their own research. Government scientific advisory committees COMA and its replacement

SACN were also key actors. The UK government were mentioned more during the earlier period of the sample. Similarly, specific politicians such as the then Health Secretary Frank Dobson were often mentioned in the earlier part of the sample, in connection with the COMA report. However, the Health Secretary at the time of the later SACN report (2010), Andrew Lansley, was only mentioned once in the sample.

7.3.2.1 Source strategies and struggles

The key actors mentioned above were responsible for the 'triggering events' which correspond to peaks in media coverage (see chart 7.1). These triggering events drove multiple articles across several media outlets. The World Cancer Research Fund (WCRF) was a key driver of media coverage in the later period of the sample. WCRF activities were the source for several triggering events for example in November 2007 when their Second Expert Report (WCRF, 2007) was published; in 2008, when they published the results of a survey into awareness of links between diet and cancer; a further survey into awareness of the links between diet and cancer in 2009; a warning issued by the WCRF about ham in children's diets, also in 2009. There was evidence in the sample of a common source for the articles covering these events. The newspaper articles in many cases used the same quotes from the charity. For example, relating to their advice to parents to cut down on the amount of ham they fed their children, Marni Craze, WCRF's children's education manager was identically quoted in the Daily Mail, The Express and The Sun:

'If children have processed meat in their lunch every day then over the course of a school year they will be eating quite a lot of it.

'It is better if children learn to view processed meat as an occasional treat if it is eaten at all.' (Hope, Daily Mail, 17 August 2009; Willey, The Express, 17 August 2009; Case, The Sun, 17 August 2009)

The WCRF sometimes engaged in 'frame contests' with the meat industry. A 'frame contest' occurs when the media report competing frames from sources in disagreement with each other (Lawrence, 2004; Entman, 2003). A clear 'frame contest' appeared in the data between those seeking to frame red and processed meat as more or less unhealthy. For example, a study published in 2011 was reported in the Daily Mail in an article headlined 'Hurrah, eating red meat is good for you after all!' (Hope, Daily Mail, 19 February 2011). The report, including quotes from the meat industry funded Meat Advisory Panel emphasized the health benefits of red meat. In the same article the WCRF were quoted;

'Professor Martin Wiseman, medical and scientific adviser for World Cancer Research Fund, said the study was being promoted by the meat industry, but added: 'This paper is not a systematic review of the evidence and does not change the fact that there is convincing evidence that red and processed meat increase risk of bowel cancer.'

(Hope, Daily Mail, 19 February 2011)

Similarly, meat industry representatives were quoted throughout the sample disagreeing or seeking to discredit reports linking red and processed meat with bowel cancer:

'The meat industry was quick to hit back last night. Colin Maclean, director general of the Meat and Livestock Commission, said: "We accept that people who eat a lot of red meat, without balancing that sensibly with fruit and vegetables, ought to look at their diet. "But these recommendations might frighten people who should be eating more red meat into eating less when there is no valid scientific basis for it."
(Palmer, *The Mirror*, 26 September 1997)

"However, a spokesman for the Meat and Livestock Commission said: 'The results of this very small- scale study merely suggest a mechanism by which red and processed meat might possibly increase an individual's risk of developing colorectal cancer. 'The authors themselves acknowledge that larger-scale studies are needed to identify how important and robust this suggested mechanism could be.'" (Wheldon, *Daily Mail*, 01 February 2006)

A spokesman for BPEX, the British pig executive, questioned the methods used in the study: "We are unable to take a view on this because there is mixed evidence based on the compounding factors to do with lifestyle that come into it." Richard Lowe, the chief executive of Eblex, the English beef and lamb executive, said: "We think that the link between diet and cancer is complex and as scientists themselves say, more research is needed to see how big a part diet plays."
(McVeigh, *The Guardian*, 01 July 2009)

The two representatives of the groups of protagonists in this frame contest often appeared in the same article as journalists sought to present a 'balanced' argument.

There was a marked contrast between headlines that emphasized the links between red meat and bowel cancer and those that emphasized the health benefits of red meat:

'Red meat in cancer link; a burger a day dramatically increases the risk of colon disease; say doctors' (Fletcher, *The Express*, 13 January 2005)

'Why red meat can cause cancer' (*The Independent*, 01 February 2006)

'Hurrah eating red meat is good for you after all!' (Hope, *Daily Mail*, 19 February 2011)

'The case against red meat' (Scurr, *Daily Mail*, 21 February 2011)

'Worried about red meat? Giving it up can be bad for you too' (Waters, *Daily Mail*, 22 February 2011)

While there were more articles exploring the dangers of eating red and processed meat (perhaps not surprising given the search terms for the sample), there were also a number of articles highlighting the problems of low iron status and the dangers of anemia in those not eating enough red meat.

7.4 Discussion

The trends in reporting in the sample suggest repeated cycles, which echo Downs' (1972) Issue Attention Cycle, which proposes a common cycle of interest to issues, showing that attention rarely remains focused on a subject for long periods. In this case, repeated cycles of interest in this issue were followed by a decline in media interest, with spasmodic repetitions following the first revolution of the cycle. In addition, and at the same time the issue is integrated into more general reporting on cancer and diet within a growing trend for lifestyle features which emphasise 'self-improvement' and personal responsibility for diet. Why could this be the case? It is important to note that Downs' (1972) model related to what he called 'public interest', arguing that levels of public interest in an event followed his five-step cycle. The data does not suggest that the media in this case can be seen as a proxy for public interest, rather that media coverage itself follows this cycle – the data follows Downs Issue Attention Cycle but is mapping 'media interest' rather than 'public interest'.

Many studies have shown that media interest in an issue follows Downs' cycle; it has been particularly tested against environmental issues or climate change (McComas and Shanahan, 1999; Nisbet et al., 2003; Shih, Wijaya and Brossard, 2008). Downs himself suggested that the cycle of attention was related to the inherent characteristics of the issue itself – in the case of his original paper the issue of ecology. However subsequent examinations of this framework such as Hilgartner and Bosk (1988) or Nisbet and Huges (2006) suggest a more complex interaction between media routines and conventions, issue stakeholders and policymakers. They recognized that stakeholders, policymakers and other interested parties play a part in co-constructing social problems in conjunction with journalists who follow media conventions and routines and play a role as gatekeepers and in framing information. The findings in this chapter suggest this complex interaction is at play in the case of UK press coverage of the association between red and processed meat and bowel cancer.

As outlined in Chapter 2 (Literature Review) several theories exist to explain the impact of media routines and conventions on media coverage. At play in this current study of press coverage of the issue of red and processed meat and its association with bowel cancer were several of these theories. Journalists have been shown to filter information through 'news values', (Galtung and Ruge, 1965; Schlesinger, 1987; MacIntyre et al. 1998; Harcup and O'Neill, 2001). These characteristics determine what is newsworthy and can include disagreement among experts, government suppression, scientific advancement, celebrity involvement etc. Key external actors such as the government, the World Cancer Research Fund

(WCRF) or the European Prospective Investigation into Cancer and Nutrition (EPIC), with privileged access to the media, played an important role in staging 'triggering events' which were reported by the media. These 'triggering events' satisfied journalists' news values in that they often presented links between red and processed meat and bowel cancer as scientific advancement. In addition, the uncertainty around the evidence in the case of red and processed meat's association with cancer and the disagreement between both scientific experts and with the meat industry was a major theme in the coverage of this issue. Another important news value is 'culture', as defined by Hilgartner and Bosk (1988) or 'symbolic issues' (Cobb and Elder, 1972) and in this case the cultural significance of traditional English dishes associated with red and processed meat such as roast beef, bacon butties or a full English breakfast/fry-up also became a major theme in the coverage. These national dishes were referred to in patriotic terms and there was a concurrent mistrust of vegetarianism expressed by several columnists. This echoes work by Maurer (1995) and Boyle (2011) who argue that while vegetarianism has been widely accepted the sometimes radical ideology of the movement has meant that vegetarianism may always be considered deviant behaviour (albeit positive deviant behaviour) and a threat to dominant cultural practices (Spencer 1995).

Linked to news values is Kitzinger's (2000) theory of media templates in which media coverage follows recognized patterns so that familiar narrative structures, stereotypes and actors are employed over and over again in replicas of story types or templates. Kitzinger and Reilly described such a template for food scares in the late 1990s (1997) and this pattern is replicated in the data with the familiar structuring of an article with a shock headline, an explanation of the dangers of eating red meat in dramatic terms with quotes from scientific 'experts' followed by a counter claim from a representative of the meat industry.

A particular 'frame contest' evident in the data was around the healthy/unhealthy status of red meat. Articles often pitted one source against another, a 'he said/she said' device which can be used by the media to create news stories, or to show impartiality or objectivity on the part of the journalist but which can also lead to a lack of critical analysis in reporting (Cunningham, 2003; Schiffer, 2008). The data in this case often indicated a clustering of articles in different newspapers with a common source, for example a similar narrative line and framing with identical quotes from 'experts'. This indicates a potential reliance by journalists on press releases and echoes concerns (Lewis et al., 2008; Davies, 2009; Williams et al., 2009) over journalistic independence and the ability of the print media to properly investigate information presented to it by external sources.

Lang et al. (2009) argue that nutrition is not given the importance in public policy it deserves not only because it is often seen as a personal and private individual matter in which no other body has the moral right to intervene, but also because it is often criticised for producing contradictory research. This is reflected in the analysis of this data in which contradictory messages were

presented, not only emphasising the uncertainty of the evidence backing up the association between red and processed meat and bowel cancer but also portraying red meat itself as more or less healthy. As noted by Bufton, Smith and Berridge (2003, p. 488), '*interpretations of ambiguous data are often conditioned by broader quasi-political interests*' – in other words when there is no scientific consensus, opportunities arise for interested parties to make claims and counterclaims and contest policy decisions in accordance with their own interests. The resulting confusion both perpetuated and despaired of by journalists, leaves readers with a level of cynicism about official dietary advice that encourages reliance on lay knowledge for example 'a little of what you fancy does you good' or 'everything in moderation' (Lupton and Chapman, 1995; Regan et al., 2014).

Nutritional research as a biological science often focuses its studies on individual ingredients, components or foodstuffs. This may influence the tendency of the media to report diet related research simplistically, often without contextualisation (Goldacre, 2007). This means that food items are often taken out of context - overall diet is less likely to be mentioned. This reflects a trend (Scrinis 2012; Dixon, 2009) in which '*real food*' (as coined by Pollan, 2008) is replaced by 'nutrients'. Scrinis calls this 'nutritional reductionism', while Dixon terms it 'nutritionalisation'. This seems to be particularly prevalent in the media's coverage of research relating to diet's role in the prevention of cancer – of course the media may be merely reporting studies produced by the scientific community, commissioned by governments, charities, research organisations who are themselves prone to this tendency to view food as isolated nutrients.

The majority of the articles in the sample framed this issue as one of personal individual responsibility rather than one which required government, industry or civil society action. This supports previous research which has shown that when reporting cancer research and research into diet-related conditions such as cardio-vascular disease and obesity, media coverage tends to focus responsibility disproportionately on the individual rather than framing the issue as the responsibility of the state or civil society (Lawrence, 2004; Clarke and Everest 2006; Hellyer and Haddock-Fraser 2011; Hilton et al., 2012). The responsabilisation of individuals in this case suggests the media collude not only in 'nutricentrism' (Dixon 2009) but also in what Greenhough (2010, p. 156) sees as a neo-Foucauldian '*state-led biological citizenship*' in which individuals have responsibilities, which are articulated by 'biological governance' (Greenhough, 2010, p. 156). Quoting Rose (2007) and echoing Dixon's concerns about '*endless self-improvement*' (Dixon, 2009, p. 323) Greenhough outlines the citizen's responsibility to maintain their health:

"The active biological citizen must engage in a constant work of self-evaluation and the modulation of conduct, diet, lifestyle, and drug regime, in response to the changing requirements of the susceptible body" (Rose, 2007, p. 154 quoted in Greenhough (2010) p. 156).

There were few instances in the data when this state-led biological citizenship was challenged or when broader drivers of nutrition choices were mentioned and set in the context of overall diet.

7.5 Summary

In summary, the findings outlined in this chapter have shown that key actors played a part in creating 'triggering events' which led to peaks in coverage over the sample period. Following the Issue Attention Cycle model (Downs 1972) the data showed that coverage then subsided until a further triggering event occurred. In addition, advice to limit red and processed meat consumption in order to prevent bowel cancer was incorporated into wider reporting on diet and bowel cancer within lifestyle and self-improvement feature articles.

There was evidence of a 'framing contest' over how red and processed meat was portrayed by the press. Key actors sought to frame red and processed meat as more or less healthy according to their own interests – either advocating a reduction in its consumption or its continued inclusion in meals as part of a 'healthy balanced diet'. In addition, the data showed source struggles as state, civil society and industry sought to present their own point of view.

The cultural importance of red and processed meat in the UK diet was emphasised by many of the articles in the sample. However, confusion, uncertainty and contradiction were major themes in the sample, with red and processed meat being portrayed as both an important component of a healthy diet and a potentially deadly carcinogen. There was consensus in the reporting that responsibility for diet lay with individuals rather than the state, the food industry or civil society. Readers were subject to a bewildering barrage of dietary advice. They were regularly encouraged to be aware of food risks as well as enjoying their food; to exercise dietary restraint as well as resisting the 'rasher bashers' and their unreasonable and exaggerated dietary demands.

Chapter 8: Research Findings, Research Question 3: Interviews

8.1 Introduction

As noted in Chapter 4 (Methodology), the research was designed in three phases to address the three research questions:

RQ1: How has the UK government's policy on RPM consumption developed?

Method: Policy analysis of government recommendations on red and processed meat consumption 1993-2012

RQ2: How do UK newspapers report this issue?

Method: Content analysis of UK newspaper reporting of consumption of red and processed meat and its relationship to the development of bowel cancer, 1993-2012

RQ3: What role did UK newspapers play in the development of the policy?

Method: Semi-structured interviews with key actors identified from stages 1 and 2, including interviewees from three key groups: stakeholders, media professionals and policy makers. These interviews will explore in detail the findings from the first two stages, investigating the motivations, feelings and views of the interviewees.

This chapter sets out the findings of the interviews carried out in phase 3 of the research design. As outlined in Chapter 4 (Methodology) research design for this phase was largely driven by phases 1 and 2 (policy analysis, content analysis). The policy analysis and content analysis identified a range of actors from three key groups: 1) journalists 2) stakeholders 3) policymakers across both time periods under study (COMA report 1993-8 and SACN report 2001-11). Some participants were equally relevant to both time periods. Steps were taken to try to achieve an equal number of participants in each group (see Table 8.1). The total number of interviewees was 27.

	Journalists	Policymakers	Stakeholders	Total
Approached	26	27	17	70
Secured	10	8	9	27

Table 8.1 Table of potential/actual participants (source: author)

These 27 participants were interviewed individually, either face to face, on the telephone or by Skype. Their interviews were recorded on a digital audio recording device. The interviews were semi-structured in nature, to allow interviewees to talk openly and freely about their lived

experience without direct or leading questions. However, a skeleton topic guide was used to ensure some focus and to allow comparison between interviews (see Appendix 9).

The 6 areas to guide the interviews were:

1. The policy making process
2. The media: role, process and influence
3. Interaction between actors
4. Framing in the media and in the policymaking arena
5. Where this issue appeared on the policy agenda
6. Where this issue appeared on the media agenda

The interview length varied from thirty minutes to one hour and thirty minutes. The interviews were then listened to and notes were made. Some interviewees had a greater degree of involvement than others, these were identified as 'key interviewees'. Key interviewees within each grouping (government policy makers, journalists, external actors) were identified (see Table 8.2).

	Key interviewees	Remaining interviewees
Government Policymakers (COMA, SACN members, government Ministers, politicians, civil servants)	6	2
Journalists (Freelance print journalists, print journalists working on national newspapers, editorial staff)	5	5
Other stakeholders (Meat industry representatives, MLC representatives, cancer charity representatives, NGO representatives)	7	2

Table 8.2 Interviewees (source: author)

These 18 key interviews were fully transcribed, anonymised and read through again several times. The interviews were coded according to the research questions. Emerging codes were identified and similar codes were clustered together to form categories, redundant codes were removed. From these categories major themes were identified for each policy development period or embedded unit of analysis of the case study. The remaining 9 interview transcripts were then re-examined and listened to again to identify further codes relating to the already identified major themes.

This chapter reports on the main themes identified through this analysis according to the research questions and comparing the two time periods under analysis / two embedded units of analysis in the case study. It is divided into three sub-sections. In the reports that follow, findings are reported by each Research Question in turn. As a sub-heading under each Research Question they are reported by time period (1993-1998 or 2001-2011) and then according to the major themes that emerged from the analysis. Each sub-section is followed by a running summary or synopsis. Table 8.3 gives a visual outline of the structure of this chapter to aid navigation.

8.2 RQ1 (How has the UK government's policy on RPM consumption developed?)	8.2.1 Policy development period: 1993-1998	8.2.1.1 Theme 1: New Government
		8.2.1.2 Theme 2: Policymaking process
		8.2.1.3 Theme 3: Tension between actors
	8.2.2 Policy development period: 2001-2011	8.2.2.1 Theme 1: Change in Government
		8.2.2.2 Theme 2: Policymaking process
		8.2.2.3 Theme 3: Tension between actors and groups of actors
8.3 RQ2 (How do UK newspapers report this issue?)	8.3.1 Policy development period: 1993-1998	8.3.1.1 Theme 1: Media processes
		8.3.1.2 Theme 2: Source strategies
		8.3.1.3 Theme 3: Red and processed meat
	8.3.2 Policy development period: 2001-2011	8.3.2.1 Theme 1: Media processes
		8.3.2.2 Theme 2: Source strategies
		8.3.2.3 Theme 3: Red and processed meat
8.4 RQ3 (What role did UK newspapers play in the development of the policy?)	8.4.1 Policy development period: 1993-1998	8.4.1.1 Theme 1: Stakeholders
		8.4.1.2 Theme 2: Government
		8.4.1.3 Theme 3: Media
	8.4.2 Policy development period: 2001-2011	8.4.2.1 Theme 1: Stakeholders
		8.4.2.2 Theme 2: Government
		8.4.2.3 Theme 3: Media

Table 8.3 Chapter 8 Structure (source: author)

8.2 Research Question 1: Policy Development

8.2.1 Major Themes: RQ1: Policy Development Period 1993-1998

There were three major themes which emerged from the interviews around policy development in the first embedded unit of analysis in this case study: 1) new Government; 2) uncertainty around policy making processes; 3) tensions between actors and groups of actors.

8.2.1.1 Theme 1: New Government

Interviewees talking about the development of the government recommendations on red and processed meat and cancer during this period (1993-1998) made references to the incoming Labour government of 1997, which had replaced a seventeen-year period (1979-1997) of Conservative government. Interviewees identified and talked about the food scares that had gone on before the change in administration and how the new government were planning to deal with this by setting up a new agency, the Food Standards Agency or FSA. For example:

“I mean you’ve got to remember, at that time, ‘97, ‘98, and prior to that ‘95, ‘96, there’d been a whole series of food problems. Orange juice, salmonella, BSE you know, a whole series. All, I might say, badly handled. They weren’t....I mean industries were being closed down by accident. It was the way they were dealt with. We came in with a plan to set up the FSA.” (Interviewee 25)

Participants also talked about a change in culture and attitude on the part of the new government (ministers, Secretaries of State and advisers), which had come into power after 17 years of Conservative government. Those in the new government saw their new ideas and lack of knowledge about rural issues as a benefit:

“I don’t think Tony [Blair] owned a pair of wellingtons. He was a bit of a misnomer in a way. (coughs) Jack [Cunningham] was ok because he’d got more sheep than anything else, you know up in Cumbria, so he was well aware – I’d asked two questions in 30 years, 25 years about MAFF. Tony only sent me there because he knew I knew nothing about it. He said: I’m sending you there, he said, because you’ve had no connection with it, I just want you to go in and take it apart. And get the FSA set up.” (Interviewee 25)

“...it was a period, how can I put it? We were so new in government. Number 10 didn’t know how to interfere with us. We got away with things that you wouldn’t do today. In setting up the FSA for a start. You know because the control freakery at number 10 hadn’t quite got the tentacles in.” (Interviewee 25)

However, radical policy changes (such as the creation of the new Food Standards Agency) and new ways of approaching government business, with increased numbers of Special Advisers created tension within the civil service:

“So this breath of fresh air came in, everybody thought, Great! Within three months, everybody wanted them out. Because they had completely alienated the whole civil service. I mean the truth in MAFF, which eventually became DEFRA but it was still MAFF at the time, Department of Health, Home Office, Department for Education, all of them had been completely sidelined for this load of independent advisors, who just came in with their opinions, their political ideologies, and the whole principle of good public service, where you provide the best evidence and impartial advice to government was gone.” (Interviewee 2)

And this change in personnel within government and the civil service, at times proved problematic for government ministers:

“...and he [the Secretary of State for Health] was in agony. About the way the staff was, [after the] long Thatcher/Major era and he was being absolutely manipulated and done by the senior civil servants. And I took him and I said look, stay cool, let me introduce you to very intelligent good, senior civil servants here who are not in that park, and I took him over and introduced him to two or three people.” (Interviewee 3)

8.2.1.2 Theme 2: Policy-making process

Hand in hand with the changes brought about by the proposed Food Standards Agency, was disagreement and confusion in government and among government advisers over the way nutrition policy was made. It was proposed to move nutrition from the Department of Health into the new Food Standards Agency.

“And that was, quite feverish, at the time. [...] And there were a number of agendas being pursued, one of which was to remove the advice-giving capacity on nutrition from within government and make it independent. So a Food Standards Agency. And the original Food Standards Agency proposal did not include nutrition. Um, but it did later on. I think that was probably a good thing. But it was problematic because lots of people didn't think it was a good thing. That for them, the Food Standards Agency was about, stop being poisons and toxins getting into the food supply it wasn't about food standards. In fact it started as a food safety agency and then when nutrition was put into it, it became a Food Standards Agency.” (Interviewee 2)

In addition, changes were proposed to try to improve the nutrition policy making process; to make it more transparent, independent and accountable. A common theme here was the key role of COMA at this time in both risk assessment and risk management. COMA looked at the evidence, then provided advice to ministers on both the science and the policy implications of it. However, for some interviewees this process under COMA was unclear – one commented “*Fair to say that at the time, when COMA was around before the FSA and SACN, the distinction between advice and policymaking was less clear. It was just a bit woolly.*” (Interviewee 2) – this

would change after the introduction of the new Food Standards Agency and the replacement of COMA with SACN, but COMA had responsibility for policy recommendations:

“So COMA was the Committee on Medical Aspects of Food and Nutrition Policy, Policy at the end. So they advised on policy based on the science. So it had two related jobs. And so government had to take policy advice, as well as the scientific advice. That began to change. So when the folic acid report came out later [...] there wasn't a recommendation there was a series of options, and the implications of those options, nutritional implications of those options. So, it had already moved into risk assessment, but not risk management.” (Interviewee 2)

Interviewees also noted the particular position of the Chief Medical Officer as both head of the medical Civil Service and chair of COMA, some seeing this as increasing the power of the committee:

“[COMA] automatically had to logically go into the Food Standards Agency. And one of the [issues] discussed at fairly regular intervals was the anomalous position of COMA, which was enormously powerful. Because it was chaired by the Chief Medical Officer for Health. So it was almost as though Ministers would not take on their CMO, because he was the walking authority on what was required for the wellbeing of the country. So, he didn't of course chair sub-committees...[...] but the reports went to the main committee in COMA and we looked at the implications of that for general policy, and balance, and, where the political and public health broader socioeconomic issues – I mean you know, it had much bigger prestige than it does now.” (Interviewee 3)

While others saw the Chief Medical Officer's (CMO) role of both independent advisor to government and a civil servant working for the government as putting him or her in a difficult position:

“The fact that the CMO could have the roles as the independent advisor to government but also the government's mouthpiece if you like, is troublesome. Now, it's pretty clear now, that the CMO is part of government and doesn't sit on the outside.” (Interviewee 2)

A number of interviewees commented on the uncertainty in the scientific evidence and therefore the difficulty COMA had in quantifying an appropriate recommendation for red and processed meat consumption – the amount per day that could be consumed. A key development at this time was the approach to evidence and evidence gathering. One interviewee noted:

“... for the COMA report on Diet and Cancer, it was at a stage where computerised searches for literature was very difficult, or if possible at all, and accessing information was very much based upon, um, individual communication of experts and colleagues

and, and, and gathering what was available. And the completeness of collecting that evidence was much, much more difficult. And the second consideration was how the evidence was interpreted, and the extent to which there was a security around different people's interpretation of the evidence. And I think that the COMA committee was the first committee to ever try to assess how different individuals rated the same information. And there was a paper that was looked at by a number of individuals and they were asked to mark it in a number of different ways and that's a published paper. But the bottom line was, it was quite clear that if you defined your approach with sufficient care you could move towards standardised interpretation." (Interviewee 12)

However, some interviewees raised the point that this same rigorous approach did not apply to the process of making policy recommendations from the available evidence – the process of risk management. Interviewees argued that this part of the policymaking process is open to lobbying without a more transparent or standardized system of making policy.

8.2.1.3 Theme 3: Tension between actors

As well as disagreements between COMA members about the precise to-the-gram recommendations on red and processed meat consumption, interviewees identified tensions between the government departments of MAFF and the Department of Health. A key theme here was the power of the UK farming and meat industry at this time (1997/1998).

"I mean, the farming industry, (coughs) is the only industry that's got its own ministry and two daily radio programmes! Now you might argue if Archers hasn't got much about country folk any more, but you know, with Farming Today and The Archers, and a captive ministry, you know? It was, a huge influence." (Interviewee 25)

"I would say probably in successive governments, that the red meat lobby are effectively the NFU. And they're powerful because they're the food producers of the country, and I would say it's more powerful with the Conservative government because more of them are farmers." (Interviewee 16)

"Well, I mean don't forget, you're so young you wouldn't remember, that, the whole basis of the post-World War 2 developments was to pour money into developing the agricultural industry. [...] So, the Meat and Livestock Commission [...] I mean they were powerful. And locked into the National Farmers Union. I knew all these people personally. And you know I wasn't antagonistic to them, you know, that was their job. And there was the Milk Marketing Board. Which was also incredibly powerful [...] And it's seen to be entirely appropriate, for the good of the British economy and the well-being of something that was fundamentally appropriate for human health and wellbeing in Britain. And they, were in and out of the offices of the minister of agriculture. The

minister of agriculture was far more important than the minister of health.” (Interviewee 3)

“The meat industry and the Meat and Livestock Commission in particular were quite powerful in lobbying against any change in the um consensus around meat.” (Interviewee 13)

Several interviewees pointed out the difficulties for government during this time of on the one hand making a recommendation to cut red meat consumption while on the other hand trying to protect the red meat industry.

“We were very keen to get people buying beef. I can remember McDonalds coming to see Jack [Cunningham] and myself. Now, you’re speaking to someone who’s never, ever, yet, set foot in a McDonalds restaurant. Never. On the other hand, millions of people do and....they came to see us “oh, you know we’re going to sell this, beef, you know” this that and the....so we were hell bent on encouraging, the beef ban, we thought we’d get it lifted. Encouraging people - “The meat’s safe” - almost, it wasn’t quite “Eat lots of it” but obviously it was a lot slower process, so by the time the red meat issue arose and cancer, I mean, it doesn’t go down very well when those things arise, I can assure you!” (Interviewee 25)

This ‘*red meat issue*’ caused tensions between civil servants within the two departments, MAFF and the Department of Health, who said during interviews that they took a different approach to policymaking in this area, with public health experts on the one hand taking a precautionary principle, and MAFF production experts favouring proof of harm beyond reasonable doubt:

“So the idea about public health is, precautionary principle and so on - absolutely not, if you haven’t got beyond reasonable doubt proof, then there’s no reason to have a policy, would be the MAFF argument, and so that was where the tension came. (Interviewee 2)

“...of course, industry, and at that time MAFF let’s face it was the farmers’ ministry. I can assure you, one half of the department hated the other half. [...] The one half of MAFF...The producer half of MAFF, was the NFU. The regulatory part of MAFF, hated the producer part. And indeed, it was pretty virulent.” (Interviewee 25)

“...you know the Food Standards Agency was devised as the solution to that problem of MAFF being too heavily involved in things like health messages around meat. It [MAFF] was also working for the industry benefit. So things like the Health Education Council at

the time was producing leaflets around healthy eating, um, and those leaflets had MAFF logos on as well as DH logos on them.” (Interviewee 13)

However, interviewees representing the meat industry were keen to point out that from their perspective supporting the red meat industry “*doesn’t just mean going for consumption for the sake of it*” (Interviewee 26), and that they had for years worked with nutritionists to improve the nutritional content of meat, reducing saturated fat levels and working hard with producers to improve food safety.

In summary, the interview data suggested that relationships between actors and the tensions that arose between them were more complex than a simple argument pitting the farming industry and MAFF against public health. While MAFF were closely aligned with British farmers and farming industry, there were actors within MAFF and the farming industry who favoured tighter regulation of the meat industry and who supported reformulation of red and processed meat to improve its nutritional quality. Similarly, there were actors within the Department of Health and their advisory committees who supported the meat industry and were concerned that a reduction in red meat consumption could compromise health in terms of iron status in particular groups.

8.2.2 Major Themes: RQ1: Policy Development 2001-2011

Analysis of the codes and categories in policy development from the interview data of the second embedded case study (2001-2011) reveals similar themes to the analysis of the first embedded case study (1993-1998) although in a different context. These themes were: change in government; the policymaking process as it relates to government advisory bodies; and tensions between actors and groups of actors.

8.2.2.1 Theme 1: Change in government

The period under analysis spans a decade (2001-2011) and some interviewees mentioned the length of time the SACN report on Iron and Health took to finish, some saying this was due to the complexity of the issue, some saying it was due to the personnel involved and others blaming a lack of political will in this area:

“I mean it had been in the pipeline for about ten years, so we knew that, that the work was going on. [...] In 2000 I’d promised colleagues that this report was coming out in three years’ time, 2003 and of course it never came out until 2010.

RW Why did it take so long?

21 It just took forever, I don’t know why it took so long. It just, I think things like that maybe get put on the back burner in terms of like priorities at the Department of Health and the FSA and whatnot” (Interviewee 21).

Most interviewees focused on the period when the SACN Iron and Health report was published, its recommendations on red and processed meat consumption were made and the government policy and nutritional recommendations were introduced, between 2010 and 2011. Like the other embedded unit of analysis, concerning the COMA report on diet and cancer of 1997/1998, this period was characterized by a change in government which took place after a general election in May 2010, replacing a 13 year period of Labour government in the UK (1997-2010) with a Conservative/Liberal Democrat Coalition government. As mentioned above, the new Labour government of 1997 had sought to introduce the Food Standards Agency. For their part, soon after coming to power, the new Conservative Secretary of State for Health, Andrew Lansley, in line with conservative policy, proposed to change the Food Standards Agency, dismantling its powers and moving responsibility for nutrition, including SACN, which had been located in the Food Standards Agency since its inception in 2001, back into the Department of Health. Interviewees saw this change to the Food Standards Agency as having an impact on the way nutrition policy and more specifically the recommendation on red and processed meat consumption was made. Some commentators identified a role for the FSA as a potentially independent regulator on nutrition, a role which was lost after responsibility for nutrition moved back into the Department of Health:

“So, today, this is where, the FSA had a role. Then what happens of course, Lansley comes along...[...] ... And, give him his due, he kept me in touch with the progress of the Tory manifesto, so I knew what was happening on diet and nutrition, um, because it was in the manifesto, and when we were geared up, we were going to lose [...] so he took all the diet and nutrition off us, but at the time beforehand you’d got COMA and all those other committees, something like, probably 8, reporting exclusively to the FSA [...]so there was an agenda which then got smashed up completely, 2010.” (Interviewee 25)

Interviewees noted that nutrition policymaking was more closed inside the Department of Health (DH) than it had been in the Food Standards Agency (FSA), both for interested stakeholders like the meat industry and for policymakers:

“We’ve always had a bit of a bumpy relationship with DH and also when previously the nutritionists were at FSA, in some ways, they were more approachable then, but, they’ve kind of cocooned themselves again since the move. And we’re finding them not so accessible and not as willing to listen.” (Interviewee 21)

“It [SACN] went completely closed. Whereas [...], the FSA advisory committees meet, in the open. And they you can go and sit in and listen. You can go and sit in at Aviation House. And SACN went behind closed doors. Oh no, let’s get it clear. In 2010 when the

Coalition came in, diet and nutrition for England, which is the Responsibility Deal, went from an open, non-political Government department, to a closed political department. Simple as that. And no-one can deny that. No one....and so therefore, the meetings with the food industry over the Responsibility Deal, are closed.” (Interviewee 25)

In connection with the change in government and the dismantling of the Food Standards Agency interviewees also mentioned the coalition government’s ‘Responsibility Deal’, the Public Health Responsibility Deal which was introduced in 2011 as part of the Public Health White Paper of 2010 and included a proposal to work collectively with industry and voluntary bodies to achieve public health improvements. Interviewees from both industry and the voluntary sector were critical of this approach, one interviewee from a large cancer charity when asked whether diet and cancer prevention were a priority for the government commented:

“It certainly doesn’t feel like it’s a big deal for the government, and it also feels like in terms of lifestyle or diet, obesity, the approach is that we, individually could or should be doing more. So, it doesn’t feel like it’s as important as it should be, I don’t think. And they certainly could be doing more. Um....we know that they’re now a fan of involving industry through this Responsibility Deal and so on. But a lot of it seems to be voluntary. I mean look at Traffic Light Labelling – public health professionals have been pushing for that for years and years and years, and it’s still voluntary as far as I’m aware. But even, it’s just something that, it seems obvious, the evidence is there to support it, but the government have taken a while to get that moving.” (Interviewee 6)

While meat industry commentators were concerned that the Responsibility Deal was a deal made to serve government interests:

“And that is an issue, going back to what I said earlier, that we have with the Department of Health and this Responsibility Deal. They’re wanting to be able to report changes. Now the changes that the agricultural industry and the meat industry have put in place have taken about 30 years to achieve. You’re not going to achieve that inside one, government administration. And that is a frustration we have – yes there’s more that could be done, there’s other things we can do in terms of fatty acid manipulation [...] But no that’s too complicated, that’s long term and they’re not interested in the long term changes that can be done, clearly. Which is frustrating for us.” (Interviewee 21)

8.2.2.2 Theme 2: Policymaking process

As mentioned above, SACN’s role differed from that of COMA in that it did not explicitly have responsibility for recommending policy, its role was specifically one of risk assessment and policy was developed and decided within the Department of Health (DH). Many interviewees when asked how policy was made or decided within DH were unclear about this. Even

interviewees closely involved in the policymaking process said that this process was difficult to describe. However, they were clear that policy was influenced by a number of different factors, including but not limited to the evidence from the advisory committee:

“We have SACN who will give independent advice on nutrition. [...] the scientific advice forms part of the evidence base, that government will think about when coming up with its conclusions. Now, for the meat advice we didn't do an economic analysis. For some things you would do an economic analysis, but, um, there's a, a, kind of ethical point, about whether you should be doing an economic analysis on something that is potentially a cancer risk, versus something that's, um, we've got an industry selling meat. So, for this one, we didn't do it, kind of for those ethical reasons. [...] That's part of the advice, and at the end of the day, for things to become government policy a minister needs to agree to them. And a minister will take into account a package of evidence that officials will bring together and part of that evidence will be the advice from our independent advisory committee. But not all of it, just part of it. So part of the advice may include, acceptability research, with consumers. It may include feasibility work with industry.[...] So then you'd say, well, so there's the scientific advice but could you really do it, is it really feasible? So part of that would be feasibility things. And you know you have to accept that we're not going to move back to a stone age diet! (laughs).” (Interviewee 11).

From this description within DH there is clearly a partially described series of processes (for example feasibility studies) that are carried out and this to some extent tries to take into account socio-economic considerations as well as bio-medical ones. This, according to one interviewee had been on the agenda for some time:

“When I was [...] on [...] SACN one of the points that I raised [...], was the relative balance that was given to the bio-medical considerations compared to the broader socio-economic considerations, and recognition that the processes that we had in place for capturing the socio-economic domain in relationship to policy were, did not appear to be as refined or developed as those that we had for capturing the bio-medical considerations. And there was a need to think through how one might draw those two dimensions together in a more balanced way to inform policy.” (Interviewee 12)

However, it was also clear that personal preferences and alliances played a part in the policy making process. In addition, there was some evidence of tension between the two government departments DEFRA and the Department of Health. While the interview data does not suggest that DEFRA played a part in the SACN deliberations on the risk assessment, it could potentially have had a role in an economic analysis to inform policy but as mentioned above this had not happened, although according to those close to the policymaking process, DEFRA and the meat industry were briefed:

“So in the sense of the meat advice, what happened is, SACN did their work, went out for public consultation, came back again, we held various engagement events with industry, to say this is coming. Spoke to DEFRA to say this is coming, but didn’t take their views into [laughs]...you know we just spoke to them to say this is coming, and you need to have a think about this chaps, be prepared for it...” [...]

“RW ...why did you do that, why didn’t you ask for their input in this case?

11 [pause] Um. This was about the publication of the SACN report, and, they, they, did not provide scientific arguments to say that meat...they had every opportunity to comment on the SACN report, same way everybody else did, they did not marshal arguments. SACN are not there to say what the policy should be, they’re there to say what the scientific recommendations are. And you know we told DEFRA, these are the scientific recommendations, and they were...I’m not saying they were entirely happy, but, you know, they didn’t marshal strong enough arguments for our minister to say... these are them. And they certainly never put any science into SACN to say you’re getting it wrong.” (Interviewee 11)

Friction between DEFRA and the Department of Health was mentioned by several interviewees and this was seen as problematic for key stakeholders, for example a meat industry representative commented:

“I think there’s a major lack of communication between the two, which is very worrying from our point of view. And often there isn’t, you know, it’s clearly not joined up government, you know because obviously DEFRA are in support of the British farmer, the English farmers, and making sure that we have got a viable sustainable industry, and then the Department of Health come along with something that seems to knock all that down. Which is very frustrating...and then of course we get challenged by our [members]. What are you doing about this?” (Interviewee 21)

Industry access to government was often mentioned by interviewees; those in public health were concerned about the access afforded to the food industry, while those representing the industry, felt they didn’t have enough access to government:

“it was interesting beforehand, DEFRA [...] asked us to come to a meeting the week before. And we thought, strange. Go along, we just want to discuss the health report with you, it’s coming out next week. We knew that. What are you going to tell us about it? Well we can’t tell you anything but we just want to warn you that it’s coming out next week. But well, we knew that it was coming out next week, what are you trying to warn us about here? So obviously there was a bit of friction between the two departments there, and all we really did, well we knew the iron and health report was coming out

anyway so we had press statements all ready and prepared, should we be questioned or approached.” (Interviewee 21)

Some interviewees articulated the difficult balance the government were trying to achieve, between supporting the meat industry and supporting public health, and were more concerned about the transparency of the process:

“I think all the industry have an entrance to government. And I think this government, all governments are keen not to destroy industry. Reasonably. And so that’s where you get into the interesting thing about politics about balancing different goods and bads. That’s politics. [...] But I think it’s important that those things are out in the open and I don’t think they are.” (Interviewee 2)

It was clear that civil servants within the Department of Health played a key role in building or dissipating support for a proposed policy:

“We briefed the Chief Medical Officers around England. The advice from SACN went to the CMO she was very very supportive of it. That meant that the Public Health Ministers then became very supportive of it and it becomes government policy. You know, that’s, that’s what it is.” (Interviewee 11)

8.2.2.3 Theme 3: Tensions between actors and groups of actors

As mentioned above there was evidence of some tension between the Department of Health and the Department for the Environment, Food and Rural Affairs (DEFRA) during the policy making process, with DEFRA not “*entirely happy*” (Interviewee 11) with the recommendation and bracing the meat industry for some knock-on effects. There was also concern in the Food Standards Agency about moving responsibility for SACN back into the Department of Health and the impact this may have on nutrition policy and the transparency in which it is made. While the meat industry was seen by some as having unfair access to government, the industry itself felt beleaguered and in some cases suspicious of government health officials and their motives:

“We know a lot of names and there is a large proportion of vegetarians working at the, what was FSA, Public Health England and Department of Health. Now, I don’t have a problem with people deciding not to eat meat, but I have my suspicions that perhaps that does colour their judgement, and I don’t know how you do that. How you address that, because there’s prejudices....

RW How do you know there’s lots of vegetarians?

21 Because I go along to the Nutrition Society meetings every year, and I sit at a table and I watch which ones are choosing vegetarian options, that’s how I know. And they sit beside me and they’ll have a vegetarian option so you know, there’s an inherent

bias there. And people are entitled to select what they like, but you know, if it colours their judgement when it comes to policy I think it's a problem." (Interviewee 21).

As mentioned above the meat industry were seen by some interviewees as having unfair access to government, however NGO representatives, for example from leading cancer charities, did not feel they had a right to take part in the policymaking process. One representative of a cancer charity when asked if they were consulted by SACN or took part in policymaking processes said:

"No, no...Nor would I expect them to, if they came to us we'd respond, but it's not an area for our expertise, it's not something we have expertise on. Our medical board consists of two oncologists, two surgeons, three surgeons, a research nurse and a GP. So they would have a view, but they aren't prevention experts, they're not public health experts." (Interviewee 4)

Other NGO representatives expressed concern about collaborating with other campaigning organisations to try to influence policy. An interviewee from an environmental charity said:

"...we tended to and still do slightly steer clear of doing joint things with the Vegetarian Society or Vegan Society, not because we don't think they do good work, but because it plays into people's perceptions about us.[...] the perception that we're a very narrow, environmentally, deep green and therefore we don't speak to the average Joe in the street, or the average family who eats meat every day. We want to be able to be seen by people like that as a reasonable voice. [...] Only a number of people will go vegetarian and yet we want to reach people who will just reduce their meat. And so if we start talking about going vegetarian or going vegan, they will immediately turn off and walk away, to put it bluntly. And that, it's just not helpful when we're trying to make a big change and a movement for change." (Interviewee 27)

8.2.3 Synopsis

Comparing the interview findings for Research Question 1 from the two embedded units of analysis there are some key similarities and some interesting differences. The two periods were both characterized by a change in government which led to changes in the nutrition policymaking process. In the first unit of analysis (1993-1998) this involved setting up the Food Standards Agency and giving it responsibility for nutrition and nutrition policy. In the second embedded unit of analysis the new government took nutrition policy back from the FSA into the Department of Health. Both units of analysis showed departmentalism with both MAFF/DEFRA and the Department of Health acting for their own interests. This created tension between departments and the civil servants working for them. However, the policymaking process was very different – in the first unit of analysis policy options were largely identified within the

advisory committee while in the later period this was carried out within government, behind closed doors, and civil servants played a key role in identifying and building support for policy options.

8.3 Research Question 2: Newspaper Reporting

8.3.1 Major Themes: RQ2: Newspaper reporting 1993-1998

There were three major themes which emerged from the interview data around newspaper reporting in the first embedded unit of analysis (1993-1998). These were: media processes, source strategies and the importance of red and processed meat as subject matter for the press.

8.3.1.1 Theme 1: Media processes

Many interviewees mentioned the gatekeepers inherent in the print media production process. From journalists' personal views and agendas which influence which stories they chose to write, to their contact with sources who might provide information to write a story, and a chain of news editors, heads of department and sub-editors who had influence over how the story is framed, the headline and the eventual position of the story in the newspaper.

Most newspaper journalists interviewed working during this period (1993-1998) talked about the daily timetable of the newspaper office in which there is a morning meeting, or conference at about 1030 or 1100 in which section editors discuss potential stories for the newspaper the next day with the editor of the paper, and decide which ones to include. Journalist participants described the process of the morning meeting or conference, during which the editors acted as gatekeepers, deciding whether stories put forward by journalists should run or not, and how they should be framed:

“They come back from conference at, I don't know, might be 11.30 [...] And they say, you know “Yes go ahead we want it” it might be a simple as that, or they might say, “yes everybody was really interested in this, and the editor said so and so, and would you contact so and so and, you know, we want to put it on the front page.” Um, I don't think this would be the case with this.... Well it might be , you know, steak! You know if it was really something really strong, new, finding, about too much steak being bad for you, it could go on the front page.” (Interviewee 1)

Journalists also talked about the framing of newspaper stories – how difficult it could be to change the framing of a press release, and described the process whereby a journalist could ‘oversell’ or exaggerate a story when pitching to an editor, cautioning against journalists overselling stories that they cannot deliver.

