



“MORE THAN JUST A MEAL”: A QUALITATIVE STUDY OF THE VIEWS AND EXPERIENCES OF OLDER PEOPLE USING A MEALS ON WHEELS (MOW) SERVICE

K. Evans^{1,2}, F. Manning¹, K. Walton¹, V. Traynor², A.T. McMahon¹, K.E. Charlton¹

Abstract: *Background:* Community based Meal on Wheels (MOW) services contribute to promoting the independence of older people through the provision of home delivered meals. It is important to actively explore the views, expectations and experiences of clients to ensure their services are contemporary. *Objectives:* To explore the views and experiences of older people who are MOW clients about the meal service and the meaning of food and mealtimes. *Design:* A phenomenological approach using semi-structured face-to-face interviews which were digitally recorded and transcribed verbatim. Line-by-line thematic analysis was undertaken until saturation was reached and codes, categories and final themes were agreed by all researchers. *Setting:* Two MOW services in regional New South Wales, Australia. *Participants:* Forty-two older people who were clients of the MOW services. *Results:* Four main themes were generated: (i) capturing perspectives on the quality and offerings of the service provision, (ii) relating the broad range of factors influencing food intake, (iii) acknowledging the critical social role food plays, and (iv) illustrating the physical and mental constraints that can limit food access and intake. *Conclusions:* The findings demonstrated the value older people put on the MOW services and factors which influenced their health, including the social role of food and constraints on their access to adequate food intake. The findings highlighted important opportunities for MOW to develop their services and ensure the service meets the contemporary needs of an ageing population.

Key words: Meals on Wheels, mealtimes, service, community, social.

Introduction

Nutrition is a major determinant of successful aging and poor nutritional intake among older people can cause functional decline, illness and cognitive impairment (1). Health status for those experiencing ill-health is significantly linked to adequate access and intake of food (2). Provision of home delivered meals through community based services such as Meal on Wheels (MOW) can improve quality of life and contribute to the maintenance of functional independence among older people (3). In Australia, 14.8 million meals per year, or 53,000 meals per day, are purchased by MOW clients who are frail, older people and/or living with a disability (4).

The Australian MOW slogan of ‘More than just a meal’ reflects its philosophy that although a nutritionally

balanced meal is the basis of the service, it like other MOW services around the world can reduce social isolation by providing social contact through its meal delivery service (5-6). Health status is linked to multiple factors but adequate access and intake of food has particular significance for older adults and those who are unwell (2).

An understanding about the acceptability of the MOW service by its clients can be used to determine whether the meals are likely to be consumed and contribute to improving the nutritional status and health of older people (3). There is a lack of research focusing on the views and experiences of clients using MOW services which limits an understanding about the effectiveness of MOW services. Further, the number and flexibility of meal service options has changed somewhat since the release of the NSW MOW Nutrition Guidelines (7). This study aimed to explore the views and experiences of the MOW meal service by the clients and the meaning of food and mealtimes.

1. School of Medicine, University of Wollongong, Wollongong NSW 2522 Australia; 2. Dementia Training Study Centre, School of Nursing, Midwifery and Indigenous Health, University of Wollongong, Wollongong NSW 2522 Australia

Corresponding Author: Karen Walton, School of Medicine, University of Wollongong, Wollongong NSW 2522, Australia, Telephone: 0422950064, e-mail: kwalton@uowmail.edu.au





Methods

Design

In 2011, a mixed method study was undertaken with clients from two MOW services in regional New South Wales (NSW), Australia, consisting of: quantitative nutritional assessments and dietary assessments and qualitative interviews (8). The findings from the interviews are reported here. A phenomenological approach (9) was adopted using semi-structured interviews to explore the views and experiences of clients on the MOW meal provision and the meaning of food and mealtimes. The University of Wollongong Illawarra Shoalhaven Local Health District Human Research Ethics Committee (HE10/417) approved the study design.

Participants

Study participants were clients of two MOW services in regional NSW (Northern Illawarra and Wollongong MOW). Exclusion criteria applied were clients identified as having a terminal illness or non-English speaking. Managers from the two MOW services identified eligible clients to participate and volunteer drivers distributed participant information sheets and consent forms to these clients.

