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23 **The role of Foodbanks in the context of food insecurity: Experiences and eating**
24 **behaviours amongst users**

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26
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Abstract

Purpose: To investigate the role of foodbanks in the context of food insecurity and explore food choices and eating behaviours amongst users. *Methods:* Face-to-face interviews were conducted with individuals who had visited the Margaret Court Community Outreach foodbanks in Perth? In Western Australia. Participants were thirty-three service users (mean age 44.12 years, SD 13.74) who had collected a food hamper from the foodbank. Interview transcripts were analysed using thematic analysis. *Results:* Five main themes emerged: *Ties you over until pay day; Food hamper supporting meals and fruit and vegetable consumption; Food choices supplementing hamper; Household gatekeeping and food control, and, Informal referral.* *Conclusions:* Opposite to previous findings, participants were very complimentary about the content of the food hamper received which included a variety of fresh produce. One of the key new findings was the frequent purchase and consumption of meat and processed meat. Future work and interventions to improve eating behaviour and reduce food-related financial pressure for those vulnerable to food insecurity include further exploration of the dimensions influencing food choices (i.e., cultural norms, habits, symbols); exposure to healthy and tasty plant-based meals, (i.e., tasting low-cost and tasty vegetable based meals); parenting training focused on handling child/partner food choice influences, and, enforcing household rules governing food.

Keywords: food insecurity, health eating, social deprivation, eating behaviour, food parcel.

The role of Foodbanks in the context of food insecurity: Experiences and eating behaviours amongst users

Food insecurity is defined as inadequate physical, social or economic access to food (Committee on World Food Security, 2012). Household food insecurity is recognised as a serious and increasingly prevalent public health problem in developed countries including the UK, Europe, Australia and the US (Pollard & Booth, 2019). The economic consequences of food insecurity are likely to be substantial, estimated at \$167.5 billion in the US in 2011 associated with lost productivity and preventable healthcare costs (Shepard et al., 2011). The prevalence of food insecurity in Australia is estimated to be the highest among developed countries at 21.7% of households (~4.6 million people) followed by Japan (15.7%) and the US (15%) (Gentilini, 2013).

Periods of prolonged food insecurity have been linked to a range of physical and mental health issues including the development of Type 2 diabetes, cardiovascular disease, obesity and depression (Foley et al., 2009; Kim & Frongillo, 2007; Ramsay et al., 2012; Seligman et al., 2010; Stuff et al., 2004; Dinour, Bergen & Yeh, 2007). There is also evidence that those with limited access to food often choose food with high caloric value instead of foods with high nutritional value, a contributing factor to weight gain (Drewnowski & Specter, 2004). Those on low incomes and experiencing food insecurity are also less likely to consume a sufficient intake of fruit and vegetables (Hume et al., 2009; Kirkpatrick & Tarasuk, 2008; Smith et al., 2013). The 2010 Global Burden of Disease study estimated 16,140 deaths per year in Australia are attributable to low fruit and vegetable intake (Lim et al., 2012). The increasing disparity in costs of living has meant that people from disadvantaged backgrounds are more reliant on food sourced from donations to community outreach services, charitable organisations and food banks.

Food banks have been the primary response to food insecurity delivered by charitable organisations (Lambie-Mumford, 2013). Most food banks tend to provide food in the form of pre-packaged hampers that are put together by food bank staff. A recent review of users' perceptions concerning food provided by food banks suggests limited food choice, and poor food quality in addition to feelings of shame, stigma and embarrassment associated with food bank use (Middleton et al., 2018 (Fallaise, Newlove et al. 2020, van der Horst, Pascucci et al. 2014)). However, no Australian studies were included in the review, and the focus concerned how users experienced food relief and how it affected their well-being. There is a gap in understanding how users make use of the food hamper or to understanding food choices and influences on eating practices in these socially deprived groups. Previous work on food banks users in Perth focussed on the homeless. (Booth, Begley et al. 2018)