All of the journalists interviewed said the headline, and sometimes the ‘standfirst’ or the first paragraph of the article would be written by senior news editors or sub editors on the ‘back bench’. Unless journalists were there when this was taking place (often overnight during the production process of the newspaper), they would not have an opportunity to change the headline or the standfirst and this might influence the framing of the article. Some journalists

found this problematic, particularly if they perceived this to introduce inaccuracies into the article, others saw this as a sort of 'peer review' process which could improve the quality of the article and prevent individual biases creeping in to reporting.

Journalists interviewed who were working during this period (1993-1998) talked about changes due to new technology (particularly the internet) and changes in health reporting. One interviewee talked about the increasing amount of information and potential articles the internet afforded journalists when it first came into their offices, noting the huge number of stories that would come into the newsroom via the internet, so that "famine became feast" (Interviewee 14). Another talked about the rise of health pages in newspapers during the 1990s:

"until The Independent came out, health articles were put on the Women's page – and that was considered to um, er, be the woman's area of interest as it were, the guardian of the family health, and [...] the health page proved to be very popular, and so every other paper started doing it within quite a short time. [...] I suppose you could say it was about health in a personal sense, it was about people and their diseases and how to keep healthy and examples of all this." (Interviewee 1)

This interviewee suggested a rise during this time, in articles within the main body of the newspaper which reflected readers' interest in their personal health and how to improve, manage or maintain it. One freelance journalist who writes for national newspapers on nutrition talked about the rise of the 'media nutritionist', suggesting that interviewees perceived a particular, and growing, interest at this time from UK newspapers in reports or articles on diet and nutrition from a self-help perspective.

8.3.1.2 Theme 2: Source strategies

Journalists interviewed talked about the importance of their 'contacts book' in accessing stories and information about stories – and who also would be able to verify or explain complex scientific information. Journalists working during this time (1993-1998) mentioned a relative lack of press releases (compared to today) but noted that organizations such as cancer charities would phone journalists with stories, and that these organizations valued publicity to generate donations. Several interviewees mentioned a lack of proactive "media management" during this period by both the government and the meat industry. For their part, those representing the meat industry at this time reported a deluge of media coverage and enquiries, particularly about BSE, which overshadowed the COMA Diet and Cancer Report and its coverage.

Several interviewees mentioned the impact BSE and other food scares and scandals of the 1990s had on media reporting:

"What the media obviously love is something that's newsworthy which is a controversy or a debate. Now the task of the scientist in reviewing the evidence is actually to come

to a consensus. [...] And I think that in nutrition policy we have been less good rather than better at achieving that and the 1990s are clearly recognised as a decade when there was a great deal of controversy in and around diet, nutrition, food guidance, to the point where the main problem was the statement that the experts never agree with each other we're always getting conflicting messages." (Interviewee 12)

While journalists interviewed explained that an element of conflict is an important news value, making a story which included differences of opinion or "rows" between experts or government ministers much more attractive to journalists.

8.3.1.3 Red and processed meat

Most interviewees, from all three groups, talked about the cultural importance of red meat in the British diet and the impact this has on media reporting around this subject. The media have an interest in writing stories about meat because, as one interviewee put it "*it matters*". Another articulated the place of red meat in British culture:

"I think it is interesting because you know the roast beef of old England and all that stuff. It's a cultural thing. I mean that's the thing about food. That's the really interesting thing about food. It's the point at which emotion and science collide. Or interact. Because it's both. It's both a scientific subject and an emotional and sociological necessity. It's a thing that binds families together, sitting round a table eating. So it has tremendously strong sentimental and emotional overtones and it's also scientific, that's what gives it impact, that's what makes it sexy, I think, to newspapers." (Interviewee 14)

There was acknowledgement of the change in attitudes towards red meat:

"When I was a girl, and that was a long time ago, you know you were told in school that red meat was healthy for you and particularly if you were a girl, you were told it would be good because it would give you lots of iron, and it would give you lots of protein, protein was a good thing. So, yes, I mean the story around meat has become pretty much reversed from what it was in say the 60s 70s, that in 50 years all the script around red meat has become negative and I'm not aware that there's anybody sort of actively championing, any active organised championing of the nutrition case for red meat. And the health case for it." (Interviewee 10)

Another interviewee elaborated on this idea of a change in nutritional messages – a strong news value or reason why journalists cover a story is a change in previous advice. When this goes further towards a prohibition on eating certain foods, or a ban, this can be problematic, and can lead to a media backlash:

"I can't imagine actually that the government would ever say "Don't eat bacon any more" because you know they'd be destroying an industry, it would have to be couched

in, you know even if some scientist came up with the idea that bacon was so bad that we should stop eating it – I think a politician would say, we can't tell people that, we'd have to tell them, just to eat less. But it could be, I suppose, quite a big story. And then I suppose there might be features where people write Why I'm Going to Go On Eating Bacon, Why I Like Bacon and those sort of things." (Interviewee 1).

8.3.2 Major Themes: RQ2: Newspaper reporting 2001-2011

The major themes which emerged from the interview data around newspaper reporting in the second embedded unit of analysis (2001-2011) were the same as those emerging from the analysis of the interview data about the first embedded unit of analysis (1993-1998), within a different context and with different outcomes. These were: media processes, source strategies and the importance of red and processed meat as subject matter for the press.

8.3.2.1 Media Processes

Like the analysis of interview data from the earlier period (1993-1998) the processes which drive media reporting were a prominent theme. Journalists from all titles who worked on newspapers during this period (2001-2011) also talked about influences on their reporting, specifically particular gatekeepers such as news editors, the 'back bench' (senior journalists in charge of making key production decisions – where stories are placed, how they are edited etc.). They talked about changes made to the articles they had written during the production process (as noted above the headline and often the 'standfirst' is written by someone else, e.g. a sub-editor) and the impact this could have on the way an article was framed. They also talked about the impact professional interaction with key gatekeepers, such as editors, could have on the framing of their stories. For example, a freelance journalist, talking about writing about government recommendations on red meat and cancer said:

"So my editor [...] wanted, you know said really, my headline, you know my photo, which I'm going to mock up, is of a cigarette stubbed out into a red steak, and (laughs)....and I want the piece to flow from that. And I said....."Well...yeah, but for me this is a 'on the one hand, on the other' piece and it cannot honestly be anything else [...] So, that's what I did in that piece. With the end result, I wasn't very happy with it. And you do get, it's a sort of good example of getting a lot of pressure from busy editors who don't want too much complexity. That's probably the politest way of putting it." (Interviewee 7)

And a journalist working for a tabloid described the importance of the news editor or the 'back bench' and their influence on the framing of a story:

"The back bench, they are the editors who make the decisions on what goes where in the newspaper. Which stories are given the greatest amount of space. Are given priority. So they are really, they, hold the keys to the kingdom! [laughs] They are very

important people! But in terms of a line, they would read your copy, and they would say hold on a second, [laughs] what about this, can you go back to this, say, one example, Health Protection Agency, and, say, categorically can you rule this out? Or is there a risk? Even if it's a very low risk, is there a risk? [...] So you'd go back and do that and then, you would relate that back to your news editor. And then they would decide how that story would appear." (Interviewee 15).

This was also reflected in the comments of a journalist working for a broadsheet newspaper:

"Yes stories can change, and they can change at every stage of the way, from being pitched from that individual organization, to the health journalist, to the news desk to the editor. Each of those stages will have their own view of what the story will be. But I'd say the key interaction will be between specialist journalist and news editor, because the news editor may want a particular angle on the story, and then there'd be a discussion between the journalist and the news editor as to whether that angle is appropriate. And normally in a decent paper like say the Independent or the Guardian that, that process will be fairly straight forward and, um, above board if I can put it like that. But on some other papers there's more of an agenda, and I think stories can get more influenced at that stage. [...] But certainly stories do get influenced and they get influenced by a variety of things, including, um, the opinions and arguably prejudices of the specialist journalist, the news editor and the editor." (Interviewee 22)

This same interviewee talked about the way the political leanings of a newspaper can also affect the way reports are written by journalists working there:

"You have to remember everyone working in a newspaper is working within a context, so they know what that newspaper is like in terms of its overall political views, the demography of the readership, what it's covered recently and how a particular story might fit into that coverage. So to some extent these things are unsaid in the sense that, if someone's writing for a very strong left or right wing paper they won't generally write something which would clash with those opinions, there would be an element of self-censorship if you want.

RW Do you mean it's a sort of unwritten rule?

22 Exactly! It would be unwritten someone would automatically know that they shouldn't write that line of story. But also things would be conveyed down the line, verbally, so I mean some of it would be context and sometimes there would be comments made." (Interviewee 22)

Journalists working during this period talked, like the journalists working in the earlier period under analysis (1993-1998), about the importance of the morning meeting or conference of editors and the difficulties for the journalist of making sure the article they were proposing for

the newspaper was not misrepresented by the news editor in the morning meeting. They also mentioned the increased pressure on journalists with the introduction of online journalism and 24-hour news:

“Then if you’ve missed that morning meeting with the editor where they discuss all the stories in the paper, then there will be another meeting at 4 o’clock. So you just let them know it’s more important, and your boss will then immediately put it up the list if it’s important and then he’ll go in and sell it hard, at 4 o’clock to the editor as the best story of the day if it is, or, if it’s not as good as you thought, you sort of try and wind it down a bit, that’s harder [laughs]. Never oversell a story – it’s harder to get it out of the paper than it is to get it in to the paper generally.” (Interviewee 23).

“...increasingly with the advent of online journalism, a story might be broken online, and they would see it as being more important than they had done you know that morning. So you’d be asked to file more copy on it. But there were times when they just assumed that you had just written up the story anyway [laughs] they hadn’t told you it was going to run...

RW Oh really!

15 ...so you would end up just writing everything, to be on the safe side. And occasionally there was a breakdown of communication, so you’d have to cover everything, but, usually, most of the stories that you’d written would be published, just you know to one degree or another.”

(Interviewee 15)

“I think it’s certainly true that there has been an increase in churnalism. Some reporters on some papers are having to churn out 4 or 5 stories a day. And really if you’re writing that many stories it’s hard to keep a proper check on context and proportionality and it’s easier just to rely on few, you know one or two, or certainly few sources rather than ringing round more widely to get a more balanced and nuanced view. So I think across the industry, the newspaper industry it’s a problem. I mean, I didn’t feel it personally very much, because I was generally left alone to come up with stories and given quite a lot of time to do so, but I think I was fairly unusual in that.” (Interviewee 22)

“It would vary but it could be sort of 6 to 8 [stories], a day. And they would generally be 500 to 800 words long. So it’s a lot. [...] most of those wouldn’t make, there was no way you’re going to get 8 stories in the paper in a day. Very unlikely, so you’d try and concentrate on the ones that are more likely to make and the ones that are least likely to make you’d just put a couple of calls in to make sure they’re true and then use the wires often, because you’ve just got to get them out of the way quickly. But it means it was a machine. [...] The sort of machinery of turning stuff around for the sake of turning

it around. No journalist should be writing 6 or 8 stories a day. No. Journalist. Should write 6 or 8 stories a day.” (Interviewee 23)

Several non-journalist interviewees said they felt newspapers sensationalized or exaggerated stories in order to sell newspapers. For example:

“I think that’s just how the media are, about most stories, and because they’re under pressure to sell, whatever their media is. And so the pressure on them is to make it as interesting, as exciting or frightening as possible. So, yeah, therefore the tendency is for them to exaggerate.” (Interviewee 17)

“Sometimes yeah they’re sensationalising evidence because their interest is in selling newspapers, so to some degree they’ve always got to exaggerate. In order to sell papers. But I think they can exaggerate either way, in the case of say meat, sometimes they’ll go overboard saying it’s really bad for you, bad for cancer or whatever ... and this is famously the case in food stories that mostly they swing around on whether coffee is bad or good for you or whether good or bad for you don’t they?” (Interviewee 13)

As noted above, a category emerging from the data for this period (2001-2011) which was not present in the first embedded unit of analysis (1993-1998) was an increased pressure on journalists to write more articles and increasing pressure within a struggling industry to sell newspapers. Journalists working in this period said they wrote anything up to 8 articles in a day, whereas journalists working in the earlier period said they wrote at most an average of 3 articles a day. This was attributed to a higher availability of information but also increasing competition between rival newspapers – journalist participants described feeling a lot of pressure from editorial staff not to ‘miss out’ on stories that might be covered by other newspapers. If they were found to have missed a news item then they would get into trouble:

“Especially as a news reporter. It was in your brief, to, you had to bring in the stories. I mean I can’t tell you, how horrendous it was. [laughs] Absolutely no shit. But it was brilliant training. But yeah you absolutely had to get something that everyone else didn’t have.

RW And what would happen if you didn’t get the story?

24 Well you’d just feel that you’d failed, you’d never get given a good story again. It never happened to me but people got bawled out in the newsroom. Shouted at, things thrown, people storming off, that sort of stuff. Big pressure. Yeah.” (Interviewee 24)

“...you would get a phone call at 11 o’clock at night when the first editions come out saying why didn’t we have this? Usually the answer is ‘cos it’s an exclusive. And then they try and follow it up at 11 o’clock for the last editions. [...] And you’re just being bombarded with stories. And you’ve got to write loads, even if they’re not going in and

sometimes newspapers can just go big on something else. So it would happen, and you'd just feel like you hadn't done a very good job but at the end of the day, it was the rest of the year that I wasn't missing stuff that I was [laughs] reasonably proud of myself. So, you know you've got to accept that they've put you in a position that you've got to do your best at and if they're not employing enough people it's never going to be perfect." (Interviewee 23)

This resulted in a number of changes in journalists' behavior. Firstly, journalists were keen to persuade their editors to include pieces they had written that they knew would also appear in other newspapers.

"If I thought that, they weren't giving prominence to a story that they should be, or that another newspaper would cover this story in a very big way, [...] so if I thought the Daily Mail was likely to splash on that story, to put it on the front page I would have to jump up and down [laughs] and go over to the News Desk repeatedly and tell them that this was going to be an important story. And if that failed then I would go and talk to the editors called the back bench, who, when they were laying out the stories I would say you have to give this prominence, everybody's going to be covering it" (Interviewee 15)

In addition, it resulted in homogeneity of stories in all the newspapers and a high level of inter-media agenda setting as newspapers competed with each other to include the same news items in their paper.

"It's sort of something that you're always aware of. Yeah you do look at what other people do [...]

RW [laughs] So you'll have other papers will come in and you look at them and you look at what's....

18 Oh God yeah. I mean the editors especially will always read the other papers. You know, that's very much a...yeah, to know what everyone else is doing. (Interviewee 18)

"It would be how do we keep in line with the Daily Mail but also how do we take a step ahead, how do we get that exclusive that they would probably be after at the same time, so there's a lot of rivalry [laughs]. And it's mad because a lot of the Health Correspondents talk to each other regularly, get on when they go to briefings, they discuss topics with each other, but at the end of the day it's about selling newspapers." (Interviewee 15)

As noted by the interviewee quoted above, newspaper health correspondents knew each other well and would regularly see each other at industry events or at press conferences. Newsworthy

topics or the framing of a story would be discussed by journalists at these events. Some participants talked about this as a sort of support network –

“...everyone is quickly going through [the report] and you know all of the different journalists are looking, flicking through quickly and, it’s brilliant when you have each other there, because you’re often looking at slightly different things. And you know, one journalist might pick up something and then ask a question and then you all turn to the page and they’ve spotted ‘the thing’. And then another journalist will have got another bit and so you actually do rely on having that broader knowledge that you all have collectively there.” (Interviewee 23)

In addition, journalists would use the opportunity to work together to make sure they all had the same story:

“Either in the briefing, or if they don’t do it in the briefing it will be afterwards, like during discussion afterwards, because everyone wants to make sure, when a story’s all round they want to make sure that it’s covered adequately and appropriately, and that everybody’s doing it and that, that nobody gets a telling off the next day for not covering that story [laughs].” (Interviewee 15).

“You were certainly allies. No one wanted anyone to... you know you could phone up and say I didn’t get my notes on that, I was 10 minutes late for the press conference, what happened? You know. But obviously you would still want exclusives, and you’d expect them to help you out, as you would help them out but no it was very much a nice beat to be on.

RW And would you discuss stories with them, and if you came out of a press conference discuss what had happened and what you thought about it?

24 Yeah absolutely, you’d say I’m going on this angle, and they’d say well I’m at the Telegraph I’m not going on that angle I’m going on this angle, or I’m at the Sun I’m going on this angle cos Sun readers care about this more, you know, so yeah, definitely.” (Interviewee 24)

One journalist participant talked about the impact of newspaper sales figures on the stories that appeared on the front page of the newspaper:

“So they knew that diet and cancer stories or diet and health stories were popular. Or how to live longer stories. They’d be looking at the [sales] stats and then if there’d be a spike they’d sort of be more interested in those stories in the future the next time one came along. But, the problem is, are they good stories? So I mean the diet and cancer one I think is a genuine story, there is good research behind it, it’s been said by various organisations and then the government adopted it, that was a genuine story. The

problem is you can have genuine stories and then a few months later another story comes along on the same subject but it's not very good research, however it will be pushed up the agenda because they know that last time there was a genuinely good story it sold loads of copies, maybe this one people will be as interested in because it's on the same subject matter but it says something different." (Interviewee 23)

As well as direct pressure from proprietors to include particular types of story, journalists working for tabloid press talked about the pressure within the organization to complain against any suggestion of 'nanny state' – or the government 'telling us what to do'. For example, one journalist said:

"They were quite into the nanny state [...]. They can't tell us to do this, and they can't tell us to do that, we don't want the nanny state. But weirdly I sort of seemed to avoid it quite a lot. I sort of, I hated the whole nanny state thing." (Interviewee 23)

"I think that they know that the officials who are the medical advisors who are drawing up the guidelines have their job to do, but they believe as a free press they have the right, and it is their....not, not just have the right, it is their role to say, pipe down, stop telling us what to do." (Interviewee 15)

"I would say all the papers, [...] you know, there's that degree of autonomy, you are an individual, you have the right to make your own decisions and live your life a certain, way, provided it doesn't harm other people." (Interviewee 15)

Participants recalling this period of policymaking frequently mentioned the difference between specialist journalists and news reporters. Participants from all three groups talked about building relationships with a handful of journalists, often finding the specialist health correspondents to be more useful than the news reporters:

"...where a health thing is in the news, you're in a completely different dimension [to correspondents or editors] [...] you're talking to journalists who, they're very bright, but they've got an attention span of 15 seconds. They have no specialist knowledge and all they're interested in is a slick one liner that's different from what happened twenty minutes ago." (Interviewee 3)

"So you know there's a difference between the news piece and the general reporting where you're dealing with, for example, The Times, or The Guardian, or The Telegraph, where you've got a special correspondent for health. [...] they have, major pieces which condition thinking amongst the intelligentsia, so it's very well worth going down that road and I've done endless stuff on that." (Interviewee 3)

“You know the health correspondents, the health editors they don’t get things wrong. (laughs) They understand – that’s the point about being a specialist correspondent? If there’s something that doesn’t appear quite right, either you haven’t said it in the right way, you realise afterwards, or, it’s been edited wrongly, which we just can’t help, but the point is it’s about building a relationship going forward.” (Interviewee 4)

“I mean the very nature of news stories, news stories are not nuanced, you see I think you have to really make a distinction between news stories, between features, between comment, analysis, opinion, all these are very different styles of things and you’re never going to get complex nuanced ideas in a news story it’s not really their function. In a feature you’re going to get informed but you’re not necessarily going to get analysis, so it’s going to be comment and opinion that’s going to have analysis and look at more complex ideas as a general rule.” (Interviewee 10)

These recognized differences between types of journalist and types of newspaper article influenced non-journalist interviewees’ view of what they read in the newspaper and their actions in terms of journalists they chose to make links or build relationships with.

8.3.2.2 Source strategies

As mentioned above, participants reported a great increase in the amount of source information available during this period (2001-2011) and a greater degree of competition between newspaper titles. Along with this came a notable frustration with the media and frustration on the part of media about levels of interaction and the strategies and gatekeepers employed to manage that interaction. Journalists reported an irritation with increased levels of PR activity, feeling they were being bombarded with press releases and potential story topics, but also feeling that the PR industry often acted as ignorant gatekeepers, deliberately employed by those in power to protect them from media interest.

“You’ve got the rise and rise of the PR companies who are now incredibly powerful at setting the agenda of what people are doing, and are very manipulative as well and aggressive.

RW What do you mean by that?

23 Well they will try and control stories and spin stories in a way that they want to and you can’t get to the people who you need to speak to who are the people in the organisations themselves, because you’re being blocked by PRs who actually usually don’t know anything about anything that you’re trying to write about. And actually make things often worse. Because they block your access to the people you need to speak to.” (Interviewee 23)

For their part, both government and stakeholders expressed frustration with media tactics and irritation with media processes and practices – that they were frequently having to field media requests for information:

“I think there’s always been a media interest for anything related to food, diet, lifestyle. So, any story that is linked to that in any way as you’ve seen with the protein (laughs) comparing that to smoking.... any story that’s linked to diet and lifestyle gets picked up by the media. [...] So it’s, can be quite frustrating when these small, um, less robust studies, shall we say get picked up and, run by the media.” (Interviewee 6)

“Nutrition sells papers, a wee bit. I mean we always say, Friday afternoon, don’t answer the phone! Because all the weekend press run nutrition articles over the weekend, they run food articles, very often nutrition articles over the weekend. And they basically work Friday night to get them ready, so, you know, we often get pulled in. I have a team of 28 I could spend my entire team’s, 100% of their time, just trying to do media, stuff for the press.” (Interviewee 11)

Interviewees from both the meat industry, NGOs and the government reported feeling under attack from the media during periods of intense scrutiny. Representatives from the meat industry were particularly concerned at the amount of negative coverage they felt red and processed meat received. These groups of actors reported an action they occasionally took was to say nothing to dampen down interest from journalists. However during this period they reported developments in tactics to manage media interest, for example hiring PR companies to monitor media coverage, or to handle correspondence with journalists. They also set up separate, apparently independent, arms-length groups or organizations to promote their interests, for example the Meat Advisory Panel (a group offering advice on meat consumption affiliated to EBLEX, the English Beef and Lamb Executive and BPEX the British Pork Executive) and Eating Better (a group offering advice on meat consumption affiliated to a number of environmental NGOs).

“Over the last years it’s shifted really. Because at the beginning we knew they would either ignore us or attack us, you know, back in the late noughties and we were going to be represented as lentil eating vegan dissenters, kind of thing. Even though that’s not what we are. Representation of us in the, in the tabloids, and the broadcast media.” (Interviewee 27)

“One of the reasons we set up Eating Better was that we were getting messages back [...] that we were coming across as inconsistent, [...] all the different groups talking about meat were not saying the same thing. I don’t think this is true but that was the message that we were getting. And it was also a bit too narrow in focus. [...] And so we [...] started developing a whole messaging, website, alliance strategy and stuff like that. [...] we did quite a lot of work on what our identity would look like, particularly the name.

And that was difficult to come up with. But there is a media strategy in that.”

(Interviewee 27)

“...what we do do, is we work with a PR agency, probably a lot of big organisations do this, ours is called Nexus [...] And Nexus pulled together for us a panel of experts we call the Meat Advisory Panel, and you know there are a number of experts on that group, I think we've got six at the minute, from different backgrounds, dietician nutritional epidemiologist, GP, ex-Professor in Nutrition, oncologist, and a gut man, and in situations where we need a spokesperson we'll get a quote from them, an independent quote – I could do it, but the press wouldn't believe me, they'd say, but you work for them – you would say that wouldn't you. So that's what I'm always challenged with so that's why we do have to have another avenue of people who we're confident will represent us well in the press. But, are seen to be, and are indeed independent in their own right.” (Interviewee 21)

In addition, interviewees reported using social media as a way of bypassing the mass media e.g. newspapers altogether and communicating directly with their audience.

“So, we do think media's an important way, but we don't always get it because we don't have the resources. So we use other means. For instance like doing a Buzz Feed story, I've got a person in IT who does great Buzz Feed things and we'll do blogs and things like that, and I do a lot of tweeting, which occasionally, on the odd occasions got me media coverage. [...] I definitely feel that there's very different routes to reaching people now, via social media....and to be honest, getting a quote at the end of an article on page 4 of the Guardian you know, doesn't give you much feedback, you know doesn't give you much reach in terms of changing public opinion.” (Interview 27)

This issue of using the media to 'change public opinion' came up several times. One interviewee talked about the point in a campaign at which you would use the media to try to influence policy, suggesting that this was more effective the beginning of the policy making process, if there is little political appetite for change:

“I tried to get the British government, the Department of Health to fund some research into the effects of price on consumption in a sort of starting point to looking at fiscal instruments but [...] there's no been no real interest in even investigating the question. So you have to....it depends on what the policy is and what part of the policy process you're trying to influence. If you're trying to influence the beginning of a policy change such as you know the idea that you can use taxes to influence prices then, then the most fruitful field for getting policy change is through the media but if it's the end of the process where the government's or the opposition party's decided to do something then there are better ways of changing things in a less media oriented way.” (Interviewee 13)

Several participants in the stakeholder group talked about media training and how that had helped them manage the sometimes stressful experience of being interviewed by journalists. They talked about being taught to use the media as an opportunity to sell their message, and the importance of identifying the message they wanted to get across before the interview, and sticking to this line or framing of the issue during the interview, regardless of the questions they were asked. For example:

“...through media training, we’ve learnt that whatever interview you give, there are messages that we want to get out, that we want to communicate. So if there’s a story on, I don’t know, this “super food” reduces your risk of cancer, one: we’ll talk about there’s no such thing as superfoods really it’s just a marketing tool, and messages we want to communicate about lifestyle risk factors and what you can do, what evidence supports that you can do to reduce your risk, so we use every interview as an opportunity to communicate those messages, no matter what the story is.” (Interview 6)

“...most people when they go into a media interview in a situation without any training, see it as a sort of, almost like a job interview, where someone asks you a question and you want to satisfy that person because they’re the person of power, whereas actually, it’s a slightly sort of artificial structure because actually you don’t care what that interviewer thinks of you, all you care is what the viewer thinks of you and if you could you’d sort of thrust them out of the way and just grab the camera and say, this is what we want you to know, so it’s about doing that, but in a way that sort of conforms with the question and answer structure, I think.” (Interview 8)

Participants from all three groups, stakeholders, journalists and government noted the use of ‘pre-pieces’ or ‘trails’. These were press releases pre-emptively offered to specific journalists as exclusives by press officers from government, NGOs or industry.

“So basically cos of that fear that you’re not going to get any coverage on the day which is always a possibility, we basically gave a bit of a teaser to the Observer to preview the fact that it’s coming out.” (Interview 8)

“It would be standard government tactic to trail a big story, with one or two of the Sunday newspapers, ahead, that gave some details of the report but not all. And the idea is with a report that you want to get coverage for and frame well you want to make sure that you’re stretching the coverage so more people can see it but then also you’re positioning it, ahead of releasing it to all news outlets, so that it’s running well from the start. And it’s much harder if you have one news outlet that says, you know this is great news, for another news outlet to say well this isn’t great news because they’re contradicting each other, if that makes sense.” (Interview 20)

In this way stakeholders and government were able to secure coverage for their report and try to elongate the duration of the coverage because media outlets, through intermedia agenda-setting, tend to follow and copy each other.

8.3.2.3 Red and processed meat

Participants emphasized the importance of particular types of red and processed meat in the media reporting around this issue. Of particular note during this period (2001-2011) was the prominence of bacon in the press reporting. The WCRF had suggested processed meat, such as bacon, should be consumed as little as possible, if at all, in their report on diet and cancer of 2007. This idea of a 'ban' on bacon was seen as a threat to national identity by some interviewees:

"I think it's because it's a threat to how people perceive themselves. So how you eat, is a very important part of your identity. It's part of national culture it's part of individual culture, at every different level it's part of culture, even your family, and this is a kind of threat to that." (Interviewee 2)

Interviewees also felt that part of the newsworthiness of a story involving cutting down, or stopping eating red and processed meat was that this was a change in accepted lay understandings of a healthy diet:

I suspect, you know, that if I could remember 50 years ago red meat was probably one of the ultimate health foods that people just wanted to eat more of, because you know it's certainly a rich source of many nutrients. But it is rather strange actually that the assumption is we're looking for something bad with red meat, when it's discussed and health aspects you know, people are looking for whether it might cause cancer, heart disease, Alzheimer's, arthritis..., you name it really, red meat falls under suspicion. Without much...the rationale for that is not very clear, usually. And I think it is a sort of way of thinking at the moment." (Interviewee 17)

"I think it's the fact that people don't necessarily think that red meat is an unhealthy food, they don't necessarily think that processed meat is an unhealthy food. So, to have someone tell you to limit the amount you're having of what you thought was one healthy food and you know I think people would generally think that ham in a child's sandwich is a perfectly acceptable healthy lunch, and to be told not to do that and that the best amount of processed meat to have is none at all, was, ... a shock for people."
(Interviewee 8)

Another interviewee emphasized the place red meat has had in the British diet for many years, not only being seen as a nutritious food, but also as tasty and enjoyable:

“Well don’t forget the British public has been bombarded for sixty years about the wonderful value of meat. And the other thing is in general terms it would appear that meat is quite an attractive food for people to eat. And, I think that that’s all to do with, you know particularly cooked meat, and the cooked meat is stimulates the umami receptors, taste receptors, so I think, there’s an element of biological attractiveness. [...] So, you know, it tastes jolly good. And the media love to have a go, not too often, so they’re not classified as being miserable devils. But you know stark horror, they love that sort of dilemma. It’s pure cynicism I think.” (Interviewee 3)

A journalist interviewee supported this last point – that the media tend to highlight stories that expose the audience to a moral dilemma, to catch the audience’s attention and get them talking:

“Yeah, the red meat and cancer. And it lent itself to great headlines. I think one of them was like ‘Save Our Bacon’ [laughs] and they knew that it would get people talking the next day. I think it was the Deputy Editor of the newspaper at the time, had seen that I’d filed the story and said: Ohhhh! We’ve got to do more on this!!! Have you seen what they’re saying?! I want you to get them on the phone again and ask them about bacon sandwiches specifically! [laughs] Which is what I did. That’s how that story just snowballed. And everybody was talking about it and saying oh my goodness they’re banning this, or they’re saying we should eat less of this again! And it just got everybody talking about it.” (Interviewee 15)

The same journalist explained that highlighting this moral dilemma (you love bacon sandwiches, but eating them can give you cancer) allows journalists to accuse the government or nutrition scientists of “nannying” the public, or interfering in areas of their life (e.g. their diet) without the right to do so:

“Because they are food that are very, very popular in this country. And cheap, widely available, everybody enjoys them, they’re seen as a bit of a treat as well. And, the tabloids in particular....not just the tabloids the broadsheets as well love any story whereby somebody’s telling you, don’t do this, or ban this, what they would call nannying stories. So it would give them, you know, a cause to fight for.

RW What do you mean, they’ve got a cause to fight for what do you mean by that?

15 They rally against interference from government and public bodies and to a degree from the medical profession, so, their attitude is, certainly from experience, there are very few pleasures in life, please allow us, a bacon sandwich, or a sausage sandwich [laughs]” (Interviewee 15)

Several interviewees noted this tendency of the press to complain about nutrition advice from government, which they would rail against as a 'nanny state'.

8.3.3 Synopsis

Comparing the interview data for Research Question 2 from the two embedded units of analysis there are some key similarities and some interesting differences. Media processes were very important in both cases, but in the later period (2001-2011) a notable difference was that interviewees reported an increase in PR activity and the use of digital information to find stories. At the same time there was increased commercial pressure on journalists employed as staff by newspapers, which meant they felt pressure to both cover more stories and not to miss stories covered by other newspapers. This, and a close relationship between health and science Participants noted an increase in PR activity, and PR companies being engaged by stakeholders for example meat industry bodies and NGOs. In addition, stakeholder actors would attempt to make their messages more credible to the media and to the public by setting up 'independent' organisations which they felt would be viewed as having fewer vested interests than themselves. Although research has shown a decline in red and processed meat consumption, interviewees reported that red and processed meat products such as beef and bacon were given high cultural significance in media coverage. This was linked to a perceived antagonism towards the nanny state especially if the media felt that specific meat products e.g. bacon was being banned by authoritative organisations e.g.: government or highly thought of NGOs or cancer charities.

8.4 Research Question 3: Interaction between press and policy

This section reports on the analysis of the interviews with respect to the third research question, “What role did UK newspapers play in the development of the policy?”. During the analysis of interviews, it became clear that rather than a causal link between newspaper coverage and nutrition policy in this case (as this third RQ suggests) there was a more complex interaction taking place, with media, stakeholders and government ministers, advisors and press officers adopting strategies to manipulate media coverage according to their own agendas.

As noted above the participants in the interviews were drawn from three key groups: journalists, government policymakers, and stakeholders. For ease of reporting, the findings are presented in two parts, first the first embedded unit of analysis, the policy development period 1993-1998, second, the second embedded unit of analysis, the policy development period 2001-2011. In each case, each interview group is reported on in turn. First stakeholders, in this case defined as those who had a stake in the policy or policymaking process for example meat industry representatives, cancer charity representatives, campaigners for meat reduction. Second government policymakers, for example ministers, press officers, advisory committee members. Thirdly, media representatives – for example journalists, sub-editors, freelance food writers who write for UK newspapers.

8.4.1 Major Themes: RQ3: Interaction between press and policy, first embedded case study 1993-1998

8.4.1.1 Stakeholders

Interviewees talking about their work during this period identified little use of large scale, formal PR (Public Relations) tactics, on the part of stakeholders, to manage media coverage in order to set the public or policy agenda. They did, however, talk about ways in which individual stakeholders built relationships with specific journalists, for example inviting them to sit on their boards or serve on foundations. Interviewees from the stakeholder group recalling this period also talked about ways in which they might have personal contacts with particular journalists for example meeting them in private clubs or knowing them personally e.g. having met them at university. More structured PR activity was not identified, in fact interviewees from the journalist group commented that the meat industry was often difficult to make contact with. For their part, meat industry representatives commented that their own strategy was sometimes to keep quiet during period of media scrutiny, to avoid negative coverage. In addition, during this period (1993-1998) interviewees recalled that they were very busy dealing with the ‘fallout’ from BSE and were not used to having to defend their product on health grounds.

In addition meat industry representatives commented that advertising campaigns to encourage higher levels of meat eating were not common after the 1980s, because of the negative health implications of high levels of red meat consumption, and although there were British Meat adverts promoting British beef in the mid-1990s continuing through to the late-2000s (see

https://www.youtube.com/watch?v=WAkjGn_i_wY 'British Beef: The Recipe for Love' and 'At Home With Beefy and Lamby' 2004-2009) these had a more subtle and 'responsible' message, which reflected what they saw as the improvements to the nutritional value of red meat.

This perhaps reflects more of a focus from the meat industry on its own marketing messages and a growing desire to control media messaging by putting out its own messages rather than engaging with journalists for example from UK newspapers. Similarly, representatives from public health bodies (e.g. cancer charities) or NGOs (e.g. environmental or food campaigners) working during this period and interviewed for this study reported little formal 'news management' activity in order to advance their arguments in the media. However, there were, again, reports of interested individuals using particular contacts in the media to put forward their own personal views and advance their own agenda. One interviewee commented that bigger issues, such as the formation of the Food Standards Agency were being played out in the media by interested parties, using the more 'trivial' issue of red meat consumption as a reason for discussing food safety in broader terms, specifically to argue that nutrition should be part of the new Food Standards Agency's remit:

"And then it got into the media. Don't know who leaked it to the media, but it did get into the media. [...] So, I think that people were pursuing their own agendas in their own particular ways.[...] And, I'm not sure whether they made any difference to whether nutrition got into the Food Standards Agency or not, probably made it more difficult rather than easier, but that I think was the purpose of the exercise." (Interviewee 2)

Similarly, several interviewees recognized that the media was a useful public arena in which stakeholders could advance their arguments or raise policy issues in order to place an issue on the public or policy agenda and also broadcast it to key decision makers in government. However, the processes they described to do this were not formal e.g. using press officers or PR companies, rather using an informal network of contacts within the media.

8.4.1.2 Government

The analysis of interviewees talking about this period (1993-1998) indicates that government press officers were not routinely ringing up journalists that were participants in this study, more often sending out information via press releases, or organizing press conferences. One journalist commented:

"Well the government isn't proactive like that, is it? You know, very very rarely have I had a phone call from a government press officer, saying this is a story, or this is an angle on something. I mean they do do it occasionally, but it's pretty unusual, they usually just send out the bumf." (Interviewee 1)

This may have been linked to a perceived strategy several interviewees mentioned on the part of the Ministry of Agriculture Fisheries and Food (MAFF) who despite having a large press office operating 24 hours a day to deal with 'crises', were reluctant to release information:

"Well we had a massive press office. At MAFF in those days. It was a very substantial, press office. And the other thing was, because of the way Whitehall worked, I don't know if it's still the case today, probably still is. Only Defence and DEFRA, have a 24-hour unit that operates permanently in the building, that was the case. For crises. [...]

RW Were they interested in how the press would pick up something like this?

25 [...] Um, no MAFF's view was not to tell anyone about anything. Avoid answering the questions. That was their view." (Interviewee 25)

While interviewees reported that frequent contact by government with media organizations was limited within the field of food and health policy, several interviewees talked about a different relationship operating for lobby correspondents – political journalists who were based at Westminster and who particularly concentrated on political news. This was described as a different relationship than was experienced by health or consumer correspondents, who, as noted above, for the most part, were not in regular contact with ministers, MPs or policy makers at this time. However, participants did talk about key players within government who made an effort to build relationships with trusted journalists. This was either informal, for example one interviewee talked about meeting journalists at his private members' club, or ringing them up for a chat:

"I had a policy where I had a select 8 to 10 key journalists and I would talk to them and they would talk to me, I would never quote them and they would never quote me. And that's a very effective way of getting into social policy, health policy, politics, agriculture, food business, who's in charge – you know, foreign policy. [...] And what you have to do is to explain the dilemma and the dimensions of the pressures going on in society, and, you know, you don't give it to an ordinary journalist. That is critical. You get nowhere near ordinary journalists. You have to select." (Interviewee 3)

In addition, government ministers would arrange informal press meetings, in order to meet specialist correspondents face to face:

"Well the ministers from time to time, you know ministers of health and so forth. They feel that they want to get to know the journalists. You know some of them are kind of more media savvy than others, and they invite you to lunches, or drinks parties and things, it might be one of those sort of lunches where there's half a dozen or a dozen people from different media and you all start off and you have your first course, and then, they clink clink clink on the glass and, I'll just have a few words, and the minister

says something about the things that he's doing to address certain problems, but it's usually a pretty bland, you know, I mean that sort of stuff doesn't usually produce stories. But you might feel that you're getting to know the minister, and the minister feels he's getting to know you, and so he's making an effort to be approachable which is a good thing." (Interviewee 1)

Participants working within government during this period reported that media scrutiny over this issue became intense during the period when the COMA report was published and then withdrawn. The media's involvement in policymaking at this point created a frenzied atmosphere within government and that could affect decision making:

"...and Number 10 would say, What are you doing about this, what's the reaction? Other papers would follow it up you see – so would the BBC, follow it up! So you'd know that was going to happen. And they'd be setting the agenda on these things." (Interviewee 25)

"...everything was going so fast, you know at six o'clock in the morning and ten o'clock at night, there was no single person managing it, and there was constant tension between Department of Health, MAFF, through the Joint Food Safety and Standards Group, [...] so, it was going to be chaos.

RW And, how does the media then feed into that chaos?

2 It just heightens....it pushes the level of excitement and feverishness to a point where it's very difficult to take time out and step back and make reasoned decisions. There are so many people involved. There's a front page story, you have to get back and respond. [...] I mean so that's very acute, that's a specific situation and so that acute situation can lead to bad policymaking. I'm not sure whether it made any difference to the actual eventual outcome in terms of policy, it was more to do with strategy and tactics at the time. Push people into doing things quickly and calling emergency meetings and all that kind of stuff. Which, probably wasn't necessary." (Interviewee 2)

There were two approaches put forward by participants from the policy making interviewee group to deal with this. Firstly, policymakers would try to manage the scientific evidence before presenting it to the media – to present a united front rather than uncertainty. Secondly, the new Labour Government were considering increasing their commitment to openness and transparency in government. There was a view reported that a level of transparency in the way government operated would reduce scare stories by being open about uncertainty. This was an approach which the government hoped to adopt with the introduction of the new Food Standards Agency which planned to operate in a more transparent and open way, and would be open about uncertainty. There is obviously a tension between these two approaches – one

seeks to remove uncertainty before presenting it to the public, the other seeks to be open about uncertainty and so reduce scaremongering in the press. One interviewee familiar with government policymaking processes at the time felt that interested parties were using the issue of red meat and cancer in the media as a battleground on which to fight over the formulation of the Food Standards Agency:

“Well I think they [the media] were incited...and I think they were incited to do it at a time, a new Labour government, brand new Labour government, issues about the Food Standards Agency, so, relatively big political issues. So I think that’s what they were using, we were just the battleground on which that was fought. I think. So the context was really all for that. The issue itself, was pretty trivial.” (Interviewee 2)

Overall interviewees reported a low-key and informal relationship with specialist health print journalists at this time except for the period during which the COMA report was first published when they reported that the intense media scrutiny caught policy makers unawares and had a potentially negative impact on policymaking processes.

8.4.1.3 Media

The reporters of the time talked during the interviews about how this issue could be used as a lens through which to analyse the recently elected Labour government and its new ministers of state. They used it to look at the formation of the Food Standards Agency and used comments or information from trusted nutrition ‘experts’ within their contacts to inform their writing. Journalists interviewed by and in large did not feel that they had influence among government policy makers. They did not imagine that their articles or reports were read by policymakers or ministers – however they did think some journalism was influential in the policy sphere – journalists interviewed cited the Daily Mail as the most influential national newspaper:

“I don’t know if I’ve ever felt that [my writing had influence] but I’ve never worked for the Daily Mail. I think the Daily Mail, I think it has a huge influence on politicians.”

“Well, I mean The Mail leads these people! You know, I mean the Daily Mail’s, a successful money making newspaper. You can’t really ignore it. And it’s pretty frequently that the more serious papers will take a Mail story and make it look slightly more adult.” (Interviewee 7)

“I mean our biggest competitor [...] was the Daily Mail, and so if I thought the Daily Mail was likely to, to splash on that story, to put it on the front page I would have to jump up and down [laughs] and go over to the News Desk repeatedly and tell them that this was a, you know it was going to be an important story. And if that failed then I would go and talk to the, the editors called the Back Bench, who, when they were laying out the

stories I would say you have to give this prominence, everybody's going to be covering it." (Interviewee 15)

Those interviewed who worked within government also identified the Daily Mail as an influential publication for policymakers:

"Oh well, the Mail? Well it sells, what is it a million, two million a day? And, the BBC love it! You know. You know I mean I hate to say this but I have to buy the Mail on a Saturday and Sunday see what the enemy's saying! Because, the fact of the matter is, it is true, what people have said, and my experience in government, in different departments, and different departments as well it was the same! Does this pass or fail the Daily Mail test? (laughs) It's bloody true! It's outrageous but it's true!" (Interviewee 25)

"Well I mean what the Daily Mail and The Sun decide, is roughly what the Prime Minister and key cabinet people do, I mean they're not very experienced in policymaking and they're experienced in power politics, but they are desperate to, try and win the next election. And they'll go for, with any populist thing." (Interview 3)

In addition, those from the stakeholder group of interviewees also identified the Daily Mail as an influential organ:

"...we know a lot of people read the Daily Mail. So it's a big audience that we can talk to. I think we've worked with them before on something else. Maybe on myth busting or something. We have worked with the Daily Mail in terms of trying to get our messages out there, so, [...] it can be a useful avenue to get your messages across as well, because [...] they've got a massive audience." (Interview 6)

"You know we have lengthy conversations negotiating why people should be very happy if their work goes in the Daily Mail, the fact that it's still got the biggest reach of any publication in the UK, um that's a very different creature from the website, so you have to kind of make sure you navigate that. [...] But you make a case by case basis when you're assessing who's the story for. If it's something that's got a really obvious relevance, for a Sun readership, you make sure that you're doing what you can to make sure that the journalist knows that that article is available, and that you've got people that they can talk to and that they can talk in a way that Sun readership will relate to. So yeah, you'd never kind of just go, great we've got it in the broadsheets, that's the job done." (Interviewee 19)

8.4.2 Major Themes: RQ3: 2001-2011

This section lays out the analysis of the interviews carried out for this study with respect to the third research question and the second embedded unit of analysis – which covers the period 2001-2011.