Data Collection

Data were collected using semi-structured face-to-face interviews. One member of the research team (FM) undertook all the interviews which were undertaken in the home of each client. An interview guide of 6 prompt questions structured the interviews. The interview guide was developed in three stages: (i) reviewing the relevant literature to identify topic areas to be addressed during the interview; (ii) presenting a draft list of interview questions generated from the topic areas to stakeholders, who were dietitians and MOW managers, to review and refine and (iii) the research team used the feedback from the stakeholder review to finalize the content of interview guide (9). The content of the interview guide was used to explore the views and experiences of clients about the MOW service, their food selection and mealtime behaviours. In addition, prompt questions were added to the interview guide by the researcher (FM) to explore some aspects of the topic areas in more detail. The prompt questions were developed using an iterative approach and enabling the data analysis from preceding interviews to inform all proceeding interviews (9). The interviews were all undertaken by the same researcher (FM) which ensured this iterative process was applied consistently as the research progressed. All interviews were digitally recorded and transcribed verbatim by the

same member of the research team.

Data Analysis

The purpose of the data analysis was to generate an understanding about the views and experiences of clients about the MOW service, their food selection and mealtime behaviours. The data analysis approach adopted in this study was informed by qualitative evaluation research methods. The first stage of the analysis was to read and re-read each transcribed interview data in its entirety to gain an overview of the views and experiences expressed by the clients during their interview. Next, the interview data were coded to generate themes which explain the views and experiences of participants of the phenomenon under investigation. In this study, two researchers separately undertook the coding activities [KE, FM]. The coding technique consists of researchers reviewing and comparing each line of data, known as the 'line by line' technique of data analysis, to generate themes and the findings from a qualitative study.

In this study, codes explaining the meaning of the data were derived from key words and phrases in the transcribed data (9). The codes were identified separately during this process by the two researchers undertaking the data analysis (FM, KE). The final list of codes were created following back-and-forth discussions among the researcher team as data were re-visited to ensure that the codes created reflected the views and experiences expressed by the participants during the interviews. Next, the codes were grouped together to create categories which were used to explain the meaning of the data. The final stage of the data analysis consisted of generating of themes from the grouped categories to explain the views and experiences of clients about the MOW service, their food selection and mealtime behaviours. Again, the whole team were involved in this stage of the analysis and back-and-forth discussions continued and the outcome was the selection of exemplar quotes to illustrate the meaning of the themes generated from the data analysis.

Rigour of data analysis

The iterative process described above is an important and valuable technique adopted in qualitative research to ensure there is confidence for the themes created from the data analysis (9). One outcome from this iterative process was that contradictory evidence in the data could be further explained and a deeper understanding about the views and experiences of the participants generated. For example, when there were divergent views and experiences expressed by the participants the researchers considered whether these examples provided a further





and more thorough explanation of a specific theme or whether the divergent example needed to be created as a new and separate theme.

Results

Forty-two clients from the two MOW services participated (26 females and 16 males) with a mean age of 81.9 (± 9.4) years. The length of time that clients had received the MOW services ranged from one month to 20 years (Table 1). A total of 35 interviews were undertaken (some interviews were with a couple living together in the same home) and lasted from ten to sixty minutes. Exemplar quotes from each of the transcripts were arranged into categories and data saturation was reached by the twentieth transcript (Figure 1). Further transcripts were analysed and some variations in categories became evident but did not result in new themes. The data analysis generated four main themes: (i) capturing perspectives on the quality and offerings of the service provision, (ii) connecting the factors influencing food intake, (iii) acknowledging the critical social role food plays, and (iv) illustrating the physical and mental constraints that can limit food access and intake. Each theme and sub-theme outlined below is supported by exemplar quotes from clients.

Theme 1: Capturing perspective on the quality and offerings of the service provision

Clients were generally satisfied with the current MOW meal service and particularly enjoyed their relationship with volunteers delivering the meals and the reassurance of a regular delivery.

