Talking Healthy Eating –
a study of the dietary practices of mothers and grandmothers

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Doctor of Philosophy (PhD)

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DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed .................................................. (candidate)

Date ........................................................ 5 December 2012

STATEMENT 1

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Abstract

Food practices are influenced by numerous factors, including the meanings that food holds and the conception of self and acceptance within a community (O'Neill et al 2004). Generational and socioeconomic differences are also influential with James et al (1997) suggesting that diet has a lifelong effect on the health of socially disadvantaged people leading to "an intergenerational spiral of ill health and handicap." The aim of this study was to identify and evaluate some of the factors that influence the dietary behaviour of women from different generations.

A questionnaire was developed from a thematic analysis of interviews with parents and grandparents. The results showed differences in perceptions around dietary practices between two generations of women. The grandmothers chose and enjoyed "healthy" foods more often, and were less influenced by external forces. Mothers were more susceptible to emotional eating and to external influences.

The results of the questionnaire were used to inform the focus groups which raised issues around the environments that determine food choice, and the difficulties that lifestyles and working arrangements pose for many women. Women in both familial roles reminisced about eating and feeding patterns and expressed that foods not made "from scratch" promoted guilty feelings and that anything "fried" or processed was automatically rendered nutritionally deficient.

In the focus groups there was also an emphasis on the environment and how it impacts on food choice. The data reinforced the belief that psychological as well as social and environmental influences are key in understanding why foods are chosen. Giddens' (1992) theory of structuration has been introduced to explore the impact of environment on food choice while Erikson's (1962) concept of generativity has been identified as an area of research to build on the current findings.
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Chapter 1

Introduction

A healthy, balanced diet is necessary for optimum health and for the prevention of some common diseases such as coronary heart disease (British Heart Foundation, 2009), mouth, stomach and bowel cancers (WCRF, 2007). Many individuals are aware of the need to eat healthily, but evidence suggests a large proportion are not putting knowledge into practice. The aim of the thesis that follows is to explore and explain some of the issues that exist for women in two different familial roles – mother and grandmother. It will look at their issues of concern, elucidate differences between the generations, and finally explore some of the reasons underlying these differences. Ultimately, it lays the foundation for further research and interventions into the impact of familial role on attitudes and perceptions towards healthy eating.

Healthy eating is not a new concept yet it is one that has largely failed to address the health outcomes stated above (Roger et al 2011) and which are threatening the health of a generation. In Wales, the latest Welsh Health Survey (2010) states that only 3 in 5 children eat fruit every day, and that only half eat vegetables every day. Health promotion efforts are failing in their attempts to improve the diet and culture of eating that has been changing in the UK since the end of the second world war.

There is an extensive body of research in the areas of nutrition and eating behaviour from all over the world and yet the solutions to the problem present challenges. This is likely to be due to the fact that dietary choice is determined by a multifactorial, complicated and intertwined set of factors, and it can be almost impossible to address these in a simple, cost-effective and targeted way. Research, therefore,
needs to continue to investigate and explore all the different aspects that influence dietary behaviour – and the aim of the present study is to examine specifically the influence that familial role may play in determining dietary choices and behaviours.

Familial role refers to a woman's position within the family, be it as a mother or grandmother of young children. These women are in positions of power in terms of the food intake of their children and partners. Women tend to be the "nutritional gatekeepers" within households and, even when many work, they still often remain the main food provider. This is not to say that men do not play a part in domestic cooking responsibilities, but as Mennell et al (1992) found, men often have a choice as to whether they take responsibility for some of the family cooking while women do not.

The aim of the following literature review, therefore, is to put this study into the context of current research around food choice and behaviour. Given that the influences on food choice are complex and determined by individual, social and environmental factors, the following review will look at each issue in turn, using the following headings:

- What is a healthy diet
- What are we eating now
- Why do we eat what we eat?
- Dietary change
- Health inequalities
- Intergenerational influences
- An international perspective
Rationale For The Research

Mothers and grandmothers undoubtedly influence the diets of the children for whom they care. There is much research suggesting that appropriate food and nutrition education needs to begin early in life (Jurs et al., 1990; Contento et al., 1995; US DHHS/CDC, 1996; Lytle et al., 1997; Dixey et al., 1999; WHO, 2002a; Borra et al., 2003). Yet there is a paucity of literature on the attitudes and perceptions of grandmothers compared with those of mothers, and both groups are likely to have important influences on the children in their care. At the start of the current study, there was a gap in the literature on comparisons between mothers and grandmothers in relation to their attitudes towards healthy eating and diet. These attitudes need to be explored if, much further down the line, the diets of children can be improved.

In summary, this study was based on three key issues:

1. The diet of much of the Welsh population is not in line with current guidelines, so to improve eating habits of every generation, it is necessary to look at the all the influences on individuals and specifically the influence of the under-researched area of familial role.

2. The attitudes and perceptions of mothers and grandmothers towards healthy eating has not been the subject of research and is an area that warrants exploration;

3. The increasing population of working women and a similar increase in the number of grandparents providing childcare for grandchildren means that their influence on the diets of children cannot be underestimated.
The Research Goals

The aim of this research was to study the attitudes and perceptions of women who are mothers of primary school aged children and women who are grandmothers of primary school aged children. An additional applied goal was to yield information useful for health professionals, specifically dietitians, and dietetic students in order to support their behaviour change approaches and to enrich their knowledge and insight about the impact of familial role, to promote a truly holistic approach within their professional practice.

The objective was to explore differences in the two groups of women in terms of food perceptions and beliefs with a view to exploring differences, or similarities, in innovative ways to develop intergenerational links and interventions.

The research was informed by a number of theories, primarily from the sociological field, but also with consideration given to psychological aspects. A mixed-methods research design combined quantitative and qualitative techniques with the aim of obtaining method and data triangulation. For the qualitative data a thematic approach was adopted.

The specific research goals were:

- To provide a picture of food preference patterns and attitudes amongst mothers and grandmothers, identifying differences and similarities between the two groups;
- To report on issues and concerns which influence and determine the food mothers and grandmothers consumed;
• To identify mothers and grandmothers perceptions and beliefs related to specific foods and the food-health link and how familial role exerts an influence on these;

• To explore the usefulness of the ecological and structuration approach to these goals and to contribute to wider theory on food and nutrition within different familial roles.

In order to provide a coherent foundation on which to base the research that follows, this literature review presents a background from which the research develops to give a comprehensive insight into some of the issues that determine food choice. In view of the researcher's work with individuals and groups as a health professional, it was anticipated that both individual and environmental influences would be likely to play a part. Individuals, however, do not exist in a vacuum and their actions must be determined to a greater or lesser extent by the socio-cultural environment in which they find themselves. The influence of the individual will be linked with their perceived ability, willingness and volition to behave in a way which may also be influenced by the environment.

Different generations of women have grown into adulthood and into their parenting responsibilities during very different socio-cultural circumstances, and these are likely to be apparent throughout the study. However, the study will be cross-sectional and therefore can only provide a "snapshot" of perceptions and attitudes at the time of data collection. Although society, culture and environment have seen significant changes over the years, at any given point of time, each participant is subject to the same general environment. It could be argued that every individual is existing within a unique environment of their own making, but on a macro-level, each participant is subject to the same, or very similar, environmental influences at the time of the data collection, at least. It is therefore likely that the data may reveal that many of the micro-level personal, familial or individual environmental influences were also shared by participants of both generations.
Studies on the impact of familial role on nutrition are limited in the literature to those looking at mothers and young children or looking at specific minority groups within populations ((Garcia-Maas (1999), Parsons et al (1999), Smith et al (2009)). Studies like these are valuable in exploring some of the inequalities that exist within health and diet among different populations. However, more research is needed into the complex roles and responsibilities that exist among women as mothers or women as grandmothers who may continue to have an influence on the behaviour of those children as they move into adulthood. By identifying differences and exploring reasons behind this, health professionals can present a more holistic approach to patients, armed with a fuller understanding of what may drive an individual to behave in a certain way.

In summary, the determinants of food choice have been the subject of much research, especially in the light of government initiatives and interventions to improve eating behaviour, most of which have been limited in their effectiveness (Thirlaway and Upton, 2009). The same authors also state that there needs to be a “paradigm shift in thinking not only by the individual, but ..........by society as a whole”. This cannot be achieved easily and therefore any further insight into the reasons and justifications for eating behaviours can only be beneficial.
What is a healthy diet – Five a day

A healthy, balanced diet is necessary for optimum health and for the prevention of some chronic diseases such as coronary heart disease (Kromhout et al, 2002, Lorgeril et al 1999), mouth, stomach and bowel cancers (WCRF, 2007). Many individuals are aware of the components of a healthy diet yet evidence shows that knowledge alone is ineffective in promoting the behaviour change needed to address dietary modification (O'Brien, 2006).

In terms of promoting nutrition knowledge, the “Five a Day” (Department of Health, 2002) campaign is one that is instantly recognizable by many individuals, food producers and retailers have all taken the initiative on board in some way. However, in the latest Welsh Health Survey (2010) 35% of adults reported eating five or more portions of fruit and vegetables on the previous day, so that 65% of the Welsh population are not eating the recommended portions of fruit and vegetables to promote long term health and wellbeing. Moreover, a matter of some concern is that in the Welsh Health Survey of 2007, 46% of adults had reported consuming the recommended five portions of fruit and vegetables per day, which was an increase on the previous year of 4%. So, in a period of two years, 11% fewer of the population report eating the recommended portions of fruit and vegetables. However, different pictures emerge when different measurements are considered. For example, the UK wide National Diet and Nutrition Survey (2009) is measured by recording the quantities of different foods consumed by individuals, and the first report from its rolling programme suggests that a third of men and women are eating the recommended portions, (33.3%). This is very similar to the percentages quoted in the 2009 Welsh Health Survey, but fails to explain why the 2007 figures were so much higher.
Further, adherence to guidelines may not be enough to promote optimal health: having said that the 5 a day campaign to promote increased intakes of fruit and vegetables is widely publicized by the Department of Health, the World Cancer Research Fund (2007) recommends 5 portions as a minimum requirement needed for individuals to benefit from the cancer protective properties of these foods.

Herbert et al (2010) examined the understanding of the 5 a day message among a group of university students. Interestingly although they found a wide awareness of the message, the detail of it was not clear. This was specifically in terms of portion sizes of smaller fruits and vegetables such as grapes or strawberries, as well as confusion surrounding what constitutes 5 a day, for example whether fruit juice is acceptable or whether potatoes count as a vegetable. The concept of variety had also been misunderstood with one participant stating that a diet of takeaways was acceptable as long as five apples a day were also consumed. They also found that men in their study were far less motivated than women to adapt their diets in line with recommendations. These findings show that although awareness is high, behaviour often doesn’t follow. It also reveals that men are reluctant to take this specific nutritional message on board. This can only serve to make the family food providers’ role even more difficult if partners are less inclined to support dietary change.

Health messages such as “five a day”, however, exist in an environment that is awash with information and “the public are increasingly being bombarded with advice from various sources offering quick fix cures or the latest fad diets, as well as a plethora of websites promoting the use of supplements and vitamins backed by unsubstantiated health claims or spurious scientific evidence” (British Dietetic Association, 2008). Indeed, there are many unregulated “professionals” giving dietary advice, so that the public may perceive nutritional advice as confusing. Yet current healthy eating guidance is many years old and it might be argued that there should be no misunderstanding of these longstanding recommendations. They were developed in 1991 by the Committee on Medical Aspects of Food and Nutrition
Policy (COMA) who published nutritional requirements of different UK population groups. This was published in *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom* (1991). The recommendations and the evidence in support of their implementation are nearly twenty years old, they are still the most up to date reference for advising on the components of a “healthy diet”. However, for older individuals this guidance may not seem as relevant or as immediately accessible to them as the advice and guidance they received during childhood or younger adulthood, which was perhaps during the war years when food and eating were highly controlled and almost prescriptive, in view of rationing.

**What is a healthy diet - Dietary Reference Values**

The dietary reference values determined by COMA provide recommended levels of energy consumption and are based on body weight and physical activity level. Protein, fat, carbohydrate and alcohol provide energy and there is evidence to suggest that the energy mix of the diet can influence the risk of developing various diseases, such as coronary heart disease (e.g. too much fat) and certain cancers (e.g. too much alcohol). The COMA panel reviewed the evidence and concluded that it would be useful to set Dietary Reference Values (DRV) for total fat (fatty acids and glycerol), fatty acid subclasses, sugars and starches. DRVs comprise a series of estimates of the amount of energy and nutrients needed by different groups of healthy people in the UK population.

Dietary Reference Values are usually expressed as a percentage of total energy intake and suggest the maximum percentage of each macronutrient that an individual should consume (Table 1.1):
Table 1. DRVs (population averages) recommendations for protein, carbohydrate and fat as a percentage (Dept of Health (1991)).

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>% of daily food energy intake not to exceed</th>
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<tr>
<td>Protein</td>
<td>15</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>50</td>
</tr>
<tr>
<td>Of which non milk extrinsic sugars</td>
<td>11</td>
</tr>
<tr>
<td>Total fat</td>
<td>35</td>
</tr>
<tr>
<td>Of which saturated fatty acids</td>
<td>11</td>
</tr>
<tr>
<td>polyunsaturated fatty acids</td>
<td>6.5</td>
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<tr>
<td>trans fatty acids</td>
<td>2</td>
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<tr>
<td>monounsaturated fatty acids</td>
<td>13</td>
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However, DRVs are not a user-friendly nor easily accessible format for much of the population, so eight food based dietary guidelines were produced by the Food Standards Agency which are largely based on the COMA guidelines and these are used in many settings in conjunction with the Eatwell Plate (see below):
Fig 1.1: Food Standards Agency guidelines for a healthy diet

**8 STEPS TO HEALTHY EATING**

1. Base your meals on starchy foods
2. Eat lots of fruit and vegetables
3. Eat more fish
4. Cut down on saturated fat and sugar
5. Try to eat less salt - no more than 6g a day
6. Get active and try to be a healthy weight
7. Drink plenty of water
8. Don’t skip breakfast

Yet, as discussed by Thirlaway and Upton (2009) terms such as “lots”, “more” and “plenty”, although accessible words, are open to misinterpretation. The interpretation of all of these words can vary hugely between different individuals. Thirlaway and Upton (2006) also state that, as a result of unclear guidelines, a lack of understanding and knowledge about what constitutes a healthy diet is a contributing factor to unbalanced eating.

Dietary Reference Values, and possibly the Eatwell Plat, then, are potentially the most comprehensive, evidence based dietary guidance tools currently available. Yet their usefulness is limited by their inaccessibility to all but the most motivated and informed consumers.
What is a healthy diet – the role of fat

The above has illustrated the challenges offered by the 5 a day campaign and some of the difficulties consumers face in implementing the recommendations. However, another aspect of diet that is implicated in chronic diseases such as coronary heart disease, diabetes and some cancers is fat.

In terms of how intakes match with guidelines, the latest National Diet and Nutrition Survey (NDNS) (2009) shows that the average total intake of fat as a percentage of total energy intake is between 35.5% and 36% while the maximum recommended by COMA is 35% - so intake is close to recommendations. However for saturated fat intake the intake figures are 13.1%-13.4%, against the recommended maximum intake of 11%.

