

Feeding the family:

“you gotta do what you’ve gotta do”

A pilot qualitative research study into the strategies used by low income mothers to feed themselves and their families



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3. Abstract

Background: Food security refers to the ability of an individual or community to reliably attain suitable and nutritious foods without reliance on emergency relief, theft or scavenging. While it has only recently begun to receive greater attention in Australian public health and welfare sectors, literature available suggests those who are food insecure are more likely to experience social or economic disadvantage and be from already marginalised groups including unemployed and low income families.

Aim: To investigate the strategies used by mothers in Goulburn who derive all of their income from government assistance, to feed themselves and their families.

Methods: Semi structured, anonymous interviews were held with mothers from the regional New South Wales city of Goulburn. Transcription, analysis and coding was undertaken to determine thematic consistencies among participants.

Results: Interviews (n=4) revealed cost as the most pressing issue for mothers when accessing food. Mothers purchased a variety of food for their families. The coping strategies employed by these mothers echo those used in published literature: mothers relied on their social networks as a first option in times of food scarcity, but could also identify other sources of support locally. Participants reported mixed experiences accessing local support agencies.

Three mothers had tried to acquire more money for food. All had previously relied on their families or friends in times of food insecurity for either food or money for food. Unexpected costs such as medical expenses often preceded times of food insecurity.

Participants described different experiences with the use of scavenging, sourcing local emergency food relief and illegal activity relating to food acquisition.

Conclusions: Thematic saturation was not reached due to the small number of study participants, however this study provides an insight into emerging issues which need to be considered in further research to determine how widespread the coping strategies used by this group are. Follow up community action is needed to address issues which are confirmed as more widespread.

Key words: food security, food insecurity, low income mothers, coping strategies, rural

4. Executive Summary

Food insecurity has been the focus of public health monitoring for more than a decade in both Canada and the United States of America (USA). The concept in Australia however, has only recently begun to receive attention.

Food security is the ability to acquire appropriate and nutritious food on a regular and reliable basis (CPHN, 2003; McIntyre et al, 2003). McIntyre (2003) and others have also said that food security involves obtaining food in 'socially acceptable' means, that is, without reliance on emergency food relief, theft or scavenging (Kendall and Kennedy, 1998; McIntyre et al, 2003). Food insecurity is thus the inability to acquire food by such measures.

Food insecurity is more likely to be experienced by groups who already experience social or economic disadvantage, including single parents, low income earners, the socially or geographically isolated, the disabled and those with an alcohol or drug dependence (CPHN, 2003).

In depth interviews were undertaken with mothers who receive all of their income from government assistance and who live in Goulburn, a regional city in the southern tablelands region of NSW. To date, there has been no formal collection of data regarding the prevalence of food insecurity in either the Goulburn city or the local government area. There is a need to have research undertaken in the rural setting, as the rural environment differs from metropolitan areas in terms of food access, food availability, as well as back up food support systems available.

Four in-depth interviews were conducted as part of this project, with mothers aged between 20-39 years. Mothers had either two or three dependent children, two were single and two had a partner living separately. Half (n=2) of participating mothers had access to a car and one reported a history of homelessness. Three of the women interviewed had recently moved to the Goulburn area and one of these three also had a partner currently incarcerated in Goulburn Correctional Facility.

By definition, all mothers in this research project could be classed as being food insecure as all could recall a recent time when they had run out of food or did not have enough money to buy all the food they wanted. In most cases this was a repeated event not a once off. Despite the planning that went into food budgeting, all mothers could recall times when it was difficult to make ends meet. Unexpected expenses appeared to be common and the limited savings mothers apparently had to draw on only compounded such problems.

Findings show that food availability was not identified as an issue for women in this study. Access to this food, on the other hand, appeared to be of much greater concern to mothers. All were conscious of the price of food, shopped where they believed they could get good value for money, and all had developed various strategies to manage their limited budgets. The responses regarding choice of supermarket, choice of food and other shopping behaviours, shows these mothers are acutely aware of their limited income and give thought to how they spend their money. All mothers indicated that some pre- shopping thought was given prior to purchasing groceries, with all suggesting a variety of food types was bought.

Knowledge of local support for food or money appeared to be good across participants. A theme beginning to emerge from the interviews was the importance of social networks. When asked about where they could turn to for help, all spoke about their own social networks and the support they provide. All mothers' interviewed recounted times when they needed help from family or friends for food and/or food for money, and two spoke about also helping out others experiencing food insecurity. In dealing with food insecurity, the importance of social networks should not be underestimated. Social networks could be harnessed to reach mothers in the area in future research or support initiatives.

The participants in this project provided suggestions to help food insecure mothers in the area. These included changes to the contents of the food pack delivered by Saint Vincent De Paul, a practical cooking and budgeting session targeted to mothers on low incomes and the possibility of establishing a food bank which redistributes commercial food about to be discarded, but still fit for consumption in the local area. These suggestions are largely realistic, practical and could be implemented by existing structures in the local community. They also offer local agencies an opportunity to respond to specific food security issues raised by a population group experiencing hardship.

Additional research is needed into emerging themes including maternal buffering, limiting the frequency of children's eating, scavenging food and stealing money for food, or stealing food. Given the sensitive and illegal nature of these strategies other more non traditional investigative methods may need to be applied. The small sample in this study makes it difficult to know if the emerging themes are experienced more broadly across this target group and if these are applicable in other regional communities.

The behaviours presented in the interviews with all four mothers challenge the stereotype of 'dole bludger', and instead paint a picture of mothers making an sincere effort to provide what they saw as good food for their families, while being faced with limited incomes. The potential benefits of implementing changes suggested will reach far beyond the select population group of this study.

5. Introduction

5.1. Background

Food insecurity, also referred to as food scarcity or food insufficiency (Booth and Smith, 2001; Kempson et al, 2002; Olson et al, 2004; Furness et al, 2004; Radimer, et al, 1992), has been the focus of public health monitoring for more than a decade in both Canada and the United States of America (USA). The concept in Australia however, has only recently begun to receive attention.

Food security has been described as an individual, household and community level. It is referred to as the ability to acquire appropriate and nutritious food on a regular and reliable basis (CPHN, 2003; McIntyre et al, 2003). McIntyre (2003) and others have also said that food security involves obtaining food in ‘socially acceptable’ means, that is, without reliance on emergency food relief, theft or scavenging (Kendall and Kennedy, 1998; McIntyre et al, 2003).

Food insecurity is a health equity issue. It is more likely to be experienced by groups who already experience social or economic disadvantage, including single parents, low income earners, the socially or geographically isolated, the disabled and those with an alcohol or drug dependence (CPHN, 2003). Other marginalised groups, including refugees, have also been found to have significantly higher food security rates than their mainstream counterparts (Gallegos et al, 2008; Sellen et al, 2002; Hadley and Sellen, 2006).