8.4.2.1 Stakeholders

Stakeholders who were interviewed (representatives from NGOs such as cancer research charities, food pressure groups or from meat industry representative bodies) reported a concern with media messages and how their organization was portrayed in the media. They described the strategies they had developed to manage media coverage, for example media training, in which they would learn strategies to get their message across during media interviews, or how they could use press releases to advance their message in the press:

“A channel, a medium, yes the media are a medium through which you can get your own messages. By and large they’re pretty bloody lazy. You provide them with a copy, and that’s what comes out. There are one or two people who are particularly interested, and then you sit down and talk them through, and by and large, the interested ones, you know from the Independent or the Guardian and so on want to get it right. They might come with a particular perspective, but if you can make sure that they get their science and facts right, then, I’m basically happy.” (Interviewee 2)

“We certainly look at what the media says, and, yes, we are concerned about it. And, as I say, that, sometimes it feels like we’re fire-fighting, so when, you know, there’s a small study on a small number of people showing this, and then, that gets told in the media, it’s our role to correct that misinformation. Very fortunately we’ve got a great press team, so we can get in touch with the media and especially the, types of media, or media companies that want to put out the correct information, and use those channels to do that. So yeah, we do monitor, very closely (laughs) what’s being said.” (Interviewee 6)

Several interviewees reported adopting this ‘firefighting’ approach to media management, in which a press team, whether internal or external (e.g. a PR company) would help manage a response to press reporting they anticipated to be inaccurate or damaging. Some interviewees reported using the media to raise the profile of a particular message, campaign or product. They felt that the media could be used to get policies on the public agenda.

“...we [charities] all do the same thing, we all see media as another means of getting the issue out. So it’s about specific policy issues but it’s also about across the long time period, if you’ve constantly got a conversation going around bowel cancer, it might be a number of separate stories or a number of separate issues, you’re clearly making a

case that bowel cancer's an important issue. Because there's a constant conversation about it." (Interviewee 4)

Some interviewees did not see this issue of red meat consumption and cancer prevention as an issue that needed to be put on the government policy agenda – they didn't see what the 'policy ask' would be, considering it less of an issue for structural or regulatory action, more of a concern for individuals and their behaviour:

"It's certainly a role that the media play, but I don't think that necessarily with the sort of red and processed meat thing, because we weren't particularly, certainly not initially, making policy asks, so it was very much a sort of talking to people, and trying to make them informed about their own cancer risk so that they could then make their own more informed choices [...] there wasn't anything obvious that government should do, we weren't asking them to do anything really on red and processed meat so I don't, I didn't see it really in that sort of context." (Interviewee 8)

8.4.2.2 Government

Interviewees active during this period of policy development (2001-2011) reported the use by government of stakeholders to communicate and reinforce policy messages. For example, the press release for the SACN report on Iron (Department of Health, 2011) which focused on the recommendation about meat consumption, featured a quote from a national bowel cancer charity:

"Very simply Department of Health would approach us and say we'd be interested in talking, would you be interested in supporting this statement which relates to bowel cancer. We'd then assess whether or not we would want to support it. And 9 times out of ten, 9.9 times out of ten, when Department of Health says would you support this statement we're going to because theirs would be evidence based and sensible. We will then give them a quote that's relevant. It's as simple as that. It doesn't necessarily imply that we've been closely involved in the process? What they're looking for is to a degree an endorsement from a respectable reputable charity that when it speaks and when the public hear government say something that's one thing but we, when if a charity says something they're more receptive to the messages." (Interviewee 4)

Policymakers described constant media attention as an irritation and a time-consuming distraction to the job they were trying to do:

"I mean we always say, Friday afternoon, don't answer the phone! Because all the weekend press run nutrition articles over the weekend, they run food articles, very often nutrition articles over the weekend. And they basically work Friday night to get them

ready, so, you know, we often get pulled in. I have a team of 28 I could spend my entire team's, 100% of their time, just trying to do media, stuff for the press." (Interviewee 11)

However, this same interviewee recognized that for government ministers and politicians in general the media can be very important and is seen as a proxy for the public voice and integral to their image and their ability to win votes:

"RW And in terms of the effect, the effect of the media on the policymaking. Are you concerned with what they're saying, or do you pay any attention to that?

11 No but the minister might and we might need to be minded to that. And you can't win, we can't win. We have had being called nanny state and not doing enough in the same newspaper on the same day in two different articles. You can't win, food, you cannot win." (Interviewee 11)

"RW And what sort of effects, when you say the minister might be concerned about the media, what kind of effects does it have, if they?

11 They've got to be elected, haven't they? They're thinking about their party, their future. And also they will always have their own interests. So breastfeeding is a classic kind of one, that, you know, a minister's personal experience of breastfeeding will of course affect their view on breastfeeding." (Interviewee 11)

"RW Ok and how do you juggle that, as a public health, as a nutritionist.

11 We, well my job, my job is just to kind of paint the scientific truth. And I am perfectly comfortable with the minister making a decision on it cos that's why we live in a democracy. Sometimes, you know I might wish, that they did things slightly differently. But actually, we live in a democracy, you have to go with it." (Interviewee 11)

This was echoed by another interviewee from within government:

"I think government communication, or communication across government is taken very very seriously, because obviously politicians want to hear back from the people that are voting in the country, you know what their thoughts are, and often that is done through media and how particular announcements are covered by media." (Interviewee 20)

In contrast, another interviewee with experience of government policy making was concerned that the more informal processes involved in setting policy (for example allowing ministers' personal experience or concerns about public votes to have an impact on their policymaking decisions) leave government open to media attack:

"I think that you have more than once alluded to policy issues and how policy issues arise and how the media deals with them, and I think that so far as the policy issues related to food are concerned, the establishment of SACN for risk assessment, although I wasn't a great fan at the time, I think has, actually helped enormously in clarifying these issues. I am less comfortable that we have an equivalent framework for

discussing assessing and weighing the policy options. It may be that I am ignorant of where that is, but I think that we have an equally important and challenging task to establish transparent and appropriate methods for developing and weighing policy options. And I think that maybe some of the comments that are made in the media relate to that vulnerability. And it is a vulnerability.” (Interviewee 12)

Government press officers were frequently mentioned by interviewees as having a key role in communicating messages to the press at the end of the policy making process. However, a few of the interviewees from the group of policymakers (including a government press officer) felt that the press should have more of a role in government policy making, with the press office ideally being involved throughout the process rather than just at the end:

“The way that policy colleagues communicate with ministers is through written documents called submissions. And in most government departments whenever a policy position is going through a minister maybe a handling advice has to be presented at that stage. So that could be months in advance of any announcement being made. So, you were constantly in touch with policy colleagues by phone and in person, to discuss what policies were being developed, and then throw stones at it in terms of understanding well what, what does that mean at a practical level, and is this a good idea?” (Interviewee 20)

“RW So you have a role throughout the policy making process, not just at the end when they’ve said this is what we want to do?

20 Ideally yes. That means that you actually come up with much better policies because more eyes have been on it, and also because press office works closely with ministers, then actually you would understand the minister’s thoughts on a particular policy and whether it’s something that they’re particularly keen on or the motivation for, for, for directing this policy as well.” (Interviewee 20)

However, for the most part, media were not seen by interviewees as important during policymaking – their primary use being in ‘verifying’ or communicating the policy – and this later role they did not fulfil very well. Those interviewed who were working in government nutrition policy during this time felt that the media’s questioning of policies was at best a distraction from policy making:

“RW Do you think the media has influence on policy?

11 Well of course it does cos it’s in the mix. But, not much. You know it’s obviously influencing it, you know, if there’s enough of a firestorm then that will influence the politicians. If the minister feels embarrassed that will influence the politicians.” (Interviewee 11)

“They have a role but it’s not a positive one because the media will always skew things, they’ll always polarise things, so, actually very good ideas or positive thoughts, or more

complicated thoughts, get lost. Because when it comes to food the media's, to you, as I said, it's always been, it's bad, it kills, don't eat it. Or, it's a wonder nutrient or a super food, eat it all the time. And apart from that they don't seem to have any other message. So I mean certainly, reading the papers will influence policy makers but if you think about the meat argument, which is very complex, the main view that these policymakers are gonna be getting from the media is "Don't eat red meat it kills you" So that it's probably making them more inclined to meddle and to advise reduction, whereas the actual scientific evidence is only based, at the moment, on observational studies." (Interviewee 5)

Contrast these views with the views of a government press officer:

"I think if you look at the history of mass communication, then newspapers, media more generally has been a fourth realm of the estate. It's a way of actually keeping the establishment in check and also communicating broader information about how our communities and our culture are changing. So I think it's very important, and a kind of pillar of democracy to make sure that you can question what is being said, and it can be shared instantly with people en masse so that everyone's getting the same information.

RW It sounds like you have quite a lot of respect for the journalists!

20 Very much so! On occasions you would offer ministers advice why a policy was not a great idea, and they would press ahead with it, and then the journalists would ask exactly the same question that you'd asked, as a kind of, member of the public. So, yeah I think you have a lot of respect for journalists and, and the job that they do in making sure that they hold government to account and also providing information around a lot of health issues." (Interviewee 20)

Interviewees from within government commented on the impact SACN's location within the Food Standards Agency and its move in 2010 to the Department of Health, had on media relations. Interviewees indicated that they felt had The Food Standards Agency been handling the Iron Report on behalf of SACN there would have been more time and effort communicating it (e.g. with a press conference) and more transparency around the process of policy making (e.g. discussing it at an open meeting, which was transmitted live as a webcast):

"At Food Standards Agency it would have been done with a press conference. Department of Health has many, many things going through its press office, and nutrition's quite a small component. Very, very small. Public health, FSA it was a really, really big component. So, you know Department of Health weren't downplaying nutrition at all, but you know, when you're dealing with waiting times in A&E that's just a bit of a bigger issue for them....than, are you recommending 70 or 90 grams of red meat a day." (Interviewee 11)

“We came in with a plan to set up the FSA. To have it open and transparent. That has actually destroyed a lot of scoops for the Mail. Because, being open and transparent and meeting in public, you take away the scoop. They still get the odd one, the odd one slips through.” (Interviewee 25)

“The other departments don’t like it, cos we [FSA] meet in public, so on this issue, I have to say it worked. And it worked for the media. Because the media didn’t have to come to the Board meeting for a start, unless they wanted to come and nobble anybody, because they could watch it live. I think other departments could benefit from that. They’re terrified of the idea of doing it in the open and doing it live. There’s very little government policy that, you know, is hush hush hush. So, I think it benefits.[...] Being open and transparent, based on evidence. It doesn’t mean to say you’ll always get your way. And it doesn’t mean to say, you’ll stop a story, based on, I don’t know, prejudice or whatever. But you’re less likely to, collapse confidence or close down an industry by mistake. So, being open and transparent, it can be very uncomfortable for people. Er, I accept that. But my experience is over the last 10 years, it’s the answer.” (Interviewee 25)

One interviewee, in addressing this point, contrasted the approach of COMA, where meetings were held in private, with modern government committee standards and regulations:

“In those days, if you sat on a government committee you probably signed the Official Secrets Act. Now, when you sit on a government committee you sign to say you will be open and transparent.

RW [laughs]

12 Ok, so it’s a completely opposite pattern of behaviour. At the time of COMA, there was absolutely no question of having COMA meetings in public, or, the documents being made available to the public or anything like that. Now it is expected as a matter of course, that the meetings are held in public, the documents wherever possible are made available for public scrutiny and so on and so forth. Ok, so, and quite clearly the nature of the relationship that you have with the media at any point in time is conditioned by all of the experience that has brought you to that point in time. And if everything has been secret and uncertain and there’s rumours and so on and so forth, dealing with the media is very very different to if you’ve had an open and transparent process and as it were you’re bringing them up to date on the conclusions that you’ve reached, based upon what you’ve already told them your conclusions would likely to be, are likely to be and you’ve invited their comments.” (Interviewee 12)

Despite nutrition being reported by some as less of a priority for the Department of Health press office, and the SACN report launch receiving no press conference, interviewees recalled and

described a detailed and complex decision-making process around the media management of the report and the recommendation on red and processed meat consumption:

“I remember it got lots of coverage. I think from memory, the story ran as well as we hoped. I think it’s quite a tricky story because obviously the public doesn’t like to be told what to do, but we had this information, and very much thought that because we’d learnt that there was this increased cancer risk, that you had to go out and give people the guidance that the science was telling us. So we very much tried to position the story as coming from the voice of science rather than a politician. From memory, the Chief Medical Officer lead the announcement. I think it was Dame Sally Davies, so we spent a lot of time um, discussing how we would explain the science of the story and what it actually meant, and then also trying to present that as what does that mean on a practical level and then doing lots of Q and As around it.” (Interviewee 20)

Despite the wide ranging nature of the Iron report, as noted above, the Department of Health press office decided to focus the press release solely on the recommendations on red and processed meat.

“I think that was the most interesting thing in the report, and from past memory and experience if you just put a report out from SACN then journalists will go and read it and they will find a nugget of information. So either you can wait until they find it and then you’ve got a difficult story, that perhaps you’re not going to kind of manage the message around well, or you can go out with this new bit of information and actually frame it as you want to, and ensure that you actually are keeping it as, as a scientific story rather than it being positioned as look, politicians are now telling people what to eat kind of story.” (Interviewee 20)

The decision to focus the press release for the SACN Iron Report on the recommendation on red and processed meat consumption was not appreciated by all the interviewees. A representative for meat producers commented:

“...in their infinite wisdom, the Department of Health launched a press release to announce the report and the headline to that press release, I can’t remember the wording exactly, was, Red Meat Link With Cancer. Now, [...] that was a very incidental part of the report, and did not reflect the overall balance of evidence and the balance of argument that was put ahead. We were annoyed about it, because obviously the press latched on to that headline, and I feel that it was very misleading of the Department of Health to do that. And, when we challenged them they said well, you know this is our press officers, you know they have a free reign to make the story as attractive as

possible to the press but I think, if that means, you know at the expense of an accurate headline, you do question their motives.” (Interviewee 21)

An interviewee from the government press office described the process by which government press officers would ‘trail’ policy announcements – or release them to a specific newspaper as an exclusive ahead of the official announcement:

“...it would be standard government tactic to trail a big story, with one or two of the Sunday newspapers, ahead, that gave some details of the report but not all. And the idea is that you want to get coverage for and frame well you want to make sure that you’re stretching the coverage so more people can see it but then also you’re positioning it, ahead of releasing it to all news outlets, so that it’s, it’s running well from the start.” (Interviewee 20)

This process of trailing a story ahead of an official policy announcement was also described by a journalist interviewed who remembered the SACN Iron report coming out, and its publication being leaked by a Sunday newspaper - this had caused a stir in the newsroom, and was, according to this journalist, less likely to elongate the coverage the story received:

“You have to do a Sunday shift once a month. And I’d gone in and there was a front page, I think in one of the broadsheets, about recommendations that were going to be announced next week and, I remember the boss saying, have you seen this, and me saying yeah, it’s coming up, we knew it was coming up, it’s saying what we knew it was going to say and they’ve just got someone quoted in it. And I, well, we should do it shouldn’t we, yeah of course we should it’s government policy. But it’s going to mean that when it’s announced next week we’re probably not going to write it again, because it’s been leaked. Um, I think that there was enough detail, it was about 80 grams or something like that, and I think it was enough so... But the thing is if it’s leaked to a Sunday or a Sunday do a curtain raiser like that, a guestimate kind of story you, you’ve got to follow it straight away you can’t wait ‘til the actual report comes out three days later and, the government were just going to wait, you know, they should really have put it out straight away.” (Interviewee 23)

Both the government press office and journalists working during this period described regular and close relationships with specialist journalists:

“You would always, if you have a press conference in the morning and the story’s coming out the next day, you wouldn’t just wait to see what’s covered, you would be speaking to the wire service, making sure they have information that they want, if there’s any questions that journalists ask, so, you’re always trying to make sure that any

journalist has the information, and all the information they need to write the best possible story, rather than just waiting to see how it's interpreted by the given journalist. And that's a really important part of how government communications works."

(Interviewee 20)

"Generally the Department of Health has a very close relationship with all the health journalists and all the journalists on specialist health news outlets as well. So on a daily basis you'd be speaking to most of the main broadcasters and to most of the main health correspondents.

RW On a daily basis?

20 Yes."

(Interviewee 20)

"They [DH press office] would be pretty proactive, they would actually ring every day and they would say: is there anything we can help you with?

RW The Department of Health? The press office?

15 Yeah, their press office, is there anything you need a comment from us on?

They would be proactive, they would be very helpful, or not maybe every day, but almost every day. if they knew there was a lot going on but it didn't directly involve them. They were aware of the news agenda, health news agenda, they would say can we help you and, just offer things up. Similarly if, if you'd written a story that they didn't agree with they would be on the phone straight away [laughs] and said, why didn't you get a line from us on this" (Interviewee 15)

8.4.2.3 Media

As mentioned in the analysis of journalists interviewed about the earlier period of policy development, journalists interviewed for this embedded unit of analysis (2001-2011) also did not think their own stories or writing had an impact on policy.

"Oh, government are, can be influenced by journalists, certainly. But I haven't influenced them yet. I'm still....I'll go on trying."

(Interviewee 7)

"I think people probably ignore me, most of the time.

RW Oh really, why do you think that?

9 [laughs] Because it's just not a sexy message... it's neither one thing or the other, it's not saying don't and it's not saying go for your life – it's in between, so it's not Dr Atkins and it's not vegan, so it's a middle line. So that's never going to excite much attention initially but it is what forms the bedrock of responsible advice."

“Policy makers I think tend to be like a bit like politicians, they kind of listen to something when it builds up a head of steam, and sooner or later some policy maker somewhere is going to think maybe there is a point there maybe we do need to look at this policy, but one of the things that disturbs me about the setting of nutrition policy in Britain is just that it’s so self-perpetuating and it never checks itself. [...] What worries me is not that it’s influenced by the headlines but almost that it’s not influenced enough by the headlines that it just keeps, it almost has a life of its own, that never gets checked or challenged.” (Interviewee 10)

Another journalist also felt that policy makers should take more notice of what was said in the press:

“I never felt that I would have been influencing anything. And, I think that there are areas where the media can influence policy, but in the meat argument I sort of feel that the research was probably...I think actually, for all its faults, people like NICE and SACN do quite a good job of telling the media to shut up, a lot of the time. Um, to the point where maybe they don’t listen to the media enough! Um, and they’re really slow. The speed at which they get stuff out suggests that they’d have no interest in what the media are talking about on a regular basis. Um, and the only, you know, I, I would have said that we have much less influence over that than you would have thought, and possibly should have more, actually, with the sort of research that’s coming out.” (Interviewee 23)

However, journalists were aware, and sometimes suspicious, of the ways in which government representatives, e.g. the press office would attempt to manage the media or build relationships with them:

“They would get in touch with you, they would host meetings, they would have... so it wouldn’t just be like briefings at the Department of Health to launch, you know the initiative. It would be prior, to the, when they were in the, in the planning stages they would be asking for journalist’s opinions on how to go about this, journalists, and newspaper editors as well. So they tried to get everybody on board.

RW So how did that take place? Did you get along to meetings with them and talk to them?

15 There would be meetings in Whitehall, um, and meetings at the newspapers themselves as well. So it was just getting everybody to the table and talk about your, you’ve covered these topics, we’re looking at doing this, can we work together to some degree, would you support what we’re doing. Um...that kind of thing.” (Interviewee 15)

Journalists were suspicious of these attempts at involving the media in policymaking and felt that they had a right to say 'stop telling us what to do' – they felt strongly that the 'free press' was a right and they did not want 'to be controlled', therefore making a more formal role in policymaking more difficult to achieve.

"They [journalists] believe as, a free press they have the right, and it is their role to say, pipe down, stop telling us what to do. So I think that they don't expect to have a massive level of influence over the final decision making processes, but they just, want to bang the drum, as it were. [...] I think that the news editors just want to make sure the newspapers' voices are heard." (Interviewee 15)

The journalists interviewed reported an increasing level of PR pressure from both stakeholders and government, this within a climate of pressure to sell newspapers, and compete with other more successful newspapers:

"They [the meat industry] became more vocal. I was certainly on their mailing list, so I would receive updates from them. [...] And then we used to get a lot of things from the NFU, and all sorts really. PRs, you would be bombarded by food industry PRs the following day." (Interviewee 15)

8.4.3 Synopsis

Comparing the interview data for Research Question 3 from the two embedded units of analysis there are some key similarities and some interesting differences. In the later embedded unit of analysis interviewees reported more use of PR companies and press officers or communications officers to try to manage media coverage of organisations or their views or products, and to use this media coverage to set the policy agenda. This was done more informally in the earlier period e.g. between key informants or contacts made between journalists and policymakers or stakeholder groups. It was done more formally in the later period via press officers, communications officers or PR companies. The media was seen by participants as a useful place to communicate messages, or get messages 'out there'. Interviewees by and large felt that policymakers were aware of the media and its coverage. However, there was disagreement about the extent to which media coverage could or should have an influence over policy. Interviewees reported an increase in government communications activity – with the department of health press office reportedly becoming more proactive in contacting journalists during this period. The press office would ring up journalists frequently to ask about stories, to offer help, and would offer 'trails' of policy announcements to specific journalists to test policies before they came out. Press officers saw media as a proxy for public opinion, but many did not see they had a role in policymaking, apart from to communicate key messages accurately. Participants reported a change in approach to media management between FSA and Department of Health, with the FSA adopting a more open approach, apparently in the hope of diffusing media 'scare stories'. Journalist participants reported an increase in PR pressure and this, along with government media management processes, they

were suspicious of. This prevented them from developing closer relationships with government. Individual journalists said they did not believe there were influential in policy making spheres, but thought that the media in general could have some influence.

8.5 Discussion

As discussed in the methodology chapter, Chapter 4, the purpose of collecting this interview data was to shed further light on the findings from the policy document analysis and media content analysis. This was intended to provide a richer picture of contributors' lived experience of how this policy was made and the part the media played in its development. This, the discussion section of this chapter, asks what is the influence of media on nutrition policy in this case and vice versa? This issue of media effects and the effect of media on policymaking is an issue that many scholars in the wider field of agenda setting and agenda building theory have attempted to address (McCombs, 2004; Baumgartner and Jones, 2009; McQuail, 2010). As outlined in Chapter 2, agenda building theories have recognized that the role of the media is not best explained by a linear model, nor can the media's role in policymaking be viewed in isolation from other actors such as government advisers or industry experts (McQuail, 2010; Van Aelst et al., 2014). The media are one part of a complex set of actors that should be analysed within their interactions. This discussion section reflects on the findings from analysis of the interview data in the light of agenda building theories, set out in Chapter 2 section 2.3.

Food policy scholars such as Lang et al. (2009) argue that although nutrition has played a large part in food policy its importance has been contested, and despite the long establishment of nutrition science, it suffers from a low engagement with public policy and does not contribute to an integrated food policy discourse which the data warrant (Lang and Heasman, 2015; Mason and Lang, 2017). Furthermore, according to MacIntyre et al. (1998) a lack of media interest in nutrition causes nutrition to be low on the government's policy making agenda – this research found not so much a lack of media interest in nutrition, but a mismatch or disconnect between the framing of nutrition policy by the government and the press. While government policymakers interviewed for this study stressed a perceived need for the press to simply and accurately communicate nutrition advice, the press had a complex interaction with the information they were presented with by government. This extended beyond simply translating or repeating messages, to framing them in ways that reflected strong cultural values attached to meat and meat products such as bacon or roast beef; a strong dislike of government intervention in matters relating to individual and personal choice (this supports arguments made by Lang et al. (2009) who contend that nutrition and food choice is seen as a private matter in which the state should not intervene); and prioritizing disagreements between nutrition scientists over nutrition advice rather than presenting consensus.

The literature suggests a lack of policy change in areas of diet-related non-communicable disease such as diabetes, heart disease or cancer, can be exacerbated by a primarily

individualized framing of nutrition and nutrition policy (Lawrence 2004, Gollust and Lantz 2009). This research found that intake of red and processed meat was presented both by policy makers and media as a matter for individual concern. In addition, interviewees from pressure groups and NGOs such as cancer charities preferred to frame this health message of a reduction in red and processed meat consumption as a matter for the individual rather than a matter for more systemic or legislative change such as agricultural reforms or pricing structures. These interviewees were unaware of particular 'policy asks' that could be made by their organization that could contribute to meat reduction, preferring to focus on the individual's role in reducing red meat consumption. Lawrence (2004) as well as Lang et al. (2009) and Kingdon (2003) argue that in order for public policy to change there needs to be a change in the way that issues are framed – this has been argued both in relation to nutrition overall (Lang et al., 2009) as well as obesity (Lawrence 2004; Hilton et al., 2012) and diabetes (Gollust and Lantz, 2009).

As well as his insights into the role of framing an issue, or what he termed the 'national mood' in policy change, Kingdon's analysis of American public policy and agenda setting found that the media were often seen as a short-term annoyance by policymakers (Kingdon, 2003). There was evidence of this among the government policymakers that were interviewed for this study, who saw the media as a necessary irritation. However, as mentioned in Chapter 2 (Literature Review) Kingdon also saw 3 peripheral ways media can have a broader effect:

1. They can act as a communicator within large, diffuse policymaking groups,
 2. They can structure, magnify or shape an issue that has originated elsewhere (Kingdon saw leaking by government employees as part of this)
 3. They can have an indirect influence via constituents – for example MPs might want to act on an issue that has been raised in the media and then raised with them by their constituents.
- (Kingdon 2003, pp. 59-61).

Interviewees mentioned all of these three points during research interviews. Stakeholders commented that they frequently used the media to get their message across to either their own stakeholders or to raise an issue in the policy arena. Several interviewees from this group (stakeholders) also commented that they used media training to try to manage media content in terms of how they framed issues during media interviews. In addition, policymakers were particularly aware of the 3rd point in Kingdon's list, that media coverage can have an indirect effect on elected policymakers through their constituents. This was seen as a major concern for politicians who relied on their constituents for re-election.

The interview analysis suggested tensions within government between communications departments (e.g. press officers) and policymakers as to the role of media. Could or should journalists have more involvement in policymaking? Some interviewees (including policymaking participants e.g. press officer) put forward the argument that one role of media in policymaking was as a reviewer of policy ideas or decisions. They highlighted the role that journalists could

have throughout the policymaking process as interrogators of policy ideas and processes, spotting flaws or offering general critique of policy as external experts. However, others, particularly policy makers felt the role of the media was more in the realm of a 'medium' – a conduit through which policy makers and politicians could promote and communicate their policies. This tension echoes those highlighted by Gaber (2007) Gregory (2012) who see problematic relationships between government who would like their policies to be prioritized and communicated 'accurately' (uncritically) to achieve informed consent and those within the press office who are bound by the civil servant's code not to spin or hype government policies over those of the opposition.

In addition, the data indicated that the journalists interviewed were not necessarily keen to be more involved with policy making as they can be suspicious of government motives to involve them more in policy making processes. Journalist interviewees valued their independence and were not keen to be seen to be a mouthpiece for government, preferring to remain at arm's length to be able to be critical of government policies, supporting work by scholars in journalism studies who identify autonomy as an important tenet of professional journalists' codes (Deuze, 2005; Singer, 2007). However, interviewees were concerned at the impact economic pressures at newspapers would have on the ability of journalists to act as an independent 'watchdog' over government policy – citing particularly the increasing workload (e.g. the number of stories they were asked by editorial staff to write per day) and the difficulties of investigating nutrition policies fully when under time pressure and having to scrutinize lengthy and complex nutrition science reports. They also cited additional pressures in the form of increasing PR effort on the part of interested stakeholders to manage media. Echoing the work of Lewis et al. 2008, Bartlett et al. 2002, Davies 2009 and Williams et al. 2009, participants expressed concerns that these increasing pressures on journalists could hamper the UK print media's ability to act as an independent, critical '4th estate'.

8.6 Summary

In summary, the findings outlined in this chapter have shown that in both embedded units of analysis changes in government and accompanying changes in nutrition policy governance have led to tensions between government departments and delays in the nutrition policy process. As part of these food policy governance changes (moving responsibility for nutrition policy to the Food Standards Agency, and then back to the Department of Health) the analysis of the interview data found a tension between a stated desire for increased openness and transparency on the part of government officials, which contrasted with increasing levels of media management and monitoring from central government. The levels of media management were found to be more marked in the later embedded unit of analysis, when participants from all three interviewee groups (policymakers, stakeholders, journalists) reported greater involvement

of PR organizations and press officers as well as media training which was designed to manage actors' or actor groups' messages and how and when they appeared in the media.

There was disagreement among interviewees as to the desirability of involvement of the media or journalists in policymaking. Some participants felt that journalists could enhance the policymaking process by offering critical feedback or constructive input. Others felt that journalists' role should be confined to the end of the policymaking process when they could act as a medium or distributor of the policy message. For their part journalists interviewed expressed some misgivings about involvement with policymaking process, being suspicious of becoming a government mouthpiece and valuing their role as critical outsiders. Moreover, participants reported that their ability to scrutinize policy had been hampered during the second embedded unit of analysis by economic pressures on the newspaper industry which put increased pressure on journalists to produce more copy and to compete with other newspapers for similar stories.

Most participants agreed that red and processed meat had high cultural significance in the UK, and that this had been a driver for media coverage. This cultural significance of red and processed meat was not mentioned as an important factor in the policymaking process. This mismatch between policy drivers and media drivers illuminates the academic debate which has argued that a lack of interest in nutrition policy in the media leads to nutrition having a low priority on the policymaking agenda – the research in this case suggests not a lack of interest on the part of the media but a disconnect between the way nutrition policy is framed by the media and the way it is framed by government nutrition policymakers.

Chapter 9: Discussion: Triangulation of Findings and Development of an Integrated Theory of Mediatized Food Policy

9.1 Introduction

As outlined by Yin (2009), case study research can illuminate a problem from several different angles using different data sources and methods of analysis. The case study presented in this thesis is made up of four different studies of four data sources:

1. Policy documents (1993-1998) – findings presented in Chapter 5
2. Policy documents (2001-2011) – findings presented in Chapter 6
3. Newspaper articles (1993-2012) – findings presented in Chapter 7
4. Semi-structured interviews with actors drawn from the policy documents and the newspaper articles – findings presented in Chapter 8

The structure of this thesis has been designed to present the results of these four separate but linked studies in four findings chapters (Chapters 5-8). Each chapter contains a Discussion section, which locates the findings in the literature which has been discussed in the reviews of the literature, Chapters 2 and 3. This chapter, Chapter 9, first discusses the findings in relation to the literature. Second it uses a framework analysis to triangulate the findings, coming up with seven major themes that have arisen from this study, which are assessed in relation to the literature. Thirdly this chapter considers the findings in the light of the agenda setting theoretical framework – using the theory of Punctuated Equilibrium to explain some of the first level findings, and going on to integrate this with the concept of mediatization to explain and illuminate the overarching implications of this research.

As explained later in this chapter, the causal logic inherent in the media effects concept of agenda setting did not sufficiently explain the findings and so this framework was extended to include the concept of mediatization, which as Schulz (2004) argues, “*both transcends and includes media effects*” (p. 90). In addition, the interdisciplinary nature of this study, which spans both food policy and journalism studies, made it necessary for the theories and concepts it builds on and uses to be drawn from both disciplines. Alongside agenda setting theories, often used in policy analysis, the concept of mediatization, most often found in research on the sociology of media, are used together to further explain the findings of this research, proposing a new proposed integrated theory of mediatized food policy which is presented and further discussed. The implications of this theory for both food policy and journalism are explored, and finally the chapter looks ahead to potential future directions in this research area.

9.2 Overview and discussion of findings

This research identified the UK Government’s policy on the consumption of red and processed meat and bowel cancer prevention as an important case study to explore the complex

relationship between food policy and the UK media. The research problem was articulated in the following way:

“What explains the mismatch between apparently stable government nutrition policy on red and processed meat consumption and cancer prevention over more than a decade, and the repeating cycle of shock headlines in the UK press on this subject?”

A literature review in seven key research areas identified several themes relevant to the research. The literature suggested that red meat has been an important nutritional component of the UK diet and has also had social and cultural significance and symbolism in the UK (Fiddes, 1994; Beardsworth and Keil, 1997; Rogers, 2003; Lang et al., 2010; Macdiarmid et al., 2016). However, in recent years there has been a leveling off in consumption patterns for red and processed meat (while white meat consumption has risen) due at least in part to health concerns (Higgs, 2000; EBLEX, 2013). These health concerns have been characterized by scientific uncertainty and have developed in the context of an overall political climate that has tried to support an ailing British red meat industry.

At the same time, there has been developing concern over the role of nutritional advisory committees – research in this area acknowledges the complex nature of science communication and its relationship to policymaking (Bufton, Smith and Berridge, 2003; van Zwanenberg and Millstone, 2005; Timotjevic et al., 2013; Moodie et al., 2013). Within a context of increased mediation of government activities, a raft of literature raised concerns about the ability of government communications departments to communicate policy impartially, as they are obliged to do by the civil service professional code of conduct (Moloney, 2001; Franklin, 2004; McNair, 2007; Schlesinger, 2009; Sanders, 2013). The media’s role in government policymaking has to some extent been explained by agenda setting theories (Cairney, 2012), however these often seek to explain linear media effects and fail to take account of the complex set of actors, interactions and reciprocities between policymaking processes and media coverage. Media effects research dominates the literature but literature cautions that studies often fail to take into account the complex structure of forces within which the media operate both inside and outside their organisations (e.g., McQuail, 2010). These reviews of the literature led to the formulation of three research questions informing and underpinning the research design:

RQ1: How has the UK government’s policy on RPM consumption developed?
Method: Policy analysis of government recommendations on red and processed meat consumption 1993-2011 using the Health Policy Triangle.

- RQ2: How do UK newspapers report this issue?
Method: Content analysis of UK newspaper reporting of consumption of red and processed meat and its relationship to the development of bowel cancer, 1993-2011
- RQ3: What role did UK newspapers play in the development of the policy?
Method: Semi-structured interviews with key actors identified from stages 1 and 2, including interviewees from three key groups: stakeholders, media professionals and policy makers. These interviews will explore in detail the findings from the first two stages, investigating the motivations, feelings and views of the interviewees.

The research found that, as already widely recognized in the literature (Jasanoff, 1997; Reilly, 1998; Miller, 1999; Reilly, 2003; Bauer et al., 2006) food scares of the late 1980s and 1990s had an important impact, with the government put under pressure on several fronts to deal with these crises – not least by a considerable dissatisfaction in rural and farming communities but also widespread public health concern over the safety of meat and meat products. During the period under investigation, this research found the government showed an increasing preoccupation with media management, particularly during the period of New Labour government 1997-2007 – confirming the findings of Moloney, 2001; Franklin, 2003; McNair 2007; Schlesinger 2009; and Sanders, 2013. Delving deeper into this area, this research found that in this case the government sought to manage the media at a particular point in the policy making process rather than involve them or include them in the formulation of the policy or the public debate, however there were tensions within government about the extent to which the media should be involved in policymaking, with the media often being seen as a proxy for public opinion and a conduit to public engagement.

Journalists may value their independence too much to enter formally into the policy arena (Deuze, 2005; Singer, 2007) but the literature suggests that they are already involved in policy making to some extent because, as Davis (2007, p. 184) has it, journalists and politicians move in '*overlapping spheres*' in which both contribute to policy debate and agendas, whether through coalitions, conflict or conversations. These often, argue Davis (2007) citing others (Lang & Lang, 1983; Protess et al., 1991; Kantola, 2001) are privileged interactions, which far from driving public engagement, exclude the wider public. The extent to which greater involvement in public policy making would further dilute the prized and important autonomy of journalists, is debated in the literature particularly by those whose concern is the continued independence of the British press and the important role they play as watchdog or 4th estate (Franklin et al., 2008; Williams et al., 2009). Accountability and autonomy have been identified as important and valued norms for professional journalists (Singer, 2007). The effect on the ability of journalists to hold government to account if they become to any extent part of government machinery has

been noted through the salutary tale of Murdoch and Berlusconi among others which Habermas (2006, p. 411) uses to argue for an independent, self-regulating media to aid '*deliberative legitimation processes in complex societies*'. This does not preclude further involvement in and scrutiny of government policymaking processes by journalists, but recognizes that any further involvement of journalists with nutrition policymaking would need to be done in a way that maintains their independence and autonomy.

This issue of transparency and openness versus control and privacy was raised again in the findings of this research which showed a move towards a more transparent government with the introduction of the Food Standards Agency in 2001. Despite this, the research showed that during the period under research (1993-2011) the Scientific Advisory Committee on Nutrition (SACN) continued to meet largely behind closed doors and few details of the policymaking process were available to the media or the public, for example via recordings or webcasts of meetings. Attempts by the government at consultation on the policy on red and processed meat were dominated by key stakeholders such as industry or NGOs. Little attempt to engage the media or the public in the formulation of policy was made. This raises questions and echoes a debate in the public policy literature as to the extent to which the public (and by implication the media as a potential route to the wider public) could or should become involved in public policy making (Pieczka and Escobar, 2012) and the dangers associated with a lack of dialogue between government and the public (e.g. Marris, 2015). If workable policies are to be made and successfully implemented do they need to be made in dialogue with the public, and should the public have some role in their construction? This is further discussed below in section 9.3.

While interviewees reported successful attempts made by COMA and SACN during the period under study (1993-2011) to standardize and formalize the collection and assessment of the biomedical and nutritional evidence informing the policy and policy making process, the research found no evidence that social, economic and cultural aspects of the policy were considered in any systematic or formal way as part of the assessment of the evidence. This may not be expected as part of standard Cochrane approach and may go beyond the scope of a scientific committee, but this narrow focus has been called into question by Lawrence et al. (2016) who argue that it is time for a more balanced evidence base with which to formulate nutrition policy. There was no evidence found in the data of any consultation with the FSA's Social Science Research Committee, established in 2008 to '*to help the Agency achieve its strategic goal of strengthening its capacity for social science research*' (SSRC, 2014) and which could have played a part in the SACN recommendations of 2011. The literature broadly reflects a dissatisfaction among food policy scholars with the lack of integrated food policy amid a departmentalism and silo mentality between nutrition, agriculture and environment policymaking departments (Lang et al. 2009; Barling 2002). In the earlier period under analysis (1993-1998) there were some attempts at integrated food policy with both the Department of Health and the Ministry of Agriculture Fisheries and Food playing a part in the policymaking process through

COMA (the Committee on Medical Aspects of Food and Nutrition Policy). However, this structure was not preserved in the later period under analysis (2001-2011) when governance of SACN (the Scientific Advisory Committee on Nutrition) was moved to the Food Standards Agency and membership of SACN and the Working Group on Iron which considered the recommendation on red and processed meat consumption was made up predominantly of members with expertise in nutrition science. Whether or not the policies were made in departmental silos, tensions between government departments and 'arms-length' government bodies such as the Food Standards Agency were evident from the data. These tensions were antagonized and the policymaking process was destabilized by changes in government which resulted in changes in the structure of food policy governance, for example the move of responsibility for nutrition from the Department of Health to the Food Standards Agency under the Labour government, moving back to the Department of Health under the Conservative/Liberal coalition government which came into power in 2010.

The data from a content analysis of newspaper reporting into this issue from 1993-2011 showed repeated 'issue attention' cycles (Downs, 1972) during which a triggering event was followed by articles expressing shock and concern, followed by a period of backlash against a 'nanny state'. After a period of little media attention, a further triggering event began the cycle again. The media coverage, like the data from the policy documents, showed an emphasis on individual, personal responsibility for diet – much of this was as part of a body of 'self-improvement' or 'lifestyle' journalism. As in other areas of media coverage of non-communicable diseases (see for example Lawrence, 2004 on obesity or Gollust and Lantz 2009 on diabetes), responsibility for the problem of over-consumption of red and processed meat was generally laid at the door of individuals, although the press often criticized nutrition experts and government for giving confusing and contradictory advice in this area. Perhaps because of the uncertainty in the scientific evidence and a number of key stakeholders arguing their own cases – for example meat industry representatives arguing red meat can form part of a healthy diet - there was evidence of a 'frame contest', with red and processed meat being portrayed or framed in media coverage as both healthy and unhealthy. In addition, and echoing broader literature in the sociology of food (Fiddes, 1994; Beardsworth and Keil, 1997; Rogers, 2003) the cultural significance of red and processed meat in the UK diet was evident in the newspaper reporting of this issue, which emphasized certain red and processed meat products and connected them to 'traditional British' dishes, making them metonyms for Britishness - for example bacon sandwiches, the British fried breakfast with bacon or sausages or the Sunday roast beef dinner. However, this cultural significance was not evident in the policy documentation or seen to be taken into account by those communicating the policy, illustrating a lack of understanding on the part of nutrition 'experts' of the part culture plays in consumption.

There was also evidence of co-construction of this issue by journalists using external sources who often appeared putting their own, contrasting points of view (for example the meat industry

promoting red meat consumption as part of a healthy diet, the World Cancer Research Fund cautioning against it). While the press, for example in the form of newspaper columnists, also criticized government scientists for acting as a 'nanny state' or as puritanical killjoys, they did not often, particularly news journalists, critically assess or examine the policy in any depth or detail. As noted above the autonomy of journalists is highly prized by many of them, but why should we expect them to act as a critical voice regarding food and nutrition policy, instead of simply reporting disputes in the academic or policymaking community? Normative theories of media and society discuss the function of the press in general and journalists in particular. McQuail (2010) drawing on Cohen (1963) argues that a broad choice exists for journalists between 'neutral reporter' and 'participant':

'The first refers to ideas of the press as informer, interpreter and instrument of government (lending itself as channel or mirror), the second to the traditional 'fourth estate' notion, covering ideas of the press as representative of the public, critic of government, advocate of policy and general watchdog.' (McQuail, 2010, p. 283)

Of course, other roles for journalists have been defined such as that of adversary, or mediator and McQuail (2010) also notes that many journalists hold a plurality of roles, rather than remaining exclusively aligned to one. However, given that the power of the press to set the political and public agenda has been shown to be widespread (Wolfe et al. 2013), and the media framing of problems can influence how the public evaluate policies (Iyengar, 1991) and how they understand issues (McCombs, 2004) the 'watchdog' or 'critic' role is important. In addition, in weighting attention on one aspect of health policy over another the media help to set the tone for subsequent policy development (Baumgartner and Jones 1993; Wolfe et al., 2013). In the findings of this study there was some evidence of freelance specialist food journalists having more time and autonomy to cover this issue in more depth but in the main nutrition policy and policy making processes were not investigated in any depth.

Lewis et al. (2008) argue that the lack of interrogation of public policy on behalf of the press is due to the reliance of the national and local media on press agency reports and this current study also suggests this. The analysis of the interview data showed evidence of an increase in the management of the media over the period under research (1993-2011). The analysis provided evidence of stakeholders beginning to use PR companies to issue increasing numbers of press releases as well as to handle or manage the media. These PR organizations undertook media monitoring as well as media training. The journalist Nick Davies (2009) has described the term 'churnalism' in which media reports are more or less rehashed versions of press releases supplied to journalists by external sources (Davies, 2009). Churnalism has been blamed by some on the 'laziness' of journalists and by others on the pressures of a modern media in which reporters are required by their editors write so many stories per week that they are forced to rely

more and more on press releases for their copy. Journalists interviewed for this study expressed concern at the impact of the increased workload on the quality of their work. While press officers saw a potential positive outcome for this increased PR activity - a potential for journalists to scrutinize and improve government policy - journalists reported their frustration with increased levels of PR activity which they saw as an obstacle in the way of contact with those making policy. Key stakeholders including government civil servants and ministers also reported frustration with high levels of media attention. Government press officers in the later part of the study period were in daily contact with journalists and constantly monitored their output. For their part journalists were under increasing pressure from internal management to write more articles, to manage increasing levels of PR activity (many more press releases and story opportunities) and to combat falling circulation. This had the effect of intensifying competition between newspapers which had an unintended consequence of health and medical correspondents from different newspaper titles working together to avoid rebuke from news editors and/or senior newspaper staff. This has been described previously in the literature as 'intermedia agenda setting' (Protest and McCombs, 1991; Walgrave and Van Aelst, 2006; Shoemaker and Reese, 2014). Researchers have raised concerns that, similarly to 'churnalism', intermedia convergence could be damaging pluralism in society. As Reese and Danielian (1989) put it, albeit from an American perspective:

'Although perhaps functional for the organizations themselves, such a tendency to follow the leader and each other could have serious societal implications. Too much sameness in media conflicts with a key value of American pluralistic society, that the press should present a diverse set of views and voices.' (Reese and Danielian, 1989, pp. 30/31)

9.3 Triangulation of findings

The three different data sources and the three different methods used in this research allow for richer and deeper analysis and confirmation of the results of each of the three phases of the research and the three data sources of the research through triangulation. While this research does not naively strive to find a particular or single truth, or assume that three different methods and data sources can be regarded as equivalents, the different sources of data and different methods used to analyse that data have provided a rich picture of the interaction between food policy and media coverage in this case. To compare results (as detailed above) from the two embedded units of analysis within the single longitudinal case study, a framework analysis method was used, which compares the two embedded units using tabulation (see table 9.1 and 9.2). This was constructed using the main findings from chapters 5, 6, 7 and 8. This triangulates the findings from the three data sources by grouping similar findings together under thematic headings. There were found to be two overarching themes – Governance and Media Processes. The combination of these two themes underlines the interdisciplinary nature of this study which looks at the interaction between food policy and media from both a public policy

perspective and a journalism studies perspective. These were grouped into sub-themes (see table 9.1).