However, when measured in terms of self-reported household expenditure, the most recent Expenditure and Food survey (2007) puts the intake of saturated fat at 14.5% of energy. Saturated fat is directly linked with cholesterol levels in the blood which in turn is a risk factor for coronary heart disease (BDA, 2005; Lloyd Jones et al, 2003). Saturated fat intake is therefore above recommended levels while total fat intake is much closer to guidelines. This suggests that people are aware of fat in their diet, but not necessarily of the different types of fat. This observation is confirmed by the Food Standards Agency in their Consumer qualitative research (2007) on fats when they stated that “...Only a minority of health-aware consumers with diagnosed medical conditions spontaneously made a differentiation between saturated fat and fat when they were talking about diet”.

This evidence, therefore, points to a lack of understanding about the different types of fat in the diet, while total fat consumption is now close to where it should be (see
above). However, all these figures may also point to the difficulties with self-reporting of data by participants (Popit et al, 1998, Johansson et al, 2001, Fricker et al, 1992). There is also evidence to indicate increased consumption of lower fat but higher calorie foods (Anderson et al, 2000) which may account for a rise in obesity in the face of dietary fat intakes which are close to recommendations. Mela (1999) supports this view with his observation that reduced energy versions of traditional foods may impede the natural expression of learned controls of intake. He is referring to work by Warwick and Schiffman (1991) who found consistent matching of energy intake with the sensory properties of food – confusion is therefore likely to result if lower energy versions of traditional foods are consumed. Mela also re-affirms Anderson’s findings that consumption of lower fat but higher calorie foods prompts behavioural eating responses linked to cognitive manipulation, rather than the nutritional aspects of the food itself.

The above highlights the current guidance on healthy eating, focussing largely on the five a day initiative and on fat intakes. Fruit and vegetable consumption and dietary fat consumption will be used throughout the literature review as they key focus of healthy eating. This is because the health benefits or detriments of these foods are clear and undisputed while both having been the focus of numerous high profile health promotion campaigns.

**Why do we eat what we eat?**

What people choose to eat is the result of a complex range of interacting factors that vary between individuals, groups and different circumstances. In addition, even if people do make healthy choices there is evidence to suggest that what they perceive to be healthy may not be. Kearney et al (1999) in their pan EU consumer attitude survey found that 70% of European participants believed that their diet was already healthy – this reveals a problem with misconception about what eating healthily involves.
**Food and taste preferences**

Aikman *et al* (2006) found that individual perceptions of the health quality of a food were not related to nutritional content, nor did they relate to how often the food is eaten. These investigators, along with others (Tuorila *et al*, 1988, Kristal 1990) have found that taste or “hedonic preference” is the most significant predictor of food choice. Taste and preference, as argued by Mela (1999), however, are likely to be proximate rather than root causes of food choice. He talks about other food properties and contexts being more important and gives the example of the reasons why Western Europeans do not consume “cats or fried clams for breakfast” – stating that it is not simply a matter of taste, suggesting that these items may taste acceptable in a blind tasting. Taste, therefore, is one aspect of food choice, but not the only determinant. For example, Lennernas *et al* (1997) found in his study of nationally representative samples of EU populations, that the most important determinants of food choice are quality or freshness, price, taste, trying to eat healthily and family preferences. Although an older study, Lennernas’s findings remain important in the context of dietary choice.

Blake *et al* (2010) in their American study, also looked at the determinants of food choice among a sample of multiethnic working parents. Their interview participants were clustered into three categories: Individualized Eating, Missing Meals, and Home Cooking. Individualized eating was characterised by providing different meals for each family member and using restaurants and other food outlets on a regular basis, Missing meals by missing breakfast and other meals and overeating between mealtime and Home Cooking by eating within the home most frequently and limited use made of external food sources – the home cooking cluster scored highest on intakes of fruits, vegetables and wholegrains when dietary intake was analysed. Their findings are important because they found that among parents the key determinants of food behaviour were work and family conditions. What they termed
“food choice coping strategies” (detailed above) were largely determined by working patterns, partner’s employment status and number of children. So although taste and hedonic preference may influence food choice, the contribution of the wider context of family and working commitments is potentially more important in many cases.

**Lack of control**

Some of the literature examining food choices has highlighted the influence of personal control, the “feeling that (individuals) can make decisions and take effective actions to produce desirable outcomes and avoid undesirable outcomes (Rodin, in Sarafino 1998, pp104-106). The following is a brief summary of some of the research that emphasises the importance of locus of control on health and dietary choice. Specifically, it focuses on the power of external locus of control in which individuals feel that they have limited power to make changes to improve their own diet or indeed health as it is predetermined by genetics, ethnic origin or other factors which cannot be modified.

Barker et al (2008), identified the aspects of food choice that influence women with lower educational attainment. They found that many of their participants made inappropriate food choices because of a sense that they lack control over food choice. They also felt food costs, lack of family support and the need to avoid waste all constrained their ability to make healthier choices for themselves or their family. These factors were combined with limited skills and experience with food – again reflecting the barrier that this undoubtedly presents.

The work of Barker et al found that their sample expressed a lack of control over food choices – they felt constrained by the demands of partners and children. When this lack of control was combined with environmental factors such as cost and poor
cooking skills, these women felt powerless to influence their family’s diet. Barker concluded that provision of food was a high priority among all the women, yet they prioritised the demands of their partners and children over their own desire to provide healthier food. Barker described how behaviour change interventions need to ensure that women of lower educational attainment give more credence to the longer term health benefits of food.

The findings of Barker et al (2008) (above) offer valuable insight into the potential of the project that follows. They used focus group discussions with women, some with high and some with low educational attainment and found that women with higher educational attainment were less inclined to feel a lack of control over food choice. They describe one mother with low educational attainment who states she would not offer her children the same food twice if it was rejected the first time, while the mother with higher educational attainment felt she needed to “push” certain foods with her children, to encourage their consumption. These quite different approaches to childhood food provisioning are interesting. However, it should be noted that the sample was heavily biased towards the women with lower educational attainment, all of whom also had children while the higher education group did not all have children. So although the findings are highly relevant to the present study in that they used focus groups to discuss issues around food choice, not only was it a small study but not all the participants were mothers so that the impact of familial role on food choice was not explored, it was more concerned with educational attainment.

Wardle and Steptoe (2003) also found control (in a different way) as being important in their study of socioeconomic status and its link with attitudes and beliefs about healthy eating. They found no association between socioeconomic status and internal locus of control but a strong association between socioeconomic status and the chance (or external) locus of control in health. People with low social status perceive that “luck” or “chance” determines their long term health, rather than any action that they may take themselves. The presence of high levels of chance locus of control combined with a lack of control determined by the actions of partners and
children, plus the lack of cooking skills provide powerful barriers to healthy eating, particularly among women with lower socio-economic status.

Another study by Wiig Damman and Smith (2009) in the United States, interviewed women on low incomes and found that many of the sample saw little relationship between their diets and their health. Even though many of their participants were already suffering from chronic health problems such as diabetes or high cholesterol, they felt that this was not something they could have avoided. They stated that it was hereditary or that it was likely to happen because of their ethnic origin. They did not see a link between their health problems and a poor diet and, even among those that did, they stated that the cost of healthier foods was prohibitive. Another example of external locus of control – their sample did not perceive the power to change was within their control.

Rozin et al (1999) looked at this phenomenon in their cross cultural study of attitudes towards food. They found the Americans to perceive strong links between food and health, while the French held perceptions around food and pleasure, rather than health. They also found that although Americans perceived the link between health and food to be strong, they were least likely to describe themselves as healthy eaters. Rozin goes on to describe that in all the countries, it was women who were more likely to perceive the link between food and health than men.

Rozin’s work gives valuable insight into the diversity and differences that exist within international cultures and communities, but the focus was not on the UK. So that although his findings add to the knowledge in this area, further research of a similar kind is needed in the UK to focus on how British consumers’ culture influences food choice in terms of health or pleasure.
Barker's (2008) recommendation, cited earlier, to publicise the long term health benefits of food among women of lower educational attainment undoubtedly offers support for health promoters. However, Wardle and Steptoe (2003) also found a “striking” social class gradient, in that participants from lower socio-economic groups seldom thought about the future. This assessment of “future salience” was combined with expectations of a shorter lifespan among the sample with lower socio-economic status. So any interventions to educate about the long term benefits of healthy food will need to facilitate a shift in deep rooted beliefs, attitudes and perceptions. Therefore food choice among some groups of the community is not something, women especially, feel in control of and often feel powerless to change.

**Gender roles**

In many families food provision and therefore choice still remains the responsibility of women. Gender roles have undergone significant changes in recent times with many more women in full time employment. Many more men are involved in traditional female roles of housework, cooking and shopping but it is likely that many women still retain the role of food provisioner. Even when couples are both in full time employment traditional gender roles still persist (van Hooff 2010)). Barker (2008) identified that women in these roles act as the “provider” whilst the partner and children often take on the role of consumer, so that the act of food preparation remains women’s work while decisions about what to cook are heavily influenced by husbands, partners and children.

Sachs in 2010 also observed that women make most of the decisions about food provisioning including the timing, location and nutritional composition of meals. Yet this is against a backdrop of a deep desire to please others, particularly their partners and children in terms of food preferences. Their exploration gives key insights into the role of women and food in society using observations on women’s position in the food industry and within the household. They state that dieting is
often a lifetime activity for women, and that in times of food shortages it is women who go without. They call for more research into feminist social science and it’s impact on gender relations in the context of diet.

Gender roles in food provisioning have long been the subject of research as Murcott (1995) proposed a model of food choice in which she argued that what people (particularly women) say they eat is not necessarily what they would actually prefer to eat. She cited evidence that married women did not always eat what they would like, and that their husband’s preferences took precedence over their own as part of the wife’s responsibility to manage the home and avoid arguments. Indeed, although Murcott’s work is from a generation ago, the observations still seem to be salient today.

In spite of the social changes that have taken place in recent years, The British Social Attitudes Survey (2006) reported that although attitudes towards gender roles have changed, behaviour has not. It explained that although women did not feel it was their “job” to carry out all the housekeeping duties whilst working full time, they were likely to do a much greater percentage of these tasks than men in the household, including cooking and food provision. So that women remain at the forefront of many household food choices, yet their role is one that is fraught with conflicting demands and priorities.

A woman’s role, however, remains vital within families, especially if children are of school age or living “at home”. It could be argued that women are the “nutritional gatekeepers” within families. This phrase emerged during the 1940s when Mead (1945) (cited by Wansink 2003) found that the member of the family who cooked was also responsible for the family’s nutritional well-being. Even though women today may not be solely responsible for cooking or food provision, it is still likely that they play a key role, as outlined above.
Nutrition initiatives and educational interventions are, however, often targeted at the consumers of food, rather than at those who provide the food. Children are the subject of many health promotion initiatives, in the hope that habits and knowledge around food learned early will remain throughout life. However, Wansink (2003) described how those who cook in a household are highly influential in determining what their family considers nutritious and appropriate to eat – they are the nutritional gatekeepers – and that they should be targeted more specifically in health promotion initiatives. Wansink (2003) went on to describe a complex range of different personality types which he found could be applied to cooks. He states that not only should nutrition behaviour change interventions focus on the nutritional gatekeeper, but also on the distinct personality types displayed by them. He perceives cooks as the “opinion leaders” about nutrition within a household and maintains that they are not a homogeneous group, and therefore should not be treated as such.

Wansink’s (2003) findings from the 1004 participants involved in his study showed that the nutritional gatekeeper, the individual most frequently involved in cooking within a household, actually influenced around 72% of all the food decisions made by the rest of the family. This highlights the power of the food provisioner in terms of the dietary choices of the whole family, and their role cannot be underestimated.

As shown above, Wansink’s (2003) research gives insight into this aspect of food choice and provision within households. However, his categorisation of food providers as innovative cooks, competitive cooks, stimulation-seeking cooks, and methodical cooks tells only a very small part of the story of dietary influence. He fails to acknowledge that in many cases cooking skills are severely limited and are replaced with ready prepared or ready to cook processed foods. A “nutritional gatekeeper” who finds themselves in such a position, without the luxury or skills to cook to anything more than at the most basic level of “heating up” food, is therefore at risk of conveying inappropriate or mixed messages to those for whom she or he
provides, if we take from Wansink that 72% of food decisions are influenced by the food provisioner.

**Psychological aspects**

Social cognitive theory has applied a number of models to predict people's dietary choice and behaviour. Models such as the Health Belief model (Rosenstock et al (1988), The Theory of Planned Behaviour (TPB) (Ajzen, 2002, Conner et al 2002, Fila et al 2006) have all been applied to healthy eating and lifestyle behaviours.

The Health Belief Model is one of the oldest theories of health behaviour, having been developed in the 1950s. It is based on the premise that six main constructs influence people’s decisions about their health such as whether to take action to prevent, screen for, and control illness” (US National Cancer Institute, 2005) The six main constructs are:

- Perceived susceptibility
- Perceived severity
- Perceived benefits
- Perceived barriers
- Cues to action
- Self efficacy

These constructs provide a useful framework for health promotion activities and relate well to healthy eating initiatives. They look at whether an individual feels they are susceptible to health problems linked with poor diet, whether they believe the problems are severe, what benefits might accrue to adopting alternative behaviours, what barriers exist to changing behaviour, what cues exist to promote the behaviour
and their level of confidence in their ability to successfully perform an action (self-efficacy).

Self-efficacy is the belief that an individual can successfully accomplish a behaviour, rather than what they are actually capable of accomplishing (Pajares 2002). Anderson et al (2000) in their study of over 300 American shoppers, using supermarket receipts, food belief and food frequency questionnaires, found that self-efficacy had the strongest influence on nutrition behaviour. They also found that important factors in food choice were positive expectations of the effect of their purchases in terms of budget and satisfaction and those who believed healthy food to be affordable and satisfying, purchased more healthy food.

The TPB is based on the premise that a person engages in behaviour because of an intention to do so. It examines relationships between beliefs, attitudes, intentions and behaviour and perceived control over that behaviour. Intention is governed by perceived behavioural control (the perceived ease or difficulty in performing a behaviour (Ajzen, 1988)), attitudes (if the behaviour is evaluated as positive) and subjective norms (if an individual feels that significant others would want them to perform the behaviour) or the extent to which an individual feels this behaviour is within their control (Conner et al (2002)). In their study of the Theory of Planned Behaviour and Healthy Eating, they found it to be a strong predictor of healthy eating, specifically in terms of fruit and vegetables and fat intake but less so for fibre intake.

Social and health psychologists focus on cognitive influences as being the most immediate determinants of dietary choice (Conner et al 1998). Yet, Barker and Swift (2009) state that to focus on cognitive influences offers poor predictive power and "limited guidance about the operationalisation of theoretical constructs", especially in terms of nutrition behaviour. They recommend that changing health behaviour
requires an integration of psychological theory and practice – they cannot stand alone. They see the way forward as a collaboration between researchers and practitioners from a range of disciplines.

Also the study by Barker et al (2008), cited earlier, of women in the UK with low socioeconomic status, found that participants expressed a feeling of lack of control in providing appropriate food choices, which in turn engendered a belief that they did not possess the capability to provide healthy diets for their families - and this links clearly with the construct of self-efficacy.

Other psychological traits, such as low self esteem or low self worth, can also be linked with dietary intake. Elfhag and Rasmussen (2008), in their study of mothers and their 12 year old children, found a strong relationship between low self worth, social disadvantage and a lower intake of fruit and vegetables. They also found a link between single parenthood and heavier daughters, whilst boys’ weights showed no significant difference. This is suggesting that girls’ eating patterns are more inclined to be influenced by family circumstances than those of boys. In another study by the same authors (2008) the influence of emotional eating, especially among mothers, was highlighted, as was the observation that children’s eating habits mirrored those of their parents.

