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UK food and eating practices to identify potential transformations in food systems

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Questions asked for each meal event? (in addition

• Activities while eating meal? (Screen use, on transport, phone

to recording type and weight of foods eaten)

How long did it take to prepare and cook the meal? (If

• Estimate of % of meal prepared uneaten and stored

Main source of food for the meal. (e.g Supermarket etc)

Estimate of % of meal prepared uneaten and thrown away

Who was this meal eaten with?

Where was this meal prepared?

participant cooked the meal)

How long did it take to eat the meal?

Where was this meal eaten?

• Who cooked this meal?

• Meal time

Introduction and Context

Food is an important part of everyday life, but measuring what, how, and when people eat, and with whom, is challenging. In Cross Cutting Theme 2 of the Healthy soil, Healthy food, Healthy people (H3) project, we aim to understand everyday practices and behaviors related to food, including eating out, shopping, home cooking, preparing, wasting, and storing food. We also explore food processing, mental wellbeing, and food insecurity. In short we aim to increase the understanding of food-related social practices as a means to understanding potential transformations to the UK food system.

The findings will inform food system decision-making by identifying areas for interventions and further research.

This survey is attempting to go beyond the nutritional, safety, or economic focus of surveys like the National Diet and Nutrition Survey or the Living Cost and Food Survey or Food and You, to provide additional insights on the social context of food and eating practices; providing a snapshot of current practices to complement the emphasis on longer-term trends in food-related behaviours explored by sociologists such as Alan Warde and Anne Murcott, we also buildson questions asked in Poulain et als Food Barometer of Malaysia. We acknowledge that this survey has the limitation of being self-reported. This poster shows some of the potential avenues of investigation, in the future we will use Warde's conceptual framework on the practice of eating (Warde 2016), and Everyday Eating (Warde 2024) which have examined changing eating practices in Britain since the 1950s to identify possible leverage points for wider food system change (Meadows 1999, Benton 2021,. Abson et al 2017).

Methods

Our survey used Qualtrics (an online survey platform) and Intake 24 (a web-based 24-hour dietary recall system). Recruitment 6 July 2024 to 8 November 2024, We required from a UK only sample, and had quotas for Male/Female, as well as age groups:, 18-24, 25-34, 35-44, 45-55, 55+. Qualtrics recruited n=8091 those who started the Intake 24 survey n=2760, those who completed the survey n=2667. Figures created with Datawrapper graphics software.

Cleaning Remaining sample n=2381, with exclusions if the amount of energy (Kcal) consumed was (<400kcal or more than 7302.8 kcal (mean + 3SD) (average Kcal was 1753); recorded less than three food Items (average food times was 11 minutes), or had a duration of 3min or less (average duration was 20 minutes). We emphasise that our data are self-reported attitudes and behaviours rather than direct observations of social practice

Questions asked for each participant.

Ask About Diet (vegan, Vegetarian etc).

- Recall of number of days Eating Out of Home in last 7 Days.
- Recall of Food and Cuisine Types eaten in last 7 days. • Who Does the Food Shopping?
- Who Does the Cooking? Self reported Cooking Skill.
- How is Food Usually Prepared in Your Household? (a self reported classification of their dietary pattern to NOVA). • Where Did the Household Get Your Food From in the Past
- Typical Transport for Food Shopping.
- Food insecurity questions using FSA "UK Public's Interests,
- Needs and Concerns Around Food" guestions. Mental wellbeing via Short Warwick-Edinburgh Mental

% of group who are food insecure

Wellbeing Scale (SWEMWBS).

Results

Demographics:

The sample was balanced in terms of gender and age distribution, closely matching the UK population. Participants were categorized by working status, household income, and ethnic origin, providing a comprehensive demographic overview. 23% of the sample lived by themselves, 22% lived with only their partner.

Food Practices:

Shopping Habits: Most participants reported shopping at large supermarkets (61%), with some also using local markets (25%) and food delivery apps (10%).