Food insecurity has been recognised as an issue of concern by a wide range of health, social and welfare agencies as a problem facing modern Australia (Anglicare, 2003; VicHealth, 2005; National Rural Health Alliance, 2003) and has been recognised as making a greater difference to what people eat than health education (WHO, 1998).

5.2. The prevalence of food insecurity

The concept of food security has been monitored by a variety of methods in the developed world. Comparisons between the reported prevalence of food insecurity between countries is complicated by the different measurement tools used and significant differences in the ways welfare and food related assistance is provided.

In the USA, food security has been measured regularly since 1995, using a set of 10 questions¹ about the experiences related to food purchasing, consumption and of individuals in a household (Nord et al, 2002). A modified version of this questionnaire has been used in Canada (Health Canada, 2004). Both countries report levels of food insecurity between nine and 11 percent of the population (Nord et al, 2002; Health Canada, 2004). New Zealand (NZ) has used eight markers to identify food insecurity (Quigley and Watts, 1997) which has shown 13% of the population can afford to eat properly only sometimes, 14% run out of food because of lack of money, and almost a third (27%) eat a limited variety of food because of lack of money (Russell et al, 1999).

¹ Additional questions are asked in this survey if there are children present in the household, aged between 0-18 years of age (Nord et al, 2002 and 2005).

By contrast, little population wide data exists on the prevalence of food security across Australian communities (Commonwealth of Australia, 2001). The 1995 National Nutrition Survey has been the only attempt to measure the prevalence of food insecurity on a national scale; and it used only one question: “In the past 12 months, were there any times that you ran out of food and you couldn’t afford to buy more?” (Commonwealth of Australia, 2001a). This survey showed that 5.2 per cent were food insecure, that is, had run out of food and could not afford to buy more in the past 12 months.

State based surveys conducted in New South Wales (NSW) using the same single question have reported similar levels of food insecurity to the 1995 survey (NSW Department of Health, 2006).

The limitations of using a single question to assess food insecurity in Australia, and the likely under representation of food insecurity it provides, have been acknowledged by several authors (CPHN, 2003; Marks et al, 2001). A study adapting the USA 18 point food security scale in Sydney showed a significantly higher prevalence of food security in comparison to the single item tool commonly used, supporting the notion that food insecurity rates in Australia may be substantially higher than reported (Nolan et al, 2006).

5.3. Who is food insecure?

A significant body of literature, predominantly from outside Australia, has examined which population groups are more at risk of food insecurity.

Food insecurity is intrinsically linked with income, and thus those on low incomes and those who experience economic disadvantage have been consistently reported to be more likely to experience food insecurity (CPHN 2003; Nord, 2002; Booth and Smith, 2001; Che, 2001). In the USA, households with income below the poverty line have rates of food insecurity around 36.0 per cent compared to 11.0 per cent national average (Nord et al, 2005). Another study from the USA examining income and food security found the presence of children in the household and a history of homelessness were predictors of food insecurity (Furness et al, 2004). The presence of children in low income households increases the likelihood of food insecurity (Nord, 2002; Nolan et al, 2006).

Food insecurity has also been consistently reported as more common in single parent families. In the USA, food insecurity was more prevalent among families with children headed by a single parent living alone (Nord et al, 2005). Others report that the risk of hunger in female headed families was increased by poorer mental and physical health (Wehler et al, 2004).

The data relating to food insecurity and geography is mixed. No geographic variations in the proportion of those experiencing food insecurity have been reported in NSW studies (NSW Health Department, 2003, 2005), while population studies in the USA have reported contradictory results (Nord, 2002; Nord et al, 2005).

Several population studies have found women, particularly single women headed families are at increased likelihood of food insecurity: such households were almost three times more likely to experience food insecurity, 31.0 per cent, than compared to

the US average of 10.5 per cent (Nord, 2002). Similarly, hunger rates were also substantially higher in this population group in comparison to the national average (Nord, 2002). Data gathered through population surveys in NSW have reported mixed results for gender and food insecurity (NSW Department of Health, 2004-6).

5.4. Factors contributing to food insecurity

A regularly low income level has been consistently reported as the main contributor to food insecurity (Tarasuk, 2001a; Wicks et al, 2006; Tarasuk and Beaton, 1999). Other factors reported by mothers in published literature, as contributing to periods of food insecurity include higher than usual expenses or the need to pay off debts (Hosington et al, 2002; Tarasuk, 2001a); additional expenses such as those associated with Christmas or a new baby, the loss of a job (Hosington et al, 2002; Tarasuk and Beaton, 1999) and newly arriving in the study site (Tarasuk and Beaton, 1999). Other literature supports these experiences (CPHN, 2003).

An Australian study involving homeless men reported that low income combined with high rent costs contributed to hunger, ready access to food was also reported as a contributing factor. Other factors raised by these participants included limited storage and preparation facilities and addictive habits (Wicks et al, 2006).

5.5. Dealing with food insecurity

5.5.1. Strategies used in the home

The strategies used by households and individuals to cope with food insecurity have been widely reported through qualitative data, generated in predominantly overseas settings.

Reducing the amount of food eaten in the home is one of the most widely reported coping strategies reported by individuals and parents facing food insecurity. It remains a common strategy reported in nationwide surveys (Russell et al, 1999; Nord 2002). Authors have reported household food consumption falling through skipping meals or eating smaller portions (Ahluwalia, 1998; Badun et al, 1995; Radimer, 1992; Kempson et al, 2003) and going whole days without food. The latter strategy was seen by those experiencing food insecurity as a severe coping strategy (Maxwell, 1996).

A parent or parents skipping meals, or reducing the size of their meals, to protect children from food restrictions is known as parental deprivation or parental buffering. This strategy has been observed in qualitative studies into food insecurity by Ahluwalia et al, 1998; Babbington and Donato-Hunt, 2007, Badun, 1995; Tarasuk, 1990; McIntyre et al, 2003; McIntyre, 2003; Crotty et al, 1992; Hosington et al, 2002; Maxwell, 1996 and Quandt et al, 2004. This strategy utilised by parents is supported by findings from USA population studies, which have shown this protection continues unless the level of parental 'deprivation is quite severe' (Nord, 2002).

Other strategies used in the home which relate to money for food, which have been used by those experiencing food insecurity, include delaying payment of household bills, the use of cash advances and limiting spending on non food items (Babington and Donato-Hunt, 2007; Hosington et al, 2002).