Psychological influences are therefore important in understanding why we choose foods but social and environmental influences must also be considered as, at least, of equal importance. In their study of the social-environmental influences on children’s diets, Cullen et al (2000) found that accessibility, availability, television and peer and parent factors were reported in food choice for both children and adults. While Giddens (1992, pp218) stated that diet is a lifestyle choice influenced by the popular media and recipe books.
Many people are indeed influenced in their food habits by forces such as nutritional information and advice, but people are also driven to behave because of outside influences such as the culture of the community within which they reside, the amount of money they have to spend, their level of confidence in their ability to produce healthy, nutritious food and influences of the family for whom they may be caring. Psychological influences will, however, impact on how individuals interpret and behave in response to the social and environmental stimuli alluded to above. There is undoubtedly an interaction between them which serves to add credence to the argument that dietary choice is determined by a complex and interacting set of factors.

Psychological aspects undoubtedly have their place in the exploration of the numerous influences on food choice, but it could be argued that by concentrating on the role and motivations of individuals, that a truly holistic approach cannot be achieved. The environmental influences on individuals are enormous and cannot be underestimated, so that a socio-ecological standpoint (to be explored below) potentially offers a way forward for practitioners and individuals.

**Sociological aspects**

Sociology offers wider insights into aspects of food choice, by incorporating aspects of society and the broader influences that this can present. Of specific interest to the following study are the areas of socio-ecological theory and structuration theory. Both these ideas provide a starting point to the exploration of mothers and grandmothers attitudes and perceptions around healthy eating and the impact of their familial role on their behaviour.

Firstly, taking Bronfenbrenner's (1994) levels of the environment, he explored the environments in which people exist as "contexts", and divided these contexts into –
Microsystems, Mesosystems, Exosystems, Macrosystems and Chronosystems. He defined Microsystems as environments such as families, schools or work in which activities and social roles take place in a face to face setting. Mesosystems refers to the linkages and processes that take place between two or more settings such as home and school or school and work. Exosystems is again related to processes and linkages but this time in settings at least one of which does not include the person but events will undoubtedly influence processes within the settings which will in turn influence the activities of the individual. Macrosystems present the overarching pattern of micro, meso and exo systems which characterise a culture, offering the belief systems , bodies of knowledge, customs and lifestyles – “a societal blueprint for a particular culture or subculture” (Bronfenbrenner 1994).

The ecological model above, and it's components will be utilised to inform the critique of the literature presented and how it fits into each paradigm of the ecological model.

Further, structuration theory (Giddens 1984) is an important sociological theory that has the potential to relate well to the study that follows. It can be argued that the external environment exerts an overwhelming influence on dietary choice. This was summarised by Anthony Giddens in his theory of structuration (1984). Giddens is keen to differentiate between structuration and structuralism, with structuralism referring to larger social structures but without the influence of individuals. Structuration as a theory proposed by Giddens addresses the dualism offered by other concepts under the umbrella term of “social theory”. Social theory uses as its basis “agency” and “structure”, with agency being an individual’s voluntary action and structure being the rules and resources surrounding this action. Giddens proposed that this duality is flawed and within structuration theory has attempted to incorporate both agency and structure into a single theory. He suggested that behaviour is strongly influenced by the “flow of daily life” or “in context”.

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In support of structuration theory, according to Wardle and Martens (1998) “much of people's everyday behaviour is predictable to a degree of detail that cannot be attributed to their biological or psychological attributes”. Further, Caplan et al (1998) talked about the difficulties with adopting an individualistic view of why people eat what they do as this fails to account for social and cultural influences such as income, time, ethical or religious reasons, and also that people are cultural and social beings. Patterns of food consumption also change throughout life and evolve through periods of social change. Not only are Warde and Martens (1998) talking about the importance of environment on behaviour, but Caplan et al (1998) are referring to the Macrosystems of life, as defined by Bronfenbrenner (1994) (see above). The relevance of structuration theory and the ecological framework will be explored later in the Discussion Chapter.

Within families (a Microsystem) parents have a significant role to play, as not only are they consumers themselves but as providers of food to their children, they act as powerful role models and “nutrition experts” in the eyes of their offspring. This, in turn, will undoubtedly have a profound effect on their food choice and consumption (Patrick et al 2005). Patrick's study found that children's fruit and vegetable intake was positively related to that of their parents and children were more likely to eat something that they dislike if they had seen other children or parents eating it. They also found, in common with other studies (Eisenberg et al 2004, Gilman et al, 2000, Neumark-Sztainer et al 2008, Cutler et al, 2011) that among adolescents the frequency of eating family meals was positively associated with higher intakes of fruit and vegetables. Mothers also typically provide structure for meals and provide information in terms of how much and what to eat – parental behaviour and practices shape many aspects of children's development.

(2005) who found that maternal employment had a positive influence on children’s diets. However, how long these influences remain has not been investigated and whether parental attitudes still shape the attitudes of their adult children is an area of limited research.

Again, the relationships between individuals in different settings are key to their development and indeed behaviour as highlighted in Bronfenbrenner’s (1994) Ecological Model.

Another concept that seeks to explain some of the issues relating to food choice, and yet one which much of the literature has largely failed to exploit, is that of the theory of structuration (see above) (Bryant and Jary 1991, pp1-31). Structuration theory suggests that all human behaviour is performed within the context of pre-determined social structures and norms. It is argued that this structure and the norms within it are not permanent, but that they are subject to development and change with the influence of human behaviour.

Delormier et al (2009) explored structuration theory in relation to feeding practices in their proposed application of the theory as it relates to diet. They explore the potential of structuration theory to support health promotion initiatives. They stress the importance of social context in determining food choice and that food choices are “integrally related to context” and explore how family eating practices can be constrained or enabled by the social structure and rules or resources (norms) in which they exist. They illustrate constraints by suggesting a scenario in which people may lack the resources, to choose and prepare food when striving to please difficult family members. Alternatively, appropriate food choice may be enabled in the presence of adequate money, transport and retailers are all accessible, and when time is not an issue.
The psychological and social influences on food choice are therefore diverse and complex and further insight and research into all these aspects can only be a valuable resource in the field of nutritional behaviour change.

**Dietary change**

There is no doubt that British diets have undergone significant changes in the last fifty years as detailed in the Expenditure and Food Survey (2007). It found that low fat milks have replaced full fat milk and solid cooking fat and butter have been replaced by vegetable oils and low fat spread. Consumers are choosing “healthier” products in some areas of their diet, yet sales of potatoes have decreased only to be replaced by an increase in potato products like frozen chips and crisps. Food consumption seems to display a cyclical progression with the consumption of ready meals increasing dramatically during the period between 1998 and 2002 when consumers were choosing them as a “premium, indulgent option” (Mintel/BBC 2003). However, the latest Mintel report shows that the market for ready meals has stalled as an interest in cooking fresh foods from scratch has re-emerged. This move away from “indulgent” options may reflect the economic downturn and recession, with people moving towards more cost effective, simpler ways of eating and cooking.

Having said this, van der Horst (2010) in his German study, found a significant association between ready meal consumption and tendency to be overweight, with his overweight participants being more positive about the nutrients and vitamins in ready meals compared with normal-weight participants. He states that the positive beliefs about ready meals in this group are a result of cognitive dissonance with guilt and shame resulting, when beliefs about these foods are more negative. He also states that any interventions to educate the public about the negative aspects of these foods will be ineffective. This is because he also found a strong link between consumption of ready meals and poor cooking skills which he saw as a barrier to
behaviour change in the context of ready prepared foods. His findings suggest, perhaps, that the availability of ready meals means that many parts of society no longer value or invest in the skills of basic cooking. These are undoubtedly issues that need to be addressed if diets are going to improve.

The origins of processed foods can be traced back to the 1930s (BDA, 2011) when sliced bread was introduced, and Spam and Kellogs Corn Flakes became a feature of British diets, the very earliest manifestations of convenience foods were already popular. The war years intervened, of course, but during the years that followed many more convenience foods entered the market place, and women began to believe they were finally being released from their role as slave to the kitchen. However, in the present day as has been shown, there is now guilt attached to convenient choices and women are now being encouraged to “cook from scratch” – almost going back to where women were in the 1930s. Yet many women now work full time and have to rely on formal childcare arrangements so that time pressures can be immense. The guilt attached to foods that were designed to make life easier is therefore interesting and maybe one that needs addressing by food producers who could produce healthier, less processed, family meals which would address the needs of the consumer without compromising their health. Carrigan (2006a) also found that the traditional model of “proper” food remains aspirational, but that contemporary lifestyles mean that convenience foods must necessarily play a part. In the same year Carrigan (2006b) also talks of convenience food consumption as offering maternal empowerment – which it undoubtedly has the capacity to do, yet their regular use is viewed negatively and accompanied by guilt and disappointment that women cannot reach the aspirational food provisioning goals thrust on them by the popular media, families and peers.

Dietary change is not necessarily a negative progression and new developments are likely to continue as new products are developed and new trends emerge, such as increasing use of “functional foods” (Blundell, 2010) a trend towards home cooking or innovative ways of eating inside or outside the home. The issue, however, still
remains that chronic disease linked to diet is increasing (Department of Health, 2008). Health promotion has been a focus of government policy since the 1980s, but to be effective it needs to address some of the underlying issues. It appears that the problem is more complex than one of simply following guidelines, especially when people might believe that they are following recommended nutritional principles, when in fact they are not (Main et al, 2002).

Dietary change in terms of practices and manufacturing as described above are well matched with Bronfenbrenner’s (1994) ecological model and can be described under the umbrella term of Macrosystems, which incorporate the belief systems and material resources of a culture.

Health Inequalities

Dietary choice is determined by many factors, as highlighted above. However, in the face of health inequalities within society, challenges remain in facilitating dietary improvement and behaviour change, despite numerous interventions to redress the balance. Many of these inequalities are avoidable, but the statistics speak for themselves when they state that in some parts of the United Kingdom, people have the same life expectancy as people in the 1950s (DoH 2003) – and this is in an environment where technological advances, medicine and dietary knowledge has never been more accessible or available – but not to everyone. The Food Standards Agency (2007) also report in the Low Income Diet and Nutrition Survey that the poorest in society are more likely to be obese, to smoke and to drink too much alcohol.

In terms of diet, socio-economic factors can be determinants of health with evidence to suggest that the diets of those from lower socio-economic groups are likely to be lower in essential nutrients and higher in fats. Those on lower incomes seem unable or unwilling to change their diets. As James et al (1997) state, “diet affects the
health of socially disadvantaged people from the cradle to the grave” and that it leads to "an intergenerational spiral of ill health and handicap". The study by Elfhag and Rasmussen (2008) cited earlier, clearly found links not only between lower intakes of fruit and vegetables and low self worth, but also between low fruit and vegetable intakes and social disadvantage linked with lack of social support, stress and depression. These factors were particularly pronounced among single mothers, many of whom suffer financial hardship.

Roos et al (1998) suggested that socio-economic differences in health result from engagement in health damaging behaviour (such as poor diet), by those from lower socio-economic groups (also see Wardle et al (2003) – cited earlier). O’Neill (2004) also talks about food having meanings beyond nutrition. He states that it represents a “conception of self” and acceptance within a community and that a poor diet is not due to a lack of knowledge. In his study, participants spoke of “what people round here eat”, and to go against a whole community norm would prove to be a huge barrier to change. To tackle behaviour change in these groups is a challenge and one that can be facilitated by more insight into attitudes, perceptions and frames of reference. The environments and culture are likely to be key in determining behaviour, so that due regard needs to be given to these factors.

Health inequalities again link well with the ecological model in that the linkages and processes between 2 or more settings in which the individual is not involved, yet is indirectly affected – an exosystem. So that low socio-economic status, whether it be due to employment status, living conditions, education or some other variable, are not necessarily areas in which the individual is in control of yet one which undoubtedly affects their individual life and behaviours.
Intergenerational influences

As illustrated in the previous sections, there is a wealth of research on determinants of food choice from psychological, sociological and biological perspectives. Yet research on the influence of differences between women in different familial roles is limited. Yet, as Bronfenbrenner (1994) points out that the environment as a context to influence development is key, so that the microsystem of the family and one’s position within it, whether that be as mother or grandmother could be important not only in development, but also in terms of behaviour, and specifically dietary behaviour. Further, dietary behaviour is likely to originate from the practices and outlooks of the group with whom individuals interact on a regular basis – so that in an environment where grandmother is often a key player in childcare provision, their influence warrants consideration.

There are studies, however, on the influence of grandmothers on outcomes for their grandchildren such as Oberlander et al (2007) who found that the presence of a grandmother in the home of an adolescent mother was central to the development of parental competence. Laraia et al (2009) also found a positive influence of a grandmother within the households of the African-American mothers they studied. They found an inverse relationship between food insecurity and the presence of a grandmother, yet having the baby’s father in the household was directly linked with food insecurity. They conclude that intergenerational support and transfer of knowledge can be a key supporting mechanism among disadvantaged mothers.

Further, Smith (2006) in his review of Grandparents and Grandchildren explored this “underresearched area” by suggesting that grandparents often take on the role of giving the child everything he desires - “Many grandparents enjoy looking after a grandchild, which can be an opportunity for indulging them. As one song puts it,
Granny spoils us, oh what fun,
Have some sweets and a sticky bun,
Don’t tell mum you were up till ten,
I want to come and babysit again!"

While Pearce et al (2010) found a direct link between grandparents who care for children, and obesity in those children – grandparents who are involved in grandchildren’s care therefore have a key role in health outcomes and are well placed to exert influence in many aspects of a child’s life. Indeed government policy is gearing towards supporting mothers back into the workplace after having children, so it is likely that informal childcare with grandmothers will increase, as has been seen in the formal childcare sector. The Welsh Assembly (2006) report in their study of childcare provision in Wales, that 77% of mothers used informal rather than formal childcare and this was most likely to be grandparents, with 62% of mothers calling on grandparents during the previous year of the survey period.

These few studies show that the influence of grandparents, and grandmothers in particular, can be a powerful resource to support young families, yet as the last two studies show, it is not a relationship or support mechanism without challenges. Grandmothers hold the potential within the microsystem of the family to influence and inspire healthy eating behaviours within their children and grandchildren, and this could be exploited to the benefit of all generations. The following section illustrates how grandmothers outside the UK or from different backgrounds within the UK are valued by the younger generation and their expertise and experience exploited.
International/multicultural perspectives

As mentioned earlier there is limited research on the specific role of grandmothers in family food provisioning in the UK. Yet, there is the potential for grandmothers to play an important role in the nutritional education of their grandchildren, as the following examples from different parts of the world show. The influence of grandmother is key in some countries or within minority groups in the UK where they particularly take on the role of educators and supporters (Serrano, 2000, Carruth 2001). Ingram et al (2003) gave a fascinating description of grandmothers’ perceptions of childbirth, breastfeeding and support among the South Asian population in the UK. They described how grandmothers believed that new mothers needed a great deal of help and that “mothers should not be worried about anything and should have enough rest, so we take over many of the household chores after the baby is born”. The grandmothers also felt that new mothers required a special diet with specific foods identified to produce good quality breastmilk, while other foods were avoided as being unsuitable for the baby. They also explained how a child’s welfare, strength and health were very much their concern as it was these children that would look after the grandparents when they were older.