THEME	SUB-THEME	1 st embedded unit of analysis (COMA) policy making period 1993-1998	2 nd embedded unit of analysis (SACN) policy making period 2001-2011	See numbered comments below
GOVERNANCE	Transparency	Archive – full documents, but not publicly available.	Online – ‘transparent’ government.	2
		‘Transparency’ agenda begins	‘Transparency’ agenda but not achieved – illusion of transparency	2
	Governance structures	Change in Government (1997)	Change in Government (2010)	2, 7
		Change in governance – introduction of FSA	Change in governance – FSA moves to DH	2, 7
		COMA moves to FSA	SACN moves to DH	2, 7
		Policymaking within COMA	Policymaking not in SACN’s remit	2
	Government communication	New Labour government -heightened media awareness	Transparency of FSA BUT lack of citizen engagement in policymaking/SACN	3
		Government media management minimal	Government media management high	3
		Media a ‘translator’ of government messages	Media a ‘translator’ of government messages	3
	Government agenda setting	Long periods of inaction	Long periods of inaction	7
		Uncertain evidence - allowed for stakeholder claims	Evidence still uncertain – but this was made clear in recommendations	1
		Little consideration of cultural/social importance of RPM	Little consideration of cultural/social importance of RPM	1, 6
		Tension between MAFF & DH	Framing contest between policymakers – red meat healthy or unhealthy?	5
	MEDIA PROCESSES	Media agenda setting	Issue Attention Cycle	Issue Attention Cycle
PRs in disarray – e.g. meat industry			PRs get their act together e.g. meat industry	5
		Newspapers investigate independently	Inter-media agenda setting	4
Pressure on mass media economic structure		Newspapers wield power and journalists have time to write stories	Some newspapers less powerful, journalists have little time to write stories	4
		Little proper scrutiny of policymaking – behind closed doors	Little proper scrutiny of policymaking despite transparency agenda	2,3
		PR activity limited	Increase in PR activity	4
		Journalists 3 stories a day	Journalists 6/7/8 stories a day	4
News values		High cultural & economic importance of red meat – including mentions of BSE	High cultural importance of red meat – BSE mentions limited	1,6

Table 9.1 Triangulated findings by theme (source: author) linked to numbered comments below

In summary, triangulation of the results from the three methods used to answer the three research questions provides evidence of: (the numbered findings relate to the numbers in the far right hand column in the table above, table 9.1).

1. Limitations in the evidence considered by policymakers when developing the policy.

Both COMA and SACN considered a large amount of academic scientific evidence when compiling their reports, this was used when developing the policies and recommendations. The evidence in this case was largely biomedical data, much of it was uncertain and there were many limitations within it which were acknowledged by the committee. Despite, or perhaps because of these many limitations, rigorous processes were developed by COMA and later, to a greater extent, SACN for evaluating this evidence. However, there was a reliance within these processes on a hierarchy of biomedical data and a lack of robust consideration and evaluation of the socio-economic or cultural dimensions of the evidence. This narrow focus in nutrition science and policy making has been called into question by those who suggest that a reductionist view of nutrition ('nutritionalism', or 'nutricentrism') misses out a more holistic view of nutrition that takes cultural and social values into account (Dixon, 2009; Scrinis, 2012; Lawrence et al., 2016). Dixon and Scrinis argue, and this author agrees that in failing to take cultural or social values into account nutrition policy is failing to acknowledge the role of food in society and the ways in which national diets could be changed. The use of biomedical evidence in isolation, therefore, could be said to produce failing nutrition policies since these are not informed by the cultural or socio-economic aspects of the diet of UK citizens. In other words, if the point of nutrition policy is to shape diets, this cannot be achieved by taking into account only biomedical evidence and ignoring socio-economic evidence. In contrast to the policy analysis, a prominent theme arising from both the analysis of media coverage and the analysis of the interviews was the cultural and social importance of red and processed meat in the UK diet, noted widely in the literature (e.g. Fiddes, 1994; Bourdieu, 2013). This mismatch in how red and processed meat was viewed by policy makers and the media goes some way to answering the initial research problem – 'What explains the mismatch between apparently stable government nutrition policy on red and processed meat consumption and cancer prevention over more than a decade, and the repeating cycle of shock headlines in the UK press on this subject?'

2. Lack of transparency in the policymaking process

Although commitments to transparency were made in both embedded units of analysis, by both government and civil servants, there was little evidence of attempts to engage with the public or to enable public discussion of the policymaking process. Much of the discussion about the policy and the policy development was held behind closed doors and many of the details of the policymaking process were not available either to academic researchers, to the media or to members of the public. This lack of transparency was exacerbated by the change in policy governance which has moved responsibility for nutrition policy back to the Department of Health from the FSA. Why is this important in the policy debate? Should we expect or want transparent

government or should we just expect governments to get on with the business of governing us? One of the problems for nutrition policy in relation to policymakers' ability to communicate it, is that it often, as in the case of red and processed meat, requires action on the part of citizens. Policymakers have emphasized this with their individualized framing of this recommendation – what you can do, in terms of diet, to reduce your risk of bowel cancer? To revisit literature from Chapter 3, the literature on science communication documents attempts to move away from what was initially called the 'deficit model' of science communication in which the public are seen as 'empty vessels' with little or no knowledge and top-down, one way communication from 'experts' fills the deficit or empty vessel with scientific information which they passively receive. In the 1980s and 1990s a Public Understanding of Science movement (Royal Society (Great Britain) & Bodmer, 1985) attempted to begin to try to change this, encouraging scientists to spend more time communicating with the public and talking about their work, rather than remaining aloof in their ivory towers. However, partly informed by the BSE crisis which was widely seen by the scientific establishment as a failure of science to communicate effectively, the Public Understanding of Science model was subsequently criticized as a rather condescending concept which implied the problems with science communication were mainly due to an inability on the part of the public to understand science (Great Britain. Parliament, House of Lords, 2000, Chapter 3, 3.9). This criticism began a move towards 'Public Engagement' with science which shifted the emphasis from one way communication, passively received, to a more active and interactive model in which the public were encouraged to 'engage' with science through innovative exhibits and shows in for example museums. By 2012 a new model of Public Dialogue (PD) had emerged (Pieczka and Escobar, 2012) which sought to further take account of an interactive model of communication and encourage dialogue and real involvement in science and science policy. This new model was not easily adopted by science communicators, as Pieczka and Escobar's study showed:

'The majority of our interviewees showed real difficulty in understanding the PD model. Very few saw the relationship between scientists, citizens and policy-makers as a socio-political issue with implications for democratic governance. Instead, mistrust was mostly framed as public misunderstanding, aggravated by the media.' (Pieczka and Escobar, 2012, p.122)

The findings from this study suggest that nutrition policy and policymaking in this case were far from the Public Dialogue model outlined here, indeed, the findings showed that SACN was not really committed to Public Engagement, and its focus was still at a level of trying to achieve Public Understanding of recommendations. This issue of mistrust on the part of the public as characterized by Pieczka and Escobar (2012) above, was described by policymakers interviewed; they felt that the public misunderstood nutrition science and this was aggravated by the media. There is evidence that the Food Standards Agency have adopted a more open and

transparent model which encourages public dialogue (Hajer et al., 2009). The move of SACN away from the Food Standards Agency and back to the Department of Health did not aid a more sophisticated understanding on the part of nutrition policymakers of communication models, despite successive government's stated commitment to transparency. SACN has now moved again to Public Health England, an executive agency of the Department of Health established in 2013. It remains to be seen if they pursue a transparency and public engagement agenda - correspondence in the BMJ, recent to the time of writing, suggests this is under question (Prentice, 2016).

3. Consideration of the media and media coverage primarily at the end of the policymaking process.

The media were generally viewed as an important medium through which to communicate nutrition recommendations and policy. However, their role was generally only considered after policy had been formulated and set, and they were often viewed as a proxy for public opinion – indeed there was some evidence that Government officials and press officers viewed the media as an important forum in which to 'test' public policy, often taking steps to manage media coverage. However, there was little evidence of government seeking feedback from or engagement with the media or their audiences, beyond monitoring their coverage for accurate and/or favourable reporting. In addition, while the media were considered by government to be a valuable channel through which to pass on scientific advice on nutrition, the press coverage provided little detailed analysis of the policy or the policymaking process, instead concentrating on the final recommendations themselves and their implications for the individual's diet. As noted above, the press have been shown to play an important role as watchdog providing valuable independent criticism of government policy. While many journalists hold a plurality of roles (McQuail, 2010), embracing the translator or communicator role as well as investigator, since their power to set political and public agenda has been shown to be widespread (McCombs 2004; Wolfe et al. 2013), their framing of problems can influence public evaluation of policies (Iyengar, 1991) the 'watchdog' or 'critic' role is important.

4. Commercial pressures on the print media industry influencing journalists' reporting of food policy.

Journalists interviewed working in the national UK print media reported increasing pressures put on them by their managers and employers to compete with other newspaper titles. This involved writing a greater number of articles than they had previously been expected to produce, leaving little time for investigative reporting; ensuring they reported on the issues and stories being reported by rival newspapers; and selecting subject matter and framing for their reports in a way that would encourage sales. As discussed above, this adds to literature about 'intermedia agenda setting' (Reese and Danielian, 1989; Protess and McCombs, 1991; Walgrave and Van Aelst, 2006; Shoemaker and Reese, 2014). Researchers have raised concerns that, similarly to 'churnalism', what they call intermedia convergence could be damaging pluralism in society –

for nutrition policy this means that a homogeneity of subjects and issues are reported on across national newspapers with similar framing and this can influence public evaluation of policies, creating a narrow view of what could be the causes of, or solutions to poor diets. (Iyengar, 1991; McCombs, 2004; Wolfe et al. 2013).

5. Key stakeholders including government seeking to influence print media coverage of food policy.

Particularly during the period under investigation during the second embedded unit of analysis, many of the key stakeholders, as well as government representatives maintained frequent contact with the media to manage the media coverage of their own messages. This was often done through PR companies or press officers. As outlined in Chapter 7 (Research Findings 3: Content Analysis) a trend in the national print media coverage was that there were regular 'triggering events', often promoted by key actors such as government or WCRF, which caused a spike in media coverage. Key actors and stakeholders such as NGOs or industry bodies used several tactics to manage media messages including 'trailing' policies or information to specific newspaper titles or journalists ahead of general release; managing information flow through carefully timed and managed press releases or press conferences; carrying out media training in order to manage messages delivered during interviews; carefully monitoring media coverage; maintaining daily contact with key journalists. As noted in the literature review, research has shown that time and resources in the newsroom are stretched (Lewis et al., 2008) because of economic pressures on newspapers e.g. a fall in circulation figures. Journalists have become increasingly reliant on press releases to write their copy (Bartlett et al., 2002; Lewis et al., 2008) and this has caused concern about the independence of the British media and its ability to interrogate or investigate information presented to it by external sources (Lewis et al. 2008; Davies 2009; Williams et al., 2009). These points were supported by data from interviews conducted for this study. This again raises concerns about the independence of the press and its ability to accurately report and investigate nutrition policy. The media landscape is in flux (McQuail, 2010) with mass media's supremacy currently threatened by a rise in social media. Several participants argued that they were increasingly using social media to directly communicate their messages – if this continues there may be less need for media management per se. However, this still leaves the question as to the role of the independent, critical and professional journalist in this new digital, social media environment. With prescience Hayes et al. (2007) and Singer (2008) argue that professional journalists are still needed to provide credible, accountable, independent information but there must be a way for citizens to determine the trustworthiness of media output – this seems all the more important with issues of so-called 'fake news' high on the agenda at the time of writing.

6. The iconic status of red and processed meat in media coverage, where its consumption was presented as a matter of individual choice.

Many of the research participants identified the iconic status of red and processed meat in the UK. This was reflected in the newspaper coverage of this issue where attempts to restrict

consumption of e.g. beef or bacon were treated with suspicion and anger. The consumption of red and processed meat and the reduction in levels of consumption were largely presented in press reporting as a matter of personal individual responsibility rather than a matter for regulation, legislation or, for example, structural agricultural reform. This supports previous research which has shown that when reporting cancer research and research into diet-related conditions such as cardio-vascular disease and obesity, media coverage tends to focus responsibility disproportionately on the individual (Lawrence, 2004; Hilton et al., 2012; Hellyer and Haddock-Fraser, 2011; Clarke and Everest, 2006). The responsabilisation of individuals in this case suggests the media collude not only in 'nutricentrism' (Dixon, 2009) but also in what Greenhough (2010) sees as a 'state-led biological citizenship' in which individuals have responsibilities to maintain their health, which are articulated by 'biological governance' (Greenhough, 2010, p. 156).

7. Long periods of inaction on the part of policy-makers

In both embedded units of analysis the policy recommendations took a long time to formulate – in the first embedded unit of analysis 5 years (1993-1998) and in the second embedded unit of analysis ten years (2001-2011). Many of the interviewees did not know why this had been the case, nor were the reasons for this completely clear from the media coverage or the policy analysis. Policymakers did argue that the evidence was complicated and unclear, and that this had had an impact on the length of time needed for policy formulation. Some interviewees contested that this was not a policy priority for the government while others, particularly journalists, put forward the view that this was not a recommendation to get excited about. Some hold-ups in the process could have arisen due to changes in government or changes in governance structures. It could be argued that this was not a policy priority for government and while work was ongoing for a number of years, this was not considered an urgent recommendation. This is an important finding which points to theories of and associated with Punctuated Equilibrium, this is further discussed in detail in the next section below.

9.3 Agenda setting, mediatization and food policy

This section addresses the findings in relation to the theoretical framework, which was identified at the outset as agenda setting and associated theories. It goes on to suggest that mediatization could also be a useful theory to use in combination with these agenda setting theories, to explain some of the overarching findings and develop a new theory integrating agenda setting and mediatization concepts. This has been found necessary partly because of the interdisciplinary nature of this study – which combines food policy and journalism studies. It was found that agenda setting theories often investigated media effects from a policy perspective. So here some key concepts of mediatization are added, such as media logic, which explores the impact the processes and norms of journalism practice have on media coverage; or concepts which investigate who sets the media's agenda, such as 'source strategies', which explore the impact external sources and stakeholders can have on media framing of issues. In

this way, agenda setting theories are augmented to take into account the interaction between media and food policy.

9.3.1 Punctuated Equilibrium

This research project began with a research problem outlined in Chapters 1 and 4:

- 'What explains the mismatch between apparently stable government nutrition policy on red and processed meat consumption and cancer prevention over more than a decade, and the repeating cycle of shock headlines in the UK press on this subject?'

Using agenda-setting theories this research found that the concept of Punctuated Equilibrium, developed by Baumgartner and Jones (2009) goes some way to explaining the research problem stated above. Punctuated Equilibrium explains long periods of continuity where a policy remains stable punctuated by more intense periods of change and policymaking activity. The media may play a part in putting issues on the policy making agenda. In describing Punctuated Equilibrium Baumgartner and Jones (2009) use several key concepts which help to explain what is happening (Baumgartner and Jones 2009; Cairney, 2012). These match the findings from the current research in the following ways:

- Bounded Rationality – government cannot consider all policy options at once therefore some get left out while others are given prominence. In this case this issue was given prominence by policy makers in the two key periods under study (1993-1998 and 2001-2011). In both periods much more attention was given to the policy at the end of each period.
- Agenda Setting – policy stakeholders push issues up and down the agenda depending on the amount of attention they think an issue should receive. Stakeholders sometimes use the media to try to increase attention on a specific issue. In this case, different actor groups (e.g. meat industry, WCRF) used the media to put their perspective across. The government in this case seems to have been in no hurry to make policy – the SACN report took 10 years to reach a conclusion and for policy to be formulated. This may have been because the Department of Health knew this issue was controversial and did not want to draw attention to it, because they did not want to be accused of 'nanny state' behaviour, or because they knew that meat consumption was declining in any case and so the issue was less pressing.
- Framing – actor groups compete to define how an issue is framed. This could clearly be seen in the media coverage of red and processed meat and its connection with bowel cancer, or alternatively framed as its connection with healthy iron status. There was a clear 'frame contest' occurring in the media coverage and the policy documents to present red meat as either healthy or unhealthy.
- Policy Monopolies – Cairney (2012) says that certain stakeholder groups may enjoy a 'monopoly of understanding' in which their preferred framing of the issue is accepted over a long period of time. This is true in this case of the predominantly and prevailing nutritional, bio-medical and individualized framing of this issue – it is overwhelmingly

assumed in both the policy documents and the media that individuals are responsible for their diet, that diets should be looked at by individual ingredients or components and that nutritional science provides the most important evidence to inform the policy recommendation.

- Venue Shopping – in order to challenge a policy monopoly, actors or actor groups attempt to put their perspective forward in another ‘venue’ – in another level of the policymaking environment or in another arena altogether – in this case interested stakeholders made attempts at influencing public debate by for example the Meat Advisory Panel sponsored the Guild of Health Writers annual dinner, giving the keynote speech and providing material in a ‘goody bag’ (Interviewee 1), or the NGO sector developed the ‘Eating Better’ organization, in order to put their messages about eating ‘less but better meat’ across to a new audience.

Using the key concepts of the Punctuated Equilibrium model in this way helps to explain the part the media have played in food policymaking in this case, in terms of the effect media coverage has had on policy, but this is still representative of a linear causal model. And there are limits to the scope and ability of agenda setting theories such as Punctuated Equilibrium to explain the complex interaction between food policy and media. As Wolfe, Jones and Baumgartner themselves (2013) note, *‘Policy process scholars have increasingly rejected simple linear models in favor of models emphasizing complex feedback effects. This suggests a different role for the media—one of highlighting attributes in a multifaceted political reality and involvement in positive feedback cycles.’* (p. 186). While Baumgartner and Jones (2009) and Wolfe et al. (2013) argue that Punctuated Equilibrium is not a simple linear cause and effect model between media and policy, but a model showing that *‘each can affect the other, reinforcing the pattern of positive feedback and punctuated equilibrium that we have observed over and over.’* (p. 125), this still does not take account of the complex social, economic, political and cultural forces in which both media and policy operate, since it concentrates mainly on media coverage and policy and the interaction between the two without taking into account the other forces at play. Media agenda setting research is often empirical and quantitative and tries to measure media influence by comparing media coverage of an issue to the political priorities it receives (e.g., Walgrave et al., 2008). In the realm of food policy, studies have measured the media coverage an issue or food product receives and have correlated this with an outcome (e.g. sales, consumption, policy change) to assume a causal effect. For examples of this see Hilton et al. (2012) on obesity coverage, Gollust and Lanz (2009) on diabetes and Greiner et al. (2010) on fish consumption. While measuring and analyzing media content of these issues is useful, the causal effect on policy has been difficult to prove and in any case these methods fall short of explaining the complex relationships between policymakers, interested stakeholders, journalists, media management, media processes, social, economic and political contexts and audiences. A salient reminder (and one model of many that exist to

map media influences) of the complexity of media effects comes from McQuail's model of media organization within a field of social forces (see figure 9.1)



Figure 9.1. The media organization in a field of social forces (source: McQuail's Mass Communication Theory 2010, p. 281)

Therefore, and as outlined by Singer (2016), a theory is required that can account for the more complex social forces at play in the interaction between media and nutrition policy in this case of government recommendations on consumption of red and processed meat. The next section returns to the theory of mediatization, outlining its development and going on to explain how and why it has been used to help explain the 'bigger picture' of the research findings of this study; in combination with Punctuated Equilibrium it can be used to develop a new combined or integrated theory of mediatized food policy.

9.3.2 Mediatization

This research has shown that Punctuated Equilibrium can help to explain some of the interactions between food policy and the media in this case, but falls short of explaining the more complex overarching interaction between the food policy and media nexus and other actors and the social, economic and cultural forces exerting an influence on them. A concept which helps to explain this complexity is the relatively new theory of mediatization. Mediatization is related to but distinct from the concept of 'mediation' although this has been debated and differently explained by several scholars. Lundby (2014) proposed a distinction in which

mediation refers to the process by which communication is mediated, and he refers to mediatization in the words of Roger Silverstone as useful to '*understand how processes of communication change the social and cultural environment that support them as well as the relationships that participants, both individual and institutional, have to that environment and to each other*' (Lundby 2014, p. 6).

Mediatization is further defined by Stromback and Esser (2014, p. 4) as referring to '*a social change process in which media have become increasingly influential in and deeply integrated into different spheres of society*'. They describe this as a meta-process similar to those of globalization, individualization or commercialization. Jansson (2002) argues that mediatization reinforces a sense of shared cultural identity. Mediatization is also described (Deacon and Stanyer, 2014) as the process by which changing information technologies drive the changing construction of society and culture – placing these developing technologies and the associated media logics at the centre of the concept. Hjarvard (2008) argues that mediatization uses the idea of 'media logic' (the processes, timetables and organizational determinants of media production) to explain some of the influences of media on society. Mediatization has grown in popularity in the last decade (Livingstone, 2009) and is not without controversy (Livingstone and Lunt, 2016). This arises from the frustration of some scholars with the increasing use of the term, which they say has seen it used indiscriminately and without proper definition, as a kind of trendy buzzword, or "conceptual bandwagon" (Deacon and Stanyer, 2014).

In common with other authors (Livingstone, 2009; Livingstone and Lunt, 2015; Deacon and Stanyer, 2014) Stromback and Esser (2014) recognise the growing popularity of the concept and its under-theorisation but see this as a positive feature of mediatization in that this places it as a new, sensitizing concept under development and as such its portability among disciplines can add to its expansion. Livingstone and Lunt (2016) argue against controversy around the term, noting that as a neologism it needs further development and due to the nature of the concept of mediatization – which examines the influence and interaction of the media in many different spheres – it already has many definitions and explanations. This, they argue, comes from a welcome cross-disciplinary approach which is too rarely used. They acknowledge that the term is indiscriminately used but argue, like Stromback and Esser (2014) that mediatization is a sensitizing concept and has become useful to scholars as a portable term that is ambiguous, multi-dimensional and multifaceted.

The mediatization of politics has been separately considered – here a four-dimensional concept – (Stromback and Esser 2014) has been proposed that argues that the mediatization of politics can be measured by the degree to which four dimensions are met. The first dimension relates to the degree to which the media are the most important source of political information. The second dimension the degree to which the media are dependent on political institutions. The third dimension the degree to which media content is guided by political or media logic and the

fourth dimension the degree to which political actors, organisations and institutions are guided by political logic (see figure 9.2).



Figure 9.2 A four-dimensional conceptualization of the mediatization of politics (source: Stromback and Esser, 2014, p. 7)

This goes some way to addressing the dearth of a logical application of mediatization to empirical research but still focuses primarily on measuring media and policy attention, failing to take into account the complex sphere of social, cultural and economic forces in which these two interact. Van Aelst et al. (2014) begin to make a link between mediatization and political agenda setting arguing that they have much to learn from each other, while Blumler (2014) argues for a broader view of the mediatization process which does take into account not only political groups, individuals and organisations but also a broad spectrum of other sources, other views and concerns. This would, he argues, require a much broader conceptualization from '*the mediatization of politics*' to '*the mediatization of the public sphere*'.

Here, the concept of mediatization is further developed as part of this current research by applying it to food policy and the case under study: government recommendations on red and processed meat consumption. In common with Deacon and Stanyer (2008) and Lunt and Livingstone (2016), the author argues that mediatization is a popular and under-theorised concept which is often used indiscriminately and in passing, disagreeing with Deacon and Stanyer's (2008) assertion that it is a '*concept of no difference*', rather agreeing with Lunt and Livingstone (2016) that mediatization will take different forms in different domains, and that it should not take a reductionist approach to seek to prove '*event-event causation*'. The conceptualization of mediatization for the purposes of this study follows Hepp et al. (2015) in that it is not a concept of linear effects or of increasing linear influence but that it is a concept that can help explain the complex and changing interplay, interactions, interdependencies and reciprocities in the context in which food policy and the media interact. As pointed out by Sellers (2010) and Bennett and Livingston (2003) and as evidenced by the research in this thesis, '*news construction is a negotiated process*' (p. 359). Therefore, the conceptualization of a

mediatized food policy for this study does not limit itself to mapping only policy makers and media but also other forces that might exert an influence. In this way mediatization is here used as an extension of political agenda setting; using it as a lens through which to view agenda setting with the assumption that political and media agenda setting is itself a negotiated process with both politics and media playing a part. This means that, as has been shown by this research, media can influence policy but this is in combination with and contingent on policy makers, other actors, as well as social, cultural and economic forces also having a reciprocal influence on, and relationship with, the media. The findings of this study are considered in the light of concepts of mediatization in the next section (section 9.4). As an aide to thinking about the overarching implications of the mediatization of food policy, Lang's (2005) Food Policy Triangle was used, in which three actor groups influence food policy (State, Industry and Civil Society). This model was developed to try to show the complex interactions between media coverage of food policy, the main actors of the Food Policy Triangle and the social, cultural and economic forces under which both media coverage and the main actors exist (see figure 9.3).

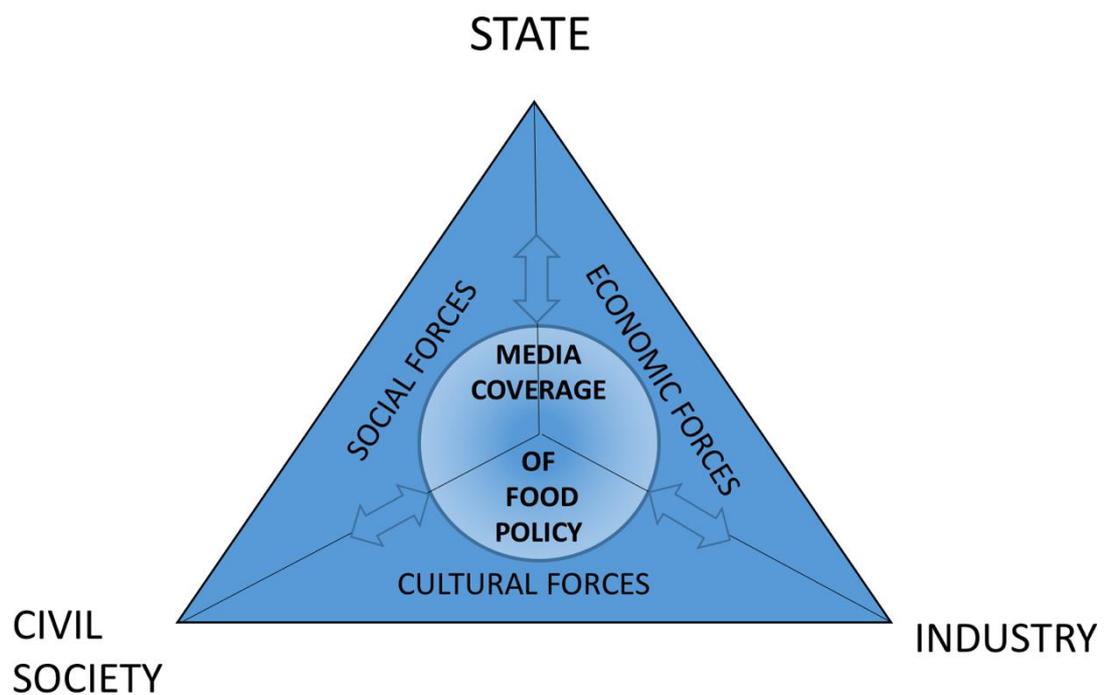


Figure 9.3 Mediatization of food policy (source: author)

How does this model apply to this study? The lighter circle inside the triangle represents media coverage of the government recommendations on red and processed meat consumption. This coverage is shaped, shifted and distorted by the pressures of economic forces (such as competition between newspapers to combat falling circulation figures) or cultural forces (such as the strong cultural significance of red and processed meat dishes in UK society and/or a perceived threat of vegetarianism). At the same time, coverage is further influenced by and

exerts influence on the actors at the three points of the triangle – those in civil society such as cancer charities, those in industry, such as meat industry representatives and those in the state, such as government policymakers. However, in developing this model the researcher realized that rather than convey the complexity of the interaction between media and food policy, the model simplified it too much. While it shows the way media coverage is influenced by both stakeholders and external forces such as cultural, economic or social forces, it fails to describe how the media coverage and media logic influences or impacts the policy. Returning to the findings of the study, a further exploration of these in all their complexity was undertaken.

9.4 Integrating Punctuated Equilibrium and Mediatization using food policy.

As noted above, Van Aelst et al. (2014) argue that mediatization theories could be used in conjunction with political agenda setting theories to both compensate for the lack of theoretical consideration in current research on agenda setting, and to add to the currently limited amount of empirical research using mediatization as a theoretical framework. To help explain the differences between these two concepts Van Aelst et al. (2014) use a table (p. 201) to compare the concepts and help to draw out instances where they may complement each other (see table 9.2).

Political agenda-setting	Mediatization of politics
Middle range theory	General theory
Mainly empirical focus	Mainly theoretical focus
Focus on political content, issues	All aspects of politics
Media influence is contingent and often modest	Media influence is often large and growing (process)
Media influence can be measured	Mediatization of politics goes partly beyond media effects and is difficult to measure

Table 9.2 Comparison of Political agenda-setting and Mediatization of Politics (source: Van Aelst et al., 2014, p. 201)

As can be seen from table 9.2 Van Aelst et al.'s (2014) characterization of the Mediatization of Politics is as a general theory with a mainly theoretical focus, as opposed to their characterization of Political Agenda-Setting as a middle range theory with a mainly empirical focus. This suggests that while Punctuated Equilibrium, as an agenda setting theory, can be used to explain the findings of this study at an empirical level, specific to the case study under research, the concept of Mediatization can usefully be added to explain the higher level findings, the overarching and more theoretical findings which arose when the findings from each data source and each embedded unit of analysis were triangulated. In addition, the integration of these two theories is necessitated by the interdisciplinary nature of the study which brings together the study of food policy and media/journalism and associated theories from these two disciplines.

To try to integrate these two theories to provide both empirical explanation and theoretical explanation, the findings were tabulated according to the key Punctuated Equilibrium and Mediatization concepts that relate to each one. So, Table 9.3 tabulates the findings from the 3 data sources for the first (1993-1998) and second (2001-2011) embedded units of analysis against the Punctuated Equilibrium and Mediatization concepts that have been found to be important.

		POLICY DATA		NEWSPAPER DATA		INTERVIEW DATA		CONSISTENT ACROSS TIME AND DATA SOURCE?
		COMA 1993-1998 DOCUMENTS	SACN 2001-2011 DOCUMENTS	NEWSPAPER ARTICLES 1993-1998	NEWSPAPER ARTICLES 2001-2011	INTERVIEWEES ACTIVE 1993-1998	INTERVIEWEES ACTIVE 2001-2011	
PUNCTUATED EQUILIBRIUM CONCEPTS (FOCUS ON POLICY MAKING PROCESS)	Disproportionate Attention	Long periods of inaction	Long periods of inaction	Issue Attention Cycle (periods of minimal coverage)	Issue Attention Cycle (periods of minimal coverage)	Long periods of inaction	Long periods of inaction	Consistent findings across all data sources and time periods
	Agenda Setting	Change in Government (1997)	Change in Government (2010)	Change in Government (1997)	Change in Government (2010)	Change in Government (1997)	Change in Government (2010)	Consistent findings across all data sources and time periods
	Bounded Rationality	Long shadow of BSE and other food scares	BSE/food scares receding?	BSE mentioned in sympathy with meat industry	BSE scarcely mentioned	BSE contextual factor	BSE less important contextual factor	Consistent across data sources and time – BSE important only in first embedded unit of analysis
	Venue Shopping	Change in governance – introduction of FSA	Change in governance – FSA moves to DH	Ministers criticised – accused of nanny state, disagreement among experts	Policy presented as CMO's opinion: an 'independent voice' to counteract accusations of nanny state	COMA moves to FSA Policymaking within COMA	SACN moves to DH Policymaking by SACN	Inconsistent – Media does not highlight policy / governance issues
	Policy Monopolies	Tension between MAFF & DH	Tension between DH/FSA and DH/DEFRA	Tension between MAFF & DH	Tension between meat industry and DH	Tension between MAFF, meat industry, DH, NGOs	Tension between DEFRA, meat industry, DH, NGOs	Consistent findings across all three data sources and time periods - departmentalism
	Framing of biomedical evidence	Framing contest – red meat healthy or unhealthy? Uncertain evidence allowed for stakeholder claims	Framing contest – red meat healthy or unhealthy? Evidence still uncertain – but this was made clear in recommendations	Framing contest – red meat healthy or unhealthy (PRs in disarray – e.g. meat industry)	Framing contest red meat healthy or unhealthy (PRs get their act together e.g. meat industry)	Framing contest, red meat healthy or unhealthy (PR activity limited)	Framing contest, red meat healthy or unhealthy (Increase in PR activity)	Consistent findings across all data sources and time periods – contest between different framings of nutritional value of red meat
MEDIATIZATION CONCEPTS (FOCUS ON MEDIA REPRESENTATION OF POLICY)	Framing of cultural aspects	Cultural aspects of RPM not addressed	Cultural aspects of RPM not addressed	High cultural importance of RPM	High cultural importance of RPM	High cultural & economic importance of RPM	High cultural importance of RPM	Inconsistent – cultural aspects of RPM not addressed during policymaking
	Media Logic – the processes and norms of journalism	Political actors governed by media logic	Political actors governed by political logic (within mediatized governance structures)	Newspapers investigate independently – media governed by political logic (within media norms)	Inter-media agenda setting – media governed by media logic	Journalists 3 stories a day – media independent of political institutions	Journalists 6/7/8 stories a day – media dependent on political institutions	Inconsistent – is media governing political actors or vice versa?
	Informed consent 1 – how transparent is the policymaking process?	Archived policy documents – full documents, but not publicly available.	Online – 'transparent' government. - transparency of FSA BUT lack of citizen engagement in policymaking/SACN	Little proper scrutiny of policymaking – behind closed doors	Little proper scrutiny of policymaking despite transparency agenda	'Transparency' agenda begins	'Transparency' agenda but not achieved – illusion of transparency	Inconsistent - transparency agenda made little difference to media coverage
	Informed consent 2 – how are media managed?	New Labour government heightened media awareness – argues that media translate	Media used to 'translate' government messages	Issue attention cycle – media inform but then backlash against 'nanny state'	Issue Attention Cycle – media inform but then backlash against 'nanny state'	Government media management minimal	Government media management high Media 'translator' of govt. messages	Inconsistent – media doesn't see its role as an informer/educator

Table 9.3 Findings by embedded unit of analysis and data source, tabulated against Punctuated Equilibrium and Mediatization concepts (source: author)

Table 9.3 should be read from left to right, the top six rows each take a concept from Punctuated Equilibrium, while the bottom four rows take concepts from Mediatization theory, and map the findings from the current study against them. Where there is consistency in the findings, the boxes in each row are the same colour (white). Where findings are inconsistent along the row, the boxes are coloured light blue. Outlined in the column at the far right-hand side of the table, is whether the findings are temporally consistent (across the two time periods under study) and methodologically consistent (across the three data sources and methods employed to answer the research questions). Clearly, both consistency and inconsistency are important findings of the study. However, the consistent findings have to some extent been explained by applying Punctuated Equilibrium concepts to the findings as outlined in section 9.3.1. The inconsistency in the Bounded Rationality row is a consistent inconsistency, in the sense that BSE was found to be an important contextual factor in the first embedded unit of analysis and less important in the second embedded unit of analysis across all three data sources. More inconsistencies arise when applying the concepts of Mediatization to the findings (there are a greater number of blue boxes in the Mediatization section of the table). This proved a useful exercise as it brought out some important and unexpected answers to the research problem and research questions. To take each Mediatization concept from table 9.3 in turn:

- **Framing**

A key finding from the triangulation process was that while the cultural importance of red and processed meat was not found to be addressed to any degree in the policy documents, this was a major factor in both the content analysis of the media coverage and the analysis of the interviews. While not the only important finding of this study, this provides some answers to the original research problem which sought to understand the reasons for the mismatch between apparently stable government guidance in the area of cancer risk and red and processed meat consumption and the apparently contradictory coverage in much of the UK print media.

- **Media Logic**

A key concept of Mediatization is 'media logic' – which can be defined (after Altheide and Snow, 1979), as the norms and processes under which media production operates. These norms and processes can permeate policy making for example when policymaking is affected by them, or when political actors are governed by media logic. In the case of the current research, there was evidence that political actors were governed by media logic, but also that media actors were governed by political logic. For example, political actors were keen to use the print media and were aware of and often used media logic to disseminate their policies effectively and efficiently. For their part, media actors were dependent on political logic in the sense that they did not often scrutinize policymaking, the processes of which, despite a government transparency agenda, were often hidden from media attention. This clearly shows the interaction between the two – suggesting that media actors and policymakers both influence each other, illustrating the reciprocal relationship between the two.

- **Informed Consent (1)**

The concept of Informed Consent relates to the idea that the ability of citizens to make decisions about policy and politicians within a democracy is linked to the information they can access about those policies and politicians. As noted above, this research found very little scrutiny of policymaking by newspaper reporting, this was exacerbated by a lack of transparency in the nutrition policy making process, despite government attempts to increase access to policymaking documents and to scientific advisory committees.

- **Informed Consent (2)**

The policy analysis undertaken as part of the first embedded unit of analysis in this case study found that the New Labour government of the late 1990s argued for further media management strategies in the form of an enlarged government communications department under the rationale of informed consent. The policy analysis of both embedded units of analysis found that the media were seen to be useful by government policymakers as translators of government messages, however, they sought to manage media coverage of their policies to determine whether the coverage was accurate and favourable. For their part when covering this issue, the media often fell into an Issue Attention Cycle (Downs, 1972) in which they tended to first report the discovery of the issue with alarm, then print negative coverage, accusing the government of being a 'nanny state' which did not have the right to dictate the make-up of diets.

9.4.1 Mediatized food policy: implications for democracy.

As outlined above, the current research has provided evidence of the mediatization of food policy which shows that:

1. UK print media and journalists working for them are increasingly pressured by falling sales and commercial competition. This promotes an environment in which journalists are increasingly reliant on external sources for stories, are expected to write more articles per day, and compete heavily with other newspapers – this creates a homogeneity of newspaper coverage of food and nutrition policy.
2. Actors and actor groups with a vested interest in specific food policies, including the government, make increasing use of PR opportunities to define how the policy is framed. The increasingly pressurized economic model of print journalism has impeded journalists' ability to properly investigate both government and others' claims about food policies.
3. Government nutrition policymakers have taken steps to base policies on 'evidence'. There are two problems with this: i) the evidence they consider is skewed towards bio-medical research and unlike the media coverage, takes little formal account of social or cultural implications of red and processed meat consumption ii) through consultation other considerations are taken into account but these are limited, e.g. industry viewpoints, political considerations. These are not subjected to rigorous and transparent scrutiny.
4. The media is viewed as important by the Government, who use it as a proxy for public opinion and a conduit to the public. However, they rarely engage as a two-way process with

the media, instead monitoring them for accuracy or routinely contacting them to transmit policy messages.

5. The public are largely left out of the policymaking process, or debates about which policies should be considered, and how they should be considered.

In their comparison of the concepts of Punctuated Equilibrium and Mediatization, Van Aelst et al. (2014) comment that “*the mediatization literature often addresses the implications for democracy of growing media influence*” (p. 201). It is this function of Mediatization theory that has been particularly useful in assessing the findings of this current study and their implications. While not attempting to address democratic theory in detail, the implications of the findings of this research project on the concept of informed consent echo the work of scholars looking at the mediatization of politics, who have identified that through mediatization of political processes, media have become a proxy for public opinion and that ‘*mediated discourse has become the accepted way for politics to address the citizenry*’ (Mazzoleni, 2014, p. 43). This reflects an increasing barrier to citizen engagement with politics and policymaking – and illuminates this by showing that this is not necessarily due to citizens’ apathy but also because government and government policy making are not transparent and open and offer little opportunity for public engagement or involvement. In using the media merely as a conduit for their policy messages and failing to engage with the media itself they play into the increasing tendency of the media to spend little time or effort scrutinizing or investigating public policy and the ways in which it is formulated. As Esser and Stromback (2014, p. 226) put it:

‘for citizens this means a lack of access to substantive, undistorted and diverse information as well as a lack of opportunity to deliberate public issues.’

How does this relate to the current study? The findings show that government and other stakeholders were to some degree able to ‘capture’ the media, which was often unable or unwilling to investigate the policymaking process in any detail. This suggests the public, who to some extent still rely on media for information about food policy are not being fully informed.

9.5 The implications for food policy and journalism

The next section looks forward and uses the theory of mediatized food policy to predict the shape of media coverage on food policy in the future. First, this section considers the implications of this current research for both food policy and for journalism.

9.5.1 Implications for Food Policy

This research has focused on government nutrition policy, but this new theory of Mediatized Food Policy has a broader application. Clearly nutrition policy is but one part of food policy, and this theory could be applied to other wider food policies, not only nutrition policy, for example policies on food banks or the sugar tax. This section outlines the other implications for both Food Policy and Journalism (research and practice).

9.5.1.1 Implications for the practice of food policy: Media, Food Policy, the Democratic Process and Informed Consent

In general, the analysis of the food policy making process in this case has shown a lack of engagement with citizens and a tendency to use the media as a conduit through which to tell citizens that they, individually, are responsible for their diet and their nutritional well-being, and to detail the type and amount of red and processed meat they should be eating. Castells (2012) and Iosifidis and Wheeler (2015) argue that political institutions have been captured by dominant stakeholders, leaving little opportunity for citizens' representation (Castells, 2012; Iosifidis and Wheeler, 2015). Despite a 'public consultation' as part of the SACN report there was little evidence in the current research that the public's views were taken into consideration. The media were used at the end of the policy making process, as a way of disseminating information and were also left out of the policy making process. This predominantly 'deficit model' of nutrition communication misunderstands the complex way in which press reporting is produced and co-constructed by its readers. This echoes a general tendency among public health professionals to adopt a largely linear model of communication which in the main fails to include the complex nature of communication and food choice. In this way, public health experts have failed to adopt research from the fields of communication that has explored audience interaction with messages, emphasizing that audiences do not simply passively accept messages, texts, symbols or signs, but that they also negotiate, oppose or interpret them (e.g., McQuail, 2011; Hartley, 2012). Simply telling citizens how and what to eat is not on its own sufficient to influence their behaviour – expecting the media to uncritically reproduce your messages compounds this problem. Mediatized food policy could help to show that public discourse about food policy has been increasingly distorted in this case as pressures on media resources and pressure from stakeholders with vested interests reduce the ability of the media to act as a public forum for debate on food and nutrition policy. This has implications for democracy as it reduces the ability of citizens to act with informed consent – without a full understanding of policy and policymaking processes, or an opportunity to discuss and debate these processes and policy outcomes fully and openly, citizens' ability to make decisions about the suitability or relevance of government recommendations or advice on diets in general, and red and processed meat consumption in particular, is limited. Brown et al. (2012) document the widespread national and international call for consumers to be included in policymaking processes for health, including dietary guidelines. They argue that the rationale for this is the rights of consumers to have a role in planning and implementing their health care as well as improved access for citizens to science, and the possibility of improved quality of the resulting dietary guidelines. They note, however, that there is a lack of established best practice to achieve this and some lack of clarity on the advantages of consumer involvement. This study has also shown a lack of willingness on the part of the UK's advisory committee on nutrition to accept or implement further citizen involvement with nutritional guidelines in this case. If we assume that governments are fallible and that they do not necessarily have the interests of their citizens at heart, some clarity from government on the best way to involve consumers in the

development of nutritional guidelines would be welcome. As outlined above, this could promote both the rights of citizens in planning their health care as well as improving their access to nutrition science. In addition, government could, through proper dialogue with citizens, further understand the socio-economic and cultural implications of nutrition policy. A lack of social science input on committees such as SACN could compound their focus on biomedical research as well as inhibiting further citizen engagement through social science research. In other words, social scientific involvement in nutrition policy making could promote further engagement with citizens in nutrition policy making through inclusive, qualitative approaches.