In particular, a release from the burden of cooking was noted as one of the best features of the service:

"The convenience of them, I think. They're cooked, and you've only got to pop them in the microwave." (Interview 19 p 2)

".....People that are bringing it here are fantastic, lovely people you know. They are always on time; they are always willing to help or anything like that." (Interview 6 p 3)

Concerns regarding the meal service were noted, including under-cooked vegetables, irregular or late delivery times and individual dislikes of the dishes offered:

"Well the peas and green beans have been almost raw quite lately. I don't know what's happened (Laugh)." (Interview 12 p 1)

"But sometimes they are a bit late coming at ...bit later than usual coming at lunchtime, and I err...but that doesn't matter. I say "I'm hungry and I'm waiting for you." (Interview 4 p 5)

Most clients felt that there was a sufficient variety of

Table 1
Characteristics of MOW clients (N = 42)

| | Category | Number of Participants (n=42) | Percentage of Participants (%) |
|------------------------------|---|-------------------------------|--------------------------------|
| Age | 65 years or under | 4 | 10 |
| | >65 years | 38 | 90 |
| Gender | Female | 26 | 62 |
| | Male | 16 | 38 |
| Number of Couples | Northern Illawarra | 4 | 10 |
| | Wollongong | 3 | 7 |
| Living Arrangement | Living alone | 24 | 57 |
| | Living with partner | 14 | 33 |
| | Living with carer/ family (not partner) | 4 | 10 |
| Length of Time Receiving MOW | Up to 1 year | 8 | 19 |
| | 1-3 years | 16 | 38 |
| | 3-5 years | 7 | 17 |
| | 5-10 years | 4 | 10 |
| | 10-15 years | 3 | 7 |
| | 15+ years | 3 | 7 |
| | Do not know | 1 | 2 |
| Type of Meal Ordered | Hot | 9 | 21 |
| | Chilled | 3 | 7 |
| | Frozen | 28 | 67 |
| | Both frozen and hot | 2 | 5 |





meal options and enjoyed the choices available:

"Oh yeah yeah yeah good variety. Yeah. No, I think it's done quite well." (Interview 3 p 3)

However, there was clearly opportunity for widening the choices offered with the limitations of the meal choices noted for those on restricted diets:

".....I think I've just about taken all of them there, there's not that many on there (low calorie, low salt options due to high blood pressure)." (Interview 21 p 9)

Some clients who had specific health concerns and required specific meal options were not clear about the range of options available. For example, some clients were unaware that texture-modified options, including chopped, minced and pureed varieties, were available on the menu, as evidenced by the following comment from a client with oesophageal cancer:

"(About the meals) I wasn't swallowing them properly and just vomited them up all the time. It gets stuck here and, by God, it hurts. It really hurts." (Interview 20 p 1)

Theme 2: Connecting factors influencing food intake and mealtimes

Issues around meal patterns and barriers to consuming adequate diet was a theme generated from the findings. Firstly, several clients reported that they had good arrangements concerning the food and mealtime service and often had the opportunity to eat meals outside their home with family and friends:

"I have a friend that takes us out Wednesday; another friend takes us Sunday (laugh)." (Interview 10 p 5)

"I'd say every weekend I go out Saturday or Sunday...Somebody's always there to take me out and take me for a drive." (Interview 15 p 5)

Others reported rarely going out, mostly due to poor mobility and various predisposing health conditions:

"No, I've been housebound for four years. I only go to the doctor, when I have to." (Interview 12 p 4)

"No, I can't go anywhere much because I've got that Oxygen machine...." (Interview 3 p 2)

Clients mostly reported that they consumed three meals per day, as well as between-meal snacks:

"Yes, breakfast, my lunch and a lighter meal for my tea time." (Interview 4 p 4)

"Oh yes. I have breakfast. I have porridge for breakfast, and lunch I have cracker bread and fillings, you know.....Oh yes, then I have the Meals on Wheels as well." (Interview 8 p 5)