Cooking and Preparation: A majority of respondents cooked from scratch (53%), though food-insecure individuals were more likely to use highly processed foods (28%) (self-classified dietary patterns). **Eating Out:** 18% of participants did not eat out in the past week, while others frequented various food outlets, including cafes and restaurants. This can be compared to FSA statistics in future analysis.

Food Waste:

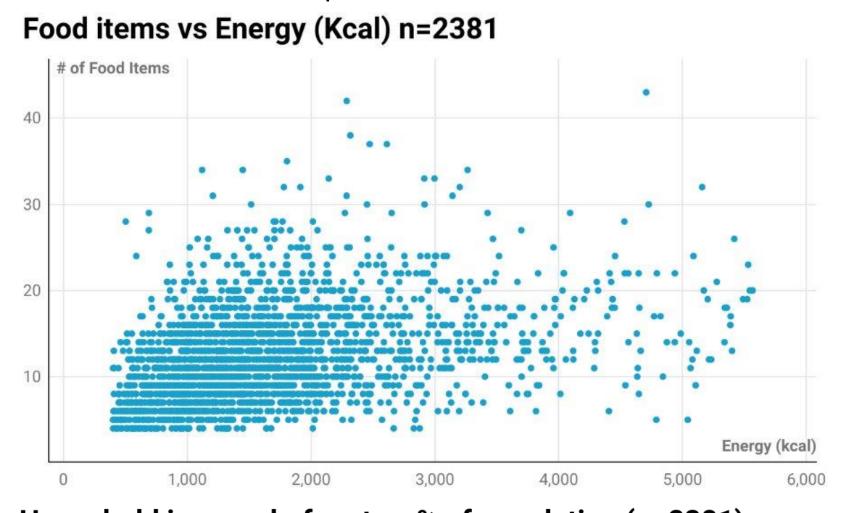
Waste Levels: On average, 7% of food prepared was wasted. If a food was wasted, the average amount wasted was 34%, with higher waste levels observed for certain food categories like non-meat and potato dishes. 94/112 foods have more than 30 datapoints

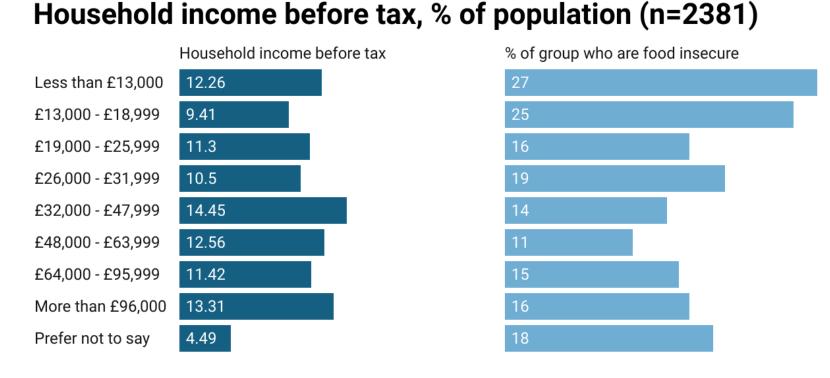
Leftovers: 78% participants reported not having leftovers. The average amount of food left over in meals that had food left overs was 35%. We do not have any data on if this leftover food was used at a future date or wasted.

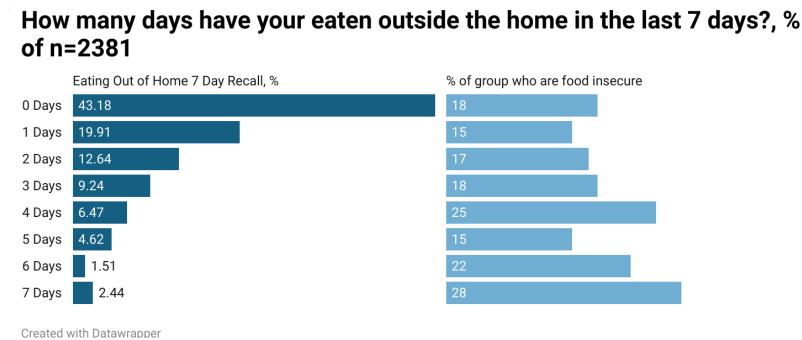
Behavioral Insights:

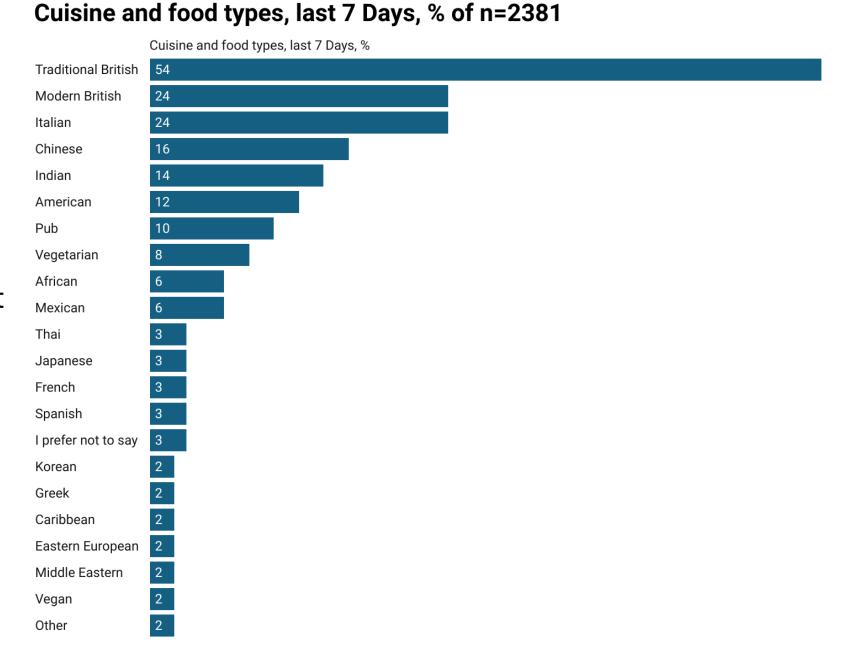
Meal Timing: The survey highlighted distinct patterns in meal timing, with breakfast and lunch being shorter compared to dinner.

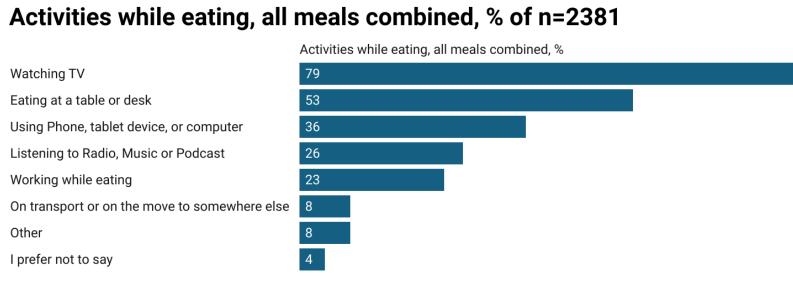
Eating Alone: 81% of participants ate alone at some point over 24hrs, even within family units, indicating a trend towards individualized eating practices.