The factors that explain the impact of socioeconomic status on food choice and eating behaviours are complex. Previous research has failed to adequately explain the link between SES and health and there is a need for more research on the specific ways that deprivation impacts upon food choice and eating practices (Daly, Pollard et al. 2018) . Factors such as economic resources, perceived stress, tastes including value of the future, knowledge and personality factors have been proposed to explain the relationship between SES and a variety of health behaviours (Cutler & Lleras-Muney, 2010). Others have suggested that poor food literacy (e.g., lack of cooking and food budgeting skills) and insufficient knowledge are barriers to healthy eating (Vidgen & Gallegos, 2014; Hardcastle et al., 2015; Hardcastle & Blake, 2016). Worsley and colleagues (2014) call for further research to examine the influence of health food patterns and food access on food consumption, rather than nutritional knowledge, in line with the food literacy framework (Vidgen & Gellegos, 2014). In addition to psycho-social influences, diet is likely to be influenced by the physical environment and access to healthy foods (Lloyd, Lawton, Caraher et al., 2011). Given that cost is a major

influence on food purchases, socially-deprived individuals will have less disposable income to spend on food and it is quite likely that healthier (and more expensive) foods may be overlooked in favour of more unhealthy, energy-dense choices (Drewnowski & Spector, 2004; Giskes et al., 2002). Food choice and healthy eating in lower SES groups is likely to be influenced by multiple factors and there is a need to identify and target these factors to improve the effectiveness of public health interventions in lower SES groups.

The voices, perceptions, and experiences of food bank users have rarely been heard and documented (Wells & Caraher, 2014 (Garthwaite 2016)). Qualitative approaches are highly appropriate for understanding complex personal and social issues such as food choice and eating habits and are useful when there is little existing knowledge. There are few qualitative studies that have explored dietary attitudes and experiences of low-income individuals (e.g., Dibsball, Lamber & Frewer, 2002; Hardcastle & Blake, 2016; Vidgen & Gallegos, 2014; Van der Velde et al., 2019). To our knowledge there are no studies that have involved interviewing the user following collection of a food hamper and asking the user how they intend to make use of the individual items of food.

The objective of the present study was to investigate the attitudes and experiences of users attending a food bank, and, to identify the ways in which the food hamper is utilised and further explore eating behaviours and practices.

Methods

The current study conformed to COREQ guidelines for qualitative research by Tong et al (2007).

Participant Recruitment

Following Human Research Ethics Committee approval (Curtin University Reference: HRE 5904), a research assistant (RA) was employed to visit Margaret Court Community Outreach (MCCO) foodbanks in Osborne Park in Perth and another based in Kwinana, Western

Australia. Subject to eligibility criteria (i.e., evidence receipt of welfare payments), individuals are permitted to visit a MCCO facility once a fortnight and received either a family-sized hamper or a single person hamper. Participants were recruited by the RA on site that met the inclusion criteria including (i) being at least 18 years of age or older; (ii) have accommodation and access to a kitchen or to cooking facilities; (iii) be eligible for and in receipt of a food hamper; and (iv) speaks and understands English. Exclusion criteria included users that were homeless and those with serious mental health problems (identified by staff at MCCO) because they have specific needs that are beyond the scope of this research. The RA approached eligible participants and briefly explained the purpose of the study, participant expectations, and rights to withdraw without prejudice. Participants were offered the opportunity to ask questions and upon verbal consent, were subsequently asked to sign consent forms. Participants were also asked to complete a brief demographic questionnaire including gender, date of birth, educational attainment, weekly household income, and relationship status. Permission for the interviews to be audio-recorded was provided and participants were informed that pseudonyms would be used in reporting of data to protect their identity.

Data Collection

Semi-structured interviews lasting up to 40 minutes were conducted by a RA. The RA was a Psychology graduate and trained by the lead author (SH) who has expertise and a wealth of experience in qualitative data collection and analysis. Interviews took place at MCCO. An interview guide was used with questions concerning (i) how users intended to use the food hamper; (ii) an exploration of food choice and eating practices; (iii) an exploration of food literacy including the purchase of food, preparation of food, budgeting and confidence in cooking meals; and (iv) healthy eating including fruit and vegetable consumption. Interviews were digitally recorded and transcribed verbatim. Data collection ceased at the

point when no new information was gained and data saturation was reached (Sparkes & Smith, 2014).