5.5.2. Strategies used in store

Extensive shopping for low cost food, purchasing store branded items, making shopping lists, shopping with families at multiple stores to reduce transport costs (Ahluwalia, 1998, Radimer, 1992; Kempson et al, 2003), shopping at several different food stores, using coupons, budgeting, purchasing food on sale or in bulk (Ahluwalia, 1998; Hosington et al, 2002; Kempson et al, 2003) are common strategies reported by those experiencing food insecurity. Other strategies used while shopping for food include substituting food types for cheaper or longer lasting food, such as substituting fresh milk for powdered, dried beans instead of fresh, canned or frozen instead of fresh (Hosington et al, 2002; Radimer, 1992).

5.5.3. Seeking assistance

Who or where people turn to for assistance varies considerably according to the social context. Some qualitative data provides an insight into the extent to which people experiencing food insecurity rely on their social networks for assistance. Parents have reported relying on family, friends and acquaintances for short term help during times of food insecurity (Ahluwalia, 1998). Other research has shown mothers in an urban setting report relying on family and friends as an 'unacceptable' strategy initially, but suitable when other 'normal' means had been exhausted (Radimer, et al, 1992).

Welfare agencies provide a range of short term or once off food related support in Australia, collectively known as emergency food relief (EFR) (CPHN, 2003). Emergency food kitchens, also known as soup kitchens are one form of EFR which provide ready to eat meals for consumption on site or occasionally for the visitor to take home (Nord et al, 2005). There are in excess of 5,000 soup kitchens operating in the USA run primarily by faith based groups. Studies show they are also a popular option for those experiencing food insecurity, with 22% of food insecure individuals accessing food from such sources in the previous 12 months (Nord et al, 2005). No data could be found outlining the number operating around Australia.

Food vans offering meals and sometimes other goods such as clothing and blankets have been established in predominantly metropolitan areas often by faith based groups.

Food pantries, also known as food banks, provide a food for preparation and consumption at another site (Nord et al, 2005), allow clients to choose the food they wish to take home (Sydney West Area Health Service, 2005) or distribute donated food to others (Tarasuk and Beaton, 1999). They can operate as a centre which provides parcels or packages directly to those who need it, or by redistributing to front line agencies to pass onto those in need (Riches, 2002). Studies have reported users of food banks and other charitable food agencies often feelings of shame and embarrassment (Babington and Donato-Hunt, 2007; Tarasuk and Beaton, 1999).

5.5.4. Obtaining more money for food

Other strategies used in the home during times of food insecurity can relate to obtaining more money to purchase food. Delaying bill payments was a common strategy used by respondents in a south western Sydney survey (Nolan et al, 2006).

Generating additional income has also been explored by researchers. Studies have shown a variety of ways families attempt to acquire additional money through

providing foster care, gambling, participating in research and selling blood (Kempson, et al, 2003). Pawning items and selling assets has also been reported (Ahluwalia, et al, 1998, Kempson, et al, 2003; Maxwell, 1996).

Other strategies which have been explored in qualitative literature include begging, theft and deliberately committing crime to be sent to jail where food is provided (Booth, 2006, Kempson et al, 2003, Eikenberry and Smith, 2003).

5.5.5. Other ways of coping

A variety of other coping strategies have been reported in qualitative studies. Eating other people's leftover food and finding road kill have been identified by some, (Kempson et al, 2002). As mentioned above others have reported deliberately committing crime so they would be sent to jail where food and shelter would be provided (Ahluwalia, et al, 1998). Results from focus groups in urban and peri-urban areas reported that theft of food or abandoning children were other strategies used to cope with food security (Maxwell, 1996).

Obtaining food from rubbish bins, known as 'dumpster diving' or 'skip digging' has also been referred to as a coping strategy used during food insecurity (Eikenberry and Smith, 2003; Rush, 2003). While not reported as a common means of obtaining food by one Australian author, (Booth, 2006), a US study of mostly homeless adults reported that although it was deemed by most as an acceptable food source it was generally only used when there were no other free food readily available (Eikenberry and Smith, 2003). Those taking part in 'skip digging' for ethical or environmental reasons have reported feelings of pride and enjoyment (Rush, 2006).

A study by Harding and Szukalska (1999) reported that those most likely to be in 'financial disadvantage' (or poverty) were those dependent on government assistance, sole parents, the unemployed, and those with three or more children (Harding and Szukalska, 1999).

6. Study site

Goulburn is a regional inland city, located within the Goulburn Mulwaree Local Government Area (LGA), in regional NSW approximately 95 kilometres north of Canberra and 192km south of Sydney (Goulburn Mulwaree Council, 2007). The LGA has a population of 26,085 residents (Australian Bureau of Statistics, 2006a), as well as an additional 535 men incarcerated in the Goulburn Correctional Facility (NSW Department of Corrective Services, 2006). No information could be found regarding the usual place of residence before incarceration or post release.

7. Research rationale

Degree of disadvantage in a community seems to be a reliable indicator of the prevalence of food insecurity. The Centre for Public Health Nutrition (CPHN) suggests those experiencing food insecurity are more likely to be those who are socioeconomically disadvantaged and have low disposable incomes (CPHN, 2003). Using the 'Index of Relative Socioeconomic Disadvantage'², the Goulburn Mulwaree area experiences more disadvantage than surrounding LGAs and compared to the NSW average. Other information indicates higher proportions NSW Department of Housing³ rental homes and lower high school retention rates than in comparison to the state as a whole (ABS, 2006a; ABS, 2006b).

There has been no formal collection of data regarding the prevalence of food insecurity in either the Goulburn Mulwaree LGA or the city itself. The several state wide surveys examining food insecurity prevalence and food access have not provided data specifically about the LGA or city (NSW DoH, 2004; The NSW Cancer Council, 2007). There is a need to have research undertaken in the rural setting, as the rural environment differs from metropolitan areas in terms of food access, food availability, as well as back up food support systems available.

Research in this study site will also help to raise the profile of this social and health issue among local agencies and provide information and direction for future action.

The aim of this research was to determine what strategies are used by mothers in Goulburn, who receive all of their income from government assistance, to feed themselves and their families.

² The 'Index of Relative Socioeconomic Disadvantage' is an index developed using data collected in the national census. The score accounts for variables including high income, low income, professional and unskilled occupations, and allows for scores between areas to be compared against each other, and to NSW. A higher score indicates more advantage in an area, while a lower score indicates less advantage, and more disadvantage. NSW is given as the reference with a score of 1000 (NSW Health Department, 2005).

³ Recorded in the Australian Census as a state/ territory housing authority.

8. Methods

Qualitative data was collected from mothers living in Goulburn with more than one dependent child and who received all of their income from government assistance through anonymous, semi structured interviews. Supplementary information including participant age range, marital status, number of dependent children, area of residence and access to motor vehicle was gathered through a survey verbalised by the researcher. Similar demographic information has been collected by others (McIntyre, et al 2002; McIntyre, 2003; Wicks et al, 2006 and Badun et al, 1995). Field notes taken during and immediately following the interviews were also used.