The role of the media in nutrition policy making also needs careful consideration by government. Those interviewed for this thesis who worked in the field of PR or government communications were keen to point out the value of strong media involvement in policy. They saw the journalist's role as watchdog, or sense checker, as a vital component of policy development. In contrast, few civil servants or government ministers spoke of journalists as anything more than a medium or channel through which policy could be communicated to citizens. Dealings with journalists were not seen by this group of interviewees as important, more often an irritation that was an unfortunate but necessary hurdle to be crossed at the end of the nutrition policy making process. As noted above (p. 245), accountability and autonomy have been identified as important and valued norms for professional journalists (Singer, 2007). The effect on the ability of journalists to hold government to account if they become to any extent part of government machinery has been noted and the effect of this is rightly feared. Habermas (2006, p. 411) uses the examples of Murdoch and Berlusconi to argue for an independent, self-regulating media to aid '*deliberative legitimation processes in complex societies*'. This does not preclude further scrutiny of government policymaking processes by journalists, but recognizes that further involvement of journalists with nutrition policymaking would need to maintain their independence and autonomy. It is the duty of the government to recognize the vital role an independent media plays in a democratic society and to work with the press to develop transparent and open policy making processes which allow press scrutiny and public debate.

9.5.1.2 Implications for Food Policy Research

As outlined earlier in this chapter this research has illuminated the policymaking process in the case of government nutrition policy on red meat consumption and bowel cancer prevention. This has shone further light on the academic debate about the problematic concept of evidence-based policy (Lang et al., 2009; Smith, 2013; Cairney, 2016). It particularly shows that while scientific advice in terms of bio-medical evidence was robustly evaluated by scientific advisory committees on nutrition (the Committee on Medical Aspects of Food Policy and the Scientific Advisory Committee on Nutrition, respectively), socio-economic evidence was not considered in the same way or given the same degree of importance when formulating the policy. This

broadly supports recent research by Lawrence et al. (2016) who make a distinction between 'nutrition specific' evidence, which addresses the immediate causes of malnutrition and 'nutrition-sensitive' evidence, which looks at the underlying causes of malnutrition. They argue that nutrition reviews and therefore nutrition policy formulation is dominated by nutrition-specific evidence and call for a more balanced evidence base (for example in Cochrane reviews) to inform and shape nutrition policy. However, this current research project has shown that nutrition policy is not only made using scientific evidence. Many other considerations were taken into account, not only after the scientific advisory committees had made their recommendations to ministers, but during their deliberations, when their draft reports were discussed with interested stakeholders and put out for 'public consultation'. This tendency for nutrition policy to be made not only on scientific evidence but also on other, less systematized factors has been described by other researchers, for example Timotijevic et al. (2013a), who recognized the complexity and nuances involved in nutrition policy making and called for a more research to recognize this, developing the EURRECA framework to help consider different types of evidence involved in public health nutrition policy development. This echoes recent research looking at Evidence Based Policy (Cairney, 2016) which outlines the complexity of the science-policy nexus. Cairney (2016a) says that to help us understand the complexity of policy making we should consider an idealized model of Evidence Based Policy Making in which:

- 'There is a core group of policymakers at the 'centre', making policy from the 'top down', breaking down their task into clearly defined and well-ordered stages;
- Scientists are in a privileged position to help those policymakers make good decisions by getting them as close as possible to the ideal of 'comprehensive rationality' in which they have the best information available to inform all options and consequences.' (Cairney, 2016a)

The findings of this study support Cairney's work, in which he argues that policymaking is much less ordered and predictable than this idealized model suggests and takes place within a multi-level policymaking environment, showing:

- 'a wide range of actors (individuals and organisations) influencing policy at many levels of government
- a proliferation of rules and norms followed by different levels or types of government
- close relationships ('networks') between policymakers and powerful actors
- a tendency for certain beliefs or 'paradigms' to dominate discussion
- shifting policy conditions and events that can prompt policymaker attention to lurch at short notice.' (Cairney, Oliver and Wellstead, 2016)

This has implications, as Cairney, Oliver and Wellstead (2016) have explored, for those wishing to influence or change food policies. Academics, argue Cairney et al. (2016) need to understand

these complex multi-level and disordered processes of policy making, if they want to ensure their own work has 'impact' on policy. Therefore, if, as is often demanded of them, academics in this field should show 'impact' on food policy we need to recognize and consider that the evidence robustly considered by scientific advisory committees when formulating nutrition policy and nutrition recommendations is biased towards bio-medical research. However, we should also note that this is not to say that socio-economic and cultural considerations are ignored but these are considered as part of the more complex multi-level policymaking environments and are conducted in a less rigorous and ordered manner than the idealized model of evidence-based policy making as outlined above would have us believe. One of the implications of this for those working in food policy is that in order for their work to have relevance for policy makers they should take the real and complex processes of policymaking into account and consider that, as Cairney et al. (2016) advise:

“Meaningful policy impact built on academic–policy maker relationships take time and effort to create and maintain. It cannot simply be bought, outsourced, or produced during ad hoc workshops. Further, in a complex policy-making system, it makes little sense to pinpoint discrete examples of academic influence. There are ways to produce meaningful academic–policy maker engagement, but we should not exaggerate its impact or our ability to measure it in a simple way.” (Cairney, Oliver and Wellstead, 2016 p. 401)

Cairney (2016) further argues that those wishing to influence policy should consider that triggering events, or new evidence can prompt a shift of attention from one policy to another. This current research has shown, as predicted by Baumgartner and Jones (2009) and Kingdon (2003) that the media can play a part in this shift of focus and is often used by powerful, vested stakeholders to place and frame policy solutions in the media arena. This was particularly the case because of a lack of transparency within the nutrition policy making process. While SACN have attempted to move their meetings and deliberations to a more open forum, in reality, the processes of deliberation that SACN undertake could be more transparent (for example transmitted live by webinar as Food Standards Agency meetings are, producing fuller meeting minutes with attributed comments and points of view). In addition, there is a knowledge gap between the recommendations made by the scientific advisory committee and the policy that is eventually made – little is known about how ministers reach their policy decisions and what considerations were taken into account to do this. This lack of transparency, operating under the illusion of transparency, allows interested stakeholders such as the meat industry or NGOs with a vested interest to lobby for policy change via the press or wider media. The analysis in this current study showed that while SACN considered further transparency and openness in the processes of the committee, this was repeatedly rejected by members of the committee, despite mechanisms being put in place to accommodate this, such as a SACN website and partially open committee meetings. This has shown a lack of commitment to government promises of transparency and openness in public life as laid out by the Nolan committee (Nolan,

1995), part of standards in public life which are still trumpeted as important by government today (Committee on Standards in Public Life, 2016).

9.5.2 Implications for Journalism

The implications of this research for the field and practice of journalism are several. These can be split into two sections: the implications for journalism research and the implications for journalism practice.

9.5.2.1 Implications for Journalism Research

As outlined in the literature review (Chapter 2) there has been a tendency for journalism and media research to concentrate on media effects and on measuring and analyzing media output (McQuail, 2010). Media production processes and norms are less frequently analysed and some of the interesting findings from this current research have importantly come from insights drawn from a combination of data from press articles and data from semi-structured interviews. The content analysis of print media (reported in Chapter 7) gave insights into what was being covered and how it was framed but this was insufficient to explain why articles were presented, written and framed in certain ways. Interviews with journalists who were involved in writing those articles as well as interviews with key stakeholders and policymakers themselves gave an insight into the norms and processes of print media production – what Altheide and Snow (1979) call ‘media logic’ and how these impact on media coverage of policy.

Furthermore, the analysis echoes existing research which argues that while content analysis can provide useful evidence showing trends in media coverage, researchers should be wary of inferring too much from the results of a content analysis (Schreier, 2012; Krippendorff, 2013). Any qualitative reading of a text, however systematic, is subjective (Krippendorff, 2013; Mellor et al., 2011) but the researcher is in agreement with those authors who argue that while content analysis can tell you a great deal about a print media article, its production and its meaning (who were the sources? how is the information framed? what information is not included?) it is not possible to infer the journalist’s intentions or the audience’s interpretation of the text or the effect it has had on them without further research – for example interviews or a survey. This research has shown that qualitative content analysis, in conjunction with interviews with journalists and their sources gives a much richer picture of the issue being analysed than quantitative content analysis alone would provide.

Another implication of this research for those in the field of public health is that a linear model of communication should not be assumed – in other words there has been a tendency among public health practitioners in general to assume a deficit model when offering information to the media – with the assumption that the public are simply empty vessels passively receiving dietary advice which they then unquestioningly accept and act upon (Coveney, 2006; Lang et al., 2009; Halkier and Jensen, 2011). However, many models of communication show, and this

research reinforces, that there are many influences on media construction of information, not least competing framing from interested parties and stakeholders or commercial pressures to present an issue in a particular way to generate, for example, newspaper sales. In addition, public health advocates should be aware that media coverage in this case had a tendency (echoing research looking at media coverage of obesity, diabetes and coronary heart disease) to frame this issue of red and processed meat's relationship to bowel cancer in a predominantly individualized way. This meant that in many of the articles about this issue it was framed as a problem of lifestyle, with individuals very much portrayed as bearing the most responsibility for their diet, as opposed to other influences on dietary choice e.g. cultural, political, economic or social.

9.5.2.2 Implications for the practice of journalism

Looking at the coverage of the specific nutrition policy in this case, reporting analysed in this research project emphasized an individual response to these nutrition recommendations (in common with research that shows that this was also the case in coverage of obesity, diabetes and heart disease e.g. Lupton, 2004; Lawrence, 2004; Hilton et al., 2012). While the cultural framing of red meat as an important and iconic British food stuff came over in the newspaper coverage loud and clear, the social, political or economic determinants of red and processed meat consumption were not often discussed by the press. There was little consideration of systemic change in the coverage (for example the wider implications on society, culture and the economy for further decline in red and processed meat consumption) and this begs the question why journalists failed in the main to consider these alternative framings of this policy. Some journalists reported difficulties in changing the predominant framing of a press release when writing the story. While recognizing that individual behavior change plays a part in public health advocacy, public health advocates, with the knowledge that the media tend to present nutrition policy disproportionately as a matter of individual responsibility should perhaps be putting an alternative policy perspective forward that emphasizes the role social, economic and regulatory policy responses could play in helping to change diets (Henderson et al., 2009; Wells, 2016).

This research has found that journalists were increasingly under commercial pressures to both write more articles, write similar articles to other competing newspaper titles and to write articles that would generate more sales. At the same time journalists interviewed reported that they were subject to a deluge of PR material from communications companies representing interested stakeholders with opposing views. Some newspapers were targeted by government press officers who attempted to shape media coverage of their policies. In this way, this research suggests that the mass media are in a weakened position where their journalists find it difficult to properly scrutinize nutrition policy and its formulation. Commercial pressures mean that journalists collude with each other to cover the same issues or 'stories' in the same way and this made coverage of this nutrition policy homogenous, with little variation in the press coverage and little press scrutiny of the policy or of the policy making process. This all supports

the work of Franklin et al. (2008), Lewis et al. (2008) and Davies (2009) who argue that this reliance on press releases and their framing of issues and policy calls into question the autonomy and independence of the UK press and its ability to hold policymakers and politicians to account.

Echoing comments above on the implications of this research for food policy, this question mark over the independence of the UK press has implications for democracy. The proposed theory of mediatized food policy shows the impact of the increasingly contested media space – as Eldridge (1993) points out, this is subject not only to its own commercial and technical constraints but also to constraints on the range of perspectives covered by media representation – this research has found that this also applies to media representation of food policy. Eldridge argues that this has implications for democracy:

“...the implications of the empirical outcomes of the struggle over this terrain are crucial for the ways in which they help or hinder the democratic process. This is so, not only because of the role which the mass media play in consciousness formation, but more specifically because public opinion, which we find crystallized and represented to us throughout the media, is itself affected by knowledge. It is an informed citizenry, not simply an opinionated one, that is a prerequisite for a mature democracy. The mass media, alongside other parts of our cultural apparatus...have a decisive role to play in this respect.” (Eldridge, 1993, p. 20)

This holds true even 20+ years after it was written, however it does not take into account the introduction of new and social media and the implications of this development for mediatized food policy. Could, as some have argued, social media provide an alternative public forum or agora which would better represent and debate public views than the mass media? This will be explored and examined in the next section.

9.6 Looking Forward

It has been beyond the scope of this research to investigate empirically the impact of the introduction of social media on the case of the government's nutrition policy and recommendations on red and processed meat consumption and the prevention of bowel cancer. However, it is important to acknowledge the enormous impact of social media on the media landscape in the UK. The interactivity offered by so-called Web 2.0 or Web 2.1 (the second wave of internet development) where ‘social’ media platforms such as Facebook and Twitter and opportunities for low-cost, simple and quick self-publication such as blogging sites or comment pages has given users the opportunity for a much more interactive experience of the internet. How could or should this change the proposed theory of mediatized food and nutrition policy. Social media offers opportunities to bypass traditional mass media, with citizens and organizations both able to put their own viewpoints across without the ‘mediator’ of a journalist.

The literature reflects the excitement of researchers at the early promise of Web 2.0 – they envisaged social media as a new Habermasian public sphere in which citizens could be re-engaged with politics and a more full and democratic engagement of citizens with public policy would result (Iosifidis and Wheeler, 2015). The idea of a Public Sphere is based on Habermas's (1989) argument that a public sphere existed in 18th Century Europe, where democratic debate could take place in an open forum for public discussion. He laments the decline of this public sphere. Many scholars have disagreed with Habermas's original idea, claiming that his model was far from democratic since various groups (e.g. women) were marginalized in 18th century European society, and that his theory, while useful, fails to explain the emergence of many different and distinct public spheres in modern societies (Susen, 2011; Lonsdale, 2014). Despite these shortcomings identified by various authors, Habermas's theory of the Public Sphere remains influential and a useful way to think about a normative model of mediated debate. Habermas himself (2006) has examined the impact of normative communication and public sphere theory on empirical research, saying:

‘mediated political communication in the public sphere can facilitate deliberative legitimization processes in complex societies only if a self-regulating media system gains independence from its social environments and if anonymous audiences grant a feedback between an informed elite discourse and a responsive civil society.’
(Habermas, 2006, p. 411).

In other words, the media can promote fair discussion and deliberation about political issues in complex societies only if the media system is independent and allows feedback between citizens, informed elites and civil society.

Assuming Habermas to be correct, this normative model would require the media to operate as an open public forum or sphere in which debate about food policy was freely and fairly allowed between sections of society. Clearly this is an idealized, normative model that has not and cannot be realized within the assumptions of agenda setting theories, where an infinite number of issues and problems compete for public attention yet very few actually secure it; those that do secure attention are socially constructed and shaped by cultural, economic, social and political pressures. However, it forms a useful model with which to compare the mediatization of food policy at particular points in time, including the impact of the introduction of social media. Among the authors that have addressed this issue, Iosifidis and Wheeler, (2015), discuss social media as public sphere, arguing that social media could facilitate citizenship, and note that *“the Internet holds the potential for a fuller realization of a democratic set of public spheres in which a true level of engagement and fulfilment will occur”* (p.4). However, they conclude that such idealistic views should be treated with caution, as despite its promise and some successes, social media is still subject to the same power struggles as mass media and has not always advanced public dialogue or shifted national politics. While some citizens may be able to access

social media and use it as a new form of participatory democracy, the triangle of food policy actors (Lang, 2005) is just as powerful in social media as it is in the mass media.

As for other future developments relating to the findings of this research, there is currently no sign that UK government nutrition policy making is likely to become more transparent – for either the media or the public. Since SACN was moved back to the Department of Health from the Food Standards Agency by the Conservative/Liberal coalition government of 2010, interviewees reported its activities to be more closed to the public. SACN has since been moved again to PHE or Public Health England, an executive agency of the Department of Health whose approach to openness and deliberative democracy is as yet uncertain. The Food Standards Agency's model of transparent policy making, with open meetings conducted online, has been held up as a successful model of deliberative governance (Hajer et al., 2009). However, there are currently no signs of this model being taken up by nutrition policymakers in the Department of Health, or of more effective forms of public engagement with and in nutrition policymaking becoming the norm. Interviewees engaged with research on the effect of red and processed meat consumption on the development of bowel cancer reported that more work was underway and needed to address the uncertainties in the data in this area and come up with more conclusive recommendations. At the time of writing as far as can be ascertained there are no plans to revisit government recommendations on red and processed meat consumption in relation to cancer prevention.

9.7 Summary

This chapter has outlined the results of this research with seven key findings from the results chapters 5-8:

- 1 Limitations in the evidence considered by policymakers when developing the policy.
- 2 Lack of transparency in the policymaking process
- 3 Consideration of the media and media coverage primarily at the end of the policymaking process.
- 4 Commercial pressures on the print media industry influencing journalists' reporting of food policy.
- 5 Key stakeholders including government seeking to influence print media coverage of food policy.
- 6 The iconic status of red and processed meat in media coverage, where its consumption was presented as a matter of individual choice.
- 7 Long periods of inaction on the part of policy-makers

In addition, it has discussed these findings in the context of the 'agenda setting' theoretical framework, identifying the Punctuated Equilibrium model as useful to partially explain the

research problem and the findings of the research. The Punctuated Equilibrium model has been found, however, to be insufficient to explain the overarching, complex inter-relationship between media and food policy and this research has identified a relatively new theory of mediatization as another useful theory to draw upon. Using mediatization and punctuated equilibrium in combination, and in response to calls in the literature to develop an integrated theory a proposed integrated theory of mediatized food policy has been developed and expanded upon.

The implications for food policy and journalism (research and practice) have been presented. For food policy, the research identified a complexity in the construction of policy which negates simplistic notions of evidence-based policy making. A lack of transparency about this complex co-construction of policy (in which media plays a part) allows interested stakeholders such as the meat industry or NGOs with a vested interest to lobby for policy change via the press or wider media. This research has shown a weakened press who rarely scrutinize policy and policymaking, whether because of time constraints, lack of editorial interest or lack of transparency on the part of the policy makers. The inevitable conclusion is a lack of informed consent – citizens are not party to or involved in a discussion or debate about policy formulation, or policy decisions.

Looking forward, the implications of social media on the theory of Mediatized Food Policy were imagined, using recent research on social media as a public sphere or forum and the ramifications of this for policy making and democracy were proposed. Scholars have argued that social media has the power to reconnect citizens with the political process, however, this has been contested and further research is needed to test the impact of social media on food policy and food policy making.

Chapter 10. Conclusion

10.1 Introduction

This chapter considers the contribution this research has made to the fields of food policy and journalism – including to the theories of agenda setting and mediatization. In addition, the contribution of this research to the ongoing debate about evidence-based policy making is set out – an important discussion for food policy. Finally, the data set out in this study, particularly the interview data, provides further evidence on the processes, routines and norms of the media which is valuable for scholars who continue to assess the impact ‘media logic’ and media processes have on society.

Section 10.3 onwards reflects on the research process – this is both a personal reflection as well as a reflection on the research design, research methods and analysis of the data, including thoughts on the limitations of the research. To conclude this chapter, and this thesis, the opportunities that this research project has thrown up for publication and future research are detailed.

10.2 The contribution of this research

The implications for food policy and journalism of this research already described in Chapter 9 highlight the value of the integration of mediatization and agenda setting theories that have been explored and reported in this thesis. This identified a complexity in the construction of policy which negates simplistic models of evidence-based policy making. A lack of transparency about this multifaceted co-construction of policy (in which media plays a part) was found to have allowed stakeholders with a vested interest to lobby to try to set the policy agenda via the press or wider media. This research has shown a weakened press who have rarely scrutinized policy and policymaking on this issue, whether because of time or budgetary constraints, lack of editorial interest or lack of transparency on the part of the policy makers. The inevitable conclusion is a lack of informed consent – citizens are not party to or involved in a discussion or debate about policy formulation, or policy decisions in this area. These overarching implications for food policy and journalism shine new light on the relationship between food policy and media coverage, illuminating an interaction that is not often scrutinized in such depth or with an interdisciplinary lens.

In addition, this research addresses a gap in the literature on food policy, by examining, what is to the best of this author’s knowledge, a previously un-researched period of government policy development on red and processed meat consumption and cancer prevention. The original research undertaken has looked at previously unanalysed data in the form of policy documents - both those that exist in the public realm (SACN documents) and those that have laid unanalysed in the Department of Health archive for more than twenty years. It has also developed new techniques for conducting qualitative content analysis using Excel to document

trends in reporting and qualitative coding to analyse more latent themes in the data. Combining these data sources with the thematic analysis of semi-structured interviews the research has provided three separate data sources and three separate methods to provide a rich picture of the case study under analysis. Triangulating the data using a tabulation-form framework analysis has provided a robust set of findings which have then been further analysed according to two theoretical frameworks, the agenda setting model of Punctuated Equilibrium and the overarching concept of Mediatization.

The research has added to the food policy debate in the areas of evidence-based policymaking and public engagement in policymaking (see Chapter 9, section 9.5 for a detailed explanation of the implications in the areas of food policy and journalism). For journalism, the interview data in conjunction with the newspaper content analysis has shed new light on the processes and norms under which print journalists covering the nutrition policy 'beat' operate. This is an important contribution to the field of journalism in which the norms and processes of media production are often overlooked in favour of the simple analysis of media content and the scrutiny of its effect.

In addition, this research has responded to the call for the integration of the theories of political agenda setting and mediatization of politics (Van Aelst et al., 2014) with a new model of mediatized food policy that maps empirical research onto key mediatization concepts and uses political agenda setting theory in the form of Punctuated Equilibrium to theorize the mediatization of food policy.

10.3 Reflections on the doctoral process

Green and Thorogood (2014) emphasize the importance of reflection and reflexivity as an essential part of the qualitative approach – the recognition that the researcher is an integral part of the research process and must be aware of their own inevitable influence on the research design, analysis and findings. Snape and Spencer (2003) advise that qualitative researchers should guard against this inevitable bias and try as much as possible to use reflection and a reflexive approach to limit the researcher's impact on those she is researching. However, Green and Thorogood (2014) also caution against either a surface reporting of reflexivity, when it is almost a box ticking exercise, and also against over-personal accounts of fieldwork which focus more on the researcher than the research itself. In this spirit, this section of this thesis considers the doctoral process in a personal reflection of the work the researcher has undertaken but taking note of the impact this has had on the research, as well as outlining the limitations of the research.

This research project was begun in October 2011 and the writing up of the thesis was completed in June 2017. The process of this research in some ways reflects one of the major findings of the research – that it is not possible to evaluate the relationship between UK print media coverage and food policy without taking into account the wider range of actors, the context and the complex web of forces (social, cultural, economic) under which both media and food policy are constructed.

Bryman (2012, p. 393) reminds us that *“knowledge’ from a reflexive position is always a reflection of a researcher’s location in time and social space.”* As explained in Chapter 1, the background of the researcher as a former journalist now working in academia has had an obvious impact on the research she has done. The amount of time this research project has taken to complete is evidence of the relative inexperience of the researcher, particularly at the beginning of this project. While the overall subject of ‘diet and cancer and the media’ was identified from the outset of the project, it took at least the first year of research to narrow the focus of the project and identify a suitable theoretical framework and subject area for the case study. This necessitated a further period of literature review, to properly formulate the research questions and produce a robust research design. Early in the research process, the importance of an iterative research design was considered and accepted (Bassett, 2010). However, once the subject area of the case design (the UK government policy on red and processed meat consumption and cancer prevention and media coverage of it) was stable, and the research questions were tabled, along with methods for answering the research questions, this aspect of the research design did not significantly change. However, the iterative nature of the research project became evident, because the findings of the research as the field work progressed had an impact on the focus of the research. Bassett (2010) argues that an iterative approach to qualitative research can provide the flexibility to adapt data collection and analysis as the research process develops as well as strengthen research findings since it provides a deep understanding of the data analysed. As noted above, it became obvious during the data collection that the relationship between UK print media coverage and UK government food policy in this case was not linear but complex and messy, as outlined in Chapter 9. The original title for this thesis asked what role UK print media coverage played in food policy – it was later revised to take account of the emerging complexity which is reflected in the richness of the data, its analysis and the multi-faceted nature of the findings.

At the same time that this doctoral research was being conducted, several other research projects were undertaken, to provide support and a ‘testing ground’ for the research methods and processes adopted and detailed in this thesis. Yin (2009) defines this process as a pilot case study, and argues that these are undertaken not as ‘trial runs’ for the actual research design but as less connected and more formative case studies, in order to develop and refine concepts and road test potential research designs. The first of these was a case study of the

media coverage of a research paper published in the BMJ, which looked at the effect of dietary fibre from wholegrains on incidence of bowel cancer. This case study, which was initially undertaken in 2011/2012, was eventually written up as a paper and published in the journal *Geoforum* (Wells, 2016). A further project looking at UK print media coverage of food banks was undertaken during 2013 and was published in the *British Food Journal* in 2014 (Wells and Caraher, 2014). Both these projects provided extremely useful opportunities to explore methods of media analysis and some of the theoretical concepts and issues that have an impact on media coverage of food and food policy. While these projects may have had an impact on the progress of the doctoral research and the time taken to complete the research, and write up the findings, they provided invaluable support for the research design of this research as well as a source of confidence in the research methods for the researcher.

These two projects then, highlighted the importance of solid research design strengthened by robust research questions underpinned by a thorough literature review. In addition, the value of a well-built theoretical framework on which the research design was based was recognised. Anfara (2008) argues that theoretical frameworks in qualitative research can focus and situate a study as well as revealing and concealing both meaning within the study, and its strengths and weaknesses. It was important that this scaffolding or framework supporting the study and informing the research questions and methodological approaches was put in place before embarking on data collection, to make sure the data collected was valid and relevant for the research questions. However, as the field work progressed it was realised that the iterative nature of qualitative inquiry means that the researcher should always be open to new information; is seeking to allow the data its own voice and should be always open to new and developing strands of relevant literature. Some scholars in qualitative research methods have called this 'emergent design' (Morgan, 2008, p. 245) which they say *'involves data collection and analysis procedures that can evolve over the course of a research project in response to what is learned in the earlier parts of the study'*. In practice this means that qualitative research should be flexible enough to allow for unexpected findings or research revelations and to be open to allowing an iterative approach which lets you incorporate these strands into the research design or the findings. Examples of this occurred when access to a large number of COMA-related documents in the Department of Health archives was granted; when interviewees who were closely involved in the nutrition policy making process were unexpectedly traced; or when a theoretical framework which seemed relevant to the findings was traced, that had not previously been considered.

Another aspect of this issue of openness on the part of the researcher arises with the concept of reflexivity which was introduced by a fellow researcher at the Centre for Food Policy early in the research process. At first considering that the previous life experience of the researcher would not be relevant to the field of study, it soon became obvious that a perspective as a former journalist, albeit a radio journalist, not a print journalist, would play a big part in assumptions

about and perspectives on the research problem; framing of the research questions as well as the understanding, analysis and interpretation of the findings. Indeed, as a qualitative researcher it was understood that this aspect of the researcher's lived experience would colour every aspect of this research and this thesis. While this was acknowledged throughout the research and writing up process, the researcher has also tried not to let this aspect dominate the research process or the research design. For example, during interviews with journalists, a concerted effort was made by the researcher not to make assumptions about interviewees perspectives or attitudes, or their ways of working or the processes they carried out as part of their work.

With hindsight, the researcher underestimated the length of time it would take to process the data that had been collected, in a robust and reliable way. The time allotted for verbatim transcription of the interviews was far too short, likewise the coding of the large number of press reports and policy documents that had been collected. A more experienced researcher may have recognised how time consuming the processing and analysing of the data would be and would have taken steps to develop a research design that included enough data to render the findings reliable without proving unmanageable - this has to do with issues of sample size and saturation. Saumure and Given (2008) define data saturation as occurring when no new or relevant information appears during data collection. However, they acknowledge that this is relative – in the sense that if researchers are continually collecting new data and information something new may emerge, but there can be what they call a 'law of diminishing returns' i.e. the new details add little to what has already been discovered. In common with Saumure and Given (2008) Morse (2004) cautions that achieving data saturation is not straightforward, especially for those new to qualitative research. On reflection, it was necessary to collect the data that has been included in this thesis, although perhaps more focussed sampling from the outset may have been sensible. There are a number of limitations on the data due to constraints that were disappointing but beyond the researcher's control. Research on the first embedded unit of analysis (1993-1998) was hampered by a lack of living potential interviewees and the patchy and inconsistent nature of the archive documents. Many of the potential interviewees were either no longer living or were not traceable due to the length of time since this policy recommendation was formulated. The archive documentation while rich and varied was patchy and inconsistent when compared to the ordered and well documented (if comparatively sparse) records of the later nutrition policy making period (2001-2011). In addition, across both embedded units of analysis it was difficult to secure interviews with journalists who were members of staff of national UK newspapers. This may be because the field work was conducted at the same time as the Leveson inquiry which uncovered unsavoury and illegal aspects of journalistic practices. This may have discouraged journalists from allowing themselves and their work to be laid open to scrutiny.

This research has concentrated on print media coverage of a specific government nutrition policy. The possibility of looking instead or also at television or radio coverage was explored, but it was obvious that capturing and securing data for the two periods under investigation as part of this case study would have been extremely difficult if not impossible. The benefit of news media databases such as LexisNexis is that they offer reasonable coverage of a large number of national newspapers, going back to the early 1990s and in searchable form. This is currently very difficult to achieve with either television or radio or online coverage (which has its own limitations). This means that the findings of this study apply to UK national print media – other media coverage may of course be different. As explained in Chapter 7, (which outlines the findings of the content analysis of national print media coverage of this issue), though impressive, databases such as LexisNexis are not comprehensive since they are bound by certain rights restrictions. This in effect means that the articles returned by any search in such databases can only be taken as a guide and should not be regarded as comprehensive. This makes the importance of the triangulation of this data source with the other data sources (interview data, policy document data) more relevant and important for the validity and reliability of this study.

10.4 Opportunities for publication and further research

This thesis has presented several opportunities for publication of this research. The preliminary case study and work on food banks in the UK print media mentioned above (p.282) have already been published in peer reviewed academic journals (Wells and Caraher, 2014; Wells, 2016). The research and publication of these two papers was instrumental in developing the techniques and some of the concepts used in this thesis. In addition, two book chapters using methods and literature developed in this thesis were written and published during this PhD process (Wells and Caraher, 2016; Wells and Caraher, 2018). For future publication, the author has already worked the policy analysis findings outlined in Chapter 6 into a paper which she intends to submit to a peer reviewed policy journal after completing this thesis. In addition, the author plans to work the findings from Chapter 7, the content analysis of press coverage 1993-2011, into another paper and submit this to a peer reviewed journal. Issues around content analysis as a method and the reliability of databases used for data collection in large scale content analyses of print media coverage as raised in the limitations section of this chapter (see above, p. 283-284) have inspired the author to begin research replicating that existing in the current literature on content analysis but which tends to have an American focus (Weaver and Bimber, 2008; Fowler et al. 2012). This paper would focus on UK press and investigate the extent to which printed newspaper articles are available in commonly used media databases such as LexisNexis and Proquest. The author has also recently secured a grant from the City, University of London Pump Priming Fund towards the continuation and development of this current research. This grant will fund research looking at the use of social media by UK government departments involved in making food policies.

This thesis has also thrown up a number of opportunities for further research. Firstly, the rich seam of data on the workings of COMA and the relationship between COMA and wider government policy during the 1990s as food policy governance was undergoing major changes deserves more thorough investigation. This would obviously be at the discretion of the archivists at the Department of Health, but a longer period of time spent documenting and analysing these documents would yield further important findings about this crucial period in food policy history and development.

It is unfortunate that limitations in technology and available databases often frustrate researchers' efforts to analyse television, radio or online media coverage. This promotes the bias in the journalism literature and empirical research into media content towards print media coverage. Great opportunities exist here to develop new and existing research methods to analyse radio or television data and the growing and important changes that take place in the media coverage of food policy as mass media production gives way increasingly to social and new media.

Finally, the approach taken to test the findings under two combined theoretical frameworks poses opportunities to further test the potential for a combined use of political agenda setting and political mediatization. This could tease out both the empirical and theoretical implications of research into the interaction between media and policy. Any opportunities for this, or any other interested researcher to further explore and test the concept of mediatized food policy, following either the research design or the theoretical framework introduced here, would be welcome.

References:

- AHDB (2013) *UK Yearbook – Cattle*. Kenilworth: Agriculture and Horticulture Development Board Available: http://www.eblex.org.uk/wp/wp-content/uploads/2014/02/m_uk_yearbook13_Cattle110713.pdf (Accessed: 8th June 2017)
- Altheide, D.L. (2002) *Creating fear: News and the construction of crisis*. Hawthorne: Aldine de Gruyter
- Altheide, D.L. and Schneider, C.J. (2013) *Qualitative media analysis*. Los Angeles: SAGE.
- Altheide, D. L., and Snow, R.P. (1979) *Media logic*. Beverly Hills, CA: SAGE.
- Anderson, A. (2006) 'Spinning the rural agenda: The Countryside Alliance, fox hunting and social policy' *Social Policy & Administration*, 40(6), pp. 722-738.
- Anderson, A.A., Brossard, D. and Scheufele, D.A. (2012) 'News coverage of controversial emerging technologies', *Politics and the Life Sciences*, 31 (1-2) pp. 87-96.
- Anfara, V.A. (2008) 'Theoretical Frameworks' in Given, L. M. *The SAGE encyclopedia of qualitative research methods* Thousand Oaks, CA: SAGE Publications Ltd doi: 10.4135/9781412963909
- Armstrong, B. and Doll, R. (1975) 'Environmental factors and cancer incidence and mortality in different countries, with special reference to dietary practices' *International Journal of Cancer*, 15(4), pp. 617-631.
- Arthur, C. and Brown, C. (1997) 'Beef on the bone is banned in new scare' *The Independent*, Thursday 4 December available from: <http://www.independent.co.uk/news/beef-on-the-bone-is-banned-in-new-scare-1286659.html> (accessed 16/06/16)
- Aveyard, H. (2014) *Doing a literature review in health and social care: A practical guide*. McGraw-Hill Education
- Baines, P.R. and Harris, P. (2000) 'Kite flying: the role of marketing in the post-BSE British beef export industry', *British Food Journal*, 102 (5/6) pp. 454-464.
- Bakir, V. (2006) 'Policy agenda setting and risk communication', *Harvard International Journal of Press/Politics*, 11 (3) pp. 67-88.
- Barling, D., Lang, T. and Caraher, M. (2002) 'Joined-up Food Policy? The Trials of Governance, Public Policy and the Food System', *Social Policy & Administration*, 36 (6) pp. 556-574.
- Bartlett, C., Sterne, J. and Egger, M. (2002) 'What is newsworthy? Longitudinal study of the reporting of medical research in two British newspapers', *BMJ*, 325 (7355) pp. 81-84.
- Bassett, B. R. (2010) 'Iterative' in Mills, A. J., Durepos, G. & Wiebe, E. (Eds) *Encyclopedia of case study research* Thousand Oaks, CA: SAGE Publications Ltd doi: 10.4135/9781412957397
- Basu, A.J. and Hogard, E. (2008) 'Fit for public consumption? An exploratory study of the reporting of nutrition research in UK tabloids with regard to its accuracy, and a preliminary investigation of public attitudes towards it', *Public health nutrition*, 11 (11) pp. 1124-1131.

Bauer, M., Howard, S., Hagenhoff, V., Gasperoni, G., Rusanen, M. and Dora, C. (2006) 'The BSE and CJD crisis in the press.', in Dora, C. (Ed.), *Health, hazards and public debate: lessons for risk communication from the BSE/CJD saga*, Geneva: World Health Organisation, pp. 125-164.

Baumgartner, F.R. and Jones, B.D. (2009) *Agendas and instability in American politics*. Chicago; London: The University of Chicago Press.

BBC News (2005) *BSE and CJD: Crisis Chronology. 1996: BSE-CJD link* BBC News website, available from http://news.bbc.co.uk/1/english/static/in_depth/health/2000/bse/1996.stm (accessed 12/06/16)

BBC News (2005a) *Timeline: Hunting Row* BBC News website, available from <http://news.bbc.co.uk/1/hi/uk/1846577.stm> (accessed 02/08/16)

Beardsworth, A. (1990) 'Trans-science and moral panics: understanding food scares', *British Food Journal*, 92 (5) pp. 11-16.

Beardsworth, A. and Keil, T. (1997) *Sociology on the menu: an invitation to the study of food and society*, 1st edn, Routledge, London.

Bennett, L. and Livingston, S., (2003) 'A Semi-Independent Press: Government Control and Journalistic Autonomy in the Political Construction of News' *Political Communication* 20(4):359-362

Bennett, P., and Calman, K., (Eds) (1999) *Risk Communication and Public Health*, Oxford: OUP

Bennett, P., Coles, D., and McDonald, A. (1999) 'Risk communication as a decision process' in Bennett, P., and Calman, K., eds, *Risk Communication and Public Health*, Oxford: OUP

Berger, A.A. (2011) *Media and communication research methods: an introduction to qualitative and quantitative approaches*. Thousand Oaks; London: SAGE.

Berger, P.L and Luckmann, T (1966) *The Social Construction of Reality* Harmondsworth: Penguin

Berkowitz, D. (1992) 'Who Sets the Media Agenda? The Ability of Policymakers to Determine News Decisions' in Kenamer, J.D (ed) *Public Opinion, The Press and Public Policy*, Westport: Praeger

Berridge, V., (ed) (2005) *Making health policy: Networks in research and policy after 1945* (Vol. 75) Amsterdam; New York: Rodopi

Berridge, V. and Stanton, J. (1999) 'Science and policy: historical insights', *Social science & medicine* (1982), 49 (9) pp. 1133.

Besley, J.C. and Nisbet, M. (2013) 'How scientists view the public, the media and the political process', *Public understanding of science* 22 (6) pp. 644-659.

Bingham, S.A. (1999) 'High-meat diets and cancer risk', *Proceedings of the Nutrition Society*, 58 (02) pp. 243-248.

Blumler, J.G. (2014) 'Mediatization and Democracy' in Esser, F. and Stromback, J. (Eds) *Mediatization of Politics* Basingstoke: Palgrave Macmillan pp. 31-42

Bodmer, W. (2010) 'Public understanding of science: the BA, the Royal Society and COPUS', *Notes and Records of the Royal Society*, vol. 64, no. Suppl 1, pp. S151-S161

Born, G. (2002) 'Reflexivity and ambivalence: Culture, creativity and government in the BBC', *Cultural Values*, 6(1-2), pp. 65-90.

Bourdieu, P. (2013) *Distinction: A Social Critique of the Judgement of Taste*. Hoboken: Taylor and Francis.

Boydston, A.E. and Glazier, R.A. (2013) 'A Two- Tiered Method for Identifying Trends in Media Framing of Policy Issues: The Case of the War on Terror', *Policy Studies Journal*, 41 (4) pp. 707-736.

Boykoff, M.T. (2008) 'The cultural politics of climate change discourse in UK tabloids', *Political Geography*, 27 (5) pp. 549-569.

Boykoff, M.T. (2013) 'Public Enemy No. 1?: Understanding Media Representations of Outlier Views on Climate Change', *American Behavioral Scientist*, 57 (6) pp. 796-817.

Boykoff, M.T. and Boykoff, J.M. (2007) 'Climate change and journalistic norms: A case-study of US mass-media coverage', *Geoforum*, 38 (6) pp. 1190-1204.

Boykoff, M.T. and Goodman, M.K. (2009) 'Conspicuous redemption? Reflections on the promises and perils of the 'Celebrization' of climate change', *Geoforum*, 40 (3) pp. 395-406.

Boyland, E.J., Harrold, J.A., Kirkham, T.C. and Halford, J.C.G. (2012) 'Persuasive techniques used in television advertisements to market foods to UK children', *Appetite*, 58 (2) pp. 658-664.

Boyle, J. (2011) 'Vegetarianism and Fruitarianism as Deviance.' In Bryant, C.D. (Ed) *The Routledge handbook of deviant behavior*, pp. 266-271 Abingdon: Routledge.

Boyle, P., Boffetta, P. and Autier, P. (2008) 'Diet, nutrition and cancer: public, media and scientific confusion', *Annals of Oncology*, 19 (10) pp. 1665-1667.

Bright, S. (1996) 'I think he's weakening!' [black drawing ink on marker pad] *Brighty's Bloggage* available: <http://brightys-bloggage.blogspot.co.uk/2010/07/> (Accessed: 8th June 2017).

British Nutrition Foundation (2015) 'Funding' available: <https://www.nutrition.org.uk/aboutbnf/whoweare/funding.html> (accessed: 3/1/16)

Brody, J.E. (1999) 'Communicating Cancer Risk in Print Journalism', *Journal of the National Cancer Institute. Monographs*, 1999 (25) pp. 170-172.

Brown, P., Zavestoski, S.M., McCormick, S., Mandelbaum, J. and Luebke, T. (2001) 'Print media coverage of environmental causation of breast cancer', *Sociology of health & illness*, 23 (6) pp. 747-775.

- Brown, K.A., Hermoso, M., Timotijevic, L., Barnett, J., Lillegaard, I.T.L., Řehůřková, I., Larrañaga, A., Lončarević-Srmić, A., Andersen, L.F., Ruprich, J. and Fernández-Celemín, L. (2013) Consumer involvement in dietary guideline development: opinions from European stakeholders. *Public health nutrition*, 16(05), pp. 769-776.
- Bryman, A. (2012) *Social research methods*. New York, NY: Oxford University Press.
- BSE Inquiry (2000) *The Inquiry into BSE and variant CJD in the United Kingdom* BSE Inquiry website, available from:
<http://webarchive.nationalarchives.gov.uk/20060715141954/bseinquiry.gov.uk/> (accessed 12/06/16)
- Bubela, T.M. and Caulfield, T.A. (2004) 'Do the print media "hype" genetic research? A comparison of newspaper stories and peer-reviewed research papers', *CMAJ : Canadian Medical Association journal*, 170 (9) pp. 1399-1407.
- Buften, M.W. (2001) 'Coronary heart disease versus BSE: Characterising official British expert advisory committees', *Science and Public Policy*, 28 (5) pp. 381-388.
- Buften, M.W. (2005) 'British Expert Advice on Diet and Heart Disease c.1945-2000' in V. Berridge (ed.) *Making health policy: Networks in research and policy after 1945*. Amsterdam: New York: Rodopi,
- Buften, M.W. and Berridge, V. (2000) 'Post-war nutrition science and policy making in Britain c. 1945-1994: the case of diet and heart disease' in Phillips, J. and Smith, D. F. (Ed.s) *Food, Science, Policy and Regulation in the Twentieth Century: International and Comparative Perspectives*, London: Routledge p. 207.
- Buften, M.W., Smith, D. F. and Berridge, V. (2003) 'Professional ambitions, political inclinations, and protein problems: conflict and compromise in the BMA Nutrition Committee 1947–1950.' *Medical history*, 47(04), pp. 473-492.
- Buse, K., Mays, N. and Walt, G. (2005) *Making health policy*. Maidenhead: Open University Press.
- Butler, D. and Butler, G. (2000) *Twentieth Century British Political Facts*, Basingstoke: Palgrave Macmillan.
- Butler, D. and Butler, G. (2006) *British Political Facts since 1971*, Basingstoke: Palgrave Macmillan.
- Byrne, B. (2012) 'Qualitative interviewing', in Seale, C. ed. *Researching society and culture*, 3, pp. 206-226 London: Sage
- Cairney, P. (2012) *Understanding public policy: theories and issues*. Basingstoke: Palgrave Macmillan.
- Cairney, P. (2016) *The Politics of Evidence Based Policy Making* London: Palgrave Macmillan
- Cairney, P. (2016a) 'Evidence-based Policymaking' and the Study of Public Policy' *Paul Cairney: Politics and Public Policy* 5 February. Available at:

<https://paulcairney.wordpress.com/2016/02/05/evidence-based-policymaking-and-the-study-of-public-policy/> accessed 26/11/16

Cairney, P., Oliver, K. and Wellstead, A. (2016) 'To Bridge the Divide between Evidence and Policy: Reduce Ambiguity as Much as Uncertainty'. *Public Administration Review*, 76(3), pp. 399-402.