This picture of an extended family in which the grandmother plays a key role in a child’s early life is interesting, but one that is not generally replicated within the wider UK population, even though 58% of grandmothers in the UK are involved in informal childcare (Grandparents Plus 2010). The UK situation, as described in the Grandparenting in Europe 2010 report is most likely to consist of informal arrangements to allow adult children to work longer hours. The type of intensive grandparenting referred to in the breastfeeding example above is much rarer in this country and the report highlights that if intensive grandparenting does take place, it can present difficulties for both grandparent and grandchild. Generally, however, the report concludes that grandparental involvement in childcare has a positive impact on the wellbeing of both caregiver and care-receiver.
Another example of grandmother’s influence on childcare is explored by Kerr et al (2008) in their study of “breastfeeding, complementary feeding and the multifaceted role of grandmothers in Malawi”. They describe a culture where grandmothers play a pivotal role in the decisions made around infant feeding, marriage and childhood illness. They found that the grandmother’s influence was crucial and that they were often the second main caregiver after the child’s mother, with younger mothers especially having limited control in making decisions concerning their children. They also found that efforts to promote more appropriate feeding practices by the authorities, for example, were met with hostility among the grandmothers. As a result, in Malawi, efforts are being made to move away from a public health education approach which focuses on teaching knowledge to mothers. The power dynamics that exist within families and the role of the grandmother have meant that a new approach is required to incorporate and embrace the role of the whole family in nutritional education.

Although the cultural contexts above differ, the generational influence is interesting and relevant. Another example is from Jingxiong (2007) who found that Chinese grandparents strongly influence the eating behaviours of their grandchildren. Their influence was borne out of past experiences of poverty, the cultural belief that obesity in the young displays good health and that part of their job as caregiver was to give plenty of food that the child enjoys. Although a Chinese study, many of these sentiments are reflected in Western societies, with many grandparents taking on the role of childcare whilst parents work (see above) and therefore having an important influence on all aspects of a child’s life, not least on their nutrition.

Although the role of the grandmother is less defined in the culture of the UK, with so many grandmothers now providing informal childcare for young children, their role should not be underestimated. The results above show that in other cultures grandparents have a pivotal role to play in the early nutrition of grandchildren. With more women working longer hours, grandmothers are likely to have an increasingly
important role in the upbringing of the grandchildren in the UK, with an undoubted influence on their nutritional intakes. The present study that follows has attempted to highlight the role of the grandmother's influence on dietary choice, and how this may differ from that of mothers. In this way, it lays the foundation for further studies and interventions on the way that attitudes and perceptions change in relation to familial role. The international perspective is important as it shows that the potential is there for grandmothers to play an increasingly influential role in the nutrition of their grandchildren. By highlighting different cultural approaches it is illustrating how different macrosystems that are in place can have an undoubted influence on the individuals within that macrosystem.
Intergenerational approaches

Indeed, the inclusion or consideration of grandmothers in health promotion activities could have a beneficial influence, not only on family cohesiveness but also on the grandmothers themselves. Moen et al (1992) in their study of successful ageing found that longevity was positively related to the number of children women had given birth to, and they also cite Litwak (1985) who suggested that health in later life can be improved by the existence of positive family relationships, which undoubtedly includes grandchildren. So not only could families potentially benefit but also health promotion activities may be more effective as a result.

Certainly, the influence of grandmothers should not be underestimated. Carruth and Skinner (2001) looked at the sources of information that mothers received about feeding their children. Unlike in Malawi (above), where grandmothers played a major role, Carruth and Skinner describe the situation in the UK where sources of nutritional information are wide and diverse, including health professionals and magazines in the early months of babyhood, followed by newspapers, television and friends after 24 months. Most interestingly, the advice from relatives (including grandparents) remained as a constant source of information throughout the child’s early life while the other sources of information became less important. The role of grandmothers could therefore be a missed opportunity among health educators and one in which more research is warranted.

Further, in terms of communication between generations, Kaplan et al (2006) in their study of eating habits in three generations of families, found disagreement and conflict among different generations in terms of healthy food choices. However, there was a consensus among all the generations that more opportunities to communicate as a group would help them all to adopt healthier eating behaviours.
The evidence showing a clear link between the generations is interesting, but further insight into the differences in perceptions and attitudes that might exist among women in different familial roles, such as mother or grandmother, is needed. By establishing what differences exist, interventions can be tailored to address these issues. Many grandparents are involved in childcare and, as we have seen, the presence of grandmothers can have a powerful beneficial effect on the caring capability of, for example, adolescent mothers. To harness these relationships in terms of food choice, cooking skills and changed attitudes could be an important tool to support positive dietary change.

The literature review, above, has introduced some of the issues that surround dietary choice with particular emphasis on the psychological and sociological influences, specifically in relation to familial role difference. It has shown that the literature on the specific importance of familial role on dietary choice is limited. However, it also shows that in cultures outside the UK, the influence of grandmothers can be extremely powerful and that here, too, grandmothers do exert influence, particularly as an important source of information for mothers with young children. Grandmothers have the potential to be powerful facilitators of behaviour change but in order to fulfil their potential in this role it is necessary to gain an understanding of the attitudes and perceptions that they possess, and how these might differ from women who are mothers of young children. In this way, it might be possible to bridge some of the generational gaps and to forge relationships between women in different familial roles. Greater understanding and empathy between women in different familial roles can only have benefits for both groups and could be an important tool in promoting healthy eating for all age groups.

**Statement Of Research Questions**

Based on the review of literature conducted, and bearing in mind the numerous studies on food choice and preference but the limited data on familial role
influences, the following research questions form the basis of the study that follows:

- What influence does familial role, as mother or grandmother, have on their attitudes and perceptions towards food choice;
- Why do similarities and differences exist between the two familial role groups;
- Is environment or personality a more important determinant on the choices of women in different familial roles;
- How can differences and similarities between familial role groups be harnessed to benefit the eating habits of all generations.

Conclusion

Dietary behaviour change is needed to address the far reaching public health problems linked with poor diets. With an increasing number of people suffering chronic diseases linked with unbalanced eating habits (Welsh Health Survey 2010), the commitment to achieving behaviour change cannot be allowed to diminish. There is a need to provide a truly holistic approach to individuals in order to understand their dietary choices. Dietitians and health professionals need to begin to gain an understanding of all the multifaceted influences on food choice, and they need to be able to use this understanding to shape effective interventions that can make a real difference.

Psychological and sociological aspects of food choice are well-researched, but the influence of familial role is less so. Yet the influence of familial role, family structure and lifestyle is bound to have a key impact on dietary behaviour. The aim of the following study is to explore some of the issues highlighted in the literature review in
order to gain an understanding of the multi-faceted and complex influences on food choice.

The study that follows will explore many of the issues highlighted above, the aim of which is to provide a valuable resource to support dietitians and health professionals. It will use the following three phase approach with mothers and grandmothers to identify areas of commonality and difference that may result from familial role. And in this way a comprehensive insight may be gained into the possible influence of familial role on food choice. The three phases are:

- Phase 1 – exploratory interviews with mothers and grandmothers (M and G)—what issues are they concerned about, what language and terminology do they use around food;
- Phase 2 – questionnaires based on the findings from Phase 1 to establish if differences in attitudes and perceptions towards healthy eating exist between the generations;
- Phase 3 – focus groups based on the findings from phase 2, to establish why differences do or do not exist with implications for further research and practice.

**Summary**

To summarise, this chapter has explored the following areas:

- An introduction to the theoretical frameworks of the ecological model and of structuration theory and how they might apply to the research that follows.
- The relevant guidelines for a healthy diet and how they were developed;
- Details of current dietary composition and dietary change in the last 30 years;
• A comprehensive look at some of the influences on food choice such as gender roles and psychosocial perspectives;
• Health inequalities are explored in order to put the study in context;
• The role of grandparents in family life and their potential to play more of a role in dietary choices of their extended families;
• An insight into the key role played by grandparents in minority groups or in other countries;
• A statement of research questions.
Chapter 2

Exploratory interviews

Introduction

Given the numerous factors that influence food choice, particularly among women in different familial roles, to dissect some of these issues and to provide a coherent snapshot of attitudes and perceptions around healthy eating, a three phase approach was adopted:

- Phase 1 – exploratory interviews – ideas collection;
- Phase 2 – questionnaire based on ideas from phase 1;
- Phase 3 – focus groups to explore findings from phase 2.

The first phase of this study into the different issues associated with dietary choice, was the exploratory stage to examine the issues that mothers and grandmothers have around food and diet. It was an ideas collection exercise more than a data collection exercise (Oppenheim, 2003), with its purpose being to lay the foundation and to enable a backdrop to be created, upon which the following stages of the project would be based.
Methods

This initial phase of the project involved exploratory interviews. Semi-structured interviews were used as they were found to be the most appropriate tool in order to understand individual perspectives in the area of healthy eating and diet among women in different familial roles (Fontana & Frey 2008). Interviews are particularly appropriate in the context of understanding how people live and why they behave as they do. They allow us to gain more of an understanding of people and their actions than could be achieved through questionnaires or focus groups. Both these methods also have their merits, of course, and were employed during later stages of the project, however for the purposes of gaining initial insights into the issues that concern women in different familial roles, one to one unstructured interviews were felt to be most suitable. Further, the researcher as a qualified health professional, was also experienced in interviewing participants on a one to one basis so that the process was familiar and one in which the researcher felt confident.

Although it was important that the participants were not unduly guided in the interview, there needed to be a basis from which to begin discussion, so a series of questions was used as a prompt as required (Appendix 1). The questions were piloted on a convenience sample to test viability, and slight adjustments were made as a result. For example, a diet history in which participants are asked to recall everything they had consumed in the previous 24 hours was trialled on the convenience sample. A diet history is a common tool among practicing dietitians and one with which the researcher is experienced. The initial aim of using this tool was to incorporate data on dietary habits into the findings about attitudes and perceptions. However, the time commitment that this would have demanded from researcher and participant did not justify the extra dimension it may have added to the research findings. Further it was felt that more insight would be gained by focussing on issues and ideas around diet rather than actual behaviour, and in addition the usefulness and accuracy of actual dietary intake information is also
often flawed (Livingstone et al 2003). The aim of the interviews was to formulate ideas, and begin to gain an understanding of some of the issues that individuals feel are important in terms of their diet.

Another reason for using interviews for this phase of the project was because it was an exploratory phase. It was designed to uncover the individuals’ experiences of issues around food and nutrition, and to extrapolate experiences from participants’ “lived, daily lives” (Kvale & Brinkmann, 2009). The purpose of these interviews was to examine the salient issues that exist around food. In this way it was hoped to capture the critical issues as a basis for further phases of the study. By recording these issues, the resulting analysis laid the foundations and framework for the stages of the project that follow. The use of qualitative techniques was most appropriate in this study as it was hoped to address social experiences, specifically in relation to food, and how these are given meaning (Denzin & Lincoln, 2008). Having said that, the study as a whole incorporated a mixed methods approach by making use of both qualitative and quantitative techniques which will be described in the relevant chapters.

Ethical approval was awarded by the Ethics Committee at UWIC (Cardiff Metropolitan University), and participant information sheets and consent forms provided as Appendix 2.

Sample

The scope of the project was limited to women, men were excluded from all parts of the research project. As alluded to in the earlier literature review, this is because women are still frequently seen as the nutritional gatekeepers within families, in that they tend to exert the most influence on what is considered to be nutritious and
appropriate to eat (Wansink, 2003). Even though gender stereotyping of roles is changing, so that men often become providers of nutrition, it is likely that women are still largely in control of this aspect in the majority of families. Historically, nutrition related tasks as well as other household tasks such as cleaning, washing clothes and caring for children have been completed mainly by women (Pilcher, 1999). Women were therefore selected as the most appropriate group to explore in this study. Indeed, during the course of the study none of the participants took issue with being considered as the nutrition provider.

Purposive sampling was used to identify mothers and grandmothers of school aged or younger children. These groups were selected as mothers often have direct control over the eating habits of their children while grandmothers are often still in a position of influence in their grandchildren’s lives. Participants were therefore required to be mothers of school aged children or grandmothers of school aged children who were selected, then, because of their maternal obligations as food providers and of the undoubted influence on the children in their care which has implications for future generations. Childless women would have been less relevant to this project as their influence on the food choices of others would be less clear. Women with children are certainly not a homogenous group either, but by taking responsibility for children they do need to display some organisational ability, some meal planning and provide some structure to the day, however limited. The study, however, was specifically concerned with the mothers’ and grandmothers’ own dietary perceptions and attitudes and not those of their children. By examining these issues it was hoped to gather information on how mothers’ and grandmothers’ attitudes to diet may differ, which will then give valuable insight into the generational and familial influence on dietary behaviour. These women are also in a position of great power in terms of transmission of their own attitudes and perceptions around food to their children of the next generation.
Procedure

Four local authority primary schools were approached in the Vale of Glamorgan – two with higher than average free school meal entitlement and two with lower than average free school meal entitlement. Free school meal provision was selected as a socioeconomic indicator with links reported between this and lower academic achievement (Welsh Assembly Government 2010). The headteacher of each school was approached and the school was given the opportunity to take part in the project. They were asked to recommend mothers of children at the school who would be willing to take part in "interviews with a PhD student about nutrition and healthy eating". This method of recruitment had disadvantages, mainly due to it being subjective in that the headteacher selected parents who s/he felt would be willing to take part in an "interview about healthy eating". The headteacher therefore was able to limit the participants to those who h/she felt might be interested in the subject. However, in view of privacy and confidentiality issues raised by the schools, this was the only possible approach to gain support of the schools and thereby access to their parents.

In addition to schools, a Flying Start programme was approached and the manager agreed that participants could be sought from their client group. Flying Start is a Welsh Assembly Government funded scheme that provides targeted support to families with young children. This targeted support includes intensive health visitor support, speech therapy, nutrition, and play support. It supports families who live in specified postcode areas who have been identified as having particularly high levels of deprivation. The researcher had previously worked with the Flying Start Project and the manager was therefore supportive and willing to take part in the study.

Only three schools, and Flying Start, were finally able to participate in the study – one school originally agreed and then “dropped out” because of other commitments.
The percentage of pupils who were entitled to free school meal provision is compared in the table below with the average for the local authority and the average for Wales as a whole:

Table 2.1: Percentage of pupils entitled to free school meals in participating schools

<table>
<thead>
<tr>
<th>School</th>
<th>Percentage of pupils entitled to free school meals</th>
<th>Local authority average</th>
<th>Wales average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>21%</td>
<td>11.9%</td>
<td>17.5%</td>
</tr>
<tr>
<td>2.</td>
<td>43%</td>
<td>11.9%</td>
<td>17.5%</td>
</tr>
<tr>
<td>3.</td>
<td>4%</td>
<td>11.9%</td>
<td>17.5%</td>
</tr>
</tbody>
</table>

(Estyn.gov.uk, 2012)

Although the sample size for this part of the study was small, it was still important to include participants from different socio-economic groups in order to incorporate a level of diversity, although by no means could it be a representative sample. However, it was an attempt to gather data from different sections of the community, whose opinions were equally valid. It was also hoped that participants for the later phases could be recruited from the same schools, therefore it was important to ensure a diverse socio-economic sample.

The headteachers and Flying Start manager provided a list of names and contact details of five mothers who were contacted by telephone by the researcher. The project was explained to them over the telephone and participant information sheets were sent to the mothers in the post or delivered to them via the school secretary or Flying Start office. They were asked if their own mother might also be available to
take part in an interview, so that both mothers and grandmothers could be included – this was a straightforward approach, which meant that the researcher could easily engage participants of the right profile without having to approach a different organisation to seek the involvement of grandmothers. Each mother, therefore, provided telephone contact details for her mother which meant that nine interviews could be arranged – five with mothers and five with grandmothers. In the event, one of the mothers withdrew from the interview, so that nine interviews were conducted with four mothers and five grandmothers.