To guarantee anonymity, participants were recruited to the project through the distribution of flyers among the local community, inviting women to call the researcher to find out more and take part. Transcripts were not returned to participants and no woman with an established relationship with the researcher was interviewed to further ensure women could not be personally identified. The interviews took place at the local community health centre. This location was chosen as it is the access point to many services and no identifiable stigma associated with it. All women who contacted the researcher went ahead with interviews and interviews lasted between 30 and 50 minutes.

Interview questions were piloted with a mother known by the researcher who previously fell into the target group. Workers from health and social welfare backgrounds also provided input into the interview questions and information sheets.

Background research information and consent forms were verbalised to participants prior to the interview. These sheets articulated the reasons for undertaking the interviews. Interviews were digitally recorded and followed a semi structured protocol. The interview examined issues relating to food purchasing behaviour and the use and preference for different coping strategies. Women were asked of individual and peer behaviour. Figure 1 provides an outline of the question themes explored with mothers during the interviews.

Figure 1: Outline of interview questions
Transport and shopping
Store preferences
Food preferences
Budgeting strategies
Running out of money
Running out/ low of food
Other sources of food
Assistance
Other issues

As an incentive to take part, and to thank participants of this research, food packs containing shelf stable food and a limited number of toiletries were given to participants at the conclusion of the interview. The research was approved by Greater Southern Area Health Service (GSAHS) Human Research Ethics Committee, reference number Ref 07/GSAHS/2.

The research was conducted by a health promotion worker (female) employed by the then Greater Southern Area Health Service (GSAHS). The subject area was chosen due to a personal interest in the area, and possibility of food security becoming an area of focus in health promotion locally. The research was undertaken as part of a rural research program for novice researchers, with this point being articulated in the participant information sheet. No other people were present for the interviews.

Data coding was undertaken solely by the researcher. Themes were identified following interviews. No data analysis software was used. No feedback was sought from participants on the findings of the research to maintain anonymity.

9. Results

Project participants

Four interviews were conducted as part of this project. All mothers were aged between 20-39 years and had two or three dependent children. Two of the mothers were single; two had a partner living separately. Two of the four mothers had access to a car and one reported a history of homelessness. Although not specifically asked, three of the women interviewed had recently moved to the Goulburn area and one of these three also had a partner currently incarcerated in Goulburn Correctional Facility.

Access to food, including transport

No woman taking part in this research identified significant problems accessing food for themselves and their families. Participants identified a range of strategies to access food including use of own car, getting lifts with friends and using free local home delivery services. The cost of transport to the shops was a theme raised by all four women.

Shopping behaviour

Three of the four mothers interviewed indicated that they did the bulk of their shopping at the Goulburn Aldi supermarket, with other 'speciality' items purchased from Woolworths⁴. The most frequently cited reasons for this shopping behaviour were cost and location.

“generally I believe they [Aldi supermarkets] are cheaper”. - M1

One mother did the bulk of her grocery shopping at the Coles supermarket, due to proximity to her home (this mother did not have her own car), peer influence and habit. Cost was repeatedly raised as a factor in choosing food purchased by all women.

Most (n=3) shopped for fruit and vegetables at a local green grocer, with half (n=2) purchasing meat from a local butcher. Women expressed a variety of reasons for doing this including convenience and location, stores accepting over the phone orders and providing home delivery. Shopping times were adjusted around children's activities, however there were no other trends apparent in particular times or days that mothers went shopping.

Budgeting strategies

A variety of strategies were used to keep the cost of food down. Most (n=3) mothers reported purchasing specials advertised in catalogues, but none purchased food advertised on television. Most (n=3) looked out for in store specials and all considered buying 'reduced to clear' items like milk, bread and meat. Three of the four participants mentioned looking for or avoiding specific brands due to the cost. Avoiding impulse purchasing was mentioned specifically by two mothers as a way to keep within budget. Only one mother of the three shopped with a written list, though all made comments indicating some thought was given to food before it was purchased.

⁴ In the study site, Aldi supermarket is located in the same complex as Woolworths and both share a common car park.

In addition to the strategies used in store to manage cost, women also reported using a variety of strategies in the home to extend the life or prolong the use of food they had purchased. Purchasing larger quantities of food when it was readily available and cheap and freezing meals for later use was mentioned as a practice used frequently by two mothers.

“Just make up, like meals, like that, that you can freeze and reheat...that’s what I do sometimes if I know in advance its going to be really hard”
-M3

Maternal deprivation was alluded to by three mothers, as was limiting the amount or frequency of food children ate. There were mixed responses to questions relating to how frequently this occurred.

“[when we run out or low of food] the meals would be a bit smaller, and um yeah, they’d be less frequent, and they wouldn’t be eating as much as often”

“So I make sure the kids eat and then um, whenever they leave I eat, so I’m sort of eating their scraps” -M4

Times of food insecurity

Most (n=3) mothers could recall a time where they did not have enough money to buy all of the food they wanted. Responses suggested that this was a frequent occurrence, rather than a once off. When asked if they had found themselves without enough money to buy all of the food you wanted or needed, two mothers suggested this happened ‘often’.

“Unfortunately too often [I haven’t had enough money to buy all the food we want]...yeah, probably at least once per month it would probably happen”
-M2

The strategies used in times of food insecurity varied between respondents: one mother said her family ate ‘simple food’ such as toasted sandwiches to ‘last’ until she was paid; one hocked jewellery or sought a short term loan; and one paid only parts of incoming bills and went without things for herself.

Half of the mothers interviewed (n=2) could recall a time when they ran out of food though this appeared to occur less frequently than running out of money. None of the participants indicated they had ever run completely out of food, though running low on food did appear to be more common. All mothers spoke about times, sometimes the in the days before being paid, when food was running low. The strategies used to cope included using meals they had previously prepared and frozen, eating the same food over several meals, eating smaller amounts and drawing on the support of their social networks.

“But I’ve usually got really good neighbours and I have a mum and dad so, as a back up, mum will throw me a tin of something you know, something from the freezer to thaw out or, so there’s only a few times when I’ve had to do that” -M2

Comments made about running out or low on money or food showed that there was often a large, sometimes unexpected expense which contributed significantly to these times of food insecurity. Mothers mentioned high bills, something broken in the home needing to be fixed immediately, higher than usual medical expenses or one off purchase.