Their level of appetite was also reported, including if they felt hungry around mealtimes, whether they ate the entire meal and if they skipped meals. There was a variety of responses, with some clients regarding their appetite as reasonably good:

"I'm always hungry at meal times." (Interview 14 p 8)

Others reported a reduced interest in meals:

"...I just eat because I got to eat. That's all." (Interview 11 p 5)

Meal skipping was reported by some clients, in particular their lunch:

"There are some days that I mightn't have any lunch. I'll just have a cup of tea." (Interview 9 p 5)

"I don't always eat lunch, to be honest. I might have a cup of tea and maybe one sandwich or a biscuit or something. But I don't always eat." (Interview 16 p 6)

Theme 3: Acknowledging the critical social role food plays

Most clients lived alone and accordingly ate most of their meals alone. Several clients mentioned that they valued social contact with their family, while others reported having regular contact with neighbours who were an important support network. It was often reported that neighbours made meals, collected mail, had a cup of tea with them and took them out to do shopping or to have a meal:

"...well tonight I have that soup that the neighbours sent in...." (Interview 3 p 5)

"My neighbours aren't just neighbours; they are also good friends too." (Interview 12 p 4)

The following comments illustrate the experiences of clients who ate alone, with friends and/ or with family:

"Always by myself....Well, my son doesn't come much anymore. He used to come quite regularly." (Interview 1 p 11)

"I have a friend. He comes down...we have lunch together. Then we go out visiting to see people...." (Interview 5 p 1)

"My daughters take me out sometimes, but the trouble is as I say, trying to get the right food." (Interview 8 p 2)

"Not too often in the week. But often on the weekends. On the weekends I get my grandchildren down from Sydney." (Interview 5 p 3)

The MOW volunteer staff were regarded very positively by clients and their important social role was emphasized by the clients:

"...Well they are friends. Not only do they just bring lunch in, but they're friends. Sometimes they might mention their family or something that is going on." (Interview 4 p 2)

The MOW service also provided lunch events which were held four times per year. Clients were collected and taken to a local restaurant to share a meal with other MOW clients. Some enjoyed the opportunity:

"Yes, when they have the lunches on, like about three or four times a year, I try to go if I can.....I love them." (Interview 14 p 7)

While others were not interested, due to health problems or a dislike of socializing:

"It's mainly the vision problem that, yeah, if she had





the vision it could probably be a lot easier to be social but it's a bit hard when you cannot see people and you know." (Interview 9 p 7)

"No, I'm just my own person....I can only feel comfortable with people that I know." (Interview 16 p 5)

Theme 4: Illustrating the physical and mental constraints that can limit food access and intake

The MOW service was identified by many clients as fulfilling a solution to their declining ability to go shopping to purchase food and prepare meals:

"Well I couldn't go up and do the shopping anymore. No, it's lovely just to shove it in the microwave and eat it at night." (Interview 13 p 1)

"I can't do a lot of cooking; that's why I have Meals on Wheels – because I've got macular degeneration...." (Interview 16 p 3)

Conversely, some clients valued their independence and capacity to shop and cook, at least some of their meals, in addition to receiving their delivered meals,

"Now and again I like to cook a meal..... like Wednesday I won't have a meal that night; I'll have toasted sandwiches or soup or something, you know, light." (Interview 19 p 2)