Data Analysis

Data were analyzed by the first author (SH) using thematic analysis (Braun & Clarke, 2006). Thematic analysis involved several steps. The first step involved *immersion* and involved carefully reading transcripts several times over to identify participants' meanings. The second step involved attaching codes to relevant text sections. The third step involved the identification of themes at a broader level and examining whether codes could be combined to form an overarching theme. The final step involved the refining and defining of final themes. The analysis offered is one interpretation of the interviewees' experiences and we acknowledge that other interpretations are possible. Nevertheless, we aim to offer a credible and trustworthy interpretation that captures participants' perceptions and experiences. For example, we provide 'thick description' via the use of extensive and direct quotations so that the reader can evaluate the interpretation (Hardcastle & Hagger, 2011).

Results

Thirty-three food bank users participated in the study. The majority were female (76%, n=25). The Mean age was 44.12 ± 13.74 . Almost half (n=16) were single parent households (exclusively mothers) with most having 1 (31%) or 2 children (31%) living at home. Three single mothers had three children and three had four children. Participant characteristics are summarized in Table 1.

Analysis of the data identified five main themes: *Ties you over until pay day*; *Food hamper supporting meals and fruit and vegetable consumption*; *Food choices supplementing hamper*; *Household gatekeeping and food control*, and, *Informal referral*.

The identifiers following each quote represent ID number, gender, and age.

Ties you over until pay day

1 For most participants, MCCO was viewed as a lifeline to provide food until a
2 further welfare? payment was received. Food insecurity was related to expenditure on
3 household bills, travel or medical conditions and appointments. For example, “My doctors
4 bills are like \$90 an appointment so that’s where all the money is going and fuel and that’s
5 like \$100” (P1, F, 54). Another referred to rent, bills and medical costs that take priority
6 over food:

7 “\$700 a fortnight and out of that is my rent and other payments so I’m basically
8 living \$250-\$350 a fortnight...I have gone this year from no medication to about 8
9 [items?]....there’s no way I would be able to afford that extra money for those
10 scripts...what I do first is pay my bills...food is the last thing that you buy, bills
11 first because then you have bad credit you can get things cut off...So when
12 everything goes up that’s what gets cut down, your food” (P3, F, 63).

13 Several referred to MCCO as invaluable in times of crisis and excessive bills: “At the
14 moment I have my car registration, insurance and all bills...about \$700 that I have to fork
15 out which I haven’t got” (P5, M, 75), and to act as a buffer until the next payment: “This
16 ties you over until you get paid again...you (get) a bit of veggies and fruit and potatoes”
17 (P6, F, 58). The only barrier to the food provision was access with a few participants
18 raising the issue of transport or petrol : “I will only come down if I have fuel but it is
19 worth the trip to put it that way” (P14, F, 31) and “You have to have a car or a lift down
20 here” (P6, F, 58). A similar response was observed in relation to hypothetical cooking or
21 health eating classes “If I have enough petrol to come here I probably would” (P4, F, 56).

22 **Food hamper supporting meals and fruit and vegetable consumption**

23 This theme concerned the types of food received in the food hamper, the longevity
24 of the hamper, and, the ways in which the hampers supported fruit and vegetable
25 consumption. Participants were consistently positive about the food hamper(s) they

1 received from MCCO, and in particular, the fresh food they received from MCCO that
2 was reportedly absent from most other local food banks: “This place is a lot better than
3 other places. You get a lot more veggies and fruit instead of tin fruits...here is more fresh”
4 (P6, F, 58) and “Most of their stuff (other food banks) is more canned stuff...you don’t
5 get fresh drinks and food. Here it is more of a fresh variety” (P12, M, 54) and “You get
6 milk (here) whereas a lot of other places you get mostly cupboard foods” (P3, F, 63).