The participants from the schools and the researcher arranged to meet at a mutually convenient time, and the interviews were conducted on school premises, or in the local YMCA cafeteria, both settings being “private, quiet, comfortable and not intimidating” (Oppenheim, 2003). The Flying Start participants were interviewed at the Partnership for Young Parents (PYP) college.

On the day of the interview the participants were asked if they had read and understood the participant information sheets that they had been sent. They were asked if they still wished to take part, and if so they were then invited to sign the Participant Consent Form to formally confirm their agreement. The interviewer was introduced as a “researcher from University of Wales Institute, Cardiff”. The researcher is a registered dietitian but it was felt that to introduce the researcher in her professional capacity might introduce an element of bias in responses, in that participants may have been inclined to tailor their answers into what they thought a dietitian would want to hear.

After an initial informal introduction, the participant was asked the first question of the interview schedule and the interview commenced. The interviews were recorded onto a dictation machine.
The aim of the interviews was to gather information about issues of concern to mothers and grandmothers around diet and healthy eating. This was to give the researcher information that would shape the following phases of the project and ensure that they were designed with due regard for the issues perceived as important by the group under investigation.

The interview schedule was divided into three sections – diet, sources of nutritional information, and family. The questions prompted discussion about what promotes or discourages healthy eating, family and partner influences on diet and where nutritional information is gathered from. Not all questions were asked to each participant as some of them spoke freely about diet with minimal prompting and no need for direct prompts. The length of the interviews ranged from 15 minutes to 94 minutes.
Method of Analysis

The interviews were transcribed by the researcher so that a “feel” for the data and what it contained could be established. The transcripts were then read through numerous times and pencil marks were made in the margin, identifying specific items or codes which related to attitudes and perceptions of diet. These different sections were then physically cut out of the paper transcript and sorted into categories in which similar items were grouped together. Each group was given a title, which would form the basis of the final themes which were then determined from rereading the transcripts and revisiting the categories to see if there was any mismatching or adjustments to be made. The quotes below are marked as (M) if said by a mother and (G) if said by a grandmother.

Many of the categories could be merged, for example:

“time I suppose and time to prepare things and working full time it’s difficult to find time to put everything together” (M3).

“But for myself I think it’s getting into the habit of the type of food and I’d say I probably have got lazy.” (G1)

The interviewees above are both talking about barriers to healthy eating, whether it be lack of time or laziness so they were merged into one larger theme of Barriers to Healthy Eating. This process was conducted systematically by the researcher and a psychology graduate colleague from within the School of Health Sciences until the final themes were established.

Thematic analysis was selected as the method of analysing the data and it is “a widely used, but rarely acknowledged form of qualitative analysis” (Braun & Clarke, 2006). Braun and Clarke argue that it is a “theoretically flexible” approach to data analysis which shares many of the aspects and techniques of other analytical
methods, yet offers the simplicity and accessibility that was required for this analysis of ideas and issues of concern around healthy eating.

Results

Of the nine interviews that took place, five were with grandmothers and four with mothers. Two of the grandmothers were related to mothers with children attending schools with high free school meal provision, one of these was related to a mother with children in a school with very low free school meal provision and the other was related to a mother who was supported by Flying Start.

Figure 2.1 shows the themes that emerged from the interview transcriptions. There is much overlap between the themes, and each of the three themes and their subthemes are interrelated with "Perceptions about healthy eating and healthy food". This therefore becomes the overarching theme from the interviews whilst the three in the middle layer are also interrelated and the three in the bottom layer have also been subsumed into the themes above them. Although some of these link with the interview schedule, not all questions were asked of all participants. The initial question of "what does healthy eating mean to you" was often enough for participants to talk freely about food and dietary choices. In these cases, the researcher simply prompted the participant to elucidate more with minimal guidance from the interview schedule. In other cases, the participants were less articulate and the questions were needed to stimulate a response. In view of the aim of the interviews being to collect ideas, it was felt to be important that the schedule was only used if necessary.
Below is a summary of the transcripts that relate to the themes. It is impractical to report every quotation relating to a specific theme, so two or three quotations have been selected that most clearly reflect each theme (Hayes, 2000).

**Perceptions of healthy eating and healthy food**

During the course of the interviews participants were given opportunities to talk about their perceptions of healthy eating. All participants talked about specific foods in terms of the basis of a healthy diet:

“*I try to include salads, it’s not always easy because not everyone in the family likes salads, but I do try.*” (M1)
"I eat quite a lot of fruit and vegetables.............I really really try to do the five and some days I go over but other days I don't" (M2)

"well I'm not particularly a vegetable lover or a salad lover so I tend to eat a lot of pasta and jacket potatoes.............a lot of fruit but I don't tend to eat vegetables that much" (M3)

"to keep healthy...............porridge, bananas, apples, salads, lots of green leaves" (G3)

"Fruit, fish I eat a lot of fish, I don't eat a lot of meat I have to admit, vegetables" (G4)

Interestingly, mothers focussed on fruit and vegetables while grandmothers incorporated fruit and vegetables as part of a more varied diet, including items like porridge and fish. This is likely to be as a result of recent large scale health promotion initiatives based on promoting daily consumption of fruit and vegetables to at least five a day (Naska et al 2000), yet the “five a day” message should not stand alone, and should be seen in the context of a balanced diet, including all the different food groups. There was a general perception among all participants that certain foods epitomised healthy eating, as specified in the quotations.

The transcripts showed a consistent perception that ready prepared foods, takeaway meals or tinned food are considered “an easy option”, which seemed to equate with being unhealthy. The participants felt guilty about providing these foods and believed they were not the basis of a healthy diet. However, they remained a regular feature of their weekly diet.

(when discussing foods she perceives as unhealthy) : ...“Macdonalds, yes.....I don't particularly have it that often I'd say very rarely, but (daughter) will probably have one once a week really.....” (M3)

(........unhealthy) – “probably a takeaway pizza from Morrisons because I love their pizzas..........it'll be quicker than having it delivered and it's nice and hot and tasty and I love it.” (G1)

(unhealthy foods) “might have been a takeaway or something like that or sausages and beefburgers and all the rubbishy foods.........” (G2)
"well fish fingers and baked beans.........but you know you're taking the easy option.........or anything out of a tin" (G5)

There was also agreement about what constitutes a healthy diet, and foods to keep healthy. Both groups spoke of the "cooked dinner" or a "Sunday dinner" as a meal that is nutritious and healthy for the whole family, one that made them feel they were providing well for their families. A cooked dinner was defined as a meal comprising of meat, potatoes and vegetables usually with gravy:

(a healthy nutritious meal) – "it would have to be a Sunday dinner, yeah.................. it would be all the veg, cauliflower, broccoli, peas, carrots, meat, potato, Yorkshire pudding, gravy” – (M3)

"........it would be roast beef and Yorkshire pudding.............you have your roast potatoes, your carrots probably, green beans this time of year and probably something like sweetcorn” (G3)

"meat or poultry, not really fish on the weekend and two or three veg and roast potatoes, gravy mint sauce with the lamb, you know – the works" (G1)

"well it would be boiled potatoes, roast, veg like cauli, broccoli, cabbage, carrots..........and your meat like."(G4)

A cooked dinner was felt to be the epitome of healthy eating – a meal that was nutritious and that the whole family enjoyed. Yet, this was only likely to happen once a week on a Sunday – likely to be due to time pressures and family commitments. Participants spoke of disjointed meal times when children ate alone straight from school and parents ate later, or when after-school activities meant meals were rushed. The grandmothers also spoke of the importance of the cooked dinner in positive terms yet it was not a regular feature of their own diets now. Indeed, the cooked dinner was mentioned by all participants as the meal that represented healthy eating, or "good, healthy food".
Food prepared outside the home was generally perceived as unhealthy but something that the participants used frequently. Eating out, however, was also mentioned in positive terms, particularly in encouraging “fussy eaters” and to promote the social aspects of eating. During the interviews, eating together was mentioned as important, particularly among the grandmothers, who recalled its importance in their own childhood. An example of eating together as a social activity is below:

"Mind, on a Sunday if we do go out for a meal, it’s lovely to see everybody sat together, the social side of it is brilliant and I think (granddaughter) does eat better now because of that situation.........I used to do that with my family" (G2)

During the conversation about diet and food, feeding styles emerged as being important to some participants. Some were forced to eat vegetables as a child and others do not allow their children to have a dessert without finishing their main meal. One participant was denied confectionery as a child and felt that she craved these foods when she was in control of her own diet:

"Because I wasn’t allowed to eat a lot of sweets and chocolates when I was younger so when I went to university and I could have what I wanted, then I used to, you know, and I do worry about that with my two as well.........if you deny them these things they are going to when they have their own money......." “...... but my problem is the chocolate, you know. But I hide it because I don’t want them to see me eating it.” (M2)

"I was sort of like forced I suppose as a child to eat healthily but it didn’t work for me ...........but whereas my mum would put the veg on my plate and I would be forced to sit there and eat it, you know, then I’d run up to my bedroom crying..............it was awful”(M3)

"I used to get into terrible trouble as I was unable to eat cabbage. I used to gag on it...............that wet stuff that my mother used to churn out, and that smell"(G3)

"it was put there and that was it you know. There was no “what would you like for dinner and what would you like?” (G5)
Feeding styles and practices are all inextricably linked to perceptions of food in that foods are given a hierarchy which can shape long-term attitudes to diet. If, for example, sweet foods are restricted unless vegetables are consumed - this is indicating that the sweet food is a reward for eating the unpalatable vegetables. This is reinforcing the view, common among children, that vegetables are unpleasant - and the only way they will eat them is to be rewarded with a much more pleasurable, enticing food like a sweet food. It is placing sweet foods on a pedestal, making them more important and therefore parents may unknowingly be actually discouraging consumption of vegetables by these strategies.

Emotional Response/Effects of food

Participants expressed clear understanding of the potential link between diet and disease which led to discussion about the effects that foods have on them either physically or emotionally:

".........I think you are what you eat. If you eat a heavy meal and it's stodgy I think you feel a bit lazy and a bit groggy and if I eat light meals I think well, I feel differently about it." (G2)

"I mean nothing's guaranteed is it anyway, a lot of it (disease) is your genes I think and what have you. It (diet) can help I think" (G5)

"I think it makes you feel, if you feel pretty well inside it makes you feel better on the outside but then as you eat a lot of bread and pastry you feel a bit sluggish and that the fruit and that can make you feel a lot lighter" (G1)

One grandmother raised the issue of guilt in relation to how food made her feel:
"well I think you feel better about eating something that's healthy than you do if you sit down and eat something stodgy, you think "shouldn’t really be eating this". (G5)

While one mother directly associated a change in diet with feeling healthier physically and having more energy:

“I do actually feel, in the last few years especially since I’ve actually changed to eating things like brown bread and rice and pasta and things I do feel a lot more healthy, I’ve got a lot more energy......and when you don’t eat healthily you do tend to feel a bit more tired and things.” (M2)

Some of the older participants talked about diet and how it is linked with health problems such as raised cholesterol and displayed an awareness of these issues:

“I’m very conscious of it because I’ve got high cholesterol now and tend to sort of think positively and think perhaps at one stage I could give up the medication (G2)

While a younger participant spoke about feeling better and fitter, having more energy and better skin when consuming a healthy diet:

“....you don’t feel so tired and bloated all the time, your skin looks better if you eat more veg and stuff.” M4

To summarise, participants spoke of strong relationships between their dietary choices and how they felt, either physically or emotionally. They spoke of wishing they had avoided certain foods and feeling guilty about eating them, and they spoke of having less energy and of tangible physical effects on skin and hair, for example, when eating certain foods. Emotional eating in the context of these interviews is included to reflect the frequent feelings of guilt reported by the participants associated with certain dietary practices.
Social influence

The influence of others was talked about in both positive and negative terms with peer pressure being perceived both positively and negatively in terms of children's diets. When talking about their own diets, they reported that peer pressure can encourage them to eat something they would otherwise avoid. One mother of a baby felt no pressure to conform to what her peers were feeding their babies and in fact she felt proud to be different:

"......well, yes, when I come into college and some babies are having Pot Noodles and stuff and (daughter)'s got a cheese sandwich with banana and grapes......." (M1)

While another mother highlighted problems with peer pressure among her own children:

"I think it's like peer pressure more than anything because I do really try to give them a healthy lunchbox........and I used to have my daughter saying to me....she's swapped with somebody and you know all this sort of thing, you know." (M2)

In terms of their own diet, one grandmother found peer pressure a difficult influence to overcome:

"it's easy to be tempted by people bringing in sweets or chocolate (to work) but I try to avoid that, em, but it's then difficult......" (G1)

While a different grandmother felt that peer pressure can also be a positive influence on eating behaviours, again referring to the social aspects of eating which can promote better eating habits:

"If she (granddaughter) is sat down eating with other people she tends to try different foods if she sees other people eating it she will try it, so the social thing is a good thing." (G2)
When the women were asked where they learned about diet, the responses were mainly the popular media. However when probed about how they judge the accuracy of this information some women felt confident in their own “instinct” to be able to sift out information that was inaccurate:

…….”you’ve got to sift through to see which ones are yes, that could be true and which ones are just scare-mongering I think really”……..”I think my own sort of common sense sort of sifts through things because you know over the years I’ve obviously learned, you know, how your body works and the things you need to keep yourself healthy…..” (M2)

“I think really it’s just common sense isn’t it, I think really you think oh yes, alright I will try and eat my five a day but it’s common sense really though, isn’t it?”……..”It’s like they say butter’s no good for you one day and the next day it’s brilliant…..you’ve just got to go with your own instincts haven’t you really.” (G5)

“I’d sort of work it out for myself I suppose, mmmmm use my instinct”. (G2)

From the interviews, instinct was a factor that was highly influential in terms of food choice. The influences on dietary choice were reported as being broad and diverse, with the popular media like magazines and televisions being important sources of information yet instinct and personal knowledge were used to assess whether what they had gleaned was appropriate. This is an important finding in that in the face of conflicting information and confusion, women are often relying on instinct as the basis for their dietary choice.

Barriers to healthy eating

Participants spoke of a number of barriers to eating healthily. Mothers spoke of working patterns and school activities which made it difficult to assign time to
preparing healthy foods. Time to prepare food was limited, combined with a perception that healthy food takes more preparation than other types of food:

"not having enough time, I suppose, to be able to prepare, to cut the fruit up and you know stuff, to be able to peel the veg." (M4)

"time I suppose and time to prepare things and working full time it's difficult to find time to put everything together". (M3)

Family preferences were also an important factor in food choice among mothers, and children (and some partners) would be averse to different foods which would mean that it would not be provided again:

"if I introduced unfamiliar foods to the family they wouldn't be happy, no. They would just moan about what was on their plates............if they hated it, I probably wouldn't do it again" (M4)

"......my daughter would automatically be “oh I don't like that”......she'll have a snack for tea and then I'll have my meal and she's started to say “oh what's that then and she'll start to be a bit inquisitive you know”. (M3)

Grandmothers, on the other hand, spoke more of barriers in terms of “laziness”, with the perception that, again, to eat healthily demands time and also the motivation to consciously plan to eat in a healthy way:

it's difficult to eat healthily when......"I think it's when you have an off day. If you have a lazy day, oh I'll just have these ready meals.......(it's when you're feeling) a bit tired, you know." (G5)

" But for myself I think it's getting into the habit of the type of food and I’d say I probably have got lazy." (G1)

One of the mothers talked in similar terms, but not about laziness, more about having to “make an effort” to eat healthy food. She stated that for two days she can “eat really well” and then two days she fails to do so. She said that:

"I would say that I need to make more of an effort on those two days to eat, sort of properly" (M2)
Thereby suggesting that an unbalanced diet is the default option and healthy eating or a balanced diet requires effort and commitment.