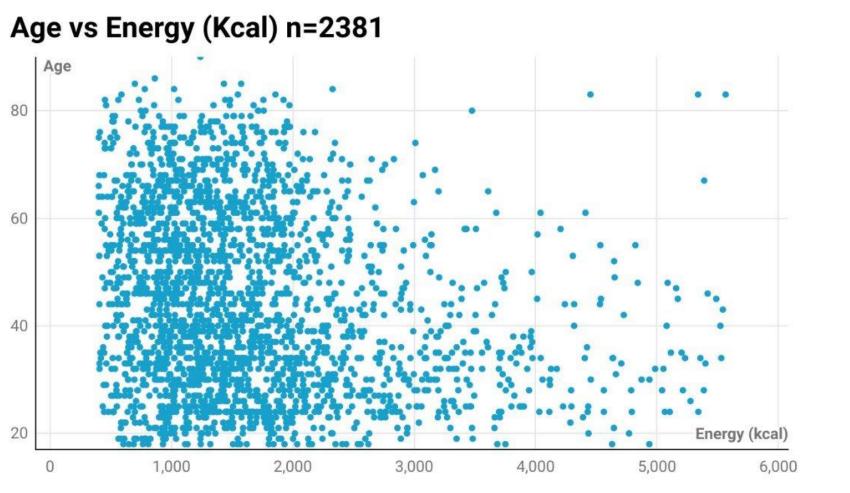


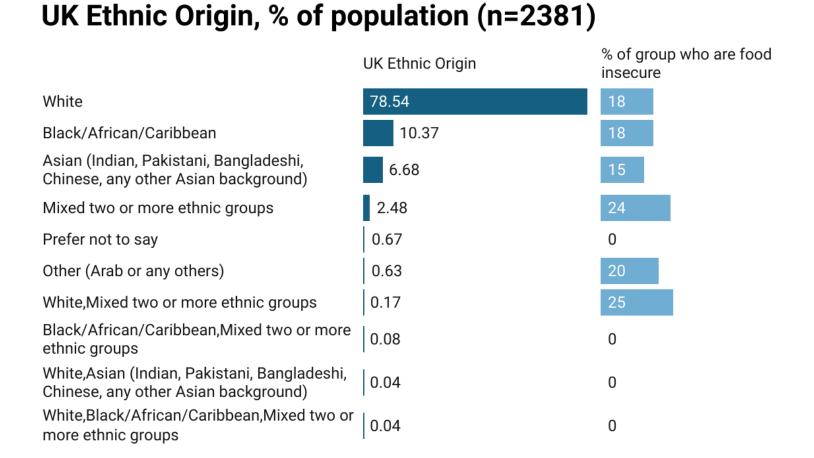


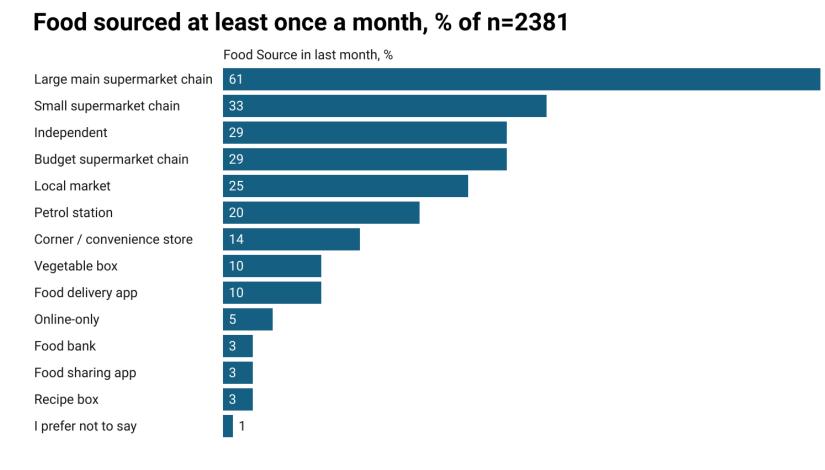


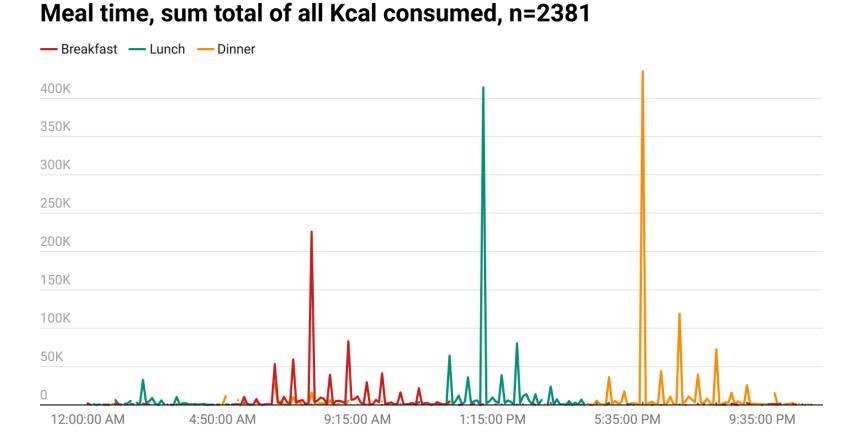


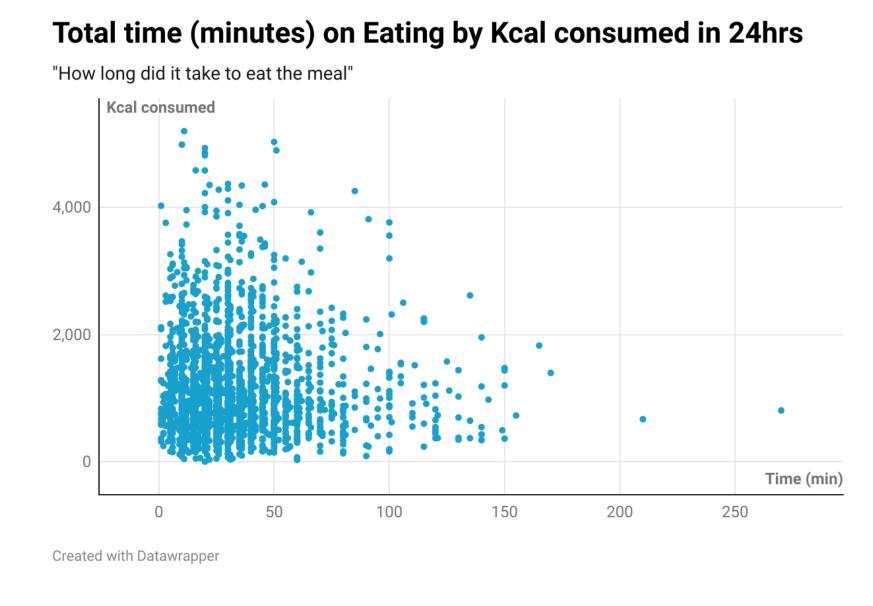