7 In relation to longevity of the food hamper, most family size hampers were
8 reported as lasting for a week (n=11), two weeks (n=4) or 10 days (n=2). For example: “I
9 would say about a week. The veggies are all fresh so you have that with the meals...and
10 then the snacks will come in handy for the weekend” (P15, F, 38), and, “Usually lasts one
11 week. Pies or frozen veggies I use a lot (P23, F, 50). Participants also reported saving a
12 substantial amount of money towards food: “I find that when I do get a hamper that my
13 shopping is probably like a \$100 so like probably half (of their original cost on
14 shopping)... It is then just meat and the bare basics” (P26, F, 42). Three reported the
15 hamper lasting for a couple to a few days (related to a later theme of household
16 gatekeeping).

17 Participants also referred to the types of food received in the hamper and how
18 these would support making meals: “There’s certainly enough in the food package that
19 you can get 10 days out of it...sometimes you get meat pies and some sort of mince or
20 roast that would do two meals. You always get mountains of bread...then the veggies and
21 stuff usually last just over a week” (P33, F, 37) and: “Last time I got potatoes, carrot,
22 cabbage and a roast and I did that in one meal and we had leftovers for the day after and
23 that was our lunch and dinner for the day after” (P1, F, 35). Another referred to the food
24 received forming entire meals, albeit not necessarily healthy: “Chicken, sausage
25 rolls...there are some chips and peas so we can have pies with chips and veggies” (P19, F,

53). Most participants commented on the fruit and vegetables they regularly received at MCCO, which was deemed important because of the cost of these in supermarkets: “Fruit, the main thing is fruit which is so expensive at shopping centres. I then don’t need to buy fruit” (P26, F, 42) and “The veggies are all fresh, so you have that with the meals. I have just got the meat pack and that’s why I’m dependent on here for the vegetables, so it goes with the meat” (P15, F, 38) and “I like a lot of fruit and there is usually plenty of fruit, apples and pears things like that” (P5, M, 75). Others made comparisons between the fresh food received from MCCO, particularly vegetables, to other food banks or sources of support (i.e., food vouchers): “(here at MCCO) you get your potatoes, lettuce, cauliflower, carrots, milk and a little luxury with the chocolate milk...this is better than all the baked beans and spaghetti” (P3, F, 63) and: “Here you get all your fruit and veg whereas with the food vouchers you can still buy chips and unhealthy stuff” (P11, F, 47). Some participants appeared to be very resourceful with the food supplied: “I use everything...If I get too much bread I put it in the freezer and make croutons with it, bread crumbs, garlic bread. I then wrap it up into the freezer ready for the oven” (P33, F, 37) and “I make a lot of pasta dishes with mince and freeze them which last me six meals. I also make lots of curry dishes with rice and freeze them” (P7, F, 60).

Food choices supplementing hamper

The food choices to supplement the food hamper represented a key theme and appeared to be related to food preferences and cultural norms. When asked what other food they needed to buy, in addition to the food hamper, most participants referred to meat and often what would be considered expensive meat, including red meat: “Just the basic meats like steak, mince and sausages...sometimes pork mince to make up sausage rolls” (P3, F, 63) and “I just get fresh meat...a meat pack, so that’s \$80 where you get different meats. There is a lot of sausage and mince to marinated chops and chicken” (P15, F, 38), and “steaks,

1 chicken, those kind of things” (P2 F, 48). Most dinners involved meat as a central part of the
2 meal plate?: “Dinner is normally tuna a couple of nights a week and then red meat the rest of
3 the week” (P26, F, 42). Others referred to ‘getting the cheap chicken at the deli counter 4 or 5
4 times a week and considered that spending at least \$200 a week on food represented ‘strict
5 budgeting’ (P27, F, 44). Meat was viewed as necessary with one participant suggesting that a
6 lack of meat may lead to a deterioration in health: “I know old people that can’t afford to buy
7 meat and then they are getting sick. They are losing weight and starting to fade” (P28, F, 47).