Discussion

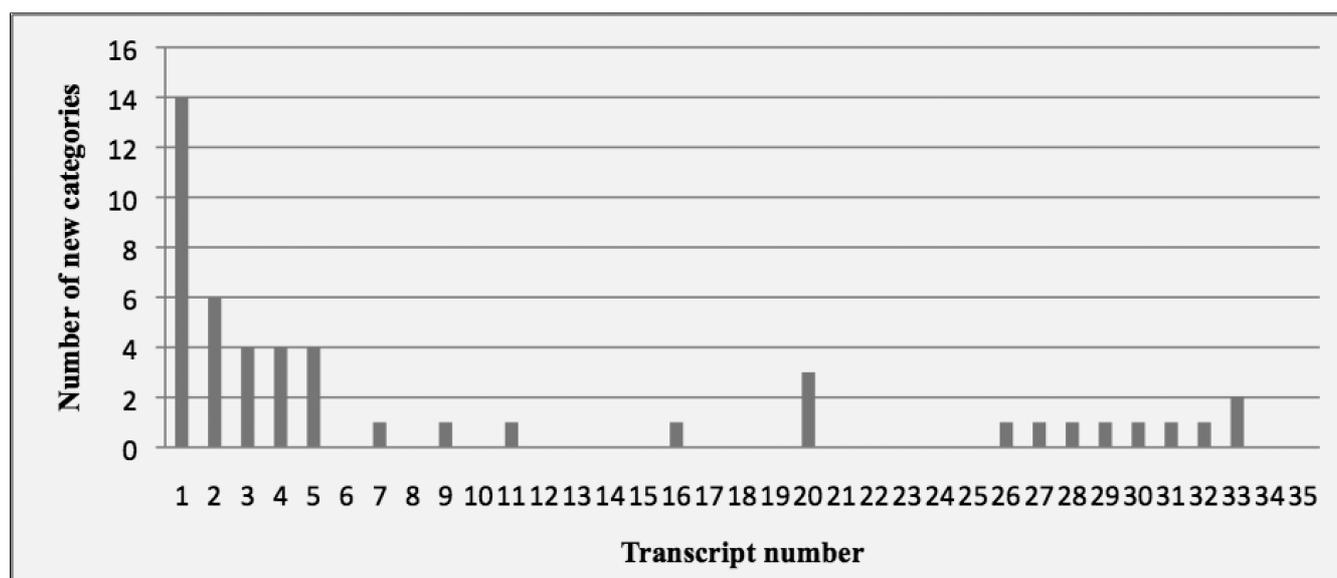
This study aimed to explore the views and experiences of the MOW meal service by the clients and the meaning

of food and mealtimes. The demographic profile of the forty-two clients was typical of clients using the local MOW service which was the focus of this study. Their demographic profile also reflects that of clients using a MOW service in other countries, for example, in Europe (10-12). MOW is a community meal service usually subsidized by government funding and clients need to fit specific eligibility criteria, including an assessment of their health and social care needs.

Despite a high level of satisfaction with the service, a number of concerns were identified, including undercooked vegetables, a need for more special diet options and better advertising of texture-modified meals available. Oral health problems such as pain or fear of causing harm to fragile dentition can lead to difficulties in chewing and swallowing and result in avoidance of particular foods (13, 14), such as whole apples, well-done meats, nuts, and raw carrots (13, 15). Our findings showed that clients avoided particular foods and identified a need for MOW services to make suitable food preparation changes to items such as vegetable types, cooking times and diet types given the restrictions this can place on small appetites. MOW services could establish community links, with allied health professionals and general practitioners, to review the need for restrictive diets that limit choices further.

A wide range of factors shape the mealtime behaviours of older people which in turn impact on their ability to consume a healthy diet. There was evidence of poor appetite, even in the presence of adequate food, which is particularly important to consider because older population groups are at an increased risk of

Figure 1
Number of new categories emerging in each MOW client interview transcript



n = 35, some clients were interviewed as a couple





malnutrition compared to younger populations (16-17). Mealtimes were regarded as a task to complete rather than an enjoyable experience. The disinterest in food among older people was found to be caused by a number of factors, including physiological changes of diminished smell, taste and poor dental health (18). Meal skipping was also reported, particularly the lunchtime meals, and reflects findings of studies of other older populations (19).

The relationship between social contact and food intake is well established (1, 20-23) and mealtime experiences lose their valuable social significance if eaten alone. Deterioration of social networks can lead to a reduced motivation to eat and consequently weight loss (2).

Clients valued the contact with MOW volunteers as much as the meals being delivered (6). Recognising the important social role that the MOW service plays in the daily lives of clients reaffirms the significance of the service and further highlights a need to continue to introduce additional programs that supplement this aspect of the service. For example, in this study, the clients viewed positively the shared mealtime outings provided as a value-add aspect of the MOW service. Congregate meals in the community promote socialisation for older people (13, 16). This value-add aspect of the MOW service enables clients to provide an opportunity to be actively participate in a community.