“We were basically living on jam and toast...yeah, um, because the bond was supposed to be my grocery money” - M4

Use of Emergency Food Relief (EFR)

All mothers interviewed were able to identify at least one place of support which could offer them assistance with either food and or money. Most (n=3) participants identified Saint Vincent De Paul (StVdP) as a source of assistance with food and/or bills. Half of the participants (n=2) had sought support from this agency and both made negative comments about this experience relating to the attitude of staff and contents of food parcel:

“It’s sort of a bit humbling, a bit, um, embarrassing cause you got to try and you know, oh, ‘I can’t afford to feed my kids” - M2

“I’ve asked Vinnies for food parcels...Um, and they’ve helped me out a bit, but their food parcels suck” -M4

Other strategies

Only one of the four mothers interviewed admitted to scavenging for food. This mother recalled feeling ashamed and embarrassed when scavenging for food.

“Horrible, embarrassing...Looking around thinking ‘shit I hope no one sees me” -M2

When asked about scavenging again, despite the risks and stigma associated with it, this mother responded:

“Oh [pause] I probably would, yeah, you know, if I had to feed the kids, and yeah, I’d resort to just about anything I guess to feed them”. - M2

Although the remaining participants had not scavenged, all indicated they would consider it but not as a first option during times of food insecurity.

None of the mothers knew if any of their peers had scavenged for food.

Two of the mothers indicated they had previously sold goods to second hand stores, relatives or friends for money for food. Again, this strategy was not considered a first option when running out of money with mothers acknowledging these strategies would be used in desperate times and if other avenues of support failed.

“Yeah in the last three years I’ve owned eight phones!... I hock my phones...I just can’t afford to get them back” -M4

No mothers interviewed indicated they had stolen either money or food, though three of the four indicated they had thought about it and would like to.

“I would, no, I really would. I don’t have the guts! [laughs]...I have thought about it but I’ve never done it”. -M3

Suggestions to improve local support

All mothers interviewed provided suggestions to improve the support available for mothers who receive all of their income from government assistance.

The issue of food waste from supermarkets was one avenue of discussion. One mother saw food thrown out from supermarkets as a waste and suggested this food could be redistributed among the community as she had seen this done in another area and recalled her experience with this positively.

“they have great food because up there that’s where all the food was given it wasn’t thrown into the bins...it was given to the churches and stuff for the soup kitchen. You know and a lot of people went there with their families and stuff”. -M2

Despite the negative comments from two participants on the contents of the food package given out by StVdP locally, a range of suggestions were provided to improve it. These suggestions focussed on the contents of the food pack provided indicating that the contents of the pack did not reflect the needs of their families. Two participants in this research commented positively on the contents of the food pack given to them for participating in the research (See Appendix 1 for contents of pack).

One participant also suggested that those distributing food packs in the community should consider the cooking facilities available to mothers, as temporary or crisis accommodation may be limited in what is available.

“But yeah, there needs to be more thought in what would the kids eat rather than ‘we’re just gonna throw all these cheap things in and hopefully you’ll eat it”. -M4

One mother also made the suggestion of a living and cooking budget workshop with mothers, showing how to cook meals for the family on a limited budget. This mother thought that she and several of her peers would attend something like this, and would possibly even have their own ideas to contribute to it.

Managing finances

All (n=4) mothers commented that feeding the family and managing all expenses while receiving all of their income from government assistance was a difficult task. Consistent comments were made by mothers around themes of making choices or sacrifices between activities and food due to limited money and the need to plan ahead.

The stigma associated with receiving all their income from government assistance was one issue which was brought up by most (n=3) mothers. A consistent theme of

wanting their children to be in better circumstances than they were in currently, such as being in paid employment and owning their own home, emerged from these interviews. The issue of teaching saving habits and children having good saving habits was also raised by two mothers.

“I’ve got kids now who have actually chipped in [pocket money] together... 9, 5 and 4 [years old], decided they wanted a...barbie movie...[laughs], of course, um, I said, I refuse to get it, I’m not getting it...And you know what they did, they chipped in and they worked for a couple of weeks, and the pooled it, I saw them on the floor...because you don’t want your kids just having this attitude for handout” -M1

The influence of children

Two mothers mentioned buying different food for their children than for themselves, and most (n=3) talked about children’s preferences for food as an important consideration. Packaged and partly pre-prepared meals, such as ready to eat lasagne, pre made sauces for meals, seemed to be commonly purchased for children.

“So I try and buy convenience meals that I know they’re going to eat” -M4

The high cost of food children wanted was an issue spoken of by all participants. Some mothers (n=2) referred to marketing techniques used by food companies and the influence of children’s peer on food preference.

“Sometimes they’ll go, they’ll look at yoghurt, and they’ll see Wiggles on it and they’ll say hey, you know, lets buy the wiggles...when that can be...much more expensive” -M1

The interviews also revealed that the health conditions of children were another theme which while not always directly related to food, did impact on spending habits. Two of the four mothers interviewed disclosed that at least one child with a diagnosed medical condition, which required some form of medication (diabetes, epilepsy, attention deficit-hyperactivity disorder). Both of these mothers spoke about the additional burden of medical appointments, travel and the cost of medication on their household budget.

Receiving government assistance as income

Half (n=2) of the mothers expressed gratitude for government assistance, and most (n=3) a desire to not be dependent on such assistance for a lifetime, expressing a wish to return to the paid workforce once their children were older. Half (n=2) of participating mothers also spoke about wanting their children to be engaged in the workforce and also not renting homes and spoke of instilling values and habits in their children now to prepare for this.

“My kids work...I give them say 50cents for half a bucket of lawn clippings or something...I’m trying to teach them to work for their money, so they don’t end up like me.” -M1

Benefits of the interview process for mothers

A theme which began to emerge from the interviews were comments from three mothers, suggesting the interview process gave mothers a sense of self efficacy and empowerment from being asked about their experiences and opinions.

“I’ve said it all, got it all off my chest now...it’s [the interview] better than counselling!” -M4

10. Discussion

Although this research presents experiences from a small sample of the population in the study area, it provides an insight into issues faced by mothers who receive all of their income from government assistance.

Due to the small number of interviews conducted, thematic saturation was not reached. Information on emerging themes and those echoed in other literature is presented as the findings of this research.

The comments made by mothers in this study suggest that the availability of food in the Goulburn city is not a problem; all spoke of a wide variety of food that was available from multiple sources in the town. Access to this food, on the other hand, appeared to be of much greater concern to mothers: the cost of getting to food outlets, and purchasing it, was an ever present factor in determining the food shopping and cooking habits of all participating mothers. This research is the first time that food access and availability have been examined in the study site, thus such findings should be used to help inform local responses.

All mothers were conscious of the price of food, shopped where they believed they could get good value for money, and all had developed various strategies to manage their limited budgets. The responses regarding choice of supermarket, choice of food and other shopping behaviours showed these mothers were acutely aware of their limited income and gave thought to how they spend their money. These findings are similar to those expressed by Ahluwalia (1998), Radimer (1992), Kempson et al (2003) and Hosington et al (2002).