8 Regular meat consumption appeared to be related to food preferences and cultural
9 norms: “I don’t like pasta, I’m more a meat, fruit and veg man”(P9, M, 45), and “My partner
10 is a fussy eater as well. He is meat and veg but also more carbs...he will only have vegetables
11 in a soup or in a winter sort of meal” (P14 F, 31) or perceptions of effort involved with
12 cooking vegetables: “I don’t mind vegetables...but if it was me cooking I would just cook the
13 steak because I can’t be bothered cooking the veggies as well” (P16, M, 33). Some cultural
14 differences in food choice were apparent in the sample: “We eat lots of rice and pasta and
15 fried bread...we have African food like foo-foo which is a flour maize. We make like thick
16 porridge thing” (P23, F, 50). In response to the question concerning what else participants had
17 to buy to go with the hamper, another referred to “eggs or noodles...he is Italian, and I am
18 Croatian...either Italian or Croatian food...like stuffed cabbage and capsicums and stuffed
19 eggplants” (P30, F, 43). The theme relating to food choice, also included missing breakfast
20 with over a quarter of the sample reporting skipping breakfast. Mostly, missing breakfast was
21 habitual: “I don’t eat breakfast, I have never eaten breakfast” (P9, M, 45) and “Just habit, it
22 makes me feel sick” (P31, F, 60). However, for at least two participants, skipping breakfast
23 was related to money and hunger: “nothing for breakfast, nothing for lunch...(is it because
24 you are not hungry or because of money), a bit of both” (P10, F, 35), and: “I have been

1 missing out on breakfast as I don't have the food until mid-next week when it is payday"
2 (P12, M, 54).

3 **Household gatekeeping and food control**

4 This theme includes household rules controlling food and eating, and to food
5 preferences and subsequent eating practices. In some cases, there appeared to be few
6 household rules controlling food and eating which led to daily food shopping: "I am an
7 everyday food shopper...the kids kind of eat you out of the house...biscuits will be missing.
8 Anything that is good will be eaten by the first couple of days" (P8, F, 39), and "I go
9 daily...if I do a big shop by the time I get home from work half of it is gone...you gonna
10 cook something up to have for dinner but then it is gone by lunchtime" (P19, F, 53). In
11 response to how long the food hamper typically lasts for: "If I am lucky less than two
12 days...the amount that teenage boys eat, you can probably imagine...I literally shop every
13 second day otherwise they just eat and don't stop" (P27, F, 44).

14 Such daily food shopping is likely to exacerbate existing financial difficulties: "I
15 usually just go daily...like the other day I got some meat and veggies and whatever for dinner
16 and you are up to \$25-30 for one meal...Meat, milk, and bread." (P27, F, 44). These daily
17 food shoppers reported spending \$25 to \$35 AUD daily on food. In reference to her adult son
18 living with her, one single mother said: "Last night he had two proteins. He had crumbed
19 steak and sausages with vegetables then he had apple crumble. He never stops. And he had a
20 muffin before he went to bed" (P19, F, 53).

21 The fewer household rules governing food extended to eating practices and food
22 preferences: "He is 3 years old and doesn't like to sit down and eat a proper meal...he doesn't
23 eat greens, he won't eat any salad. I can just get him to eat peas" (P1, F, 35), and "My kids are
24 not going to eat a vegetarian meal or things like that" (P8, F, 39). Another single parent of
25 three was more concerned with keeping her children content: "On the weekends I will do hash

1 browns for the kids in the morning and stuff like that...it keeps them happy, I don't know
2 about healthy but happy" (P8, F, 39). Only one participant appeared to enforce healthy eating
3 (fruit and vegetable consumption) by making the dessert contingent on eating the meal: " We
4 go for stir-fry veggies frozen and I whack honey on them oh yeah that worked...and now you
5 don't get a dessert or a treat if you can't eat all your dinner...they are now eating all these
6 dinners because of that dessert" (P28, F, 47). For another, there was perceived social pressure
7 to purchase certain snacks for school that other children have: "You got to have all the recess
8 snacks for the kids you know to be up there with the rest of the kids. You think you go in to
9 get \$20 worth of stuff, but it ends up being \$50 or something like that" (P15, F, 38).

10 **Informal referral**

11 The informal nature of referral to MCCO represented a theme. Most participants were
12 referred through word of mouth by other users, usually family members or friends: "I found
13 out through a friend...even the other places you don't hear about it. It's all word of mouth"
14 (P3, F, 63); "from a family member" (P17, F, 38) and "a friend, word of mouth" (P30, F, 43)
15 and in one case through an internet search: "I went on the web last night and got a list...I
16 went to Spiers centre in Heathridge (an emergency relief community service) and they
17 referred me here" (P7, F, 60). Only one participant reported being referred to MCCO through
18 a formal channel: "a social worker" (P35, F, 23).