Cameron, R. (2011) 'Mixed methods research: The five Ps framework', *Electronic Journal of Business Research Methods*, 9 (2) pp. 96-108.

Campbell, A. (2011) *Diaries Volume Two: Power and the People* London: Random House.

Campbell, A. (2012) *The Burden of Power: Countdown to Iraq -The Alastair Campbell Diaries*. London: Random House.

Canel, M.J., and Sanders, K. (2013) 'Introduction: Mapping the field of government communication' in Sanders, K. and Canel, M.J. (eds) *Government Communication: Cases and Challenges* Bloomsbury pp. 1-26

Caraher, M., Carey, R. McConell, K. and Lawrence, M. (2013) 'Food Policy Development in the Australian State of Victoria: A Case Study of the Food Alliance.' *International planning studies*, 18(1), pp. 78-95.

Carslaw, N. (2008) 'Communicating risks linked to food – the media's role', *Trends in Food Science & Technology*, 19 (1) pp. S14-S17.

Carver, R.B., Rødland, E.A. and Breivik, J. (2013) 'Quantitative Frame Analysis of How the Gene Concept Is Presented in Tabloid and Elite Newspapers', *Science Communication*, 35 (4) pp. 449-475.

Castell, S., Charlton, A., Clemence, M., Pettigrew, N., Pope, S., Quigley, A., Navin Shah, J. and Silman, T. (2014) *Public Attitudes to Science 2014*, London: Ipsos MORI

Castells, M. (2012) *Networks of Outrage and Hope: Social Movements in the Internet Age*. Cambridge: Polity. ^[1]_[SEP]

Chan, D.S., Lau, R., Aune, D., Vieira, R., Greenwood, D.C., Kampman, E. and Norat, T. (2011) 'Red and processed meat and colorectal cancer incidence: meta-analysis of prospective studies', *PloS one*, 6 (6) pp. e20456.

Chandler, D. and Munday, R., 2011 *A dictionary of media and communication*. OUP Oxford.

Chapman, S., McLeod, K., Wakefield, M. and Holding, S. (2005) 'Impact of news of celebrity illness on breast cancer screening: Kylie Minogue's breast cancer diagnosis', *Medical journal of Australia*, 183 (5) pp. 247.

Chen, J., Eborall, H. and Armstrong, N. (2014) 'Stakeholders' positions in the breast screening debate, and media coverage of the debate: a qualitative study', *Critical Public Health*, 24 (1) pp. 62-72.

Chenoweth, N. (2001) *Rupert Murdoch: the untold story of the world's greatest media wizard*, 1st American edn, Crown Business: New York.

- Clarke, J. and Van Amerom, G. (2008) 'Mass print media depictions of cancer and heart disease: community versus individualistic perspectives?', *Health & Social Care in the Community*, 16 (1) pp. 96-103.
- Clarke, J.N. and Everest, M.M. (2006) 'Cancer in the mass print media: fear, uncertainty and the medical model', *Social science & medicine*, 62 (10) pp. 2591-2600.
- Clarkson, J. (2011) 'Swap meat for leaves....and die bored aged 28', *The Sun*, 26 February p. 11
- Cobb, R., Ross, J.K. and Ross, M.H. (1976) 'Agenda building as a comparative political process.' *The American Political Science Review*, 70(1), pp. 126-138.
- Cobb, R.W. and Elder, C.D. (1972) 'Individual orientations in the study of political symbolism'. *Social Science Quarterly*, pp. 79-90.
- Cobb, R. W., and Elder, C. (1983) *Participation in American Politics: The Dynamics of Agenda-Building*. 2nd ed. Baltimore: John Hopkins University Press.
- Coebergh, J., Martin-Moreno, J.M., Soerjomataram, I. and Renehan, A.G. (2010) 'The long road towards cancer prevention: 4 steps backward and 8 forward', *European journal of cancer*, 46 (14) pp. 2660-2662.
- Cohen, B.C. (1963) *The press and foreign policy*, Princeton: Princeton University Press
- Cole, P. (2005) 'The Structure of the Print Industry', in: Keeble, R. (Ed.), *Print Journalism: a critical introduction*, Abingdon: Routledge, pp. 21-38.
- Connor, S.M. (2006) 'Food-related advertising on preschool television: building brand recognition in young viewers' *Pediatrics*, 118(4), pp. 1478-1485.
- Committee on Standards in Public Life (2016) 'Why Standards Continue to Matter' *Blog: Committee on Standards in Public Life*, 8 July, available at: <https://cspl.blog.gov.uk/2016/07/08/why-standards-continue-to-matter/> (Accessed: 19/11/17).
- Cooper, B.E.J., Lee, W.E., Goldacre, B.M. and Sanders, T.A.B. (2011) 'The quality of the evidence for dietary advice given in UK national newspapers', *Public Understanding of Science*, 21(6), pp. 664-673.
- Cooper, D. (2000), *Snail Eggs and Samphire: Dispatches from the Food Front*, London: Macmillan.
- Coster, O. (2007) 'Eating grapefruit can increase the risk of breast cancer by almost a third, a study suggests', *Daily Mail*, 13 September
- Cottle, S. (2003) *News, public relations and power*. London: Sage
- Cousins, K. and Kypri, K. (2008) 'Alcohol advertising in the New Zealand university student press', *Drug and Alcohol Review*, 27 (5) pp. 566-569.
- Coveney, J. (2006) *Food, morals and meaning: The pleasure and anxiety of eating*. Routledge.

- Coveney, J., Meyer, S.B., Ward, P.R., Wilson, A., Lloyd, S., Calnan, M., Henderson, J. and McCullum, D. (2014) 'The role of the media in construction and presentation of food risks', *Health, Risk & Society*, 16 (7) pp. 615-630.
- Cox, J., & Hassard, J. (2010) 'Triangulation'. In Albert J. Mills, G. Durepos, & E. Wiebe (Eds.), *Encyclopedia of Case Study Research*. (pp. 945-949). Thousand Oaks, CA: SAGE Publications, Inc. doi: <http://0-dx.doi.org.wam.city.ac.uk/10.4135/9781412957397.n348>
- Cunningham, B. (2003). 'Re-thinking objectivity'. *Columbia Journalism Review*, 42(2), pp. 24-32.
- Curran, J. (2002) *Media and power*. London: Routledge.
- Daily Mail (2006) 'How broccoli helps you combat cancer' *Daily Mail*, 8th February
- Davidson, R., Hunt, K. and Kitzinger, J. (2003) "Radical blueprint for social change"? Media representations of New Labour's policies on public health', *Sociology of health & illness*, 25 (6) pp. 532; 532-552; 552.
- Davies, N. (2009) *Flat earth news: an award-winning reporter exposes falsehood, distortion and propaganda in the global media*. London: Vintage.
- Davis, A. (2003) 'Whither mass media and power? Evidence for a critical elite theory alternative' *Media, Culture & Society*, 25(5), pp. 669-690.
- Davis, A. (2007) 'Investigating Journalist Influences on Political Issue Agendas at Westminster', *Political Communication*, 24 (2) pp. 181-199.
- Davis, A. (2010) *Political communication and social theory*. London: Routledge.
- Davis, M., Lohm, D., Flowers, P., Waller, E. and Stephenson, N. (2014) "'We Became Sceptics": Fear and Media Hype in General Public Narrative on the Advent of Pandemic Influenza', *Sociological Inquiry*, 84 (4) pp. 499-518.
- Davison, W.P. (1983) 'The Third-Person Effect in Communication', *The Public Opinion Quarterly*, 47 (1) pp. 1-15.
- Daw, J.R., Morgan, S.G., Thomson, P.A. and Law, M.R. (2013) 'Here today, gone tomorrow: the issue attention cycle and national print media coverage of prescription drug financing in Canada', *Health policy (Amsterdam, Netherlands)*, 110 (1) pp. 67-75.
- De Brún, A., McKenzie, K., .McCarthy, M, .and McGloin, A. (2012) 'The Emergence and Portrayal of Obesity in The Irish Times: Content Analysis of Obesity Coverage, 1997–2009', *Health communication*, 27 (4) pp. 389-398.
- De Burgh, H., 2008. *Investigative journalism*. Abingdon: Routledge.
- Deacon, D. and Stanyer, J. (2014). 'Mediatization: key concept or conceptual bandwagon?' *Media, Culture & Society*, p.0163443714542218.
- Denzin, N.K. and Lincoln, Y.S. (2000) *Handbook of qualitative research*. London: Sage.

Department of Health (1998) *Nutritional Aspects of the Development of Cancer - Report of the Working Group on Diet and Cancer of the Committee on Medical Aspects of Food and Nutrition Policy*, London: The Stationery Office

Department of Health (2011) *Red meat link to bowel cancer* [press release]

Department of Health (2011a) *Improving Outcomes: A Strategy for Cancer*, online, available <https://www.gov.uk/government/publications/the-national-cancer-strategy> (accessed: 9th November 2017)

Deuze, M. (2005) 'What is journalism? Professional identity and ideology of journalists reconsidered' *Journalism*, 6(4), pp. 442-464.

Diack, L., Pennington, T.H., Russell, E., and Smith, D.F. (2013) 'Departmental, professional, and political agendas in the implementation of the recommendations of a food crisis enquiry: the Milne report and inspection of overseas meat plants.' In Smith, D.F and Philips, J. (Eds) *Food, Science, Policy and Regulation in the Twentieth Century: International and Comparative Perspectives*, 12, pp. 189-207. Abingdon: Routledge

Diack, L. and Smith, D. (2004) 'The media and the management of a food crisis: Aberdeen's typhoid outbreak in 1964' in Berridge, V. and Loughlin, K. (Eds.) *Medicine, the market and the mass media: producing health in the twentieth century*. Abingdon: Routledge.

Directorate-General for Agriculture and Rural Development, European Commission (2012) *Prospects for Agricultural Markets and Income in the EU 2012-2022*. online: European Commission. Available: http://ec.europa.eu/agriculture/markets-and-prices/medium-term-outlook/2012/fullrep_en.pdf (accessed: 10 November 2016)

Dixon, J., (2009) 'From the imperial to the empty calorie: how nutrition relations underpin food regime transitions'. *Agriculture and Human Values*, 26(4), pp. 321-333.

Djerf-Pierre, M. (2012) 'The Crowding-Out Effect: Issue dynamics and attention to environmental issues in television news reporting over 30 years', *Journalism Studies*, 13 (4) pp. 499-18.

Djerf-Pierre, M. (2013) 'Green metacycles of attention: Reassessing the attention cycles of environmental news reporting 1961-2010', *Public understanding of science (Bristol, England)*, 22 (4) pp. 495-512.

Djerf-Pierre, M., Ekström, M., and Johansson, B. (2013) 'Policy failure or moral scandal? Political accountability, journalism and new public management', *Media, Culture & Society*, 35 (8) pp. 960-976.

Doll, R. (1983) 'Prospects for Prevention', *British Medical Journal (Clinical Research Edition)*, 286 (6363) pp. 445-453.

Doll, R. and Peto, R. (1981) 'The causes of cancer: quantitative estimates of avoidable risks of cancer in the United States today', *Journal of the National Cancer Institute*, 66 (6) pp. 1192-1308.

Doubleday, R. and Wilsdon, J. (2013) 'Future directions for scientific advice in Whitehall'

- Downs, A. (1972) 'Up and Down with Ecology-the Issue-Attention Cycle', *Public Interest*, (28) p. 38.
- Dunaway, D.K. (2000) 'Digital radio production: towards an aesthetic', *New Media and Society*, 2(1), pp. 29-50.
- Dunaway, J. (2013) 'Media Ownership and Story Tone in Campaign News', *American Politics Research*, 41 (1) pp. 24-53.
- Dunleavy, P. (2012) 'Gauging the time lags in Whitehall's responses to modern digital processes suggests an enduring problem with organizational culture in the civil service', *British Politics and Policy at LSE*
- EBLEX (2013) *UK Yearbook 2013 - Cattle*. UK: Agriculture and Horticulture Development Board.
- Edy, C.M. (2010) 'Women's Magazine Coverage of Heart Disease Risk Factors: Good Housekeeping Magazine, 1997 to 2007', *Women & health*, 50 (2) pp. 176-194.
- Eidsvaag, T. and Weitkamp, E. (2014) 'Agenda Building in Media Coverage of Food Research: Superfoods coverage in UK national newspapers', *Journalism Practice*, 8 (6) pp. 871-886.
- Eissler, R., Russell, A. and Jones, B.D. (2014) 'New Avenues for the Study of Agenda Setting', *Policy Studies Journal*, 42 (1) pp. S71-S86.
- Elder-Vass, D. (2012) *The reality of social construction*. Cambridge: Cambridge University Press.
- Eldridge, J. E. T., Glasgow University Media Group (1993) *Getting the message: news, truth and power*, New York; London: Routledge.
- Eldridge, J.E.T., Kitzinger, J. and Williams, K. (1997) *The mass media and power in modern Britain*. Oxford: Oxford University Press.
- Elliott, C. (1997) Eat less meat to cut cancer risk, urges report. *The Guardian*, September 26 1997, p. 3
- Entwistle, V. (1994) *Information flows affecting coverage of medical research in the UK quality press* ProQuest, UMI Dissertations Publishing.
- Entwistle, V. (1995) 'Reporting research in medical journals and newspapers', *BMJ*, 310 (6984) pp. 920-923.
- Entwistle, V. and Hancock-Beaulieu, M. (1992) 'Health and medical coverage in the UK national press', *Public Understanding of Science*, 1 (4) pp. 367-382.
- Erasmus, E. and Gilson, L. (2008) 'How to start thinking about investigating power in the organizational settings of policy implementation', *Health policy and planning*, 23 (5) pp. 361-368.

- European Commission Directorate-General for Agriculture (2004) *The Meat Sector in the European Union*. Brussels: EU Publications Office.
- Fernández-Celemín, L. and Jung, A. (2006) 'What should be the role of the media in nutrition communication?' *The British Journal of Nutrition*, 96 Suppl 1 pp. S86-S88.
- Fiddes, N. (1994) 'Social aspects of meat eating', *Proceedings of the Nutrition Society*, 53 (2) pp. 271-279.
- Fitzgerald, R. and Campbell, H., (2001) 'Food scares and GM: movement on the nature/culture fault line', *The Drawing Board: An Australian Journal of Public Affairs*. Available: <http://www.australianreview.net/digest/2001/10/fitzgeraldcampbell.html> (accessed: 19/11/17)
- Flood, A., Velie, E.M., Sinha, R., Chatterjee, N., Lacey, J.V., Schairer C. and Schatzkin, A. (2003) 'Meat fat and their subtypes as risk factors for colorectal cancer in a Prospective Cohort of Women', *American Journal of Epidemiology* 158 (1): 59-68. doi: 10.1093/aje/kwg099
- Florini, A. (2007) *The right to know: transparency for an open world*. Columbia University Press.
- Flynn, A. and Marsden, T. (1992) 'Food regulation in a period of agricultural retreat: the British experience'. *Geoforum*, 23(1), pp. 85-93.
- Food Standards Agency (2013) *FSA letter explains rare burgers are safe to eat* Available: <http://webarchive.nationalarchives.gov.uk/+http://www.food.gov.uk/news-updates/news/2013/5776/letter> Accessed: 8th June 2017.
- Food Standards Agency (2015) *Responsibilities for food-related policies* Available: <http://www.food.gov.uk/about-us/about-the-fsa> Accessed: 3rd March, 2015
- Foster, S. (2010) *Political Communication*, Edinburgh University Press
- Fowler, E., Searles, K. and Ridout, T. (2012) 'Exploring the validity of electronic newspaper databases', *International Journal of Social Research Methodology*, 15 (6) pp. 451-16.
- Franklin, B. (2004) *Packaging politics: political communications in Britain's media democracy*. London: Arnold.
- Franklin, B., Lewis, J. and Williams, A. (2008) 'A compromised fourth estate?: UK news journalism, public relations and news sources', *Journalism Studies*, 9 (1) pp. 1-20.
- Froud, J., Johal, S., Leaver, A., Phillips, R. and Williams, K. (2009) 'Stressed by choice: A business model analysis of the BBC' *British Journal of Management*, 20(2), pp. 252-264.
- Funtowicz, S.O. and Ravetz, J.R. (1993) 'Science for the post-normal age'. *Futures*, 25(7), pp. 739-755.
- Gaber, I. (2007) 'Too much of a good thing: the 'problem' of political communications in a mass media democracy', *Journal of public affairs*, 7 (3) pp. 219; 219-234; 234.
- Galtung, J. and Ruge, M.H. (1965) 'The Structure of Foreign News', *Journal of Peace Research*, 2 (1) pp. 64-91.
- Geertz, C., (1973) *The interpretation of cultures: Selected essays* (Vol. 5019). Basic books.

- Gerlach, K.K., Marino, C. and Hoffman- Goetz, L. (1997) 'Cancer coverage in women's magazines: what information are women receiving?' *Journal of Cancer Education*, 12(4), pp. 240-244.
- Glenn, N.M., McGannon, K.R. and Spence, J.C. (2013) 'Exploring media representations of weight-loss surgery', *Qualitative health research*, 23 (5) pp. 631-644.
- Goffman, E. (1974) *Frame analysis: an essay on the organization of experience*. Harmondsworth: Penguin.
- Goldacre, B. (2007) 'Tell us the truth about nutritionists', *BMJ*, 334 (7588) pp. 292-292.
- Goldacre, B. (2009) *Bad science*. London: Fourth Estate.
- Golding, P., Murdock, G. and Schlesinger, P. (1986) *Communicating politics: mass communications and the political process*. Leicester: Leicester University Press.
- Gollust, S.E. and Lantz, P.M. (2006) 'Communicating population health: print news media coverage of type 2 diabetes', *Social science & medicine*, 69 (7) pp. 1091-1098.
- Gollust, S.E., Lantz, P.M. and Ubel, P.A. (2009) 'The Polarizing Effect of News Media Messages About the Social Determinants of Health', *American Journal of Public Health*, 99 (12) pp. 2160-2167.
- Gornall, J. (2015) 'Sugar: spinning a web of influence', *BMJ*, 350 pp. h231.
- Government Office for Science (2011) *Code of Practice for Scientific Advisory Committees*. UK: Government Office for Science.
- Graham, T., Broersma, M., Hazelhoff, K. and van't Haar, G. (2013) 'Between broadcasting political messages and interacting with voters: The use of Twitter during the 2010 UK general election campaign', *Information, Communication & Society*, 16 (5) pp. 692-716.
- Grant, M. (1999) 'Towards a Central Office of Information: Continuity and Change in British Government Information Policy, 1939-51' *Journal of Contemporary history*, pp. 49-67.
- Great Britain. Parliament. House of Lords (2000) *Science and Society. Third Report of the House of Lords Select Committee on Science and Technology*, London: The Stationery Office
- Green, J. and Thorogood, N. (2014) *Qualitative methods for health research*. Los Angeles: SAGE.
- Greenhalgh, T., & Hurwitz, B. (1999). 'Narrative based medicine: Why study narrative?' *BMJ: British Medical Journal*, 318(7175), 48.
- Greenhalgh, T. and Peacock, R., (2005) 'Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources.' *BMJ*, 331(7524), pp. 1064-1065.
- Greenhough, B. (2010) 'Citizenship, care and companionship: Approaching geographies of health and bioscience.' *Progress in Human Geography*, 35(2), 153-171.

- Gregory, A. (2012) 'UK Government communications: Full circle in the 21st century?', *Public relations review*, 38 (3) pp. 367; 367-375; 375.
- Greiner, A., Clegg Smith, K. and Guallar, E. (2010) 'Something fishy? News media presentation of complex health issues related to fish consumption guidelines', *Public Health Nutrition*, 13 (11) pp. 1786-1794.
- Grilli, R., Ramsay, C. and Minozzi, S. (2002) 'Mass media interventions: effects on health services utilisation' *The Cochrane database of systematic reviews*, (1) pp.CD000389.
- Gross, A. G., (1994) 'The roles of rhetoric in the public understanding of science' *Public Understanding of Science* vol.3 pp. 3-23
- Guba, E. G. (1990) 'The alternative paradigm dialog.' In E. G. Guba (Ed.), *The paradigm dialog* (pp. 17-27). Newbury Park, CA: Sage.
- Guba, E. and Lincoln, Y. (2000) 'Competing paradigms in qualitative research.' In N. K. Denzin, ed. & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Thousand Oaks, CA: Sage.
- Habermas, J. (1989) *The structural transformation of the public sphere: an inquiry into a category of bourgeois society*. Cambridge: Polity.
- Habermas, J. (1996) *Between Facts and Norms*. Cambridge, Polity.
- Habermas, J. (2006) 'Political Communication in Media Society: Does Democracy Still Enjoy an Epistemic Dimension? The Impact of Normative Theory on Empirical Research' *Communication Theory*, 16: 411–426. doi:10.1111/j.1468-2885.2006.00280.x
- Hajer, M.A., Laws, D. and Versteeg, W., 2009 'Authority through deliberative governance: the British Food Standards Agency in action' in Hajer, M. (2009), *Authoritative Governance, Policy-making in the Age of Mediatization*, Oxford, OUP
- Hall, M. (2009) 'Why should the taxpayer bankroll bloated quangos', *Express* July 8 2009 available online <http://www.express.co.uk/comment/columnists/macer-hall/112533/Why-should-the-taxpayer-bankroll-bloated-quangos> accessed 13/01/16
- Halkier, B. and Jensen, I., (2011) 'Doing 'healthier' food in everyday life? A qualitative study of how Pakistani Danes handle nutritional communication.' *Critical Public Health*, 21(4), pp. 471-483.
- Hallin, D.C. (2015) 'Transcending the medical/media opposition in research on news coverage of health and medicine', *Media, culture & society*, 37 (1) pp. 85-100
- Hanitzsch, T., Anikina, M., Berganza, R., Cangoz, I., Coman, M., Hamada, B., Hanusch, F., Karadjov, C.D., Mellado, C., Moreira, S.V., Mwesige, P.G., Plaisance, P.L., Reich, Z., Seethaler, J., Skewes, E.A., Noor, D.V. and Yuen, K.W. (2010) 'Modelling perceived influences on journalism: Evidence from a cross-national survey of journalists', *Journalism and Mass Communication Quarterly*, 87 (1) pp. 5-22.
- Hansen, A. (1994) 'Journalistic practices and science reporting in the British press', *Public Understanding of Science*, 3 (2) pp. 111-134.

- Hanusch, F. (2012) 'Broadening the focus: The case for lifestyle journalism as a field of scholarly inquiry.' *Journalism practice*, 6(1), pp. 2-11.
- Harcup, T. and O'Neill, D. (2001) 'What is news? Galtung and Ruge revisited', *Journalism studies*, 2 (2) pp. 261-280.
- Harrabin, R., Coote, A. and Allen, J. (2003) *Health in the news: risk, reporting and media influence*. King's Fund London.
- Harris, M. and Wegg-Prosser, V. (2007) 'Post bureaucracy and the politics of forgetting: The management of change at the BBC, 1991-2002' *Journal of Organizational Change Management*, 20(3), pp. 290-303.
- Hart, C. (1998) *Doing a literature review: Releasing the social science research imagination*. Sage.
- Hartley, J. (2012) *Communication, cultural and media studies: The key concepts*. Routledge.
- Hastings, G. (2012) 'Why corporate power is a public health priority.', *British Medical Journal*, 345 (e5124)
- Hastings, G., McDermott, L., Angus, K., Stead, M. and Thomson, S. (2006) 'The extent, nature and effects of food promotion to children: a review of the evidence', *Geneva: World Health Organisation*
- Haydock, W. (2014) 'The rise and fall of the 'nudge' of minimum unit pricing: The continuity of neoliberalism in alcohol policy in England', *Critical Social Policy*, 34 (2) pp. 260-279.
- Hayes, A.S., Singer, J.B. and Ceppos, J. (2007) 'Shifting roles, enduring values: The credible journalist in a digital age.' *Journal of Mass Media Ethics*, 22(4), pp. 262-279.
- HC (1997) Deb 25 November 1997 vol. 301 cc517-9W
- HC (1997a) Deb 27 November 1997, col 601W available
<http://www.publications.parliament.uk/pa/cm199798/cmhansrd/vo971127/text/71127w01.htm> accessed 15/06/16
- Hellyer, N.E. and Haddock-Fraser, J. (2011) 'Reporting diet-related health issues through newspapers: portrayal of cardiovascular disease and Type 2 diabetes', *Health education research*, 26 (1) pp. 13-25.
- Henderson, S. (2000) 'The Al-Jazeera Effect: Arab satellite television and public opinion.' *The Washington Institute for Near East Policy*.
- Henderson, J., Coveney, J., Ward, P. and Taylor, A. (2009). 'Governing childhood obesity: Framing regulation of fast food advertising in the Australian print media'. *Social Science & Medicine*, 69(9), pp. 1402-1408.
- Henderson, L., Kitzinger, J. and Green, J. (2000) 'Representing Infant Feeding: Content Analysis Of British Media Portrayals Of Bottle Feeding And Breast Feeding', *BMJ: British Medical Journal*, 321 (7270) pp. 1196-1198.

- Hendriks, C.M. (2009) Deliberative governance in the context of power. *Policy and Society*, 28(3), pp. 173-184.
- Hepp, A., Hjarvard, S. and Lundby, K. (2015) 'Mediatization: theorizing the interplay between media, culture and society' *Media, Culture and Society*, 37(2) pp. 314-324
- Higgs, J. and Pratt, J. (1998) 'Meat, poultry and meat products'. In Sadler, MJ, Strain, JJ & Caballero, B. (eds), *Encyclopedia of Human Nutrition*, San Diego, CA and London, UK: Academic Press, pp. 1272-1282.
- Higgs, J.D. (2000) 'The changing nature of red meat: 20 years of improving nutritional quality', *Trends in Food Science & Technology*, 11 (3) pp. 85-95.
- Hilgartner, S. and Bosk, C.L. (1988) 'The Rise and Fall of Social Problems: A Public Arenas Model', *American Journal of Sociology*, 94 (1) pp. 53-78.
- Hill, M. (2002) 'Meat, cancer and dietary advice to the public', *European journal of clinical nutrition*, 56 (1) pp. S36-S41.
- Hill, M.J. and Davies, G.J. (2000) 'Dietary advice on cancer prevention: time for a change?', *The journal of the Royal Society for the Promotion of Health*, 120 (4) pp. 227-229.
- Hilton, S. and Hunt, K. (2010) 'Coverage of Jade Goody's cervical cancer in UK newspapers: a missed opportunity for health promotion?', *BMC public health*, 10 (1) pp. 368.
- Hilton, S. and Hunt, K. (2011) 'UK newspapers' representations of the 2009--10 outbreak of swine flu: one health scare not over-hyped by the media?', *Journal of Epidemiology & Community Health*, 65 (10) pp. 941-946.
- Hilton, S., Hunt, K., Langan, M., Bedford, H. and Petticrew, M. (2010) 'Newsprint media representations of the introduction of the HPV vaccination programme for cervical cancer prevention in the UK (2005 - 2008)', *Social science & medicine*, 70 (6) pp. 942-950.
- Hilton, S., Patterson, C. and Teyhan, A. (2012) 'Escalating coverage of obesity in UK newspapers: The evolution and framing of the "Obesity Epidemic" from 1996 to 2010', *Obesity*, 20(8), pp. 1688-1695.
- Hilton, S., Wood, K., Patterson, C. and Katikireddi, S.V. (2014) 'Implications for alcohol minimum unit pricing advocacy: what can we learn for public health from UK newsprint coverage of key claim-makers in the policy debate?', *Social science & medicine* (1982), 102 pp. 157-164.
- HL (1998) Deb 14 January 1998, vol. 584 c201WA available http://hansard.millbanksystems.com/written_answers/1998/jan/14/strategic-communications-unit accessed 03/08/2016
- Hodgetts, D., Chamberlain, K., Scammell, M., Karapu, R. and Waimarie Nikora, L. (2008) 'Constructing health news: possibilities for a civic-oriented journalism', *Health* 12 (1) pp. 43-66.
- Holland, W. (1803) *Mr and Mrs Bull giving Buonaparte a Christmas Treat!* [hand-coloured etching] British Museum, London ©Trustees of the British Museum.

- Holloway I., & Wheeler, S. (2002) *Qualitative Research in Nursing*. Oxford, UK: Blackwell Science Ltd.
- Holsti, O.R. (1969) *Content analysis for the social sciences and humanities*. Addison-Wesley.
- Hood, C., Emmerson, C. and Dixon, R. (2009) *Public spending in hard times*. ESRC Public Services Programme, available: https://www.researchgate.net/profile/Ruth_Dixon2/publication/242110282_Public_Spending_in_Hard_Times/links/542544690cf26120b7ac87f7.pdf (accessed: 8th June 2017)
- Hope, J. (1997) *Big Meat Eaters Cancer Warning*, Daily Mail, 13th September 1997, p. 1
- House of Commons (2008) *Environment, Food and Rural Affairs Committee, 'The English pig industry'* available <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmenvfru/96/96.pdf> (Accessed: 12/06/17)
- Hughes, D. and Collin, J. (2011) 'The silent killer in media stories: Representations of hypertension as health risk factor in French-language Canadian newspapers', *Health, Risk & Society*, 13 (6) pp. 577-592.
- Hutton, L.B. (2004) *Return to an Address of the Honourable the House of Commons Dated 28th January 2004 for the Report of the Inquiry Into the Circumstances Surrounding the Death of Dr David Kelly CMG* (Vol. 247). London: The Stationery Office.
- IARC (2017) International Agency for Research on Cancer *EPIC study* Available: <http://epic.iarc.fr> (Accessed: 09/11/17)
- Ingham, B. (2003) *The wages of spin*. John Murray General Pub. Division.
- Iosifidis, P. (2005) 'Digital switchover and the role of the new BBC services in digital television take-up' *Convergence*, 11(3), pp. 57-74.
- Iosifidis, P. and Wheeler, M. (2015) 'The public sphere and network democracy: Social movements and political change?' *Global Media Journal*, 13(25)
- Irwin, A. and Michael, M. (2003) *Science, social theory & public knowledge*. McGraw-Hill Education (UK).
- Iyengar, S. (1990) 'Framing responsibility for political issues: The Case of Poverty', *Political Behavior*, vol.12, no.1, pp. 19-40
- Iyengar, S. (1996) 'Framing Responsibility for Political Issues' *Annals of the American Academy of Political and Social Science*, 546, 59-70
- Iyengar, S. and Kinder, D.R., (1987) 'News that matters'. *Television and American Opinion*, Chicago, IL, p. 98.
- Jackson, N. and Lilleker, D. (2011) 'Microblogging, constituency service and impression management: UK MPs and the use of Twitter', *The Journal of Legislative Studies*, 17 (1) pp. 86-105.

- James, P. (1997) *Establishment of an independent Food Standards Agency: report by Professor Philip James, Rowett Research Institute* (James Report)
- Jansson, A. (2002) 'The mediatization of consumption: Towards an analytical framework of image culture'. *Journal of Consumer Culture*, 2(1), pp. 5-31.
- Jasanoff, S. (1997) Civilization and madness: the great BSE scare of 1996. *Public understanding of science*, 6(3), pp. 221-232.
- Jensen, J.D., Moriarty, C.M., Hurley, R.J. and Stryker, J.E. (2010) 'Making sense of cancer news coverage trends: A comparison of three comprehensive content analyses', *Journal of health communication*, 15 (2) pp. 136-151.
- Jha, A. (2010) 'Fruit and veg do little to cut cancer risk, says study', *Guardian*, 1st December 2010
- Johnson, R.B. and Onwuegbuzie, A.J. (2004) 'Mixed Methods Research: A Research Paradigm Whose Time Has Come', *Educational Researcher*, 33 (7) pp. 14.
- Jones, R., Pykett, J. and Whitehead, M. (2010) 'Big society's little nudges: The changing politics of health care in an age of austerity' *Political Insight*, 1(3), pp. 85-87.
- Karpf, A. (1988) *Doctoring the media: the reporting of health and medicine*. Routledge.
- Keane, A., (1997). Too hard to swallow? The Palatability of Healthy Eating Advice. *Food Health and Identity*, ed. Kaplan, P, 1997, Routledge, London pp. 172-192.
- Kenamer, J.D. (1994) *Public opinion, the press, and public policy*. Westport, Conn.; London: Praeger.
- Key, T.J., Fraser, G.E., Thorogood, M., Appleby, P.N., Beral, V., Reeves, G., Burr, M.L., Chang-Claude, J., Frentzel-Beyme, R. and Kuzma, J.W. (1998) 'Mortality in vegetarians and non-vegetarians: a collaborative analysis of 8300 deaths among 76,000 men and women in five prospective studies.' *Public health nutrition*, 1(01), pp. 33-41.
- Key, T.J., Schatzkin, A., Willett, W.C., Allen, N.E., Spencer, E.A. and Travis, R.C. (2004) 'Diet, nutrition and the prevention of cancer', *Public health nutrition*, 7 (1a) pp. 187-200.
- Kim, S.H. and Willis, A. (2007) 'Talking about obesity: News framing of who is responsible for causing and fixing the problem.' *Journal of health communication*, 12(4), pp. 359-376.
- Koster, O. (2007) 'Dangers of eating just a quarter of grapefruit' *Daily Mail* (London) 16 July p. 11
- Kingdon, J.W. (2011) *Agendas, alternatives, and public policies*. Longman Pub Group.
- Kiousis, S., Park, J.M., Kim, J.Y. and Go, E. (2013) 'Exploring the Role of Agenda-Building Efforts in Media Coverage and Policymaking Activity of Healthcare Reform', *Journalism & Mass Communication Quarterly*, 90 (4) pp. 652-672.
- Kiss, S.J. (2013) 'Legislation by Agenda-Setting: Assessing the Media's Role in the Regulation of Bisphenol A in the U.S. States', *Mass Communication and Society*, 16 (5) pp. 687-712.

Kitzinger, J. (2000) 'Media templates: patterns of association and the (re) construction of meaning over time', *Media, Culture & Society*, 22 (1) pp. 61-84.

Kitzinger, J. (2004) *Framing abuse: media influence and public understanding of sexual violence against children*. London: Pluto Press.

Kitzinger, J. and Reilly, J. (1997) 'The Rise and Fall of Risk Reporting: Media Coverage of Human Genetics Research, 'False Memory Syndrome' and 'Mad Cow Disease'', *European Journal of Communication*, 12 (3) pp. 319-350.

Kline, K. (2006) 'A Decade of Research on Health Content in the Media: The Focus on Health Challenges and Sociocultural Context and Attendant Informational and Ideological Problems', *Journal of health communication*, 11 (1) pp. 43-59.

Knowles, T., Moody, R. and McEachern, M.G. (2007) 'European food scares and their impact on EU food policy.' *British food journal*, 109(1), pp. 43-67.

Krippendorff, K. (2013) *Content analysis: an introduction to its methodology*. Los Angeles, Calif; London: SAGE.

Krippendorff, K. and Bock, M.A. (2009) *The content analysis reader*. Sage.

Kristiansen, C.M. (1983) 'Newspaper coverage of diseases and actual mortality statistics', *European Journal of Social Psychology*, 13 (2) pp. 193-194.

Kuckartz, U. (2014) *Qualitative Text Analysis*. SAGE Publications Ltd.

Lang, G.E. and Lang, K. (1981) 'Watergate: An exploration of the agenda-building process', *Mass communication review yearbook*, 2 (447-468)

Lang, T. (2005) 'Food control or food democracy? Re-engaging nutrition with society and the environment', *Public health nutrition*, 8 (6a) pp. 730-737.

Lang, T. (1997) 'Going public: food campaigns during the 1980s and 1990s.' In Smith, D (Ed) *Nutrition Scientists and Nutrition Policy in the 20th Century*, London: Routledge pp. 238-260

Lang, T., Barling, D. and Caraher, M. (2001) 'Food, social policy and the environment: towards a new model.' *Social policy & administration*, 35(5), pp. 538-558.

Lang, T., Barling, D. and Caraher, M. (2009) *Food policy: integrating health, environment and society*. Oxford: Oxford University Press.

Lang, T. and Heasman, M. (2015) *Food wars: The global battle for mouths, minds and markets*. Abingdon: Routledge.

Lang, T. and Rayner, G. (2012) 'Ecological public health: the 21st century's big idea? An essay by Tim Lang and Geof Rayner', *British Medical Journal*, 345 (e5466)

Lantz, P.M. and Booth, K.M. (1998) 'The social construction of the breast cancer epidemic', *Social science & medicine*, 46 (7) pp. 907-918.

Laswell, H.D. (1948) 'The structure and function of communication in society' in Bryson, L. (ed) *The communication of ideas* New York: The Institute for Religious and Social Studies pp. 37-51

Laurance, J. (1997) 'Even one burger a day can increase your risk of cancer' *The Independent*, September 26, p. 3

Lawrence, M., Warner, N. (2015) *The BBC's Future: Charter Renewal and Beyond* London: Institute for Public Policy Research

Lawrence, M., Naude, C., Armstrong, R., Bero, L., Covic, N., Durao, S., Ghersi, D., Macdonald, G., MacLehose, H., Margetts, B., Tovey, D., Volmink, J., and Young T. (2016) 'A call to action to reshape evidence synthesis and use for nutrition policy' [editorial] *Cochrane Database of Systematic Reviews* 2016;(11): [10.1002/14651858.ED000118](https://doi.org/10.1002/14651858.ED000118)

Lawrence, R.G. (2004) 'Framing Obesity the Evolution of News Discourse on a Public Health Issue', *The Harvard International Journal of Press/Politics*, 9 (3) pp. 56-75.

Leach, B. (2012) 'Is this the end of the rare burger', *The Telegraph* Available: <http://www.telegraph.co.uk/foodanddrink/foodanddrinknews/9731808/Is-this-the-end-of-the-rare-burger.html> (Accessed: 8th June 2017)

Leader, A.E., Weiner, J.L., Kelly, B.J., Hornik, R.C. and Cappella, J.N. (2009) 'Effects of information framing on human papillomavirus vaccination', *Journal of Women's Health*, 18 (2) pp. 225-233.

Lee, C.J. (2009) 'The interplay between media use and interpersonal communication in the context of healthy lifestyle behaviors: Reinforcing or substituting?'. *Mass Communication and Society*, 13(1), pp. 48-66.

Leveson, L.J.B.H.L. (2012) *An Inquiry Into the Culture, Practices and Ethics of the Press: Executive Summary and Recommendations [Leveson Report]*. The Stationery Office.

Lewis, J. (2003) 'Design Issues' in Ritchie, J. and Lewis, J., (Ed.s) *Qualitative research practice: A guide for social science students and researchers*. Sage pp. 47-76

Lewis, J. Williams, A., Franklin, B., Thomas, J. and Mosdell, N. (2008) 'The quality and independence of British journalism', *Cardiff: Cardiff University Media Department*

Lewison, G., Tootell, S., Roe, P. and Sullivan, R. (2008) 'How do the media report cancer research? A study of the UK's BBC website', *British journal of cancer*, 99 (4) pp. 569-576.

Livingstone, Sonia (2009) 'On the mediation of everything: ICA presidential address 2008.' *Journal of Communication* 59 (1) pp. 1-18

Loader, B.D. and Mercea, D. (2011) "Networking Democracy? Social media innovations and participatory politics", *Information, Communication & Society*, London: Routledge, 14 (6): 757–769

Lodge, M. and Matus, K. (2014) 'Science, Badgers, Politics: Advocacy Coalitions and Policy Change in Bovine Tuberculosis Policy in Britain', *Policy Studies Journal*, 42 (3) pp. 367-390.

Löfstedt, R. and Frewer, L. eds. (1998) *The Earthscan reader in risk and modern society* London: Earthscan.

Lonsdale, S. (2014) 'Roast Seagull and Other Quaint Bird Dishes' *Journalism Studies*, doi: 10.1080/1461670X.2014.950474

Lundby, K. (Ed.) (2014) *Mediatization of Communication* Berlin/Boston: Walter de Gruyter

Lupton, D. (2004) "A grim health future': food risks in the Sydney press', *Health, Risk & Society*, 6 (2) pp.187; 187-200; 200.

Lupton, D. and Chapman, S. (1995) "A healthy lifestyle might be the death of you': discourses on diet, cholesterol control and heart disease in the press and among the lay public'. *Sociology of health & illness*, 17(4), pp. 477-494.

McCambridge, J., Hawkins, B. and Holden, C. (2013) 'Industry use of evidence to influence alcohol policy: a case study of submissions to the 2008 Scottish government consultation', *PLoS medicine*, 10 (4) pp. e1001431.

McComas, K. and Shanahan, J. (1999) 'Telling Stories About Global Climate Change: Measuring the Impact of Narratives on Issue Cycles', *Communication Research*, 26 (1) pp. 30-57.

McCombs, M.E. (2004) *Setting the Agenda: the mass media and public opinion* Cambridge: Polity Press

McCombs, M.E. and Shaw, D.L. (1972) 'The Agenda-Setting Function of Mass Media', *The Public Opinion Quarterly*, 36 (2) pp. 176-187.

Macdiarmid, J.I., Douglas, F. and Campbell, J. (2016) 'Eating like there's no tomorrow: Public awareness of the environmental impact of food and reluctance to eat less meat as part of a sustainable diet.' *Appetite*, 96, pp. 487-493.

McDonald, D 2004, 'Twentieth-century media effects research', in *The Sage handbook of media studies*, SAGE Publications, Inc., Thousand Oaks, CA, pp. 183-200, viewed 18 November 2017, doi: 10.4135/9781412976077.n10.

McGinn, M. (2010) 'Depth of Data', in Albert J. Mills, G Durepos, & E Wiebe (eds), *Encyclopedia of Case Study Research*, SAGE Publications, Inc., Thousand Oaks, CA, pp. 287-9, viewed 14 March 2015, doi: <http://0-dx.doi.org.wam.city.ac.uk/10.4135/9781412957397.n107>.

Macintyre, S., Reilly, J. Miller, D., and Eldridge, J. (1998) 'Food choice, food scares, and health: the role of the media' in Murcott A. (ed.) *The nation's diet: the social science of food choice*, London: Longman

Mackendrick, N.A. (2010) 'Media Framing of Body Burdens: Precautionary Consumption and the Individualization of Risk*', *Sociological Inquiry*, 80 (1) pp. 126-149.

MacKenzie, R., Chapman, S., McGeechan, K. and Holding, S. (2010) "A disease many people still feel uncomfortable talking about': Australian television coverage of colorectal cancer', *Psycho-oncology*, 19 (3) pp. 283-288.

McManus, J.H. (1994) 'The nature of news reconsidered' in Tumber, H. (ed) (2008) *Journalism Critical Concepts in Media and Cultural Studies* vol. II pp. 124-147

Macnamara, J. (2005) 'Media content analysis: Its uses, benefits and best practice methodology', *Asia Pacific Public Relations Journal*, 6 (1) pp. 1-34.

McNair, B. (2004) 'PR must die: spin, anti- spin and political public relations in the UK, 1997–2004', *Journalism Studies*, 5 (3) pp. 325-338.

McQuail, D. (2010) *McQuail's mass communication theory*. Sage Publications Limited.

McQuail, D. (2013) *Journalism and society*. Los Angeles, Calif; London: SAGE.

Maeselele, P. (2013) 'Risk conflicts, critical discourse analysis and media discourses on GM crops and food', *Journalism*, pp.1464884913511568.

Maeselele, P.A. (2007) 'Science and technology in a mediatized and democratized society', *JCOM : Journal of Science Communication*, 6 .

Maitland, A. (1998) 'Ministers accused of holding up diet report to 'save face'' *Financial Times*, February 3, p. 1

Mandeville, K.L., O'Neill, S., Brighouse, A., Walker, A., Yarrow, K. and Chan, K. (2014) 'Academics and competing interests in H1N1 influenza media reporting',

Marris, C. (2015) 'The construction of imaginaries of the public as a threat to synthetic biology.' *Science as Culture*, 24(1), pp. 83-98.