By definition, all mothers in this research project could be classed as being food insecure as all could recall a recent time when they had run out of food or did not have enough money to buy all the food they wanted. In most cases this was a repeated event not a once off. Despite the planning that went into food budgeting, all mothers could recall times when it was difficult to make ends meet. Unexpected expenses appeared to be common among these women and echoes findings from other authors (Hosington et al, 2002 and Tarasuk, 2001a). The limited savings mothers apparently had to draw on only compounded such problems. This finding, if applicable to the wider population group, supports research indicating that single parent and low income households are at an increased risk of food insecurity. This research suggests that the problem may be more entrenched than suggested by population studies, given food insecurity seemed to be a repeated rather than once off occurrence.

Knowledge of local support for food and/or money appeared to be good across participants, especially considering some participants were new to the area. A theme beginning to emerge from the interviews was the importance of social networks,

which is supported from findings from Ahluwalia (1998). When asked about where they could turn to for help, all spoke about their own social networks and the support they provide. There were mixed responses regarding whether running out of food was something which was of a general concern, most followed such questions with comments about their social networks and the support they could draw on if needed. All mothers' interviews recounted times when they needed help from family or friends for food and/or food for money, and two spoke about also helping out friends who were short on food. In dealing with food insecurity, the importance of social networks should not be underestimated. Social networks could indeed be harnessed to reach mothers in the area in future research or support initiatives.

The influence of children on food purchased is an issue unique to parents and was brought up repeatedly by all mothers (n=4) in this study. All mothers spoke of modifying food provided based on children's preferences. The food preferences of children were spoken of as an important consideration in relation to the food purchased. Mothers described a tension between providing food which is liked by children and that they will eat, providing food for the whole family and the cost of the food children eat.

“She likes steak...that can be quite expensive. But if she's going to eat it, I'll buy it. Do you know what I mean, I'll just take less off the electricity bill or something, to get some nice steak or whatever” -M3

The amount of food eaten by children and the cost implications of this was also raised by three participants. It would be reasonable to assume, that other parents receiving government assistance face similar issues in providing food for their families.

Improvements to local support

The participants in this project provided a range of suggestions for possible changes and improvements to the support services and agencies available locally. The suggestions were largely realistic, practical and offer local agencies an opportunity to respond to specific food security issues raised by a population group experiencing hardship.

Positive changes which could be made to the food pack delivered by StVdP were suggested. A review of the current contents of this pack, perhaps with mothers who have received the pack to provide a perspective of those who are on a limited income, would heighten the value of the pack to mothers.

The negative feelings felt by mothers who had accessed support services locally has also been reported by other research into this area (Babington and Donato-Hunt, 2007; Tarasuk and Beaton, 1999). Despite this, it is worth investigating this further locally.

A practical cooking and budgeting session targeted to mothers on low incomes is another suggestion made by mothers which could be further developed and trialled in Goulburn. There are various agencies in welfare, health and community services within the local area who would be well placed to lead this. Drawing on other similar initiatives run elsewhere in Australia (Foley and Pollard, 1998) would also be worthy of consideration by local groups.

The suggestion of a food bank which redistributes commercial food about to be discarded, but still fit for consumption, made by one participant is likely to be a large undertaking, but one which may hold great merit. There are not for profit organisations in Australia which redistribute food (OzHarvest, 2010; Food bank Australia, 2010), but may need modification to suit a regional city context. While needing further investigation, there are structures within the Goulburn Mulwaree LGA which are suited to assist in establishing this.

Challenging the ‘dole bludger’ stereotype

The behaviours presented in the interview challenge the stereotype of ‘dole bludger’, and instead paint a picture of mothers making an sincere effort to provide what they saw as good food for their families, while being faced with limited incomes. The participants provided insight into their food and shopping habits, revealing the preparation required for budgeting, and the strategies used when things do not go to plan. Some mothers also clearly articulated not wanting to always receive welfare support and hope that their children would not rely on it as adults either.

Areas requiring further investigation

The limited number of interviews conducted as part of this research has meant that thematic saturation was not reached. The findings presented in this report offer insights into emerging themes only. Emerging themes include maternal buffering and limiting frequency of children eating. There was no consistent message from women about the use of such strategies, but given the health and psychosocial implications of this practice it warrants further investigation.

Research into the use of scavenging and stealing remain in its infancy and respondents in the current study provided mixed views of these strategies highlighting the need for additional, local research. Given the sensitive and illegal nature of these strategies investigative methods, such as snowball sampling as described by Faugier and Sargeant (1997) would be worthy of consideration.

The perceived attitude of staff at a local StVdP agency is concerning, however it is unclear if this is an isolated experience and whether it relates to the individuals embarrassment about seeking help from this service, or an issue with staff. Additional investigation into this is recommended.

The apparent positive impact on mothers personally for participating in this research should be considered by services looking to address food security locally. Providers should be encouraged to investigate positive ways their target groups can participate in designing and implementing solutions.

11. Research strengths and limitations

The small number of participants in this research is an obvious and major limitation of the project. Failing to reach thematic saturation limits how generalisable the findings from this research are to other mothers in this target group in the local community, and more broadly to other regions.

Other sampling methods, such as snowballing, which have been used to reach 'hidden' population groups, should be considered for further research into this field to increase the number of participants, and to allow for anonymity to be maintained.

Despite the small sample, the research did reach the intended target group and feedback from participants indicated that participating in the research was a positive experience for women. Women were also highly engaged in talking to the researcher about their family and good, and provided a range of practical and realistic suggestions which should be regarded as another strength of this research project.

12. Conclusion

This research study found that mothers in Goulburn, who receive all of their income from government assistance, use a variety of strategies to feed themselves and their families, largely consistent with those referred to in published literature. Additional research with this target group is needed to explore how widespread the use of maternal buffering, stealing, scavenging and limiting the frequency of children eating is.

This small scale research project could be seen as a litmus test for possible major issues likely to be facing mothers who receive all of their income from government assistance. The behaviours presented in the interview challenge the stereotype of 'dole bludger', and instead paint a picture of mothers making an sincere effort to provide what they saw as good food for their families, while being faced with limited incomes. The participants provided insight into their food and shopping habits, revealing the preparation required for budgeting, and the strategies used when things do not go to plan. Importantly, mothers offered several practical and realistic suggestions for new support to be put in place in the Goulburn area and for improvements to existing supports, which should be actively pursued. The potential benefits of implementing changes suggested will reach far beyond the select population group of this study.

The reality of relying on government assistance as a sole source of income means avoiding food insecurity will not always be possible. Responding to concerns about current support structures in place and investigating areas requiring further validation is needed so that mothers and their families can be better supported to cope with food insecurity without resorting to socially unacceptable practices.