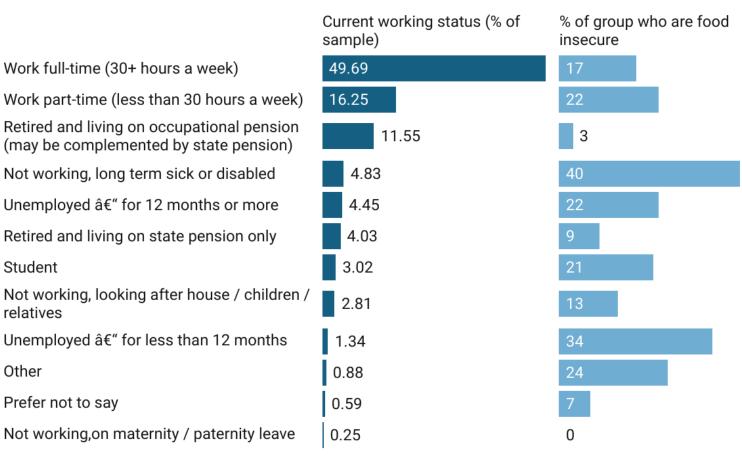




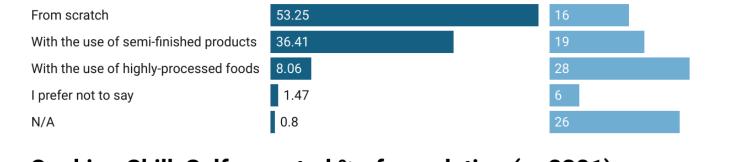




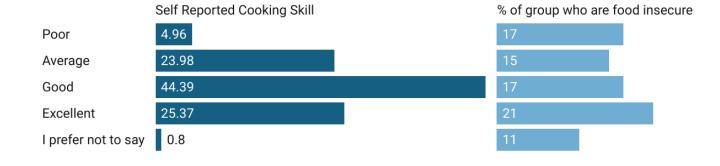
Current working status as % of population (n=2381)