As people age their functional capacity to shop to purchase food and prepare meals decreases and highlights the important role and benefits of support services such as MOW, which can provide older people with easily accessible and low cost nutritious meals (6). Life changes such as illness, the loss of a spouse or transition into supported accommodation can further influence mealtime routines. Clients in this study lamented that the social significance of both preparing and enjoying meals with others can be lost as they age (24). The presence of a spouse has a positive effect on the nutritional status of older people (6). Bereavement can cause an increased risk of poor nutritional status. For men, because they may lack knowledge about shopping and cooking (22, 25) and for women, because the meaning of cooking is often lost when they no longer have someone to cook for (3, 6). The result for both men and women is smaller and less frequent meals.

The heterogeneity of the MOW client group was demonstrated through quotations from other clients who commented on their enjoyment of still having the capacity to cook and shop for additional meals and snacks. These independent activities of daily living provide an opportunity for socialisation and help maintain independence (26-27). Regardless of the level of dependency, receipt of a home delivered meal can regularize mealtimes and be a reminder for older people to eat.

A potential limitation of this study was the social

desirability to speak positively about the MOW service which the clients received at the time of the interviews. Despite emphasizing to clients the anonymity of their data, some clients could fear exclusion from the service if they expressed criticism. Generalizability of the findings to clients from MOW services in other geographical areas could be limited because clients were recruited were from a single region. However, the themes generated from this study have been discussed in other studies exploring mealtime experiences for older people (1, 11-12). Thus, we can conclude that others can learn about mealtime services from the findings of this study.

In conclusion, this study enabled a better understanding about the views and experiences of two MOW services and the meaning of food and mealtimes to these clients. The findings confirmed the credibility and value of the MOW service within the community where the service is delivered. Issues identified that face older people living at home included a reduced social network, reduced appetite, functional decline, and concerns about dentition and food variety. These were important findings which can be used to improve the acceptability of the delivered meal service provided by MOW for potential clients and inform the development of the MOW service, including specialist services to ensure the MOW service grows and reflects the contemporary needs of an ageing population.

Acknowledgements: Special thanks to the two MOW Managers, Melinda Stuckey and Faye Ralph, as well as the MOW clients who shared their views and experiences with the researchers.

Funding Source: This study was supported by a University of Wollongong Community Engagement Grant with Northern Illawarra and Wollongong Meals on Wheels. A student research grant was also awarded by the NSW/ACT Dementia Study Training Centre.

Conflict of interest confirmation: The sources of funding were declared. There are no other conflicts of interest.

Ethical Standards: This study complied with the requirements of the University of Wollongong and the Illawarra Shoalhaven Local Health District Health and Medical Human Research Ethics Committee (HE10/417).

References

1. Winterton R, Warburton J & Oppenheimer M. (2013) The future of Meals on Wheels? Reviewing innovative approaches to meal provision for ageing populations. *Int J Social Welfare* 22: 141-151.
2. Donini LM, Savina C et al. (2003) Eating habits and appetite control in the elderly: The anorexia of aging. *Int Psychogeriatr* 15(1): 73-87.
3. Locher JL, Burgio KL et al. (1998) The Social Significance of Food and Eating in the Lives of Older Recipients of Meals on Wheels. *J Nutr Elder* 17(2): 15-33.
4. Meals on Wheels. (2011) <http://www.nswmealsonwheels.org.au/Home.aspx>. Accessed: 11/08/12.
5. Kretser AJ, Voss T et al. (2003) Effects of two models of nutritional intervention on homebound older adults at nutritional risk. *J Am Diet Assoc* 103(3): 329-336.
6. Timonen V, O'Dwyer C. (2010) It is nice to see someone coming in: Exploring the Social Objectives of Meals-on-Wheels. *Can J Aging* 29(3): 399-410.
7. Krassie J. (2002) Destination: Good Nutrition. Strathfield, NSW: Department of Ageing, Disability and Home Care.
8. Walton K, Charlton K, McMahon A, Manning F, Galea S, Stuckey M & Ralph F (2012). Meals on Wheels (MOW): Exploring nutritional status, client experiences and dietary intakes, *Nutrition & Dietetics* 69(S1 Conference Abstract):110.
9. Patton MQ (2002). *Qualitative Research & Evaluation Methods*. Sage