19 **Discussion**

20 The present study aimed to provide better insight concerning the attitudes and experiences of
21 users attending a food bank in Western Australia, and, to identify the ways in which the food
22 hamper is utilised and further explore eating behaviours and practices. Overall, participants
23 were very complimentary about the food they received from MCCO and showed some
24 awareness of the importance of healthy eating behaviour, particularly fruit and vegetable
25 consumption. Consistent with previous research [Douglas et al., 2015; Garthwaite et al.,

2015], the food bank was viewed as a lifeline for many participants and played a role in providing food ‘until pay day’. Rent and household bills were prioritised which left little money to buy food. Despite the clear need for food relief support amongst participants, we found that almost all participants learnt of MCCO through informal networks, usually family or friends. This is of concern and indicates poor signposting or formal referral processes towards emergency food relief by various welfare agencies.

A novel finding is the longevity of the food hamper and frequently made comparisons between food released at other food banks (typically tins and shelf foods) and the fresh food they received from MCCO. The content of food hamper received at MCCO differed to what was provided elsewhere in Perth and included vegetables, fruits, potatoes, milk and meat. Our findings are opposite to those reported in a recent review suggesting that users consistently report poor food quality and limited food choices provided by food banks [Middleton et al., 2018 (Caraher, Davison 2019)]. One other study in Holland found that participants were satisfied with the food hampers, and, also perceived them as healthy [Neter 2018], despite their content not conforming to nutritional guidelines. Our findings suggest that the food hamper supported consumption of fruit and vegetables, even though not all foods received might be considered healthy. It is noteworthy that there was little food waste, and that mostly the food provided mostly appeared to match food preferences, healthy or otherwise.

One of the key findings from the present study related to food choice. The main food item purchased and seemingly eaten on most days was meat, including steak, mince, sausage and chicken which was surprising given the high cost of meat, and a new finding amongst those facing food insecurity. It is a finding that is difficult to explain in the context of food insecurity and appeared to be related to food preferences and cultural norms. It can be related to what is called the social appetite which is different from nutritional hunger (Germov, Williams 2017) . For example, many participants referred to preparing traditional meals at

1 home involving meat, potatoes, and vegetables linked to what Douglas identified as the a+ 2b
2 model where there is a main or central part to the meal (meat) surrounded by 2 subsidiary
3 parts . Previous research supports the influence of cultural norms surrounding eating habits
4 (Van der Velde et al., 2019; Blake & Bisogni, 2003; Larson et al., 2008; Ristovski-
5 Slijepcevic, Chapman, & Beagan, 2008).

6 The impact of excessive meat consumption and particularly processed meat on health
7 are well documented (Foster et al., 2003; Popkin et al., 2009). Previous work that has
8 attempted to explain why lower SES individuals may choose meat over plant-based foods has
9 focused on the symbolic status of meat, with meat representing masculinity and a metaphor
10 for maleness (Rozin, Hormes, Faith & Wansink, 2012) and a symbol of status (meat is
11 ranked highest in a hierarchy of foods) (Douglas & Nicod, 1974; Chan & Zlatevska, 2019).
12 Drawing on psychological theories of compensation, Chan and Zlateveska (2019)
13 hypothesized that individuals low on subjective socioeconomic status (SES) would have a
14 greater preference for meat, as meat may be a substitute for the status that they lack. They
15 found support for their hypothesis; those who perceived themselves to be low on SES
16 preferred meat more than those high on it, and this was the case after controlling for other
17 dimensions including perceived healthiness, tastiness, and caloric density. Further work could
18 explore the meanings underlying food choices to further elucidate the mechanisms explaining
19 the relationship between SES and food choices. In the present study, very few participants
20 referred to making vegetable-based meals. In addition to the issue of status, this may be due
21 to perceptions regarding taste, previous history, habits or familiarity which have been found
22 to influence food choice (Ensnaфф et al., 2015; Hardcastle & Blake, 2016). Such findings are
23 important because if individuals are not exposed to vegetable-based meals, they are less likely
24 to choose plant-based foods.