Another mother stated that healthy eating would be far easier if she had:

"more time I suppose to be able to prepare, to cut the fruit up and you know stuff, to be able to peel the veg." (M4)

Income, although often cited as a barrier to healthy eating (Lobstein 2007) was not raised as a barrier among these participants. One grandmother, however, stated that being financially “comfortable” meant it was easier to eat the foods she perceived to be healthy without having to budget:

"Yes it is easy because I don’t have to budget I would say. So if I want to eat salmon I can, I don’t have to eat corned beef! .........although I do like corned beef" (G3)

Some felt confused about nutritional guidelines and felt that “experts keep changing their minds” – a commonly held perception and a potential barrier to healthy eating:

"...... if you followed everything there always something every week that comes out isn’t it......and I read something the other day ......but if you drink too much water too quickly it can flood the brain and then you can end up.......and I’m thinking.......I think I’m doing really well drinking lots of water and then I’m being told, you know........" (M2)

"......I know they research and everything but then you do get conflicting answers don’t you to these things. Sometimes you’ve got to kind of work out for yourself what to believe........it’s like taking supplements. Some say oh yes, you’ve got to take supplements for so and so, and another one will say no, it’s not good for you. So you’ve got to make up your own mind really, haven’t you.” (G5)

"it’s definitely, because I take vitamins as well and I hear different things about vitamins and I just have to think, well, if it’s no good for my body, it gets rid of it and hope it hasn’t been averse in any way to my body." (G1)
"Well, it's usually some scientist isn't it really, you know. It's like they say butter's no good for you one day and the next day it's brilliant you know. And I think you've just got to go with your own instincts haven't you really. I mean if you took supplements for everything they tell you, you'd be walking around rattling wouldn't you?" (G3)

There was a perception among some participants that "experts" change their minds frequently and that it is very difficult to know what to believe sometimes. Time was a persistent barrier to many, but cost of healthy food was not generally an issue for these participants. Other influences felt to be important were peer pressure and family preferences.

In summary, this stage of the study was an "ideas collection" exercise to establish issues of concern around food among women who are mothers of young children, and who are grandmothers of young children. Although the aim was not to identify differences between the groups at this stage, inevitably some did emerge.

A brief summary of the findings is detailed below:

**Perceptions of Healthy Food** – Fruit and vegetables were universally highlighted as the basis of a healthy diet, yet grandmothers focused more on the "balanced" diet and mothers more on the "5 a day" concept.

There was a general negative perception around processed foods and food eaten outside the home, yet the social aspects of eating out were mentioned as being important for children.
Many participants described feeding styles they were subjected to as children with many describing being forced to eat certain foods, usually vegetables, some of whom described using similar strategies on their own children.

*Emotional Response/Effects of food* – Some participants described the guilt associated with the consumption of “unhealthy” foods combined with the positive connotations of healthy eating, or foods perceived as healthy. Healthy eating was viewed in a positive light with benefits in terms of energy and physical appearance.

*Dietary influences* – peer pressure and numerous sources of information were important determinants of dietary choice for many participants. External influences were important, but so too was the importance of “instinct” with a number of participants explaining that although they seek out information and consult peers, professionals or the media, they largely rely on their own judgment and instinct as to whether they act upon the information they receive.

*Barriers to healthy eating* – participants spoke at length about the barriers to healthy eating with mothers highlighting working hours, school commitments and family pressures as being most important. These were also described by grandmothers, not about themselves but about others, whereas they also stated that laziness and a lack of motivation were powerful barriers to the consumption of a healthy diet.

Confusion was another common barrier among the participants with many describing frustration with “experts” or “celebrities” who seem to contradict each other in terms of diet, leaving consumers understandably puzzled.
Discussion

Perceptions of healthy eating and healthy food

The Five a Day message to encourage individuals to eat five portions of fruit and vegetables each day is widely publicised in the UK and well known by all participants – it came up in every interview when discussing a healthy diet and was felt to be important by all participants. However, just because individuals are aware of how to eat healthily, no conclusions can be drawn about actual behaviour. In fact, knowledge alone is generally not enough to change behaviour evidenced by the latest Welsh Health Survey (2010) clearly showing that the number of people eating five or more fruit and vegetables has actually dropped in recent years from 46% in 2007 to 35% in 2010. So that even though “5 a day” is embedded in the culture and language of the study sample, and potentially a large proportion of the wider population, it cannot be assumed that behaviour reflects knowledge.

Food eaten outside the home, takeaway foods or ready meals which needed little preparation were frequently mentioned by the participants. They were described as easy options or foods that were chosen when time was short, or they were tired or late home. Equally, participants perceived these foods in a negative way, with some of them expressing feelings of guilt about using them. However, six out of the nine the participants were from the catchment area of schools with a relatively high proportion of children in receipt of free school meals – an indicator of deprivation, and this is often linked with a high concentration of fast food and takeaway outlets. Not that the accessibility of alternative food sources is necessarily going to increase their consumption, but merely the presence of these alternatives may promote their use. Again ensuring that unhealthy eating is the default option, with healthy eating perceived as requiring time, effort and commitment – even though participants were
positive about the benefits of healthy eating they were resigned to not being able to adhere to it all the time, nor to be able to provide it for their families all the time.

However, it should be remembered that there is a place for all foods, and all types of foods in the Balance of Good Health and that even fatty and sugary foods, such as would be available in a takeaway or as a processed meal from a supermarket, can be consumed as part of a healthy diet. It would be wrong to dismiss these foods as bad or entirely disreputable although that does seem to be the general consensus among the participants of this study. Yet some of them state they include them in their own, or their children's diets on a fairly regular basis. Perhaps it is time to remove the guilt or the perception that it is an easy option that should be used with caution. This is not to suggest that people increase their consumption of these foods, but perhaps a change of focus is called for - more emphasis on the positive aspects of these food choices and perhaps working with takeaway and fast food providers to improve the nutrient quality of their products. Indeed, one of the largest fast food chains, McDonalds, widely cited by the women in the present study as the worst example of a guilt-inducing meal opportunity, has made efforts in recent years to improve the nutritional standards of their products. So that now it is possible to purchase a nutritionally balanced meal from one of their outlets – perhaps it is time to repackage the takeaway model. This would mean that families could take advantage of the time-saving benefits of takeaways without the associated feelings of guilt.

Conversely, while the concept of takeaway and fast food was perceived as a necessary evil by some participants, the traditional cooked dinner or Sunday roast was perceived as a meal that was nutritious, healthy and enjoyed by the whole family. Indeed, not only was it considered to be nutritionally sound but also held properties beyond nutrition – the social side of eating together and sharing a meal with an extended family was something many participants felt proud of achieving or at least aspired to.
**Emotional response/effects of food**

The emotional response of food in the context of these interviews is largely confined to the feelings of guilt that often surround certain foods that the participants consume frequently. The specific types of food included fast foods, takeaway foods or more generally *stodgy* foods. There was a general perception that takeaway or convenience foods were unhealthy and nutritionally unbalanced. Yet Carrigan et al (2006) argue that it is the marketing of these products that is unbalanced rather than the foods themselves. They talk about the capacity of these products to free women from domestic drudgery – which they undoubtedly do. They talk of the need to address the feelings of guilt often associated with them by marketing them in such a way as to stress their nutritional value, their cost effectiveness and their ability to allow parents to spend more time with the family. They see this as a way forward in removing feelings of guilt associated with these foods.

*Effects of food*, here, is referring to the women who directly related their diet to personal outcomes, whether that be in physical or mental terms. They spoke of stodgy foods making them lethargic, while they felt lighter and fitter eating foods like salads, fruits and vegetables. They also made the link between physical wellbeing and a healthy diet.

In the current study, participants from both generations and different social groups saw that certain types of food directly influenced their physical feelings of sluggishness while some of them spoke of the link between diet and heart disease particularly in terms of cholesterol.
Dietary influences

There are numerous influences on food choice and the participants in these interviews talked of peer influence and the influence of the media. They also spoke of their own experiences, often being forced to eat certain foods when growing up – these experiences often shaped their own eating habits and feeding habits when providing food for their own families.

In terms of the influence of the media on food choice, most women in the interviews reported that the popular media including television, newspapers and magazines were the most likely sources of nutritional information. There was, however, the perception that the information was not always accurate and that it was often misleading. The women in the current study certainly viewed the media as important yet their own instinct and previous knowledge seemed to be a more powerful influence on food choice. A surprising finding, perhaps, was the feeling that many of the participants reported – that they would trust their own instinct or judgement to make appropriate choices in the face of conflicting advice from "professionals". There are two important aspects to this – one being that instinct must originate from somewhere and in order to change behaviour it may be necessary to delve into how instinct develops. To be able to harness this instinct would be a powerful tool in behaviour change. The other point about conflicting advice is to ask why advice is, or perceived to be, conflicting. Certainly as a registered dietitian the researcher is familiar with healthy eating guidelines and well versed in their application. However, it is not only dietitians that people turn to for dietary advice. Indeed, the vast majority of the British population will never be referred to a dietitian. Therefore, dietary advice is sought from numerous other areas – medics, nursing staff, their local gym or health food shop, as examples. This is not to say that their advice is inaccurate but that the focus of their professional training has not been diet related so that it may be difficult for them to approach the subject of diet with their patients in a non-
subjective way without imposing their personal viewpoints on any advice they give. When this is combined with the variety and volume of nutritional advice available online, in print or from other media which is largely unregulated for accuracy, it is little wonder that consumers can sometimes feel confused.

**Barriers to Healthy Eating**

Among the participants in this study the main barriers that they perceived were time, family preferences and conflicting advice. Time pressures were a key barrier to healthy eating among the present sample, but in various ways. Time to prepare foods such as a meal *from scratch* was perceived as difficult when faced with the demands of a busy work schedule (mothers) and perceived as being something they were unable to do very often as they had become lazy (grandmothers). There was a general feeling among both groups of women that healthy eating demanded time and effort, and although it was an aspirational ideal, it was not something that most of them could claim to follow. They spoke of *good days* and *bad days* resulting in unhealthy eating often being the default option, especially when time pressures were being felt.
Conclusion

The interviews gave an insight into the issues that surround women’s attitudes and ideas about their diet. Children’s diets seemed to be the focus of many of the comments made, perhaps due to the participants’ status as mother or grandmother. However, on revisiting the aims and objectives of the study, it became apparent that children’s diets are beyond the scope of this project. Therefore, the questionnaire developed for the second stage focused on what mothers and grandmothers feed themselves. Equally, it may seem a missed opportunity not to draw conclusions or make assumptions from the results based on the relationships between the women – bearing in mind that the mothers were related to the grandmothers. However, the key to the project is the familial role of the women involved and not their relationship, attitudes and perceptions as compared with their mother or daughter. This would have been beyond the scope of the project as it would have used family relationships as the focus, rather than familial role.

It should be remembered throughout that the reporting of the initial phase of the study is deliberately avoiding comparisons or highlighting differences between the two groups of women. This is observed in the later phases, described in the following chapters. The initial phase of interviewing was “ideas collection” or “setting the scene”, to explore the perceptions and attitudes around diet and healthy eating of women in different familial roles and to determine their areas of interest or concern. It was about learning their ideas around food – especially as the researcher is a registered dietitian, it would have been too subjective to embark on the project without some degree of initial insight, gleaned from the preliminary interviews. This insight informs the design and development of the questionnaire and focus groups to follow.

In order to examine the issues more deeply, the themes raised in the initial interviews were used to explore whether differences exist in these specific areas
between mothers and grandmothers. Now that some of the issues have been explored, the importance of familial role needs to be investigated. Each heading, above, has been used as headings for the questionnaire that follows and is described in full in the next chapter.

Summary

Areas of concern for women as mothers or grandmothers of young children include the following:

- Perceptions of healthy food;
- Emotional response/effects of food;
- Dietary influences;
- Barriers to healthy eating.

Within these:

- healthy eating messages such as “five a day” were commonly recognized and aspired to;
- when convenience foods are consumed they are often accompanied by feelings of guilt;
- Foods are perceived in different ways by women – some believing that starchy foods make them feel “sluggish”, while fruit and vegetables feel lighter;
- Children are an important influence on food choice, as are parents whose influence can persist into adulthood;
- This group of women cited time, family preferences and conflicting advice as the biggest barriers to eating healthily;
- Instinct was a key factor in determining food choice in a climate of misinformation and information overload.
Chapter 3 – Questionnaire

Introduction

The preceding chapter reported the initial study involving exploratory interviews and introduced the purpose of the second study which involved questionnaires shaped from the interview data. It presented the results from the first study (or phase) of the project – the semi-structured interviews, the aim of which was to collect information on the language used and the issues of concern to women in terms of diet and healthy eating. The thematic analysis of the interviews was used to shape and inform the design of the second phase of the project – the questionnaire – the details of which are explained below. By using the initial results to inform the second data collection exercise it was possible to use the language and issues of concern to the two generations of women to design the questionnaire.

Design and Materials

The aim of the questionnaire was to gain an insight into whether differences exist between two groups of women acting in different familial roles – as mothers and grandmothers - in terms of attitudes and perceptions towards healthy eating.

The themes from initial interviews, as detailed in Table 1.1 in the previous chapter, were used to divide the questionnaire into the following sections:

- Perceptions of healthy eating and healthy food;
  - Beliefs and behaviour relating to healthy foods
- Health Awareness;
- Enjoying healthy choices;
- Emotional response/effects of food;
- Food and feelings
- Dietary influences;
- Barriers to healthy eating.

The questionnaire was developed with guidance and input from the supervisory team as it existed at the time – two of whom are psychologists and one of whom is a dietitian. The dietitian was specifically involved in the questions relating to particular foods and food choice. The researcher’s own experiences as a dietitian in clinical practice and within a health promotion role also gave some insight into the range of questions that would be salient to the study. The aim of the questionnaire was to explore whether differences exist between the two groups of women in different familial roles – mother or grandmother.

The initial questionnaire was piloted on a convenience sample of five participants and as a result of the pilot it was amended. It became clear during the pilot that several of the questions were ambiguous, for example terms such as “ready meals”, “cooked dinner” and “cooked breakfast” were not understood in the same way by the pilot participants and therefore required clarification which was included in the final questionnaire.

The final questionnaire comprised of 37 questions – 29 of which used a Likert scale in which the participants had to choose the most applicable response, four of the questions were demographic questions about post code, year of birth, ethnic origin, employment status and educational attainment and three were open questions which were included to allow participants to express their own views without the limitations imposed by previously determined responses.
A Likert scale was used as it meant the questionnaire could be accessible and easy to understand by participants. However, there are disadvantages to this type of scale, one being that the options offered may not reflect the participants' view, and also that by answering a number of questions in a certain way the participant may be inclined to continue answering all the following questions in the same way (a mindless response). To avoid this, the researcher included some reversed scales and grouped many of the questions together in small groups, to avoid numerous questions using the same format.