Martin-Moreno, J.M., Soerjomataram, I. and Magnusson, G. (2008) 'Cancer causes and prevention: A condensed appraisal in Europe in 2008', *European journal of cancer*, 44 (10) pp. 1390-1403.

Mason, P. and Lang, T. (2017) *Sustainable Diets: How Ecological Nutrition Can Transform Consumption and the Food System*. Abingdon: Routledge.

Maurer, D. (1995) 'Meat as a Social Problem Rhetorical Strategies in the Contemporary Vegetarian Literature' in Maurer, D. and Sobal, J. (eds.) *Eating agendas: food and nutrition as social problems*. Transaction Publishers, pp. 143-166.

Maude, F. (2014) 'Foreword', *Social media guidance for civil servants: October 2014*, available <https://www.gov.uk/government/publications/social-media-guidance-for-civil-servants/social-media-guidance-for-civil-servants> (Accessed: 9th June 2017)

Mazzoleni, G. (2014) 'Mediatization and Political Populism' in Esser, F. and Stromback, J. (Eds) *Mediatization of Politics* Basingstoke: Palgrave Macmillan

Mellor, F., Webster, S. & Bell, A.R. (2011) *Content Analysis of the BBC's Science Coverage T1 - Review of the Impartiality and Accuracy of the BBC's Coverage of Science* http://www.bbc.co.uk/bbctrust/assets/files/pdf/our_work/science_impartiality/appendix_a.pdf. London: BBC.

- Mihill, C. (1997), 'Alert on red meat risk 'was wrong'' *The Guardian*, October 17, p. 14
- Miller, D. (1999) 'Risk, science and policy: definitional struggles, information management, the media and BSE', *Social science & medicine*, 49 (9) pp. 1239-1255.
- Miller, D. and Macintyre, S. (1998) 'Risk communication: the relationships between the media, public beliefs, and policy-making' in Bennett, P. and Calman, K. (ed.) *Risk Communication and Public Health*. Oxford: Oxford University Press, pp. 229.
- Miller, D. and Reilly, J. (1995) 'Making an issue of food safety: the media, pressure groups and the public sphere' in Maurer, D. and Sobal, J. (eds.) *Eating agendas: food and nutrition as social problems*. Transaction Publishers
- Miller, S. (2001) 'Public understanding of science at the crossroads', *Public Understanding of Science*, vol. 10, no. 1, pp. 115-120.
- Mills, A.J., Durepos, G. and Wiebe, E. (2009) *Encyclopedia of Case Study Research*. SAGE Publications, Inc.
- Ministry of Agriculture, Fisheries and Food, (1998) *The Food Standards Agency A Force for Change Presented to Parliament by the Minister of Agriculture, Fisheries and Food by Command of Her Majesty January 1998*, London: The Stationery Office (Cm 3830)
- Mintz, S.W. (1996) *Tasting food, tasting freedom: Excursions into eating, culture, and the past*. Beacon Press.
- Mintz, S.W. and Schlettwein-Gsell, D., (2001) 'Food Patterns in Agrarian Societies: The "Core-Fringe-Legume Hypothesis" A Dialogue'. *Gastronomica*, 1(3), pp. 40-52.
- Mitchell, V.W. and Greatorex, M. (1990). 'Consumer perceived risk in the UK food market.' *British Food Journal*, 92(2), pp. 16-22.
- Moloney, K. (2001). 'The rise and fall of spin: Changes of fashion in the presentation of UK politics.' *Journal of Public Affairs*, 1(2), pp. 124-135.
- Moodie, R., Stuckler, D., Monteiro, C., Sheron, N., Neal, B., Thamarangsi, T., Lincoln, P., Casswell, S. and Lancet NCD Action Grp (2013) 'Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries', *Lancet*, 381 (9867) pp. 670-679.
- Morgan, D.L. (2008) 'Emergent Design' in Given, L. M. (Ed.). *The SAGE encyclopedia of qualitative research methods* Thousand Oaks, CA: SAGE Publications Ltd doi: 10.4135/9781412963909
- Morgan, P.J. (2012) 'Back to the future: the changing frontiers of nutrition research and its relationship to policy', *The Proceedings of the Nutrition Society*, 71 (1) pp. 190.
- Moriarty, C.M., Jensen, J.D. and Stryker, J.E. (2010) 'Frequently cited sources in cancer news coverage: a content analysis examining the relationship between cancer news content and source citation', *Cancer Causes & Control: CCC*, 21 (1) pp. 41-49.

Morse, J.M (2004) 'Sampling in Qualitative Research' in Lewis-Beck, M.S; Bryman, A. and Liao, T.F (Eds) *The SAGE Encyclopedia of Social Science Research Methods* Thousand Oaks, SAGE

Nagler, R. and Hornik, R. (2012) 'Measuring Media Exposure to Contradictory Health Information: A Comparative Analysis of Four Potential Measures', *Communication Methods and Measures*, 6 (1) pp. 56-75.

Nagler, R.H. (2014) 'Adverse Outcomes Associated With Media Exposure to Contradictory Nutrition Messages', *Journal of health communication*, 19 (1) pp. 24-40

Nathanson, C.A. (1999) 'Social movements as catalysts for policy change: the case of smoking and guns', *Journal of health politics, policy and law*, 24 (3) pp. 421-488.

National Readership Survey (2017) *National Readership Survey* Available at: <http://www.nrs.co.uk> (Accessed: 12 June 2017)

Nelkin, D. (1987) *Selling science: how the press covers science and technology*. Freeman.

Neuendorf, K.A. (2002) *The content analysis guidebook*. Sage Publications, Inc.

NHS (2017) *Achieving World-Class Cancer Outcomes: A Strategy for England 2015-2020 Progress Report 2016-17* Available at: <https://www.england.nhs.uk/publication/achieving-world-class-cancer-outcomes/> (Accessed 09/11/17)

NHS Choices (no date) *Red meat and the risk of bowel cancer*, Available at: <http://www.nhs.uk/livewell/goodfood/pages/red-meat.aspx> (Accessed 30/12/15)

NHS Choices (2015) *Cut cancer risk: food, weight, smoking*, Available at: <https://www.nhs.uk/Livewell/preventing-cancer/Pages/diet-and-cancer.aspx> (Accessed 09/11/17)

Nisbet, M.C. (2008) 'Agenda building', in Donsbach, W. and Donsbach, W., *The International Encyclopedia of Communication*. Wiley Publishing, 1, pp. 140-145.

Nisbet, M.C. and Huge, M. (2006) 'Attention Cycles and Frames in the Plant Biotechnology Debate: Managing Power and Participation through the Press/Policy Connection', *The Harvard International Journal of Press/Politics*, 11 (2) pp. 3-40.

Nisbet, M.C. and Lewenstein, B.V. (2002) 'Biotechnology and the American Media: The Policy Process and the Elite Press, 1970 to 1999', *Science Communication*, 23 (4) pp. 359-391.

Nisbet, M.C., Brossard, D. and Kroepsch, A. (2003) 'Framing science: the stem cell controversy in an age of press/politics', *Harvard International Journal of Press/Politics*, 8 (2) pp. 36-70.

Noelle-Neumann, E. and Mathes, R. (1987) 'The event as event and the event as news: The significance of consonance for media effects research'. *European Journal of Communication*, 2(4), pp. 391-414.

Nolan, M. (1995) *Standards in public life: First report of the Committee on Standards in Public Life*, vol.1: report. London: HMSO (Cm 2850-1)

Norat, T., Lukanova, A., Ferrari, P. and Riboli, E. (2002) 'Meat consumption and colorectal cancer risk: Dose- response meta- analysis of epidemiological studies.' *International Journal of Cancer*, **98**(2), pp. 241-256.

Norat, T., Bingham, S., Ferrari, P., Slimani, N., Jenab, M., Mazuir, M., Overvad, K., Olsen, A., Tjonneland, A., Clavel, F., Boutron-Ruault, M.C., Kesse, E., Boeing, H., Bergmann, M.M., Nieters, A., Linseisen, J., Trichopoulou, A., Trichopoulos, D., Tountas, Y., Berrino, F., Palli, D., Panico, S., Tumino, R., Vineis, P., Bueno-de-Mesquita, H.B., Peeters, P.H., Engeset, D., Lund, E., Skeie, G., Ardanaz, E., Gonzalez, C., Navarro, C., Quiros, J.R., Sanchez, M.J., Berglund, G., Mattisson, I., Hallmans, G., Palmqvist, R., Day, N.E., Khaw, K.T., Key, T.J., San Joaquin, M., Hemon, B., Saracci, R., Kaaks, R. and Riboli, E. (2005) 'Meat, fish, and colorectal cancer risk: the European Prospective Investigation into cancer and nutrition', *Journal of the National Cancer Institute*, **97** (12) pp. 906-916.

Ogilvy-Webb, M. (1965) *The government explains: A study of the information services; A report of the Royal Institute of Public Administration*. G. Allen and Unwin.

Oxford Dictionaries (2017) Oxford University Press. <https://0-premium-oxforddictionaries-com.wam.city.ac.uk/definition/english/food-scare> (accessed June 12, 2017).

Paalman, M. (1997) 'How to do (or not to do) ... media analysis for policy making', *Health policy and planning*, **12** (1) pp. 86-91.

Packer, R. (2006) *The Politics of BSE*. UK: Palgrave, Macmillan.

Panjwani, C. and Caraher, M. (2014) 'The Public Health Responsibility Deal: Brokering a deal for public health, but on whose terms?', *Health Policy*, **114** (2-3) pp. 163-173.

Parkin, D., Boyd, L. and Walker, L. (2011) 'The fraction of cancer attributable to lifestyle and environmental factors in the UK in 2010', *British journal of cancer*, **105** pp. S77-S81.

Peters, H.P., Brossard, D. de Cheveigné, S., Dunwoody, S., Kalfass, M., Miller, S. and Tsuchida, S. (2008) 'Interactions with the Mass Media', *Science*, **321** (5886) pp. 204-205.

Pieczka, M. and Escobar, O. (2012) 'Dialogue and science: Innovation in policy-making and the discourse of public engagement in the UK', *Science and Public Policy*.

Phillis, B., (2004) *An Independent Review of Government Communications: Presented to the Minister for the Cabinet Office*. Cabinet Office.

Piggin, J. (2012) 'Turning health research into health promotion: a study of causality and 'critical insights' in a United Kingdom health campaign', *Health policy (Amsterdam, Netherlands)*, **107** (2-3) pp. 296-303.

Pollan, M. (2008) *In defence of food*, London: Allen Lane, Penguin Books

Popkin, B.M., (1993) 'Nutritional patterns and transitions'. *Population and Development Review*, pp. 138-157.

Prentice, A. (2016) 'SACN is committed to openness and engagement' *BMJ Letters* **BMJ** 2016;354:i5183

Protest, D.L. and McCombs, M.E. (1991) *Agenda setting: readings on media, public opinion, and policymaking*. New York; London: Routledge.

Public Records Act (1958) The Stationery Office

Rapley, T. (2012) 'Analysing Conversation' in Seale, C. (ed.), 3. *Researching society and culture*, pp. 424-440. London: SAGE.

Raup, J. (2014) 'Social agents and news media as risk amplifiers: a case study on the public debate about the E. coli outbreak in Germany 2011', *Health, Risk & Society*, 16 (6) pp. 565-579.

Ravitch, S.M. and Riggan, M., (2017) *Reason & rigor: How conceptual frameworks guide research*. Sage Publications.

Rayner, G. and Lang, T. (2012) *Ecological public health: reshaping the conditions for good health*. London: Routledge.

Reese, S.D. and Danielian, L.H. (1989) 'Intermedia influence and the drug issue.' In Shoemaker, P.J. (Ed) *Communication Campaigns about Drugs*, Routledge, pp. 29-46.

Regan, Á., Shan, L., McConnon, Á., Marcu, A., Raats, M., Wall, P. and Barnett, J. (2014) 'Strategies for dismissing dietary risks: insights from user-generated comments online'. *Health, risk & society*, 16(4), pp. 308-322.

Reilly, J. (1998) 'Just another food scare? Public understanding and the BSE crisis' in G. Philo (ed.) *Message received: Glasgow Media Group research, 1993-1998*. Harlow: Longman, pp. 128-147.

Reilly, J. (2003) 'Food Risks, Public Policy and the Mass Media' in P.S. Belton and T. Belton (eds.) *Food, Science and Society Exploring the Gap Between Expert Advice and Individual Behaviour*. Heidelberg: Springer, pp. 71.

Reilly, J. (2010) 'The impact of the media on food choice' in Shepherd R. and Raats, M. (eds.) *The psychology of food choice*. Wallingford: CABI, pp. 201-225.

Reilly, J. and Miller, D. (1997) 'Scaremonger or scapegoat? The role of the media in the emergence of food as a social issue' in P. Caplan (ed.) *Food, health, and identity*. London: Routledge.

Riesch, H. and Spiegelhalter, D.J. (2011) 'Careless pork costs lives': Risk stories from science to press release to media', *Health, Risk & Society*, 13 (1) pp. 47-64.

Rivas, C (2012) 'Coding and Analysing Qualitative Data' in Seale, C. (ed.), 3. *Researching society and culture*, pp. 366-392

Robertson, G. (1996) 'Beef' *Hansard, Oral Answers to Questions* 1 May, c.1127 Available at: <https://www.publications.parliament.uk/pa/cm199596/cmhansrd/vo960501/debtext/60501-15.htm> (Accessed: 10 June 2017)

Robinson, P. (2000) 'The policy-media interaction model: Measuring media power during humanitarian crisis', *Journal of Peace Research*, 37 (5) pp. 613-633.

- Rogers, B. (2003) *Beef and liberty*. Vintage.
- Rogers, E.M. (1986) *Communication technology* New York: Free Press
- Rogers, E.M. and Dearing, J.W. (1996) 'Agenda-setting research', *Communication yearbook*, 11
- Rose, G. (1992) *The strategy of preventive medicine*, Oxford: Oxford University Press.
- Rowbottom, J. (2010) *Democracy distorted: wealth, influence and democratic politics*. Cambridge: Cambridge University Press.
- Rowe, S., Alexander, N., Weaver, C.M., Dwyer, J.T., Drew, C., Applebaum, R.S., Atkinson, S., Clydesdale, F.M., Hentges, E., Higley, N.A., Westring, M.E., International Life Sciences Institute (ILSI) North America Conflict of Interest Working Group and ILSI (2013) 'How experts are chosen to inform public policy: can the process be improved?', *Health policy (Amsterdam, Netherlands)*, 112 (3) pp. 172-178.
- Royal Society (Great Britain) & Bodmer, W.F. (1985) *The Public Understanding of Science: Report of a Royal Society Ad Hoc Group Endorsed by the Council of the Royal Society*, London: The Royal Society.
- Russo, F. (2012) 'Public health policy, evidence, and causation: lessons from the studies on obesity', *Medicine, health care, and philosophy*, 15 (2) pp. 141-151.
- SACN (2001) 'Members of new Scientific Advisory Committee on Nutrition appointed' SACN, [Online]. Available: http://webarchive.nationalarchives.gov.uk/20140507012718/http://www.sacn.gov.uk/news_press_releases/press_releases/thursday_22_february_2001.html (Accessed: 2/1/16, 2016).
- SACN (2001a) 'Agenda Item 2: Openness of Committee Proceedings Item 19' *Minutes of 1st Meeting 12th and 13th June 2001*, Scientific Advisory Committee on Nutrition. Available http://webarchive.nationalarchives.gov.uk/20140507012718/http://www.sacn.gov.uk/meetings/committee/main_sacn_meetings/12062001.html (Accessed: 2/1/16)
- SACN (2002) 'Minutes of 1st Meeting of the Working Group on Iron, 8th March 2002' SACN Available http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/archived_groups/iron/08032002.html (Accessed: 2/1/16)
- SACN (2002a) 'Minutes of 2nd Meeting of the Working Group on Iron 24th July 2002' SACN Available http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/archived_groups/iron/24072002.html (Accessed: 3/1/16)
- SACN (2003) 'Agenda item 43: Timetable' *Minutes of 4th Meeting of the Working Group on Iron, 13th May 2003* Available http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/archived_groups/iron/130503.html (Accessed 2/1/16)
- SACN, (2004) 'Agenda item 9: Review of Workplan' *Minutes of the 7th Meeting of the Working Group on Iron, 23 March 2004* [available

http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/archived_groups/iron/230304.html [2/1/16]

SACN (2005) 'Agenda item 3: Conclusions and recommendations for each section' para.9 *Minutes of the 9th Meeting of the Working Group on Iron 12th January 2005* Available: http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/archived_groups/iron/120105.html (Accessed: 2/1/16)

SACN (2008) 'Agenda item 2 – consideration of Iron report' *Minutes of the 11th Meeting of the Working Group on Iron 16th October 2008* Available: http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/archived_groups/iron/120105.html (Accessed: 2/1/16)

SACN (2009) 'Matters Arising – Iron Report' *Minutes of the 28th SACN meeting 1st October 2009* Available: http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/committee/main_sacn_meetings/01102009.html (Accessed: 3/1/16)

SACN (2009a) 'Draft Iron and Health report press release' 17th June 2009 Available: http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/news_press_releases/index.html (Accessed: 3/1/16)

SACN (2009b) 'Summary of responses received from scientific consultation on the iron and health draft SACN report and actions agreed by SACN Working Group on Iron (11/11/09)' Available: http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/archived_groups/iron/11112009.html (Accessed: 3/1/16)

SACN (2009c) 'Paper for agreement: COMs Strategy paper' (10/06/09) Available: <http://webarchive.nationalarchives.gov.uk/20140507012718/http://www.sacn.gov.uk/pdfs/SACN0916%20%20COMS%20strategy%20paper%20v2.pdf> (Accessed: 3/1/16)

SACN (2009d) 'Agenda item 4 – COMs strategy' *Minutes of the 27th SACN meeting 10th June 2009* Available: http://webarchive.nationalarchives.gov.uk/20140507012718/http://www.sacn.gov.uk/pdfs/sacn09min03_final_minutes_10_june_2009_as_agreed_at_oct_09_meeting.pdf (Accessed: 3/1/16)

SACN (Scientific Advisory Committee on Nutrition) (2010) *Iron and Health*. UK: Department of Health.

SACN (2010a) 'Matters Arising – Iron Report' *Minutes of the 31st Meeting 7th June 2010* Available: http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/committee/main_sacn_meetings/07062010.html (Accessed: 3/1/16)

SACN (2010b) 'Agenda Item 3 – Committee openness' *Minutes of the 30th Meeting 24th February 2010* Available: http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/committee/main_sacn_meetings/24022010.html (Accessed: 3/1/16)

- SACN (2010c) 'Morning Session, paragraph 3' *Minutes of the 32nd Meeting 15th October 2010*
Available:
http://webarchive.nationalarchives.gov.uk/20140507013106/http://www.sacn.gov.uk/meetings/committee/main_sacn_meetings/15102010.html (Accessed: 3/1/16)
- Saguy, A.C. and Almeling, R. (2008) 'Fat in the Fire? Science, the News Media, and the "Obesity Epidemic"', *Sociological Forum*, 23 (1) pp. 53-83.
- Saldana, J. (2013) *The coding manual for qualitative researchers*. Sage.
- Saldana, J. and Omasta, M. (2018) *Qualitative Research: Analyzing Life*. Thousand Oaks, Sage
- Sandell, T., Sebar, B. and Harris, N. (2013) 'Framing risk: communication messages in the Australian and Swedish print media surrounding the 2009 H1N1 pandemic', *Scandinavian Journal of Public Health*, 41 (8) pp. 860-865.
- Sanders, K. and Canel, M.J. (2013) *Government Communication*. A&C Black.
- Sanders, K. (2009) *Communicating politics in the twenty-first century*. Basingstoke: Palgrave Macmillan.
- Sandhu, M.S., White, I.R. and McPherson, K. (2001) 'Systematic review of the prospective cohort studies on meat consumption and colorectal cancer risk: a meta-analytical approach', *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*, 10 (5) pp. 439-446.
- Saumure, K. and Given, L.M. (2008) 'Data Saturation' in *The SAGE Encyclopedia of Qualitative Research Methods*, Thousand Oaks, Sage.
- Scheufele, D. (1999) 'Framing as a theory of media effects', *Journal of Communication*, 49 (1) pp. 103-122.
- Schildkraut, J. and Muschert, G.W. (2014) 'Media Salience and the Framing of Mass Murder in Schools: A Comparison of the Columbine and Sandy Hook Massacres', *Homicide Studies*, 18 (1) pp. 23-43.
- Schlesinger, P. (1987) *Putting 'Reality' Together: BBC News*, Abingdon: Routledge.
- Schlesinger, P. (2006) 'Is there a crisis in British journalism?', *Media, Culture & Society* 28 (2) pp. 299.
- Schlesinger, P. (2009) 'Creativity and the Experts: New Labour, Think Tanks, and the Policy Process', *The International Journal of Press/Politics*, 14 (1) pp. 3-20.
- Schlesinger, P., and Tumber, H. (1995) *Reporting crime: the media politics of criminal justice*. Oxford University Press.
- Schreier, M. (2012) *Qualitative content analysis in practice*. Sage Publications.

- Schudson, M. (2006) 'The trouble with experts—and why democracies need them'. *Theory and Society*, **35**(5-6), pp. 491-506.
- Schulz, W. (2004) 'Reconstructing mediatization as an analytical concept'. *European journal of communication*, **19**(1), pp. 87-101.
- Schwitzer, G., Mudur, G., Henry, D., Wilson, A., Goozner, M., Simbra, M., Sweet, M. and Baverstock, K.A. (2005) 'What are the roles and responsibilities of the media in disseminating health information?', *PLoS medicine*, **2** (7) pp. e215.
- Schiffer, A.J. (2008) *Conditional press influence in politics*. Lexington Books.
- Scrinis, G. (2012) 'Nutritionism and functional foods' in Kaplan, D. (ed.) *The Philosophy of Food*, Berkeley: University of California Press
- Seale C. and Tonkiss, F. (2012) 'Content and Comparative Keyword Analysis' in Seale, C. (ed.), *3. Researching society and culture*, pp. 459-479 London: SAGE.
- Seale, C. (2001) 'Sporting cancer: struggle language in news reports of people with cancer', *Sociology of health & illness*, **23** (3) pp. 308-329.
- Seale, C. (2002) 'Cancer Heroics: A Study of News Reports with Particular Reference to Gender', *Sociology*, **36** (1) pp. 107-126.
- Seale, C. (2002) *Media and health*. London: Sage.
- Seale, C., Boden, S., Williams, S., Lowe, P., and Steinberg, D. (2007) 'Media constructions of sleep and sleep disorders: A study of UK national newspapers', *Social science & medicine*, **65** (3) pp. 418-430.
- Seale, C., Ziebland, S., and Charteris-Black, J. (2006) 'Gender, cancer experience and internet use: A comparative keyword analysis of interviews and online cancer support groups', *Social science & medicine*, **62** (10) pp. 2577-2590.
- Sellers, P. (2010) *Cycles of Spin. Strategic communication in the U.S. Congress*, New York: Cambridge University Press.
- Shan, L., Regan, A., De Brún, A., Barnett, J., van der Sanden, Maarten C A., Wall, P. and McConnon, A. (2014) 'Food crisis coverage by social and traditional media: A case study of the 2008 Irish dioxin crisis', *Public understanding of science (Bristol, England)*, **23** (8) pp. 911-928.
- Shih, T.J., Wijaya, R. and Brossard, D. (2008) 'Media coverage of public health epidemics: Linking framing and issue attention cycle toward an integrated theory of print news coverage of epidemics'. *Mass Communication & Society*, **11**(2), pp. 141-160.
- Shlonsky, A. and Mildon, R. (2014) 'Methodological pluralism in the age of evidence-informed practice and policy', *Scandinavian Journal of Public Health*, **42** (13 Suppl) pp. 18-27.
- Shoemaker, P.J. (1991) *Gatekeeping*. Newbury Park, Calif; London: Sage.
- Shoemaker, P.J. (1999) 'Gatekeeping' in H. Tumber (ed.) *News: A Reader*. Oxford: Oxford University Press, pp. 73-78.

Shoemaker, P.J. & Reese, S.D. (1996) *Mediating the message: theories of influences on mass media content* 2nd edition, White Plains, N.Y.: Longman

Shoemaker, P.J., Reese, S.D. (2014) *Mediating the message in the 21st century: a media sociology perspective*. New York; London: Routledge.

Singer, J.B., (2007). 'Contested autonomy: Professional and popular claims on journalistic norms.' *Journalism studies*, 8(1), pp. 79-95.

Singer, J.B. (2008) 'The Journalist in the Network: A Shifting Rationale for the Gatekeeping Role and Objectivity Norms'. *Tripodos*, 23, pp. 61-76.

Singer, J.B. (2016). 'Transmission Creep.' *Journalism Studies* pp. 1–18.
doi:10.1080/1461670X.2016.1186498.

Skinner, D. (2008) *Interdisciplinary Research* in Given, L.M., (Ed.) *The sage encyclopedia of qualitative research methods*, SAGE Publications, Inc., Thousand Oaks, CA, [Accessed 22 April 2017], doi: 10.4135/9781412963909.

Slater, M., Reineke, J., Bettinghaus, E. and Long, M. (2008) 'News Coverage of Cancer in the United States: A National Sample of Newspapers, Television, and Magazines', *Journal of health communication*, 13 (6) pp. 523-537.

Smith, D. (1998) 'The discourse of scientific knowledge of nutrition and dietary change in the twentieth century' in A. Murcott (ed.) *The nation's diet: the social science of food choice*. London: Longman, pp. 311-331.

Smith, D.F. (1997) *Nutrition in Britain: science, scientists, and politics in the twentieth century*. London: Routledge.

Smith, D.F., and Phillips, J. (2000) *Food, science, policy, and regulation in the twentieth century: international and comparative perspectives*. London: Routledge.

Smith, D.F. (2010) 'The rise and fall of the Scientific Food Committee during the Second World War.' In Smith, D.F. and Phillips, J. (eds) *Food, Science, Policy and Regulation in the Twentieth Century: International and Comparative Perspectives*, London: Routledge 10, p. 101.

Smith, M.J. (1991) 'From policy community to issue network: Salmonella in eggs and the new politics of food.' *Public Administration*, 69(2), pp. 235-255.

Snape, D. and Spencer, L. (2003) 'The foundations of qualitative research' in Ritchie, J. and Lewis, J (eds) *Qualitative Research Practice: a guide for social science students and researchers*, SAGE, London.

Spencer, C. (1995) *The Heretic's Feast—a history of vegetarianism* London: Fourth Estate

Spicer, N. (2012) 'Combining qualitative and quantitative methods' in Seale, C. ed., *Researching society and culture*, SAGE, London.

SSRC (2014) 'About the SSRC' *Social Science Research Committee* Available:
<https://ssrc.food.gov.uk/about-us> (Accessed: 11 June 2017)

Stan, L. (2010) 'Archival Records as Evidence.' In Mills, A.J., Durepos, G and Wiebe, E. (Eds.), *Encyclopedia of Case Study Research*. (pp. 30-32). Thousand Oaks, CA: SAGE Publications, Inc. doi: <http://0-dx.doi.org.wam.city.ac.uk/10.4135/9781412957397.n12>

Street, C., & Ward, K. (2010) 'Retrospective Case Study', in Mills, A.J., Durepos, G. and Wiebe, E. (eds), *Encyclopedia of Case Study Research*, SAGE Publications, Inc., Thousand Oaks, CA, pp. 825-8, viewed 14 March 2015, doi: <http://0-dx.doi.org.wam.city.ac.uk/10.4135/9781412957397.n303>.

Strömbäck, J. (2008) 'Four Phases of Mediatization: An Analysis of the Mediatization of Politics', *The International Journal of Press/Politics*, 13 (3) pp. 228-246.

Strömbäck, J. and Esser, F. (2014) 'Mediatization of politics: Towards a theoretical framework.' In in Esser, F. and Stromback, J. (Eds) *Mediatization of Poltiics* Basingstoke: Palgrave Macmillan

Stryker, J.E., Moriarty, C.M. and Jensen, J.D. (2008) 'Effects of newspaper coverage on public knowledge about modifiable cancer risks', *Health communication*, 23 (4) pp. 380-390.

Sturgis, P. and Allum, N. (2004) 'Science in society: re-evaluating the deficit model of public attitudes', *Public understanding of science*, 13 (1) pp. 55-74.

Sullivan, R. and Purushotham, A. (2012) 'Analysis of media reporting of The Lancet Oncology Commission', *The Lancet Oncology*, 13 (1) pp. 12-13.

The Sun (2008) 'Bangers in new cancer warning' *The Sun 2008*

Tanner, A.H. (2004) 'Agenda building, source selection, and health news at local television stations: A nationwide survey of local television health reporters.' *Science Communication*, 25(4), pp. 350-363.

Thomas, G. (2011) *How to do your case study: a guide for students and researchers*. Los Angeles, Calif; London: Sage.

Timotijevic, L., Barnett, J., Brown, K., Raats, M.M. and Shepherd, R. (2013) 'Scientific decision-making and stakeholder consultations: the case of salt recommendations', *Social science & medicine (1982)*, 85 pp. 79-86.

Timotijevic, L., Brown, K.A., Lähteenmäki, L., De Wit, L., Sonne, A.M., Ruprich, J., Řehůřková, I., Jeruszka-Bielak, M., Sicinska, E., García, N.B. and Guzzon, A. (2013) 'EURRECA—A Framework for Considering Evidence in Public Health Nutrition Policy Development.' *Critical reviews in food science and nutrition*, 53(10), pp. 1124-1134.

Travis, A (2016) 'Snooper's charter becomes law, extending UK state surveillance.' *The Guardian*, 29 November 2016, Available online: <https://www.theguardian.com/world/2016/nov/29/snoopers-charter-bill-becomes-law-extending-uk-state-surveillance> (Accessed: 19th April 2017)

Tulloch, J. (1993) 'Policing the public sphere - the British machinery of news management', *Media, Culture & Society*, 15 (3) pp. 363-384.

- Turnpenny, J., Lorenzoni, I. and Jones, M. (2009) 'Noisy and definitely not normal: responding to wicked issues in the environment, energy and health', *Environmental Science and Policy*, 12 (3) pp. 347-358.
- Udell, T. (2008) 'When two sides go to war: newspaper reporting of 'television food advertising restrictions' as a solution to childhood obesity', *Health, Risk & Society*, 10 (6) pp. 535-548
- Ursell, A. (2008) 'A bit of sausage won't kill you' *The Sun*, April 3 2008, p. 41
- USDA (2017) *Food Safety and Inspection Service: Ask Karen* Available at: https://askkaren.custhelp.com/app/answers/detail/a_id/1357/kw/red%20meat/related/1 (Accessed: 8th June 2017)
- Van Aelst, P., Thesen, G., Walgrave, S. and Vliegenthart, R. (2014) 'Mediatization and political agenda-setting: changing issue priorities?.' In *Mediatization of Politics* pp. 200-220 Palgrave Macmillan UK.
- van der Pas, D. (2014) 'Making Hay While the Sun Shines: Do Parties Only Respond to Media Attention When the Framing Is Right?', *The International Journal of Press/Politics*, 19 (1) pp. 42-65.
- van Zwanenberg, P., Millstone, E. (2005) *BSE: risk, science, and governance*. Oxford; New York: Oxford University Press.
- Vicsek, L. (2014) 'GM Crops in Hungary: Comparing Mass Media Framing and Public Understanding of Technoscientific Controversy', *Science as Culture*, 23 (3) pp. 344-368.
- Vliegenthart, R. and Walgrave, S. (2008) 'The contingency of intermedia agenda setting: A longitudinal study in Belgium'. *Journalism & Mass Communication Quarterly*, 85(4), pp. 860-877.
- Walgrave, S. (2008) 'Again, the Almighty Mass Media? The Media's Political Agenda-Setting Power According to Politicians and Journalists in Belgium', *Political Communication*, 25 (4) pp. 445-459.
- Walgrave, S. and Van Aelst, P. (2006) 'The contingency of the mass media's political agenda setting power: Toward a preliminary theory', *Journal of Communication*, 56 (1) pp. 88-109.
- Walgrave, S., and Van Aelst, P. (2016) 'Political Agenda Setting and the Mass Media'. *Oxford Research Encyclopedia of Politics*. Accessed: 23 Apr. 2017, <http://politics.oxfordre.com/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-46>.
- Walgrave, S., Soroka, S. and Nuytemans, M. (2008) 'The Mass Media's Political Agenda-Setting Power: A Longitudinal Analysis of Media, Parliament, and Government in Belgium (1993 to 2000)', *Comparative Political Studies*, 41 (6) pp. 814-836.
- Walt, G. and Gilson, L. (1994) 'Reforming the health sector in developing countries: the central role of policy analysis'. *Health policy and planning*, 9(4), pp. 353-370.

Walt, G., Shiffman, J., Schneider, H., Murray, S.F., Brugha, R. and Gilson, L. (2008) 'Doing' health policy analysis: methodological and conceptual reflections and challenges', *Health policy and planning*, 23 (5) pp. 308-317.

Watson-Smyth, K. (1997) *Dover blockade fails but farmers continue protests over beef imports* The Independent, online, available <http://www.independent.co.uk/news/dover-blockade-fails-but-farmers-continue-protests-over-beef-imports-1287618.html>

Watson, E. (2010) 'SACN and School Food Trust on quango bonfire?' *foodmanufacture.co.uk* 24 September 2010 available online <http://www.foodmanufacture.co.uk/Business-News/SACN-and-School-Food-Trust-on-quango-bonfire> Accessed: 13/01/16

WCRF (1997) *Food, nutrition and the prevention of Cancer*, Washington, DC: American Institute for Cancer Research

WCRF (2007) *Food, nutrition, physical activity, and the prevention of cancer: a global perspective*, Washington DC: AICR

Weaver, D.A. and Bimber, B. (2008) 'Finding News Stories: A Comparison of Searches using LexisNexis and Google News', *Journalism and Mass Communication Quarterly* 85 (3) pp. 515.

Wei, E.K., Giovannucci, E., Wu, K., Rosner, B., Fuchs, C.S., Willett, W.C. and Colditz, G.A., (2004). 'Comparison of risk factors for colon and rectal cancer' *International journal of cancer*, **108**(3), pp. 433-442.

Weimann, G. (2014) 'Reevaluating "The End of Mass Communication?"', *Mass communication & society*, 17 (6) pp. 803-829

Weinberg, A.M. (1972) 'Science and Trans-Science', *Minerva*, 10 (2) pp. 209-222.

Weiss, D. (2009) 'Agenda-setting theory'. *Encyclopedia of Communication Theory*.

Weitkamp, E. (2003) 'British newspapers privilege health and medicine topics over other science news', *Public Relations Review*, 29 (3) pp. 321-333.

Weitkamp, E. and Eidsvaag, T. (2014) 'Agenda building in media coverage of food research: Superfoods coverage in UK national newspapers.' *Journalism Practice*, 8(6), pp. 871-886.

Wellcome Library (2006) L0040445 *Advert for Liebig's Beef Wine prepared by S. Stephens, Chemist and Opticians, Milnsbridge* Wellcome Library, London Available: <https://wellcomeimages.org/indexplus/image/L0040445.html> (Accessed: 8th June 2017)

Wells, R. (2016) 'Mediating the spaces of diet and health: A critical analysis of reporting on nutrition and colorectal cancer in the UK.' *Geoforum*.

Wells, R. and Caraher, M. (2014) 'UK print media coverage of the food bank phenomenon: from food welfare to food charity?' *British Food Journal*, 116(9), pp. 1426-1445.

Wells, R. and Caraher, M. (2016) 'Britain's Hidden Hungry?' in Oyedemi, T. and Servaes, J. (Eds.) *The Praxis of Social Inequality in Media: A Global Perspective*, (pp. 39-61) London: Lexington Books

- Wells, R. and Caraher, M. (2018) 'From Food Advertising to Digital Engagements: Future Challenges for Public Health' in LeBesco, K. and Naccarato, P. (Eds.), *The Bloomsbury Handbook of Food and Popular Culture*. (pp. 245-259). London: Bloomsbury Academic.
- Wheldon, J. (2006) 'Why red meat diet raises risk of bowel cancer by a third' *Daily Mail*, February 1
- White, D.M. (1999) 'The 'Gatekeeper': A Case Study in the Selection of News' in H. Tumber (ed.) *News: A Reader*. Oxford: Oxford University Press, pp. 66-72.
- Willett, W.C., Stampfer, M.J., Colditz, G.A., Rosner, B.A. and Speizer, F.E. (1990) 'Relation of meat, fat, and fiber intake to the risk of colon cancer in a prospective study among women.' *New England Journal of Medicine*, **323**(24), pp. 1664-1672.
- Williams, A. and Clifford, S. (2008) 'Mapping the field: a political economic account of specialist science news journalism in the UK national media'. Project Report. [Online]. Cardiff University. Available at: http://cf.ac.uk/jomec/resources/Mapping_Science_Journalism_Final_Report_2003-11-09.pdf
- Williams, A. and Gajevic, S. (2013) 'Selling Science?: Source struggles, public relations, and UK press coverage of animal-human hybrid embryos', *Journalism Studies*, 14 (4) pp. 507-522.
- Williams, K. (2010) *Understanding media theory*. London: Arnold.
- Williams, S.J., Seasle, C., Boden, S., Lowe, P. and Steinberg, D.L. (2008) 'Medicalization and beyond: the social construction of insomnia and snoring in the news', *Health: An Interdisciplinary Journal for the Social Study of Health, Illness & Medicine*, 12 (2) pp. 251-268.
- Williamson, J.M.L., Jones, I.H. and Hocken, D.B. (2011) 'How does the media profile of cancer compare with prevalence?', *Annals of the Royal College of Surgeons of England*, 93 (1) pp. 9-12.
- Wilson, P.M., Booth, A.M., Eastwood, A. and Watt, I.S. (2008) 'Deconstructing media coverage of trastuzumab (Herceptin): an analysis of national newspaper coverage', *JRSM*, 101 (3) pp. 125-132.
- Wolfe, M., Jones, B.D. and Baumgartner, F.R. (2013) 'A failure to communicate: Agenda setting in media and policy studies.' *Political Communication*, 30(2), pp. 175-192.
- Wolff, M. (2010) *The man who owns the news: inside the secret world of Rupert Murdoch*, 1st paperback edn, Broadway Books, New York; London
- Woloshin, S. and Schwartz, L.M. (2002) 'Press Releases: Translating Research Into News', *JAMA: The Journal of the American Medical Association*, 287 (21) pp. 2856-2858.
- Wood, K., Patterson, C., Katikireddi, S.V. and Hilton, S. (2014) 'Harms to 'others' from alcohol consumption in the minimum unit pricing policy debate: a qualitative content analysis of UK newspapers (2005–12)', *Addiction*, 109 (4) pp. 578-584.
- Wooding, D. (2009) 'You know when you've been quango'd', *The Sun* 7th July 2009, Available online <http://www.thesun.co.uk/sol/homepage/news/money/2520703/David-Camerons-war-on-quangos.html> Accessed: 13/01/16).

Yavchitz, A., Boutron, I., Bafeta, A., Marroun, I., Charles, P., Mantz, J. and Ravaud, P. (2012) 'Misrepresentation of randomized controlled trials in press releases and news coverage: a cohort study', *PLoS medicine*, 9 (9) pp. e1001308.

Yin, R.K (2009) *Case Study Research Design and Methods* (4th edition) London: Sage

Appendices

APPENDIX 1 Email exchange requesting SACN meeting minutes

← REPLY ←← REPLY ALL → FORWARD ...



Wells, Rebecca

Fri 26/04/2013 11:59

Sent Items

Mark as unread

To: [REDACTED]

Dear SACN Secretariat

I am a PhD student at City University, London studying the relationship between diet, cancer and the media at the Centre for Food Policy and the Department of Journalism.

I'm currently looking at media coverage of links between consumption of meat and incidence of cancer and am interested in government recommendations in this area. Is it possible for you to provide me with the minutes of the final (12th) meeting of the SACN Working Group on Iron which was held on the 11th November 2009. Minutes of all the other meetings of this working group are available on your website but I am unable to find the minutes of this meeting.

I would be most grateful for your assistance in this matter.

I look forward to hearing from you.

Rebecca Wells

PhD Candidate

Centre for Food Policy & Dept of Journalism

Department of Sociology

School of Arts and Social Sciences

Northampton Square

City University

London EC1V OHB

Tel: [REDACTED]

Email: [REDACTED]

← ← →



[REDACTED]
Fri 26/04/2013 13:33

Mark as unread

Dear Rebecca,

I have now fixed this broken link, please try again. If you can't see the link straight away, pressing F5 or refresh will rectify this.

Best wishes,

← REPLY ← REPLY ALL → FORWARD ...



Wells, Rebecca

Fri 26/04/2013 13:52

Sent Items

Mark as unread

To: [REDACTED]

● You forwarded this message on 07/05/2013 12:13.

Dear [REDACTED]

Thank you for your prompt response to my query. I've now found the minutes of the 12th meeting from your website. I wondered if you could help me with a further query – item 5 in these minutes states:

“All the responses to the consultation, which were considered under the relevant sections of the report, together with the actions agreed by the Working Group are summarised in the attached table.”

Is this table also available?

Many thanks again for your help and best wishes

Rebecca

← REPLY ← REPLY ALL → FORWARD ...



Wells, Rebecca

Tue 07/05/2013 12:13

Sent Items

Mark as unread

To: [REDACTED]

Dear SACN Secretariat

I wonder if it's possible for you to respond to this query, which I sent on the 26th April?

Many thanks

Rebecca Wells

APPENDIX 2 Freedom of Information Request

Freedom of Information Request

DELETE REPLY REPLY ALL FORWARD ...



Wells, Rebecca
Wed 17/07/2013 12:13
Sent Items

Mark as unread

To: FOI@phe.gov.uk;



sacn_iron_12 minutes_...
90 KB

Show all 1 attachments

Action Items

+ Get more apps

Dear Public Health England

I am a PhD student at the Centre for Food Policy and the Department of Journalism at City University, London. I would like to make a Freedom of Information request relating to the Scientific Advisory Committee on Nutrition (SACN).

My request relates to the published minutes of the 12th Meeting of the SACN Working Group on Iron held on 11th November 2009 (SACN/IRON09/MIN01, attached) which are published on the SACN website at http://www.sacn.gov.uk/meetings/archived_groups/iron/11112009.html

Item 5 of these minutes (page 2) states:

“5. All the responses to the consultation, which were considered under the relevant sections of the report, together with the actions agreed by the Working Group are summarised in the attached table.”

However, the table referred to is not attached to the document nor available on the SACN website. I have emailed the SACN Secretariat twice to ask to see a copy of the table but have received no response. Please could you send me a copy of this table, which summarises both the responses to the consultation on the draft report of the SACN Working Group on Iron and the actions agreed by the Working Group on Iron.

I look forward to receiving your response

Yours faithfully

Rebecca Wells

Rebecca Wells
PhD Candidate
Centre for Food Policy & Dept of Journalism
Department of Sociology
School of Arts and Social Sciences
Northampton Square
City University
London EC1V 0HB
Tel: [REDACTED]
Email: [REDACTED]

APPENDIX 3 Correspondence with National Archives

From: contactforms@nationalarchives.gsi.gov.uk[SMTP:CONTACTFORMS@NATIONALARCHIVES.GSI.GOV.UK]
Sent: Thursday, April 11, 2013 7:43:22 AM
To: ARK Records Enquiries
Subject: TNA130066625: Research/records advice (General enquiries) Auto forwarded by a Rule

ENQUIRY DETAILS FIRST NAME: Rebecca LAST NAME: Wells EMAIL ADDRESS: [REDACTED]
COUNTRY: United Kingdom

CATALOGUE REFERENCE: ENQUIRY DETAIL: I am a PhD student at City University, London. I'm interested in the Committee on Medical Aspects of Food Policy (COMA) and am trying to find minutes of their meetings. I am only able to find minutes up until the late 1980s on your website. Can you advise if you have later documents? Many thanks Rebecca Wells

TNA130066625: Research/records advice (General enquiries) [UNCLASSIFIED]

DELETE REPLY REPLY ALL FORWARD ...
Mark as unread



ARK Records Enquiries <enquiry@nationalarchives.gsi.gov.uk>
Wed 17/04/2013 10:59
Inbox

To: Wells, Rebecca;

You replied on 14/08/2013 10:20.

Dear Ms Wells

Many thanks for contacting The National Archives.

I have made an initial search of our catalogue, Discovery for the 'Committee on Medical Aspects of Food Policy' restricted to the years 1980 to 2000. Here are the [search results](#).