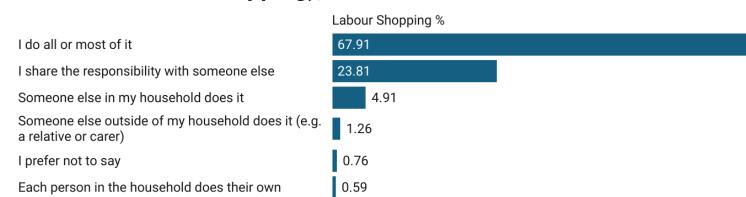
Food Processing of dietary pattern, self reported, % of population (n=2381)



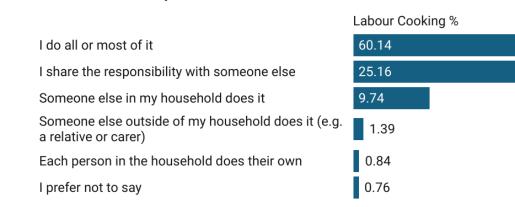
Cooking Skill, Self-reported % of population (n=2381)



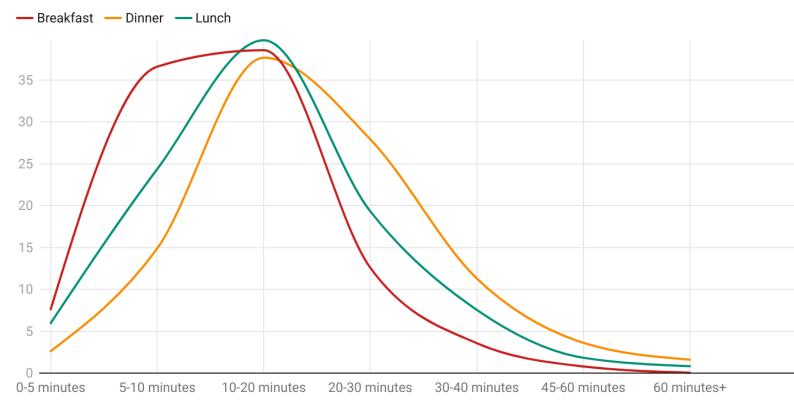
Who generally does the food shopping for your household (both online and in store food shopping), % of n=2381



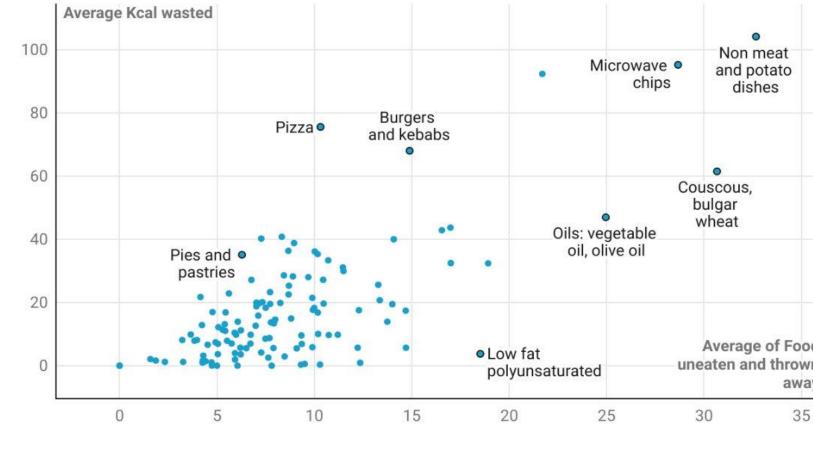
Who generally does the food preparation and cooking for your household?, % of n=2381



How long did it take to eat the meal %, n=2381



% of food waste by Average Kcal wasted per portion



Created with Datawrappe

Discussion and Conclusion

The findings from the H3 survey provide valuable insights into the current state of food practices in the UK. The data highlights the complexity of food-related behaviors and the influence of socio-economic factors on dietary habits. These insights can inform future research and policy-making aimed at improving food security and promoting healthier eating practices.

The H3 survey underscores the importance of understanding food practices to address issues related to health, sustainability, and food security. Continued analysis and dissemination of these findings will contribute to the broader goal of transforming the UK food system. Future research will focus on (de)routinisation diversification, convenience, casualization, coordination, and divisions of labour References

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