1 The final finding from the present study theme concerned food gatekeeping and
2 household rules controlling food. In some cases, there appeared to be few household rules
3 controlling food and eating which led to daily food shopping. Most parents had a relaxed
4 approach to their children's eating and snacking habits, and this has been found elsewhere
5 (Hardcastle & Blake, 2016). Our study reinforces the importance of the food 'gatekeeper'
6 (Reid et al., 2009) (usually the single mother in the present study) in controlling family
7 eating. Findings concerning household rules controlling food have been observed previously
8 (e.g., Catford & Caterson, 2003), however to our knowledge, the present study is the first to
9 identify daily food shopping as a strategy to restrict food amongst those facing food
10 insecurity. Few studies have explored food security and food shopping. Shopping frequency
11 is known to vary by SES in that low-income households are more likely to make trips to
12 supermarket and convenience stores compared to high-income households (Le Doux et al.,
13 2013; Xiaonan et al., 2017). In the latter study, visit to supermarkets/food stores averaged 9.3
14 times a month. However, opposite to previous work suggesting that a higher shopping
15 frequency is related to comparing prices across stores, or shopping regularly and at different
16 stores to take advantage of sales or carefully planning their menus around items that are on
17 sale rather than on what the family would prefer to eat [Mabli, 2014], the present study found
18 the daily practice of food shopping was to maintain a food supply given the lack of household
19 rules concerning food consumption. The higher costs associated with frequent food shopping
20 is likely to lead to less healthy choices since cost affects food choices [Niebylski et al., 2015]
21 and further strain limited financial resources. The influence of the family and children in the
22 development of family food habits found in the present study has been identified [Coveney,
23 2002]. Therefore, the development of interventions to improve healthy eating among families
24 (and especially single parent families) at risk of food insecurity will need to consider the
25 wider family influences including children.

Strengths and Limitations

A strength of the present study is the high number of participants recruited for a qualitative study and the real-time approach to interviewing immediately following collection of the food hamper. Our study has certain limitations including recall bias and the potential for socially desirable responses. Participants were recruited from a specific food bank provider (i.e., MCCO) in Western Australia, and our findings may not be transferable to other food banks.

Conclusion

In this study, the food hamper was a lifeline in times of crisis. Opposite to previous findings, participants were very complimentary about the content of the food hamper received at MCCO which was different to what was provided elsewhere including a variety of fresh produce, that lasted for one to two weeks in many cases. One of the key new findings was the frequent purchase and consumption of meat and processed meat. Future research and interventions may consider further exploration of the dimensions underlying such food choices, and, ways of introducing healthy plant-based meals to low SES individuals and demonstrating that such foods can be tasty, healthier and may help reduce household costs spent on food. The final novel finding related to household rules controlling eating which led to daily food shopping in some cases to restrict food availability. Future work and interventions to improve eating behaviour and reduce food-related financial pressure include further exploration of the dimensions influencing food choices (i.e., cultural norms, habits, symbols); exposure to healthy and tasty plant-based meals, (i.e., tasting low-cost vegetable based meals); parenting training focused on handling child/partner food choice influences, and, enforcing household rules governing food.

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5

6 **Conflict of Interests**

7 The authors do not have any competing interests to declare. The authors have full control of
8 all primary data and agree to allow the Journal to review the data if required.

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Table 1

Demographic characteristics of participants.

	Overall (<i>n</i> =33)
Age (mean, <i>SD</i>)	44.12 (SD 13.74)
Sex	
Female	25 (76%)
Marital status	
Married	1 (3.0%)
In a relationship	3 (9.2%)
Divorced/Separated	14 (42.4%)
Single	14 (42.4%)
Widowed	1 (3.0%)
Education	
University degree	3 (9.38%)
Post-school training/qualification	7 (21.88%)
High school/Secondary School	16 (50%)
No Qualifications	4 (12.5%)
Other	2 (6.25%)
Gross weekly Household income (AUD)	414.64 (SD 188.51)

Note. SD = standard deviation. One participant did not complete educational attainment. Eight participants did not report gross weekly household income.