13. References

- Ahluwalia IB, Dodds JM, Baligh M. 1998. *Social Support and Coping Behaviors of Low-Income Families Experiencing Food Insufficiency in North Carolina*. Journal of Health Education and Behavior. 25(5):599-612
- Anglicare, 2003 *Food insecurity- a welfare agency perspective*, Anglicare Sydney Research and Planning Unit.
- Australian Bureau of Statistics (ABS) 2006a. *Basic Community Profile: Goulburn Urban locality 20010.0 BCP Goulburn (Urban Centre- Locality)*. Commonwealth of Australia
- Australian Bureau of Statistics (ABS) 2006b. *Basic Community Profile: New South Wales 20010.0 BCP NSW*. Commonwealth of Australia
- Babington S, Donato-Hunt C, 2007, *When there isn't enough to eat: the food insecurity of Anglicare Sydney's clients emergency relief in Wollongong full report*, ANGLICARE, Viewed online 2 February 2009, <<http://www.anglicare.org.au/files/pdf/WhenThereIsntEnoughToEat.pdf>>
- Badun C, Evers S, Hooper M. 1995. *Food security and Nutritional Concerns of Parents in an Economically Disadvantaged Community*. J Canadian Diet Assoc. 56(2):75-80
- Booth S. 2006, Eating rough: food sources and acquisition practices of homeless young people in Adelaide, South Australia, Public Health Nutrition, 9(2): 212-218
- Booth S, Smith A. 2001. *Food Security and poverty in Australia- challenges for dietitians*. Australian Journal of Nutrition and Dietetics 58 (3):150-156
- Commonwealth of Australia Australian Food and Nutrition Monitoring Unit. 2001a. Evaluation of short dietary questions from the 1995 National Nutrition Survey. Commonwealth of Australia. Canberra, ACT, Australia.
- Commonwealth of Australia Australian Food and Nutrition Monitoring Unit. 2001 Key food and Nutrition Data for Australia 1990-1999. Canberra, ACT, Australia.
- Crotty PA, Rutishauser HE, Chaill M. 1992. *Food in low-income families*. Australian Journal of Public Health 16(2):168-174
- Eikenberry N, Smith C, 2003, Attitudes, beliefs and prevalence of dumpster diving as a means to obtain food by Midwestern, low-income, urban dwellers, Agriculture and Human Values, 22:187-202
- Faugier J, Sargeant M. 1997. *Sampling hard to reach populations*. Journal of Advanced Nursing 26(4):790-797
- Food Bank Australia, 2011, Food Bank Australia Limited. North Ryde, New South Wales, viewed 19 May 2010 <<http://www.foodbank.com.au/default.asp>>
- Foley RM, Pollard CM. 1998. Food Cent\$- implementing and evaluating a nutrition education project focusing on value for money. Australian and New Zealand Journal of Public Health. 22(4):494-501
- Furness BW, Simon PA, Wold CM, Asarian-Anderson J. 2004. *Prevalence and predictors of food insecurity among low-income households in Los Angeles County*. Public Health Nutrition. 7(6):791-794
- Gallegos D, Ellies P, Wright J, 2008. *Still there's no food! Food insecurity in a refugee population in Perth, Western Australia*. Nutrition and Dietetics 65(1):78-83.
- Goulburn Mulwaree Council. 2007. State and facts about Goulburn Mulwaree...at a glance, Goulburn Mulwaree Council, viewed 1 December 2009, <<http://www.goulburn.nsw.gov.au/files/6002/File/ataglance.pdf>>
- Hadley C, Sellen D, 2006. *Food Security and child hunger among recently resettled Liberian refugees and Asylum Seekers: a pilot study*. Journal of Immigrant and Minority Health. 8(4): 369-375.

Harding A. Szukalska A. 1999. *Financial Disadvantage in Australia- 1999*. The Smith Family, viewed 22 November 2006, <http://www.thsmithfamily.com.au/webdata/resources/files/Financial_Disadvantage_Report_Nov_2000.pdf>

Health Canada, 2004, *Income related household food security in Canada* (Canadian Community Health Survey Cycle 2.2, Nutrition), Office of Nutrition Policy and Promotion, Health Canada, viewed 21 April 2008, <http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/surveill/income_food_sec-sec_alim-eng.pdf>

Hosington A. Shultz JA. Butkus S. 2002. *Coping strategies and nutrition education needs among food pantry users*. J of Nutrition Education and Behaviour 34(6):326-33

Kempson K. Keenan DP. Sadani PS. Adler A. 2003. *Maintaining food sufficiency: coping strategies identified by limited resource individuals versus nutrition educators*. J Nutrition Education & Behavior 35(4): 179-88

Kempson K. Keenan DP. Sadani PS. Ridlen S. Rosato NS. 2002. *Food management practices used by people with limited resources to maintain food sufficiency as reported by nutrition educators*. Journal of the American Dietetic Association. 102(12):1795-1799

Kendall A. Kennedy E.1998. *Position of the American Dietetic Association: domestic food and nutrition security*. Journal of American Dietetic Association 98: 337-42

Marks GC, Webb K, Rutishauser IE, Riley M, 2001, Monitoring food habits in the Australian population using short questions, viewed 29 March 2007, <[http://www.health.gov.au/internet/main/publishing.nsf/Content/08744E494E7BBF84CA256F190004C9F0/\\$File/foodhabits.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/08744E494E7BBF84CA256F190004C9F0/$File/foodhabits.pdf)>

Maxwell DG. 1996. *Measuring food insecurity: the frequency and severity of "coping strategies"*. Food Policy 21(3):291-303

McIntyre L. Glanville NT. Officer SD. Anderson B. Raine KD. Dayle JB. 2002. *Food Insecurity of Low-income Lone Mothers and Their Children in Atlantic Canada*. Canadian Journal of Public Health. 93(6):411-15

McIntyre L. Glanville NT. Raine KD. Datle JB, Anderson B. Battaglia N. 2003. *Do low-income lone mothers compromise their nutrition to feed their children?* Canadian Medical Association Journal. 168 (6):686-691

McIntyre L. 2003. Food security: *More than a Determinant of Health*. Policy Options. March: 46-51

National Rural Health Alliance, 2003, Position paper: providing fresh food in remote Indigenous communities, National Rural Health Alliance, viewed 9 April 2008, <[http://nrha.ruralhealth.org.au/cms/uploads/projects/providing%20fresh%20food%20\(30aug06\).pdf](http://nrha.ruralhealth.org.au/cms/uploads/projects/providing%20fresh%20food%20(30aug06).pdf)>

NSW Department of Corrective Services. 2006. Annual report 2005-06. NSW Department of Corrective Services, viewed 9 April 2007, <http://143.119.253.176/_media/dcs/about-us/publications/annual-reports/annual-report-2005-2006/AnnualReport2006.pdf>