As you say, the most recent results are from the late 1980s. The transfer of records from government departments to The National Archives is currently governed by the 30 year rule (Public Records Act, 1958, s.3.4), although we are moving to [20 year disclosure](#).

However, occasionally records may be transferred earlier (as seems to be the case here) or it may be that the full record is not transferred yet, although I would say this is probably unlikely in this case.

A result of the 30 year rule is that records from the early 1990s onwards are not yet transferred to The National Archives, and remain with the responsible department. For records from the 1990s and the 2000s you will need to contact the Departmental Record Officer of the department responsible, which appears to be the Department of Health:

Departmental Record Officer
Skipton House
80 London Road
London
SE1 6LH

Alternatively, you could make a Freedom of Information request via the GOV.uk website: <https://www.gov.uk/feedback/foi>

For the later period, from the mid-2000s onwards, you may find useful information on the [UK Government Web Archive](#), if minutes from similar meetings were indeed published on external websites. There is not a direct reference to COMA in the [A-Z list](#) of archived websites, but perhaps if you know of a successor organisation which might have taken over this policy area, you could browse through archived versions of the website.

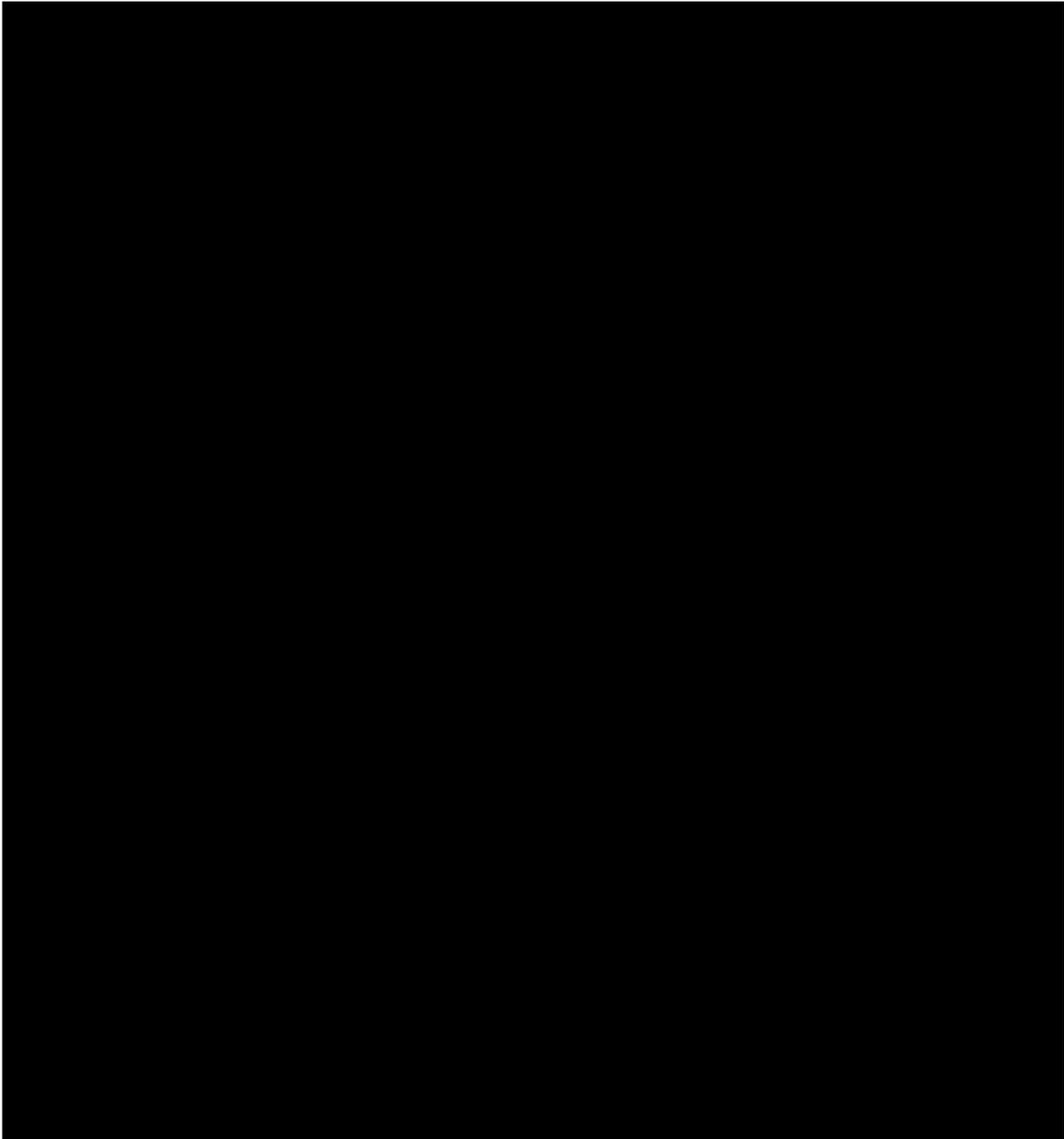
I hope this is useful – feel free to contact us if you have any further questions.

If you need to respond to this email, please click on Reply to do so. It is very helpful for us for the text of the earlier emails to be included. For a new enquiry, please complete our [contact form](#).

To avoid receiving our initial auto-response again please make sure you include the letters SART, with a space on either side, in your subject line.

All the best,

APPENDIX 4 Extract from Department of Health archive records





**School of Arts
and Social Sciences**
CITY UNIVERSITY LONDON

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27 October 2014

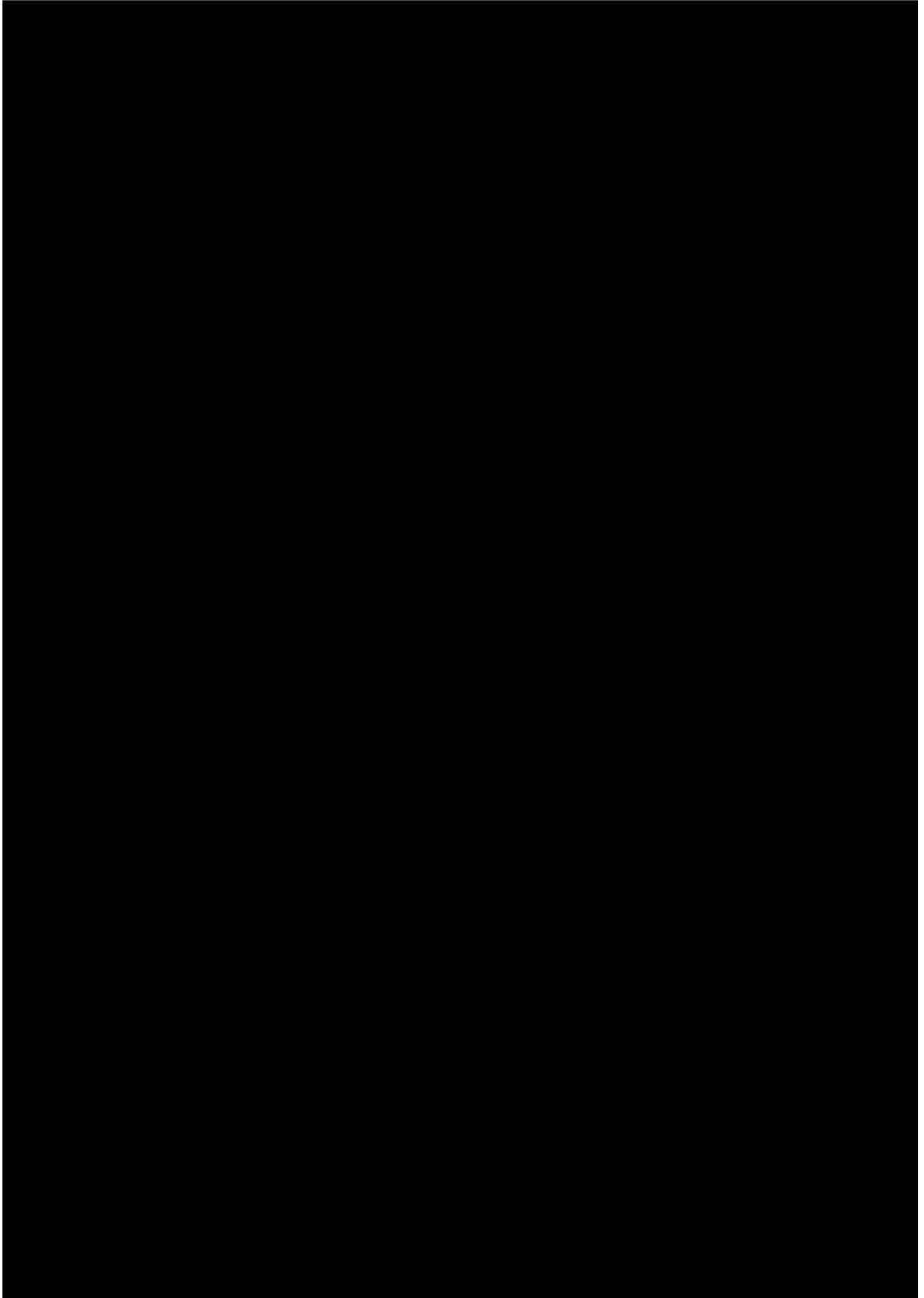
To whom it may concern

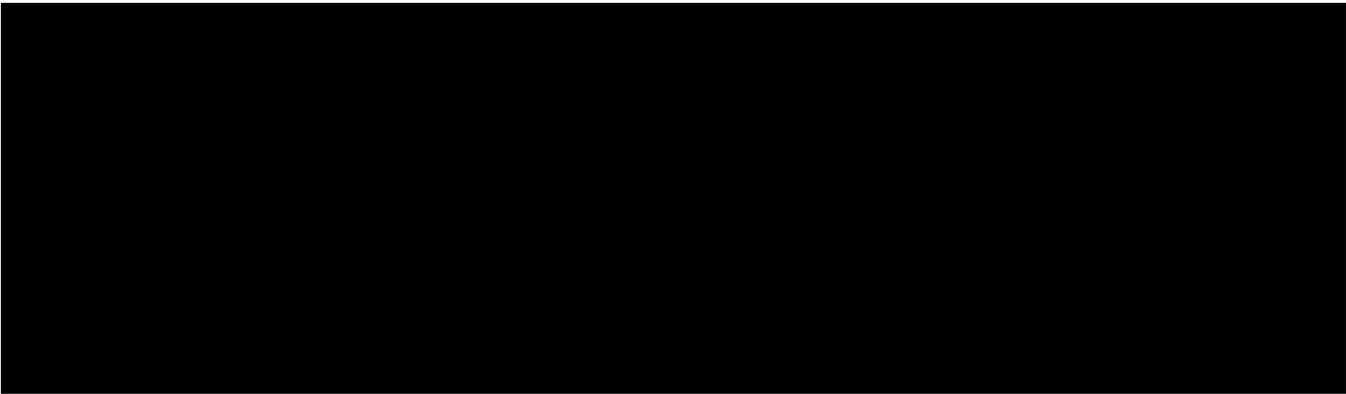
This is to confirm that the Ethics Committee of the Department of Sociology approved the project 'What part do the media play in food policy? The case of UK Government recommendations on red meat consumption and cancer prevention' on the 7th October 2013. The principal investigator of this project is Ms Rebecca Wells, doctoral researcher at the Department of Sociology, City University.

[Redacted]
Dr Lena Karamanidou
Chair of Ethics
Department of Sociology
City University
Northampton Square
London EC1V 0HB
Email: [Redacted]



APPENDIX 6 Timeline, publication of COMA (1998) report





APPENDIX 7

INSTRUCTIONS FOR IMPORTING MANIFEST CONTENT/DATA FROM NEXIS DOWNLOADED WORD DOCUMENT INTO EXCEL

1. Save file as titles only
2. Delete rest of data (articles' content)
3. Save
4. Select all
5. Copy
6. Paste back as text only
7. Save as
8. Select plain text (.txt) file
9. Check the box 'end lines with CR only'
10. Save
11. Open an excel file
12. Go to Data tab
13. Go to 'Get External Data'
14. Go to 'From text'
15. Choose 'Delimited' in the original data type field
16. Check Comma as well as Tab in the delimiters section
17. Keep General as the column data format
18. Click Finish
19. Now clean your data
20. Insert pivot chart
21. Now play!!

APPENDIX 8 Content analysis source data

ID	Title	Publication	Tabloid/ Broadsheet	Date	Year	Day	Section	Page no	Word count	Author	Author designation
16	Meat and cancer risks	The Times	B	06/05/1996	1996	Monday	Features		208	Nigel Hawkes	
20	Bad diet is biggest cause of cancer	The Sunday Times	B	08/06/1997	1997	Sunday	Home news		612	Paul Nuki	Consumer Affairs Correspondent
24	Scientists to issue cancer warning over red meat	Financial Times	B	15/09/1997	1997	Monday	Front page, first section	1	411	Alison Maitland & Nicholas Timmins	
25	HEALTH: DOCTOR AT LARGE LUISA DILLNER: FRUIT AND TWO	The Guardian	B	16/09/1997	1997	Tuesday	THE GUARDIAN	Pg. T17	773	Luisa Dillner	
26	Vital signs	The Independent	B	16/09/1997	1997	Tuesday	HEALTH	17	267		
27	HOW WE'RE EATING OUR WAY TO AN EARLY GRAVE: FAMILY HEALTH; HEALTH WARNING OVER POOR DIETS	The Mirror	T	16/09/1997	1997	Tuesday	FEATURES	21	588	Jill Palmer	Medical Correspondent
28	Risk in living off fat of the land	The Times	B	16/09/1997	1997	Tuesday	Home news		430	Dr Thomas Stuttaford	
30	Meat industry faces worrying week ahead	Financial Times	B	20/09/1997	1997	Saturday	NEWS: UK	9	554		
31	THEME OF THE WEEK HEALTH SCARES	The Guardian	B	20/09/1997	1997	Saturday	THE GUARDIAN FEATURES PAGE	2	490		
33	Red meat cancer alert is widened to average eaters	Daily Mail	T	26/09/1997	1997	Friday		11	536	Jenny Hope	
34	New warning on cancer risk of eating red meat Medical advisers recommend cuts in daily intake	Financial Times	B	26/09/1997	1997	Friday	Back page, first section	18	408	Nicholas Timmins & Maggie Urry	
35	EAT LESS RED MEAT TO CUT CANCER RISK, URGES REPORT	The Guardian	B	26/09/1997	1997	Friday	THE GUARDIAN HOME	3	620	Christopher Elliott	
36	Even one burger a day can increase your risk of cancer	The Independent	B	26/09/1997	1997	Friday	NEWS	3	621	Jeremy Laurance	Health Editor
37	EAT LESS RED MEAT TO CUT CANCER RISK; SHOCK 'DANGER DIET' REPORT; GOVERNMENT REPORT WARNS OF CANCER RISK	The Mirror	T	26/09/1997	1997	Friday	NEWS	2	503	Jill Palmer	Medical Correspondent
38	Trade body finds tough meat warning hard to stomach	The Times	B	26/09/1997	1997	Friday	Home news		464	Nigel Hawkes	Science Editor
39	Shopping: Red-meat warning fails to put off the young	The Independent	B	27/09/1997	1997	Saturday	NEWS	5	407	Jojo Moyes and Amanda Kelly	
40	MEAT RISK: WHY DID THE U.S. KNOW YEARS AGO?; AT LAST A GOVERNMENT WILLING TO WARN THAT MEAT CAUSES	The People	T	28/09/1997	1997	Sunday	NEWS	6	539	Vernon Coleman	
46	Alert on red meat risk 'was wrong'	The Guardian	B	17/10/1997	1997		The Guardian Home Page	14	432	CHRIS MIHILL	MEDICAL CORRESPONDENT
48	Doubts on meat links to cancer UK NEWS DIGEST	Financial Times	B	30/10/1997	1997	Thursday	NEWS: UK	10	160		
49	Doubt cast on red meat link with cancer	The Independent	B	30/10/1997	1997	Thursday	NEWS	6	472	Glenda Cooper	
50	Meaty issues	Financial Times	B	10/11/1997	1997	Monday	LEADER	9	414		
51	Claims of cancer in meat 'wrong'	The Guardian	B	10/12/1997	1997	Wednesday	The Guardian Home Page	4	364	RORY CARROLL	
52	Ministers accused of holding up diet report to 'save face'	Financial Times	B	03/02/1998	1998	Tuesday	FRONT PAGE, FIRST	1	370	Alison Maitland	
53	Dobson to tone down warning about red meat	The Times	B	04/02/1998	1998	Wednesday	Home news		528	Nigel Hawkes	
55	Dobson accused of U-turn on red meat cancer risk	Daily Mail	T	06/03/1998	1998	Friday		2	610	Jenny Hope	
56	Ministers 'reverse' red meat warning HEALTH GOVERNMENT CRITICISED AFTER REPORT SAYS REDUCTION IN 'ABOVE AVERAGE' CONSUMPTION MAY CUT RISK OF BOWEL C	Financial Times	B	06/03/1998	1998	Friday	NATIONAL NEWS	8	441	Maggie Urry & George Parker	
57	U-turn claims on meat report	The Guardian	B	06/03/1998	1998	Friday	The Guardian Home Page	5	581	SARAH BOSELEY & JAMES MEIKLE	

APPENDIX 8 (cont.) Content analysis source data

ID	Title	Publication	Tabloid/ Broadsheet	Date	Year	Day	Section	Page no	Word count	Author	Author designation
58	Rare good news for red-meat eaters	The Independent	B	06/03/1998	1998	Friday	NEWS	10	678	Jeremy Laurance	Health Editor
59	U-TURN ON HOW MUCH RED MEAT YOU CAN EAT; CALL FOR PROBE AS GOVERNMENT SPARKS CANCER FURY; GOVERNMENT CHANGE THEIR MIND ON SAFETY OF RED MEAT	The Mirror	T	06/03/1998	1998	Friday	NEWS	2	473	Jill Palmer	Medical Correspondent
60	Cancer Research Campaign: The ultimate secret to better health dished up on a plate	The Independent	B	01/04/1998	1998	Wednesday	FEATURES	C2	1000	Lee Rodwell	
66	Meat factor in cancer	The Times	B	16/07/1998	1998	Thursday	Features		450	Dr Thomas Stuttaford	
74	Right diet may help prevent cancer; The British approach to food is causing major health problems, according to new research. Sarah Boseley reports	The Guardian	B	11/12/1998	1998		The Guardian Home Page	3	1233	SARAH BOSELEY	
76	ADDING FRUIT MAY HELP TO KEEP SOME CANCER AT BAY, SAY SCIENTISTS Are cherryburgers the new taste of health?	DAILY MAIL	T	11/01/1999	1999			20	515	David Derbyshire	
109	A killer we can help to cure;YOUR CUT-OUT AND KEEP GUIDE TO BOWEL CANCER; GOOD HEALTH	Daily Mail	T	03/10/2000	2000			41	939		
128	Smoking drinkers '50 times more at risk from cancer'	The Daily Telegraph	B	22/06/2001	2001	Friday			592	Celia Hall	Medical Editor
129	Scientists link third of cancers to eating the wrong food	Sunday Times	B	24/06/2001	2001	Sunday	Home news		452	Lois Rogers	
211	Food that's good for thought	The Times	B	29/09/2004	2004	Wednesday	Features; Times2	10	1064	Jane Clarke	
213	OFM: Eat your veg. It could be the next best thing to giving up smoking: Eating the wrong foods could be responsible for up to 30 per cent of cancers, but there is growing belief that 'superfoods' are the key to preventing it. Can broccoli really be that good for you?	The Observer	B	10/10/2004	2004	Sunday	Observer Food Monthly	24	4151	Andrew Purvis	
223	RED MEAT IN CANCER LINK; A BURGER A DAY DRAMATICALLY INCREASES THE RISK OF COLON DISEASE, SAY DOCTORS	The Express	T	13/01/2005	2005		NEWS	9	490	Victoria Fletcher	Health Editor
225	FOOD LINK TO CANCER	The Sun	T	18/01/2005	2005				136	Emma Morton	Health Reporter
233	Observer Magazine: Life NUTRITION: Carnal pleasures: A recent report links eating red meat with an increased risk of colon cancer. But, as Dr John Briffa explains, there's a body of evidence to the contrary	The Observer	B	01/05/2005	2005	Sunday	Observer Magazine Pages	58	435	Dr John Briffa	
235	Observer Magazine: Life NUTRITION: NUTRITION NEWS	The Observer	B	08/05/2005	2005	Sunday	Observer Magazine Pages	59	201		
239	120,000 MEAL SERVICE	The Sun	T	09/06/2005	2005		HAYNES MANUAL FOR FAT BLOKES; HEALTH		956	Henry Biggs	
242	How daily diet of red meat raises bowel cancer threat	Daily Mail	T	15/06/2005	2005			6	345	JULIE WHELDON	
243	Red meat linked to increased risk of bowel cancer	The Daily Telegraph	B	15/06/2005	2005	Wednesday			557	Celia Hall	Medical Editor
244	MEAT LINK TO BOWEL CANCER	The Express	T	15/06/2005	2005		NEWS	20	228	Victoria Fletcher	Health Editor

APPENDIX 8 (cont.) Content analysis source data

ID	Title	Publication	Tabloid/ Broadsheet	Date	Year	Day	Section	Page no	Word count	Author	Author designation
245	Big study links red meat diet to cancer	The Guardian	B	15/06/2005	2005		Guardian Home Pages	1	502	Sarah Boseley	Health editor
246	RED MEAT 'RAISES RISK OF BOWEL CANCER'	The Independent	B	15/06/2005	2005	Wednesday	NEWS	10	226	LYNDSAY MOSS	
247	Diet rich in red meat is linked with bowel cancer	The Times	B	15/06/2005	2005	Wednesday	Home news	26	551	Nigel Hawkes	Health Editor
249	MEAT CANCER SHOCK	Daily Star	T	16/06/2005	2005	Thursday	NEWS	2	96		
251	NEW MEAT WARNING MAKES ME SEE RED	The Express	T	16/06/2005	2005	Thursday	COLUMNS	16	698	Clarissa Dickson Wright	
256	The painful condition usually affects people who are aged between 20 and 40	The Times	B	20/06/2005	2005	Monday	Features; Times2	8	798	Dr Thomas Stuttaford	
259	Don't panic - God-fearing folk give the lie to the latest red meat scare stories Doctor's Diary	The Daily Telegraph	B	21/06/2005	2005	Tuesday			608	James Le Fanu	
265	HEALTH: RED ALERT; YET ANOTHER STUDY HAS FOUND THAT EATING STEAK, SAUSAGES AND BACON	The Independent	B	19/07/2005	2005	Tuesday	NEWS	37	919	JEREMY LAURANCE	
270	HEALTH: THE TRUTH ABOUT YOUR FOOD FEARS; WORRIED AND CONFUSED ABOUT THE CONTENTS OF YOUR FRIDGE? WE ASKED	Sunday Mirror	T	04/09/2005	2005	Sunday	FEATURES		1329	RHIANNON VIVIAN.	
273	CANCER: HOW MUCH DO YOU KNOW?; YOUR HEALTH	The Express	T	04/10/2005	2005		FEATURES	33	1761	HILARY FREEMAN	
281	DR MIRIAM: HEALTH AT STEAK	The Mirror	T	02/12/2005	2005	Friday	FEATURES	56	198	MIRIAM STOPPARD	
288	Cancer diet link	The Times	B	31/01/2006	2006	Tuesday	HOME NEWS	27	51		
289	Why red meat diet raises risk of bowel cancer by a third	Daily Mail	T	01/02/2006	2006	Wednesday		16	703	JULIE WHELDON	
290	Science: DNA damage from eating red meat linked to cancer: Harmful compounds raise risk of bowel disease: Volunteers fed diet heavy in beef and pork	The Guardian	B	01/02/2006	2006	Wednesday	GUARDIAN HOME PAGES	11	650	Sarah Hall	Health correspondent
291	HOME NEWS IN BRIEF: Why red meat can cause cancer	The Independent	B	01/02/2006	2006	Wednesday	NEWS	8	51		
292	Cancer's meat link	The Sun	T	01/02/2006	2006	Wednesday			59		
293	Gut reaction	The Times	B	04/02/2006	2006	Saturday	FEATURES; Body & Soul	2	455	Vivienne Parry	
302	Should red meat really be put on prescription?; As a GP says we must eat more steak... YES DR JOHN CANNON	Daily Mail	T	14/03/2006	2006	Tuesday		56	1263	CHARLOTTE DOVEY	
312	Radiotherapy before surgery the best way to tackle bowel cancer	The Guardian	B	09/10/2006	2006	Monday	GUARDIAN HOME PAGES	6	524	Ian Sample	Science correspondent
314	Why we're the Fa; GoodHealth	Daily Mail	T	07/11/2006	2006	Tuesday		38	2146	ANGELA EPSTEIN	
342	YOUR LIFE: WHATS ON THE ANTI-CANCER MENU?; FOOD SCIENTISTS SAY GOOD FOOD CAN CUT YOUR CHANCE OF GETTING THE KILLER C. REDUCE YOUR RISK WITH OUR PROTECTIVE MEAL.	The Mirror	T	05/06/2007	2007	Tuesday	FEATURES	32	798	BY ANGELA DOWDEN	
343	Diet holds clues to cancer risk; Scientists are getting closer to developing a bowel screening test	The Independent	B	03/07/2007	2007	Tuesday			481		

APPENDIX 8 (cont.) Content analysis source data

ID	Title	Publication	Tabloid/ Broadsheet	Date	Year	Day	Section	Page no	Word count	Author	Author designation
346	Confused by health advice? Then read on	The Observer	B	05/08/2007	2007	Sunday	OBSERVER HOME PAGES	15	1678	Denis Campbell	
349	Why tomato sauce cuts risk of prostate cancer	The Sun	T	30/08/2007	2007	Thursday	SUN HEALTH		918	Jane Symons	Health Editor
351	National: Red meat and alcohol 'raise the risk of cancer': Experts say small amounts can endanger health	The Observer	B	28/10/2007	2007	Sunday	OBSERVER HOME PAGES	5	522	Denis Campbell	Health Correspondent
356	Cancer alert over meat and alcohol	The Daily Telegraph	B	01/11/2007	2007	Thursday	NEWS	1	559	Rebecca Smith	Medical Editor
361	Bacon butty is a 'cancer killer'	Daily Star	T	01/11/2007	2007	Thursday	NEWS	2	107		
362	Stay trim and stop eating bacon, cancer report declares	The Guardian	B	01/11/2007	2007	Thursday	GUARDIAN HOME PAGES	6	702	Sarah Boseley	Health editor
365	HAVE A LONG, HEALTHY ...AND MISERABLE LIFE;	The Mirror	T	01/11/2007	2007	Thursday	NEWS	6	377	EMILY COOK	Health correspondent
366	Careless pork costs lives	The Sun	T	01/11/2007	2007	Thursday	HEALTH EXPERTS' SHOCK CANCER ADVICE		541	Emma Morton	Health and Science Editor
368	The new rules for defeating cancer	The Times	B	01/11/2007	2007	Thursday	HOME NEWS	1	1164	Nigel Hawkes	Health Editor
369	Comment & Debate: Blame it on the bacon: The latest commotion over diet and cancer suggests the hysteria bug has now infected doctors	The Guardian	B	02/11/2007	2007	Friday	GUARDIAN COMMENT AND DEBATE PAGES	36	871	Mark Lawson	
370	The sizzling debate over epistemology: can you still feel contented about eating bacon?	The Times	B	03/11/2007	2007	Saturday	HOME NEWS	35	1200	Nigel Hawkes	Health Editor
372	So are we all doomed by daily life? Or does a little of what you fancy do you good?	Mail on Sunday	T	04/11/2007	2007	Sunday		27	1146	KAROL SIKORA	
373	Garlic linked to lower cancer risk	The Observer	B	04/11/2007	2007	Sunday	OBSERVER HOME PAGES	14	186	Denis Campbell	Health Correspondent
374	EATING BACON, HAM AND PROCESSED MEATS	Sunday Mirror	T	04/11/2007	2007	Sunday	FEATURES	31	42	CAROLE MALONE	
375	Hold the muesli - you might fancy playing bacon roulette	The Sunday Times	B	04/11/2007	2007	Sunday	FEATURES; Weekend Review	3	996	Steve Farrar	
376	A tale of lies, damned lies and bacon sandwiches	The Sunday Times	B	04/11/2007	2007	Sunday	FEATURES; News	15	168	Rod Liddle	
379	Tuck into the anti-cancer foods; The latest findings on cancer and diet have given all of us plenty of food for thought	Sunday Express	T	04/11/2007	2007	Sunday	FEATURES	49	903	LUCY ATKINS	
382	Why we won't banish bacon	The Sun	T	08/11/2007	2007	Thursday	SUN HEALTH		416	Jane Symons	Health Editor
383	Why health experts are bad for your, er, health	The Sun	T	08/11/2007	2007	Thursday	SUN HEALTH		1330	Jane Symons & Ellie White	
385	Health secretary clashes with the rasher bashers	The Sunday Times	B	18/11/2007	2007	Sunday	HOME NEWS; Scotland News	4	788	Tom Gordon	
387	WHAT'S YOUR LIMIT: BACON; GOODHEALTH	Daily Mail	T	27/11/2007	2007	Tuesday		55	106		
388	Eat less red meat 'to prevent cancer'	The Daily Telegraph	B	11/12/2007	2007	Tuesday	NEWS	4	268	Nic Fleming	Medical Correspondent
389	Red meat 'can raise the risk of cancer by 25 per cent'	Daily Mail	T	11/12/2007	2007	Tuesday		30	480	David Derbyshire	
390	Meat's a Big C risk	The Sun	T	11/12/2007	2007	Tuesday			73		
396	Simple test offers early bowel cancer warning	Daily Mail	T	02/01/2008	2008	Wednesday		13	424	David Derbyshire	
397	WHATS YOUR LIMIT: BACON	Daily Mail	T	15/01/2008	2008	Tuesday	IRE	53	103		

APPENDIX 8 (cont.) Content analysis source data

ID	Title	Publication	Tabloid/ Broadsheet	Date	Year	Day	Section	Page no	Word count	Author	Author designation
407	Eating one sausage a day raises cancer risk by 20pc	Daily Mail	T	31/03/2008	2008	Monday		7	610	Fiona MacRae	
408	THREE STEAKS A WEEK - AND NO MORE	Daily Mail (London)	Daily Mail	31/03/2008	2008	Monday		7	281		
409	One sausage a day can increase the risk of bowel cancer	The Daily Telegraph	B	31/03/2008	2008	Monday	NEWS	11	384	Rebecca Smith	Medical Editor
410	KILLER FRY-UPS; Fave brekkie 'can give you cancer'	Daily Star	T	31/03/2008	2008	Monday	NEWS	17	157	RICHARD PEPPIATT	
419	JUST ONE SAUSAGE COULD KILL'	The Mirror	T	31/03/2008	2008	Monday	NEWS	9	139	EMILY COOK	HEALTH CORRESPONDENT
422	CANCER RISK OF ASAUSAGE A DAY; DANGER INCREASES 20%	The Mirror	T	31/03/2008	2008	Monday	NEWS	25	153	EMILY COOK	
423	Bangers in cancer warning	The Sun	T	31/03/2008	2008	Monday			162		
424	Processed meat risk	The Times	B	31/03/2008	2008	Monday	HOME NEWS	29	61		
425	Scared to eat sausages? Here's what you must know	Daily Mail	T	01/04/2008	2008	Tuesday		37	374		
427	Shame on those who ganged up on Harriet	The Independent	B	03/04/2008	2008	Thursday	COMMENT	36	882	Janet Street-Porter	
428	A bit of sausage won't kill you	The Sun	T	03/04/2008	2008	Thursday	CANCER SCARE: THE FACTS; SUN HEALTH		769	Amanda Ursell	
435	YOUR LIFE: DEAR MIRIAM - YOU CAN SLASH YOUR RISK OF THE BIG C	The Mirror	T	13/05/2008	2008	Tuesday	FEATURES	28	1034	DR. MIRIAM STOPPARD	
449	The deadly breakfast; A traditional fry-up 'may raise risk of bowel cancer by 63pc'	Daily Mail	T	26/08/2008	2008	Tuesday		11	684	Sam Greenhill	
450	Fry-ups 'increase; bowel cancer risk'	The Daily Telegraph	B	26/08/2008	2008	Tuesday	NEWS	6	192	Chris Irvine	
451	KILLER FRY-UP; Cooked brekkie can give you cancer	Daily Star	T	26/08/2008	2008	Tuesday	NEWS		265	GEMMA WHEATLEY & CAMERON MILLAR	
454	FRY-UPS INCREASE CHANCE OF BOWEL CANCER BY 63%; PROCESSED MEAT WARNING	The Mirror	T	26/08/2008	2008	Tuesday	NEWS	16	172	MIKE SWAIN	Science editor
456	Bacon & eggs-it	The Sun	T	26/08/2008	2008	Tuesday			303	Emma Morton	Health Editor
458	YOUR LIFE: 10 BETTER BREAKFASTS; FOLLOWING THE PANNING THAT HEALTH EXPERTS GAVE FRY-UPS THIS WEEK, HERE'S HOW TO GIVE YOUR FAVOURITE BREAKFAST A HEALTHY MAKEOVER.	The Mirror	T	27/08/2008	2008	Wednesday	FEATURES	32	1046	CAROLINE JONES	
459	Another great debate: Do hot dogs cause cancer?	The Daily Telegraph	B	28/08/2008	2008	Thursday	NEWS; International	15	228	Tom Leonard in New York	
462	Are you gambling with your life?	The Sun	T	11/09/2008	2008	Thursday	SUN HEALTH		1163	Andrea Hammett	
463	Don't feel guilty about eating meat; Britain's leading nutritionist on how to eat your way to health	Daily Mail	T	16/09/2008	2008	Tuesday		50	549	Jane Clarke	
474	Meat additive 'could make cancers grow'	Daily Mail	T	31/12/2008	2008	Wednesday		19	531	David Derbyshire	
500	Vegetarians have lower cancer risk, claims study	The Daily Telegraph	B	17/03/2009	2009	Tuesday	NEWS	12	359	Louise Gray	
502	OFM: They finish their cereal. They snack on nuts and fruit juice. They avoid burgers and fizzy drinks. So, how could they possibly get fat?	The Observer	B	22/03/2009	2009	Sunday	OBSERVER FOOD MONTHLY	18	3001	ANDREW PURVIS	
504	YOUR LIFE: BRILLIANT BITES.. ON A BUDGET; WE'RE ALL TRYING TO CUT FOOD COSTS BUT THESE GREAT MEALS COST LESS THAN POUNDS 2, ARE HEALTHY AND COULD CUT YOUR CANCER RISK, TOO.	The Mirror	T	26/03/2009	2009	Thursday	FEATURES	34	848	SHERYL PLANT	

APPENDIX 8 (cont.) Content analysis source data

ID	Title	Publication	Tabloid/ Broadsheet	Date	Year	Day	Section	Page no	Word count	Author	Author designation
511	KNOW YOUR BODY AND STOP BOWEL CANCER	Mail on Sunday	T	05/04/2009	2009	Sunday			394	DR ELLIE CANNON	
516	COULD THIS BURNT SAUSAGE GIVE YOU CANCER?	The Mirror	T	23/04/2009	2009	Thursday	FEATURES	40/41	1500	CHARLOTTE HAIGH	
521	NEW CANCER ALERT ON RED MEAT; Millions don't know dangers, say experts	The Express	T	15/06/2009	2009	Monday	NEWS	1	491	Jo Willey	Health Correspondent
522	National: Three rashers or less: how to cut cancer risk	The Guardian	B	15/06/2009	2009	Monday	GUARDIAN HOME PAGES	11	301	Denis Campbell	Health correspondent
530	National: Health: Vegetarians less likely to develop cancer than meat eaters, says study: Striking difference found in risk of disease in blood: Scientists acknowledge more research still needed	The Guardian	B	01/07/2009	2009	Wednesday	GUARDIAN HOME PAGES	9	774	Karen McVeigh	
535	Obituary of Professor Sheila Rodwell	The Daily Telegraph	B	03/08/2009	2009	Monday	FEATURES	29	641		
537	DON'T GIVE CHILDREN HAM SANDWICHES, SAY CANCER EXPERTS	Daily Mail	T	17/08/2009	2009	Monday			574	JENNY HOPE	Medical Correspondent
539	Cancer alarm for mums over ham in lunchboxes	The Express	T	17/08/2009	2009	Monday	NEWS	29	377	Jo Willey	Health Correspondent
541	Ban ham sandwich from kids' lunchbox'	The Sun	T	17/08/2009	2009	Monday	NEWS	11	135	PHILIP CASE	
542	THESE HAM-FISTED FOOD FASCISTS ARE JUST PIG IGNORANT	Daily Mail	T	18/08/2009	2009	Tuesday			1253	Jan Moir	
544	SPOON-FED A-LEVELS THAT FAIL EVERYONE	Daily Mail	T	19/08/2009	2009	Wednesday			1581	ALLISON PEARSON	
549	LUNCHBOXES.. THAT DON'T HAM IT UP; LAST WEEK EXPERTS WARNED PARENTS TO PUT LESS PROCESSED MEAT SUCH AS HAM IN SANDWICHES FOR KIDS BECAUSE OF A LINK TO BOWEL CANCER. HERE ARE A FEW TASTY NUTRITIOUS ALTERNATIVES FOR LITTLE ONES	The Mirror	T	25/08/2009	2009	Tuesday	FEATURES	32	816		
583	MY FATHER'S DEATH FROM BOWEL CANCER MAY HAVE SAVED MY HUSBAND ALDO'S LIFE	Mail on Sunday	T	16/05/2010	2010	Sunday			1229	SADIE NICHOLAS	
616		The Guardian	B	19/10/2010	2010	Tuesday	GUARDIAN HOME PAGES	7	533	Denis Campbell	Health Correspondent
626	5 lifestyle changes that would slash bowel cancer toll	The Express	T	27/10/2010	2010	Wednesday	NEWS	22	410	Victoria Fletcher	
633	WHAT'S THEIR BEEF WITH EATING MEAT?	The Mirror	T	04/11/2010	2010	Thursday	FEATURES	56	332	MIRIAM STOPPARD	
648	HURRAH Z EATING RED MEAT IS GOOD FOR YOU AFTER ALL!	Daily Mail	T	19/02/2011	2011	Saturday			841	JENNY HOPE	Medical Correspondent
649	Q & A The Sunday Telegraph (London)	The Sunday Telegraph	B	20/02/2011	2011	Sunday	NEWS	2	454		
650	Official: eat less red meat	The Sunday Telegraph	B	20/02/2011	2011	Sunday	NEWS	1	436	PATRICK HENNESSY & LAURA DONNELLY	
651	STAY HEALTHY..GIVE RED MEAT THE CHOP; EAT NO MORE THAN ONE STEAK A WEEK TO AVOID CANCER, WARN EXPERTS	Sunday Mirror	T	20/02/2011	2011	Sunday	NEWS	6	334	VINCENT MOSS	
652	THE CASE AGAINST RED MEAT	Daily Mail	T	21/02/2011	2011	Monday			398	BY TOP GP MARTIN SCURR	
653	SO HOW MUCH RED MEAT CAN WE EAT?	Daily Mail	T	21/02/2011	2011	Monday			376	SOPHIE BORLAND	
654	Eat less red meat to lower cancer risk	The Daily Telegraph	B	21/02/2011	2011	Monday	NEWS	8	465	Martin Beckford	

APPENDIX 8 (cont.) Content analysis source data

ID	Title	Publication	Tabloid/ Broadsheet	Date	Year	Day	Section	Page no	Word count	Author	Author designation
654	Eat less red meat to lower cancer risk	The Daily Telegraph	B	21/02/2011	2011	Monday	NEWS	8	465	Martin Beckford	
657	Too much red meat can give you cancer	The Express	T	21/02/2011	2011	Monday	NEWS	27	347	Victoria Fletcher	
658	WORRIED ABOUT RED MEAT? GIVING IT UP CAN BE BAD FOR YOU, TC [REDACTED]	Daily Mail	T	22/02/2011	2011	Tuesday			1109	Jo Waters	
661	After red alert you could think fish and chicken	The Sun	T	24/02/2011	2011	Thursday	FEATURES	49	513		
665	Call to 'ration' rashers; RED MEAT RISK	The Sun	T	25/02/2011	2011	Friday	NEWS	16	112	Jane Hamilton	
667	Red meat risk reduced by 'two sausages a day' limit	The Times	B	25/02/2011	2011	Friday	NEWS	20	114		
668	Three slices of ham or a lamb chop per day: your meat limit	The Daily Telegraph (London)	B	26/02/2011	2011	Saturday	NEWS	14	150		
670	Swap meat for leaves... and die bored aged 28	The Sun	T	26/02/2011	2011	Saturday	FEATURES; OPINION	37	492	Clarkson	
672	TABLE TALK	The Sunday Times	B	13/03/2011	2011	Sunday	STYLE;FEATURES	54/55	1398	AA Gill	
686	LESS RED MEAT COULD PREVENT 17,000 BOWEL CANCER CASES	Daily Mail	T	23/05/2011	2011	Monday			511	Jenny Hope	Medical Correspondent
687	Eating less red meat could save 17,000 lives	The Daily Telegraph	B	23/05/2011	2011	Monday	NEWS	10	221	Stephen Adams	
690	CANCER RISK IN YOUR FRY-UP	The Express	T	23/05/2011	2011	Monday	NEWS	1	555	Victoria Fletcher	
691	Cut red meat intake and don't eat ham, say cancer researchers	The Guardian	B	23/05/2011	2011	Monday	GUARDIAN HOME PAGES	5	329	Denis Campbell	Health Correspondent
711	BOWEL CANCER RATE DOUBLES FOR MEN	Daily Mail	T	27/07/2011	2011	Wednesday			423	Tamara Cohen	Science Reporter
720	DO I REALLY NEED TO ... CUT DOWN ON RED MEAT	Daily Mail	T	16/08/2011	2011	Tuesday			147		
742	CANCER ALERT ON RED MEAT	The Express	T	04/11/2011	2011	Friday	NEWS	1	516	Jo Willey	Health Correspondent

APPENDIX 9 Interview topic guide

Policy makers:

- A: The process of policy making
- B: The role/influence of the media
- C: Contact with journalists
- D: Framing in the media and in the policymaking process
- E: Where this issue was placed on the policy agenda
- F: Where this issue was placed on the media agenda

Journalists:

- A: The process of journalism
- B: The role/influence of the media
- C: Sources
- D: Framing/news values
- E: Where this issue was placed on the media agenda
- F: Where this issue was placed on the policy agenda

Other external actors:

- A: Their part in the policy and media process
- B: The role/influence of the media
- C: Contact with journalists / policymakers
- D: Framing of the issue from their perspective
- E: Where this issue was placed on the media agenda
- F: Where this issue was placed on the policy agenda

APPENDIX 10 Sample of interview transcript

INTERVIEW 7

RW So, first of all tell me, what did you have for breakfast

7 Um, I had a croissant and a boiled egg, and several cups of tea

RW Marvellous. And, just how would you like to be described. Sort of for the purposes of this...

7 Er, I'm a, I'm a, campaigning journalist

RW Ok, um, so, as you know I'm talking mostly about red and processed meat...

7 sure

RW ...that's been the focus of my research, but you can kind of talk in general terms...

7 sure

RW um, I wanted to ask you about, um, the sort of process of how... because you're a freelance journalist...

7 yeah

RW ...so if you were writing about this subject, how does that hap...what's the process of doing that, how does that work?

7 Well, I, I, I, I mean I sort of... I suppose I'm one of...only two or three journalists in, journalists in Britain who's sort of known to concentrate on policy and food so I quite often get approached especially if a news story breaks, by the Mail, the Guardian and the Times, and the Observer. Um, with query...usually by news editors saying, you know (laughs) what what, how serious is this, and what should we do about it. And often by comment editors, looking for, for context and for you to put in comments. So often it's reactive, depending on how busy I am I might pick up, it's almost always on the back of some story breaking so with horsemeat, the horsemeat scandal you know clearly it was in January last year when the first stories started to emerge, and, one's little freelance antennae went, 'ding ding ding ding' you know, and also you know as a campaigner I'm somebody with wider beliefs in the system, you know seeing an opportunity to try and put some of the bigger, bigger problems over, not just, 'ooh er there's horse meat in beef' but um...

RW So they contact you as a....as somebody with an opinion, rather than as somebody who can, write about it?

7 No I think both, really.