The final questionnaire was printed onto nine sides of A4, the first of which included an introductory paragraph to explain the scope of the project and to give contact details of the researcher the institution. The questionnaire is attached as Appendix 3.
Sample

A convenience sampling method of recruitment was used as it was decided that this would be the most effective in terms of time and resources and one that was most accessible to the researcher. However, this method means that the results cannot claim to be those of a representative sample of the population, yet as can be seen from the participant descriptors below, a diverse demographic spread has been achieved.

The study design required both mothers and grandmothers to take part, and it was felt that schools would be the most appropriate settings from which to recruit participants. To achieve a varied range of respondents, schools with high and low levels of pupils in receipt of free school meals were identified, with a view to recruiting their mothers or grandmothers into this phase of the study. These were different from the schools who had been approached in the earlier phase. Flying Start (a Welsh Assembly initiative aimed at providing children under the age of four with childcare and support needs) was also approached so that some of their service users could be given the opportunity to take part. The recruitment of the Flying Start families was an important aspect to the study as it meant that a number of participants were recruited from groups that are often described as “hard to reach” in terms of health promotion activities, so that their input was extremely valuable and provided a dimension of diversity in the project. The Flying Start project manager allowed the researcher to access some of their service user groups such as “drop in” sessions and mother and toddler groups which enabled the researcher to recruit participants in situ.
Procedure

Six schools were identified in the Vale of Glamorgan locality – the area local to the researcher and one with which she already had established contacts and local knowledge. They were selected by the researcher from all the local authority primary schools in the area using their Ofsted summary report which indicated that three of them had less than 1% of children in receipt of free school meals and three of them had more than 20% of children in receipt of free school meals. Chapter 2 detailed more about the use of free school meals as a socio-economic marker.

However, two of the schools were preparing for an Ofsted inspection and another two were reluctant to take part - it was close to the end of the Spring Term and schools were preoccupied with numerous school events and the impending school holidays. One headteacher stated that he had recently given out questionnaires from the local authority to parents, and that it would be inappropriate to overburden them with additional administrative tasks. One school agreed and allowed the researcher to visit during Parental Consultations and questionnaires were distributed to parents while they were waiting to see their child’s class teacher. Another of the schools did agree to take part and 40 questionnaires were distributed, via pupils, to the parents of one of the classes at the school, while a nursery school attached to one of the schools also distributed 100 questionnaires to their pupils’ parents.

The questionnaires were distributed in a number of ways – some were sent home to parents via the pupils, some were distributed to parents directly by the researcher after giving an introduction to the study. Many of the questionnaires were completed in situ, but some participants requested that they complete them at a later date, and were provided with a freepost envelope to return them directly to the researcher.
In order to increase recruitment among grandmothers contact was made with older people's organisations and charities that employed older people for volunteer roles. Many participants were engaged in this way via Age Concern, Tenovus and the Red Cross in the Vale of Glamorgan. Additionally, the Vale Older people's forum was found to be an organisation which provides a voice for local elderly people. The co-ordinator of the Vale Older People's forum was approached and was able to distribute 300 questionnaires to their members. The Human Resource Departments of three local supermarkets were also approached and agreed to distribute a number of questionnaires to their female staff, many of whom were either mothers or grandmothers.

To further encourage participation it was decided to incorporate a prize draw scheme as an incentive. Three prizes of shopping vouchers were offered – £25, £15 and £10. A local supermarket donated a £10 shopping card as one of the prizes and the remainder was secured from the School of Health Sciences within Cardiff Metropolitan University (UWIC). This was explained to participants by the addition of a covering letter detailing the prize draw, and a sealed envelope in which they were invited to write their name and telephone number, if they wished to be entered into the draw. Personal details were kept in the sealed envelopes until data collection was complete, and then prize winners were randomly selected by the researcher and informed by telephone of their prize which was then posted to them.

Data collection was completed during the autumn of 2009 by which time 1000 questionnaires had been distributed to prospective participants. A response rate of 29% (n=293) was achieved.

**Method of Analysis**

The questionnaires were manually sorted into familial role ie grandmother or mother and any that had not been completed were removed. Each questionnaire was given
a unique number to ensure anonymity and to allow efficient data analysis. The questions/statements were converted to variables and incorporated into an SPSS database. The data was then transferred from the questionnaires onto the database.

**Quantitative data**

Demographic data was analysed using cross tabs and frequencies. The Likert scale statements for health awareness, enjoying healthy choices, barriers to healthy eating and food and feelings were analysed using Cronbach's Alpha to test their internal reliability. Cronbach's alpha is widely believed to indirectly indicate the degree to which a set of items measures a single unidimensional latent construct. A Cronbach's Alpha of more than 0.8 is widely considered to be reliable (Bland et al 1997). All the subgroups of statements analysed had a Cronbach's Alpha of more than 0.8 so that each group of statements could be considered to be measuring the same latent construct. Mann Whitney tests were also performed on each statement to determine the magnitude of any differences between the two groups, and the results of these tests are detailed in the relevant results section. The questions that could not be grouped together as measuring the same construct, have been detailed separately below.

**Qualitative data**

In addition to the quantitative questions detailed above, the questionnaire comprised three open statements with the aim of allowing participants to describe their own interpretation of issues around food and eating. The three open statements were:
1. Name three or more foods that you regularly eat and that you consider to be healthy and why;
2. Name three or more foods that you sometimes eat and that you consider to be unhealthy and why;
3. Please write down three words or phrases that sum up healthy eating to you.

The first question was manually sorted and the first part of the responses (specific foods) were subdivided into the five food groups that comprise the Balance of Good Health (FSA, 2011) -

- fruit and vegetables,
- bread, cereals and potatoes,
- meat, fish and alternatives,
- milk and dairy foods,
- foods containing fat and foods containing sugar.

The second part of the question asked participants “why” these foods are perceived as healthy or unhealthy foods. These responses were subdivided into the following categories which were devised with input from a psychologist from the School of Health Sciences at Cardiff Metropolitan University (UWIC). Below is a list of categories used, with a full explanation of what each category comprises provided as Appendix 5:

- Nutrient terms
- Good stuff
- Low in something bad
- Health benefits

The second question about foods considered to be unhealthy and why could not be categorised in the same way as above. This was because, on initial sorting of the data, it became clear that the vast majority of the foods specified as unhealthy were
from the fatty and sugary foods group, with only a small number of participants
specifying foods from other food groups. As a result, these responses were grouped
into the foods that were specifically mentioned by the women (a full breakdown of
what terms are in each category is provided as Appendix 6):

- Chocolate;
- Snacks (including crisps, nuts and sweets)
- Fried food (including chips)
- Processed foods (including ready meals, sausages, bacon)
- Outside the home (takeaways, eating out)
- Cakes, biscuits (all cakes, biscuits, desserts, puddings)
- Dairy foods (cheese, cream, butter, ice cream)
- Meat (excluding processed)
- Fizzy drinks
- Pastry
- Miscellaneous (pasta, sauces, curry, spicy food, onions)

The reasons why these foods were perceived as unhealthy were manually sorted
and again by far the most frequently cited reason was that these foods were high in
an “unhealthy” ingredient such as fat, salt, sugar or saturated fat. Other reasons
given were that the foods were in some way detrimental to health, or that they were
low in nutritional value or that they were “fattening”. The responses were therefore
grouped as follows (a full breakdown of the terms included in each category is
provided as Appendix 7):

- High in something bad
- Health detriments
- No nutritional value
- “fattening”
The final open question asked participants to “Please write down 3 words or phrases that sum up healthy eating to you.” There were numerous different interpretations of this question and therefore answers. The responses were sifted and divided by the researcher and a colleague from the School of Health Sciences (UWIC) into themes that were broadly similar with the following headings. A full breakdown of what each category comprises is included as Appendix 8:

- Nutrient terms
- Good stuff
- Low in something bad
- Health benefits
- 5 a day/Balance
- Regular meals
- Specific foods

The responses were input onto an Excel database by the researcher, which meant that the data could be manipulated and ordered to provide a comprehensive overview of the results. The manual coding of each questionnaire was a time-consuming exercise as the open questions had generated a large volume of data. It was therefore necessary to be rigorous in the codings so that some semblance of order could be maintained.
Results

Sample

After data collection, the final number of completed questionnaires received was 139 from mothers and 154 from grandmothers. With 1000 questionnaires distributed, this represents a response rate of 29%.

Age

The participants were asked to give their year of birth which enabled the following breakdown of age ranges. They have been divided in this way to show the crossover between the age groups. The mothers' ages ranged from 22 to 56 and the grandmothers ages ranged from 44 to 89. There is therefore some overlap.

Table 3:1 Mother and Grandmother Age Breakdown

<table>
<thead>
<tr>
<th>Age Range</th>
<th>M Mean Age 38</th>
<th>G Mean Age 67</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 – 43</td>
<td>103 (74%)</td>
<td></td>
</tr>
<tr>
<td>44 – 56</td>
<td>36 (26%)</td>
<td>23 (15%)</td>
</tr>
<tr>
<td>57 - 89</td>
<td></td>
<td>131 (85%)</td>
</tr>
</tbody>
</table>
Ethnic origin

The ethnic origin of participants was recorded and 2% of mothers and grandmothers specified their ethnic origin as being other than "white", whereas for the population of Wales the percentage is 2.9%.

Employment status

Over half of the mothers (52%) were working mothers, with 19% of grandmothers in employment. 59% of the grandmothers were retired and 12% described themselves as "looking after the home or family". Among the mothers 35% of them stated that they were "looking after the home or family". The questionnaire did not elicit information on whether participants were working on a full time or a part time basis nor whether they were the sole or main earner within a family. The employment status results are summarised below:

Table 3.2 – Employment Status by familial role

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>M (n=139)</th>
<th>G (n=154)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In employment or self employment</td>
<td>73</td>
<td>30</td>
</tr>
<tr>
<td>Looking after the home or family</td>
<td>49</td>
<td>19</td>
</tr>
<tr>
<td>Permanently unable to work because of long term sickness or disability</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Not answered</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Going to school or college full time</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Looking for paid work or a government training scheme</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Intending to look for work but prevented by temporary sickness</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Doing something else</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Retired from paid work</td>
<td>0</td>
<td>91</td>
</tr>
</tbody>
</table>
It should be noted that a proportion of the questionnaires were distributed to the female supermarket staff and may explain the high number in paid employment.

**Education**

Different levels of highest educational attainment were represented within this study, ranging from a number of participants with no formal qualifications to some with a higher degree. This compares with the Welsh population of which 33% of those aged between 16 and 74 have no qualifications and 17% of those aged between 16 and 74 have a higher degree or higher qualification (NOS Census 2008).

Educational attainment is summarised in table 3.3 below:

**Table 3.3 – Highest qualifications gained**

<table>
<thead>
<tr>
<th>Qualification</th>
<th>M(n=139)</th>
<th>G(n=154)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other qualifications (eg. City and Guilds, RSA/OCR, BTEC/Edexcel)</td>
<td>38</td>
<td>25</td>
</tr>
<tr>
<td>5+ O levels, 5+ CSEs (grade 1)</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>5+GCSEs (grade A-C), School Certificate</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>First Degree (BA, BSc)</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Higher Degree (eg MA, PhD, PGCE, Post grad cert/diplomas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2+ A levels, 4+ AS levels</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>1+ O levels/CSEs/GCSEs (any grades)</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>NVQ Level 2, Intermediate GNVQ</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>1+ A levels/AS levels</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>No qualifications</td>
<td>7</td>
<td>34</td>
</tr>
<tr>
<td>NVQ Levels 4-5, HNC, HND</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>NVQ Level 3, Advanced GNVQ</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>NVQ Level 1, Foundation GNVQ</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Not answered</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>
**Geography**

Participants were asked to specify their postcodes on the questionnaire and these were sorted using an Excel database. They were then classified into one of five categories as per the Townsend Index of Disadvantage and Deprivation (1988). Each postcode was manually checked against the Townsend Index for the specific area. The Townsend Index results are recorded as a figure and then divided into quintiles with 1 representing the least deprived areas and 5 representing the most deprived. These quintiles were used for the participants of this study and the results are below:

### Table 3.4– Postcode breakdown of respondents (using Townsend Index)

<table>
<thead>
<tr>
<th>Quintile 1 – least deprived</th>
<th>Quintile 2</th>
<th>Quintile 3</th>
<th>Quintile 4</th>
<th>Quintile 5 – most deprived</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers (n=139)</td>
<td>19 (14%)</td>
<td>55 (39%)</td>
<td>8 (6%)</td>
<td>10 (7%)</td>
</tr>
<tr>
<td>Grandmothers (n=154)</td>
<td>46 (30%)</td>
<td>28 (19%)</td>
<td>11 (7%)</td>
<td>26 (17%)</td>
</tr>
</tbody>
</table>

Table 3.4 shows that the largest group of Grandmothers were in the least deprived quintile, while for Mothers the largest group were in the second quintile. The number in the most deprived was similar for the two groups.

The composition of the participants in terms of age range, ethnic origin, employment and educational status is largely in line with that of the wider population within
Wales, with lower socio-economic groups well represented among the women in this study.

Quantitative Results

*Health awareness*

The first two sections of questions were used to measure health awareness and enjoying healthy choices, in which respondents were asked to answer Always (4), Sometimes (3), Rarely (2) or Never (1) to the statements listed below. Thus the scoring system is such that a lower mean represents less frequently. The mean responses, below, show that the responses were between Always and Sometimes to the following statements:

**Health awareness statements:**
- I consider healthy eating in choosing what to eat,
- I am very concerned with the nutritional content of foods,
- I choose to eat low fat foods
- I check the nutritional information on food packaging
- I choose to eat low sugar foods I choose to eat low salt foods

<table>
<thead>
<tr>
<th>Scale</th>
<th>M Mean</th>
<th>G Mean</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Awareness</td>
<td>3.05</td>
<td>3.20</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 3.5 – Mean responses and probability to Health awareness statements – 1 = Never to 4 = Always
The above table shows that both groups consider healthy eating *always* or *sometimes* yet there is a significant difference between the groups with grandmothers displaying more health awareness than the mothers.

**Enjoying healthy choices**

In terms of enjoyment of healthy choices, the participants were asked to respond to the following statements using 1=never, 2=rarely, 3=sometimes, 4=Always:

Enjoying healthy options statements:

I enjoy low fat foods;

I enjoy low salt foods;

I enjoy low sugar foods.

The table below (3.6) shows that there was a significant difference between the two groups of women, with grandmothers stating their agreement with the statements more frequently than mothers. While both groups sometimes or always enjoy healthier choices, grandmothers reported more frequent enjoyment compared with the mothers:
Table 3.6 – Mean responses and probability to enjoyment of healthy options statements – 1=never to 4=always (M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Scale</th>
<th>M Mean</th>
<th>G Mean</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoying healthy eating</td>
<td>3.01</td>
<td>3.24</td>
<td>&gt;.001</td>
</tr>
</tbody>
</table>

Barriers to healthy eating

Seven statements were categorised as measuring barriers to healthy eating. The statements below had the available responses of - Strongly disagree (1), Disagree (2), Undecided (3), agree (4), Strongly agree (5):

Barriers to healthy eating statements:

Healthy food costs too much;

Healthy eating advice is too confusing;

Eating healthily takes a lot of effort;

Healthy food takes too long to prepare;

Healthy foods are unappetising;

Nobody I know eats a healthy diet;

Slim people don’t need to think about eating healthily.
Table 3.7 – Barriers to healthy eating mean responses and significance – 1= strongly disagree to 5= strongly agree (M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Scale</th>
<th>M Mean</th>
<th>G Mean</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers to Healthy Eating</td>
<td>2.20</td>
<td>2.30</td>
<td>NS</td>
</tr>
</tbody>
</table>

The means detailed in Table 3.7 show that both groups were in disagreement or undecided as to the barriers to healthy eating statements. There was no significance difference between these two groups of women, but as the results show, both groups of women in different familial roles reported that commonly held beliefs about healthy food and the barriers to consuming them were not necessarily an issue for these participants.