NSW Department of Health, 2004, *The NSW Adult Health Survey 2003*, Centre for Epidemiology and Research, NSW Department of Health. NSW Public Health Bulletin 2004, 15 (s4), viewed 21 April 2007, <<http://www.health.nsw.gov.au/public-health/phbsup/ahs2003.pdf>>

NSW Department of Health, 2005, *The NSW Population Health Survey 2004*, NSW Department of Health, Centre for Epidemiology and Research, NSW Public Health Bulletin 2004, 16 (s1), viewed 21 April 2007, <<http://www.health.nsw.gov.au/pubs/2005/pdf/adultreport2004.pdf>>

NSW Department of Health, 2006, *New South Wales Population Health Survey 2005 Report on Adult Health*, NSW Department of Health, Centre for Epidemiology and Research, Publication number: PH 060139, viewed 21 April 2007, <<http://www.health.nsw.gov.au/pubs/2006/pdf/adultreport2005.pdf>>

- Nolan M. Rikard-Bel G. Mohsin M. William M. 2006. *Food insecurity in three socially disadvantaged localities in Sydney, Australia*. Health Promotion Journal of Australia. 17(3):247-254
- Nord M. 2002. *Rates of food insecurity and hunger unchanged in rural households*. Rural America, 16(4):42-47, viewed 21 April 2007, <<http://www.ers.usda.gov/publications/ruralamerica/ra164/ra164g.pdf>>
- Nord M. Kabbani N. Tiehen L. Andrews M. Bickel G. Carlson S. 2002 *Household Food Security in the United States, 2000*. Food Assistance and Nutrition Research Report No. ((FANRR)21)
- Nord M. Kantor LS. 2006. *Seasonal variation in Food Insecurity Is Associated with Heating and Cooling Costs among Low-Income Elderly Americans*. Journal of Nutrition 136: 2939-2944
- Nord M. Andrews M. Carlson S. 2005. Household Food Security in the United States, 2005. Economic Research Services Food Assistance and Nutrition Research Program (Report 29), viewed 1 November 2006, <<http://www.ers.usda.gov/Publications/ERR29/ERR29.pdf>>
- Olson CM. Anderson K. Kiss E. Lawrence FC. Seiling SB. 2004., *Factors Protecting Against and Contributing to Food Insecurity Among Rural families*. Family Economics and Nutrition Review. 16 (1):12-20
- OzHarvest, 2011, OzHarvest Sydney, New South Wales, <<http://www.ozharvest.org> >
- Quandt SA. Arcury TA. Early J. Tapia J. Davis JD. 2004. *Household food security among migrant and seasonal Latino farm workers in North Carolina*. Public Health Reports 119(6):568-76
- Quigley R. Watts C. 1997 Food Comes First: *Methodologies for the National Nutrition Survey of New Zealand*. Public Health Report No 2, Public Health Group, Ministry of Health, Wellington, New Zealand, viewed 8 October 2006, <[http://www.moh.govt.nz/moh.nsf/82f4780aa066f8d7cc2570bb006b5d4d/8bf3be812cd9ec5e4c25667000341ba2/\\$FILE/meth140.pdf](http://www.moh.govt.nz/moh.nsf/82f4780aa066f8d7cc2570bb006b5d4d/8bf3be812cd9ec5e4c25667000341ba2/$FILE/meth140.pdf)>
- Radimer KL. 1992 *Measurement of household food security in the USA and other industrialised countries*. Public Health Nutrition. 5(6A): 859-864
- Rush E, 2006, Skip Digging in Australia, <<https://www.tai.org.au/documents/downloads/WP85.pdf>> The Australia Institute Webpaper, 2006
- Russell DG, Parnell WR, Wilson NC et al. 1999. NZ Food: NZ People. Key results of the 1997 National Nutrition Survey. Ministry of Health: Wellington, viewed 1 May 2008, <[http://www.moh.govt.nz/moh.nsf/82f4780aa066f8d7cc2570bb006b5d4d/8f1dbeb1e0e1c70c4c2567d80009b770/\\$FILE/nns.pdf](http://www.moh.govt.nz/moh.nsf/82f4780aa066f8d7cc2570bb006b5d4d/8f1dbeb1e0e1c70c4c2567d80009b770/$FILE/nns.pdf) >
- Sellen DW, Tedstone AE, Frize J, 2002. *Food insecurity among refugee families in East London: results of a pilot assessment*. Journal of Public Health Nutrition 5:637-644.
- Tarasuk V 2001, Discussion paper on household and individual food security, Health Canada, viewed 6 October 2008, <http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/nutrition/food_sec_entire-sec_aliments_entier-eng.pdf >
- Tarasuk V. 2001a, Household Food Insecurity with Hunger Is Associated with Women's Food Intakes, Health and Household Circumstances, *Journal of Nutrition*. 131:2670-2676
- Tarasuk V. Beaton GH. 1999. Household food insecurity and hunger among families using food pantries. Canadian Journal of Public Health , 90(2): 109-113
- The NSW Cancer Council. 2007 NSW Healthy Food Basket Survey: Cost, availability and Quality Survey. Sydney.
- Wehler C. Weinreb LF. Huntington N. Scott R. Hosmer D. Fletcher K. Goldberg R. Gundersen C. 2004. *Risk and Protective factors for Adult and Child Hunger Among Low-income Housed and Homeless Female-headed families*. American Journal of Public Health 94(1):109-115

Wicks R, Trevena LJ, Quaine S. 2006. *Experiences of Food Insecurity among Urban Soup Kitchen Consumers: Insights for Improving Nutrition and Well-Being*. Journal of the American Dietetic Association. 106(6):921-924

World Health Organisation. 1998 Wilkinson R & Marmot M (ed) *Social Determinants of Health: The Solid Facts*. WHO Europe, Denmark

Sydney West Area Health Service, 2005, Katoomba Food Project: Emergency Food relief report, viewed 21 April 2009,
<<http://www.sustainablebluemountains.net.au/imagesDB/resources/KatoombaFoodProject;EmergencyFoodReliefReport-SWAH.pdf>>

12. Appendix 1: Contents of grocery pack given to participants

Grocery items included in pack	
Quantity	Item
1	Aldi Re-usable 'Green' Bag
1	1L UHT Skim Milk
1	750g packet Quick Cook Oats
1	1.12kg box Wheat Biscuits Breakfast cereal
2	420g Baked beans in tomato Sauce
1	420g tinned Spaghetti
1	2kg packet long grain rice
1	500g packet Quick cook pasta
1	550g stir fry sauce in vegetables (non cream sauce)
1	500g tomato pasta sauce
1	800g tin fruit in juice
Non grocery items included in pack	
Quantity	Item
1	5 soap bar pack
1	Shampoo
1	Conditioner
1	Toothpaste (adult)
1	Toothbrush
1	Dental floss