- Publications, 3rd Edition, Thousand Oaks, California.
10. Wilson L (2010) Personalisation, Nutrition and the Role of Community Meals. A report from a round table discussion on Personalisation and Community Meals Chaired by Baroness Greengross http://www.ilcuk.org.uk/files/pdf_pdf_123.pdf Accessed on 08.08.2013
 11. O'Dwyer C, Corish CA & Timonen V. (2009) Nutritional status of Irish older people in receipt of meals-on-wheels and the nutritional content of meals provided. *J Hum Nutr Diet* 22: 521-527.
 12. Soini H, Routasalo P & Lauri S. (2006) Nutrition in patients receiving home care in Finland - tackling the multifactorial problem. *J Gerontol Nurs* 32: 12-17.
 13. Richard L, Gosselin C et al. (2000) Outings to your taste: A nutrition program for the elderly. *Gerontologist* 40(5): 612-617.
 14. Parsons K, Roll C. (2004) Assessing the need for hot meals: A descriptive meals on wheels study. *Can J Diet Pract Res* 65(2): 90-92.
 15. Tilston CH, Gregson K et al. (1994). The Meals on Wheels Service: A Consumer Survey. *Nutr Food Sci* 94(2): 7-10.
 16. Neyman MR, ZidenbergCherr S et al. (1996) Effect of participation in congregate-site meal programs on nutritional status or the healthy elderly. *J Am Diet Assoc* 96(5): 475-483.
 17. Manning F, Harris K, Duncan R, Walton K, Bracks J, Larby L, Vari L, Jukkola K, Bell J, Chan M, Batterham M. (2012) Volunteer feeding assistants can improve the energy and protein intakes of hospitalised elderly patients - A Health Services Evaluation. *Appetite* 59:471-477.
 18. McIntosh WA, Shifflett PA et al. (1989) Social support, stressful events, strain, dietary-intake, and the elderly. *Med Care* 27(2): 140-153.
 19. Sheiham A, Steele J. (2001) Does the condition of the mouth and teeth affect the ability to eat certain foods, nutrient and dietary intake and nutritional status amongst older people? *Public Health Nutr* 4(3): 797-803.
 20. Coulston AM, Craig L et al. (1996) Meals-on-wheels applicants are a population at risk for poor nutritional status. *J Am Diet Assoc* 96(6): 570-573.
 21. Wylie C, Copeman J, Kirk SFL. (1999) Health and social factors affecting the food choice and nutritional intake of elderly people with restricted mobility. *J Hum Nutr Diet* 12(5): 375-380.
 22. Kurasaki KS. (2000) Intercoder Reliability for Validating Conclusions Drawn from Open-Ended Interview Data. *Field Method* 12(3): 179-194.
 23. Quandt SA, Chen HY et al. (2010) Food Avoidance and Food Modification Practices of Older Rural Adults: Association With Oral Health Status and Implications for Service Provision. *Gerontologist* 50(1): 100-111.
 24. Locher JL, Robinson CO et al. (2005) The effect of the presence of others on caloric intake in homebound older adults. *J Gerontol A-Biol* 60(11): 1475-1478.
 25. Krassie J, Smart C et al. (2000) A Review of the nutritional needs of Meals on Wheels consumers and factors associated with the provision of an effective Meals on Wheels service - an Australian perspective. *Eur J Clin Nutr* 54(4): 275-280.
 26. McKie L. (1999) Older people and food: independence, locality and diet. *Brit Food J* 101(7): 528-536.
 27. Routasalo PE, Savikko N et al. (2006) Social contacts and their relationship to loneliness among aged people - A population-based study. *Gerontology* 52(3): 181-187.