Food and Feelings

Three statements were offered about participants' emotions that may be linked with food, and also their perceptions of how food makes them feel and whether different types of food influence their moods. The food and feelings statements were as follows:

- When I am depressed I eat more unhealthy food;
- When I am stressed/anxious I eat more unhealthy food;
- When I am angry, I tend to eat more unhealthy food.

And the available responses were: 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree.
Table 3.8 – Mean responses and significance of Negative Emotions and Food statements – 1=strongly disagree to 5=strongly agree (M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Scales</th>
<th>M Mean</th>
<th>G Mean</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Feelings</td>
<td>3.60</td>
<td>3.30</td>
<td>&gt;.001</td>
</tr>
</tbody>
</table>

The total means reveal that general trends in responses were between "agree" and “undecided” so for this group of statements, significantly more mothers than grandmothers reported that they eat certain foods in response to being depressed, stressed or angry.

**Dietary influences**

The participants were asked how great an influence the items (detailed in Table 3.9) have on their dietary choice as follows, with the available responses on a 5-point scale (1=very weak influence, 5=very strong influence).

Table 3.9, below, shows that among this sample, the results suggest that mothers were more strongly influenced by celebrity chefs, television programmes, magazines, the internet, cookery books and family dislikes than the grandmothers while the grandmothers' results suggest that they were more strongly influenced by the seasonal availability of foods.
Table 3.9 – Dietary influences: Mean response (1=very weak influence to 5=very strong influence)(M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Influence</th>
<th>M</th>
<th>G</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family likes and dislikes</td>
<td>4.13</td>
<td>3.54</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>My mother’s cooking</td>
<td>3.42</td>
<td>3.08</td>
<td>NS</td>
</tr>
<tr>
<td>What food is in season</td>
<td>3.42</td>
<td>3.92</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>The weather</td>
<td>3.34</td>
<td>3.27</td>
<td>NS</td>
</tr>
<tr>
<td>Cookery books</td>
<td>3.24</td>
<td>2.75</td>
<td>.002</td>
</tr>
<tr>
<td>Health professionals</td>
<td>3.02</td>
<td>3.00</td>
<td>NS</td>
</tr>
<tr>
<td>Friends</td>
<td>2.83</td>
<td>2.63</td>
<td>NS</td>
</tr>
<tr>
<td>TV programmes</td>
<td>2.63</td>
<td>1.95</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Magazines</td>
<td>2.55</td>
<td>2.14</td>
<td>.001</td>
</tr>
<tr>
<td>Celebrity Chefs</td>
<td>2.23</td>
<td>1.72</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Newspapers</td>
<td>2.20</td>
<td>2.03</td>
<td>.007</td>
</tr>
<tr>
<td>Internet</td>
<td>2.09</td>
<td>1.54</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Beliefs and behaviour relating to healthy foods

Participants were asked to rate the importance of certain foods for a healthy diet and to specify how often they include these foods in their diet. They were asked how important each food is for a healthy diet using a Likert scale 1-5 with 1 indicating unimportant, and 5 indicating very important. The second part of the question asked how often the foods were included in their own diet with 1 = never, 2 = rarely, 3 = monthly, 4 = weekly and 5 = daily.

The tables below show the categories, the mean responses and the statistical difference between the groups in terms of their perception of the importance of the food (tables 3.10-3.12) and of their reported consumption (Tables 3.13 and 3.14).
Table 3.10 – How important are the following foods for a healthy diet – (1 = unimportant, 5=Very important) (M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Food item</th>
<th>M</th>
<th>G</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green vegetables</td>
<td>4.8</td>
<td>4.6</td>
<td>NS</td>
</tr>
<tr>
<td>3 meals a day</td>
<td>4.6</td>
<td>4.2</td>
<td>.004</td>
</tr>
<tr>
<td>Apples</td>
<td>4.4</td>
<td>4.0</td>
<td>.005</td>
</tr>
<tr>
<td>Wholemeal bread</td>
<td>4.3</td>
<td>4.3</td>
<td>NS</td>
</tr>
<tr>
<td>White Meat</td>
<td>4.3</td>
<td>4.2</td>
<td>NS</td>
</tr>
<tr>
<td>Oranges</td>
<td>4.3</td>
<td>4.0</td>
<td>NS</td>
</tr>
<tr>
<td>Cooked dinner</td>
<td>4.2</td>
<td>3.9</td>
<td>.022</td>
</tr>
<tr>
<td>Yogurt</td>
<td>4.1</td>
<td>3.9</td>
<td>NS</td>
</tr>
<tr>
<td>Salmon</td>
<td>3.8</td>
<td>4.1</td>
<td>NS</td>
</tr>
</tbody>
</table>

Table 3.10 shows the foods that had the highest scores (mean >4) on the importance scale for a healthy diet. The following two tables 3.11 and 3.12 display the results for those foods perceived as less important for a healthy diet, ie. with a mean of >3 (table 3.11) and with a mean of <3 (table 3.12). The results have been presented in this way for ease of reference.

Table 3.10 illustrates the differences that exist between the two groups of women with mothers perceiving 3 meals a day, apples and a cooked dinner as more important for a healthy diet than the grandmothers did.
Table 3.11 - How important are the following foods for a healthy diet - 1 = unimportant, 5=Very important (M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Food item</th>
<th>M</th>
<th>G</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pasta</td>
<td>3.9</td>
<td>3.4</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Eggs</td>
<td>3.8</td>
<td>3.5</td>
<td>.025</td>
</tr>
<tr>
<td>Dried beans pulses</td>
<td>3.8</td>
<td>3.8</td>
<td>NS</td>
</tr>
<tr>
<td>Bottled water</td>
<td>3.7</td>
<td>2.5</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Red Meat</td>
<td>3.7</td>
<td>3.2</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Roast Meat</td>
<td>3.6</td>
<td>3.2</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Porridge</td>
<td>3.6</td>
<td>3.8</td>
<td>.040</td>
</tr>
<tr>
<td>Cheese</td>
<td>3.4</td>
<td>3.2</td>
<td>NS</td>
</tr>
<tr>
<td>Liver</td>
<td>3.0</td>
<td>3.4</td>
<td>.038</td>
</tr>
<tr>
<td>Honey</td>
<td>2.5</td>
<td>3.4</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Table 3.11 shows that mothers, compared to grandmothers perceived pasta, eggs, bottled water, red meat and roast meat to be more important for a healthy diet. Grandmothers compared to mothers, perceived porridge, liver and honey to be more important.

Table 3.12 - How important are the following foods for a healthy diet - 1 = unimportant to 5=Very important (M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Food item</th>
<th>M</th>
<th>G</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snacks</td>
<td>2.5</td>
<td>1.91</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>White bread</td>
<td>2.4</td>
<td>2.2</td>
<td>NS</td>
</tr>
<tr>
<td>Full Cream Milk</td>
<td>2.3</td>
<td>1.8</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Butter</td>
<td>2.3</td>
<td>2.6</td>
<td>NS</td>
</tr>
<tr>
<td>Eating between meals</td>
<td>2.2</td>
<td>1.9</td>
<td>.005</td>
</tr>
<tr>
<td>Cooked breakfast</td>
<td>2.1</td>
<td>2.1</td>
<td>NS</td>
</tr>
<tr>
<td>Pastry</td>
<td>1.7</td>
<td>1.8</td>
<td>NS</td>
</tr>
<tr>
<td>Cream</td>
<td>1.6</td>
<td>1.9</td>
<td>NS</td>
</tr>
<tr>
<td>Ready meals</td>
<td>1.5</td>
<td>2.1</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
Table 3.12 shows that mothers compared to grandmothers perceived snacks, full cream milk, eating between meals to be more important for a healthy diet, while the grandmothers compared with mothers perceived ready meals to be more important. It should be noted, however, that all the means in this table are less than 3 suggesting that neither group felt these foods to be very important for a healthy diet, but it is interesting that significant differences exist between the two groups.

The second part of the question asked participants to state how often they consumed the same foods in their own diet. The results are presented in Tables 3.13 and 3.14 below. Again these have been divided into groups, with the highest means >3.5 in table 3.13 and the lower mean values (<3.5) in table 3.14.

Table 3.13 – Consumption statements –how often foods are included in the diet 1=Never, 5= daily (M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Food item</th>
<th>M</th>
<th>G</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green vegetables</td>
<td>4.47</td>
<td>4.66</td>
<td>NS</td>
</tr>
<tr>
<td>Semi Skimmed milk</td>
<td>4.23</td>
<td>4.36</td>
<td>NS</td>
</tr>
<tr>
<td>Yogurt</td>
<td>4.12</td>
<td>3.94</td>
<td>NS</td>
</tr>
<tr>
<td>Wholemeal bread</td>
<td>4.09</td>
<td>4.35</td>
<td>NS</td>
</tr>
<tr>
<td>Snacks</td>
<td>4.08</td>
<td>3.11</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>White meat</td>
<td>4.02</td>
<td>3.88</td>
<td>NS</td>
</tr>
<tr>
<td>Pasta</td>
<td>3.96</td>
<td>3.41</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Bottled Water</td>
<td>3.84</td>
<td>2.87</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Eating between meals</td>
<td>3.84</td>
<td>2.84</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Eggs</td>
<td>3.81</td>
<td>3.77</td>
<td>NS</td>
</tr>
<tr>
<td>Red meat</td>
<td>3.59</td>
<td>3.41</td>
<td>NS</td>
</tr>
</tbody>
</table>

Table 3.13 shows that mothers stated they consumed snacks, pasta, bottled water and ate between meals more frequently than the grandmothers in the study.
Table 3.14 – Consumption statements – how often foods included in the diet – 1=never, 5 = daily (M=Mothers, G=Grandmothers)

<table>
<thead>
<tr>
<th>Food item</th>
<th>M</th>
<th>G</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>White bread</td>
<td>3.50</td>
<td>2.94</td>
<td>.003</td>
</tr>
<tr>
<td>Butter</td>
<td>3.24</td>
<td>2.89</td>
<td>NS</td>
</tr>
<tr>
<td>Porridge</td>
<td>2.72</td>
<td>3.30</td>
<td>.001</td>
</tr>
<tr>
<td>Pastry</td>
<td>2.65</td>
<td>2.46</td>
<td>NS</td>
</tr>
<tr>
<td>Dried beans and pulses</td>
<td>2.59</td>
<td>2.89</td>
<td>NS</td>
</tr>
<tr>
<td>Cooked breakfast</td>
<td>2.58</td>
<td>2.2</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Honey</td>
<td>2.18</td>
<td>2.87</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Cream</td>
<td>2.06</td>
<td>2.22</td>
<td>NS</td>
</tr>
<tr>
<td>Full cream milk</td>
<td>2.01</td>
<td>1.49</td>
<td>.001</td>
</tr>
<tr>
<td>Liver</td>
<td>1.6</td>
<td>2.32</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Table 3.14 above shows that, according to participant’s self-report, white bread, cooked breakfast and full cream milk were reported to be consumed more frequently by the mothers than by the grandmothers, while porridge, honey and liver were reportedly consumed more frequently by the grandmothers.
Open Question Results

The three open question results are presented in the following summary under the headings used in the questionnaire:

- Foods you consider to be healthy and why;
- Foods you consider to be unhealthy and why;
- Words or phrases that sum up healthy eating to you.

**Foods you consider to be healthy and why**

The question, as it appeared on the questionnaire was:

"In the boxes below, please name three or more foods that you regularly eat and that you consider to be healthy and why:

The basis of this question was to establish which foods participants sometimes consume and perceive to be healthy, and it also asked them to describe what they believe to be healthy about this food. The results from this question are reported below in two sections - the first part reporting the specific foods mentioned and the second half reporting the reasons why these foods are considered to be healthy.

The responses to the part of the question asking for specific foods perceived as healthy have been divided into the five food groups, as they appear in the Balance of Good Health Model (FSA):

- Fruit and Vegetables
- Bread, cereal and potatoes
- Milk and dairy foods
- Meat, fish and alternatives
- Foods containing fat and foods containing sugar.

As described above, the statement required three responses which have been totalled in the following tables. The responses from mothers are coded as M and the responses from grandmothers as G throughout the following tables.

Table 3.15: Food groups regularly consumed and considered healthy.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>G</td>
<td></td>
</tr>
<tr>
<td>Fruit &amp; Vegetables</td>
<td>47%</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Meat, fish/alternatives</td>
<td>27%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Bread, cereals and potatoes</td>
<td>17%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Milk and dairy products</td>
<td>9%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.15 (above) shows a striking similarity in the percentages of both groups of women who perceived foods from the different groups as healthy and that they regularly consume.

The fatty and sugary group is not included as a separate category for the purposes of the table above but a small number of the respondents specified foods from this group as foods they perceived as healthy. One mother believed that cakes and biscuits were healthy if they were low in fat. One mother referred to the word “treats” and felt that these are important in a diet for “pleasure”, whilst a grandmother felt that a “small amount of chocolate” was healthy as it provided the “feel good factor”. Dark chocolate, honey and olive oil were also perceived as healthy foods, with the
reasons being given as being a “natural antibacterial, healing” (honey) or “low in saturated fat, good for general health” (olive oil).

Why are these foods healthy?

The second part of the question asked what participants considered to be healthy about the foods they had specified. Detailed analysis of this data found that the terms used to describe why these foods are perceived as healthy could be subdivided into the following categories (full explanation of which terms are absorbed into which category is detailed as Appendix 5):

- Nutritional terms (eg. Vitamins, minerals, omega 3, antioxidants, fibre);
- “good stuff” (eg. Good for you, healthy, nutritious, 5 a day)
- Health benefits (eg. Lowers cholesterol, good for joints, good for heart);
- Low in something bad (eg. low fat, low sugar, low calorie)
Table 3.16: Criteria for describing food as healthy

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Fruit &amp; vegetables</th>
<th>Bread, cereals &amp; potatoes</th>
<th>Meat, fish &amp; alternative s</th>
<th>Milk &amp; dairy products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terms used</td>
<td>M n=159</td>
<td>G n=147</td>
<td>M n=57</td>
<td>G n=59</td>
<td></td>
</tr>
<tr>
<td>Nutritional Terms</td>
<td>63%</td>
<td>63%</td>
<td>46%</td>
<td>41%</td>
<td>67%</td>
</tr>
<tr>
<td>Good Stuff</td>
<td>23%</td>
<td>20%</td>
<td>37%</td>
<td>42%</td>
<td>13%</td>
</tr>
<tr>
<td>Low in something bad</td>
<td>11%</td>
<td>12%</td>
<td>17%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Health benefits</td>
<td>2%</td>
<td>4%</td>
<td>0</td>
<td>10%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Table 3.16 shows that a higher percentage of the mothers in this study use nutritional terms such as vitamins, carbohydrates, minerals to describe why foods are healthy except in terms of fruit and vegetables where the percentages were identical. The grandmothers use more terms such as wholesome, nutritious, good for you (good stuff) more frequently than mothers in the study and also several more grandmothers highlighted the health benefits of foods, particularly in respect of starchy foods, meat and fish and milk and dairy foods.
Foods that you consider to be unhealthy and why

The next open question appeared in the following format:

"In the boxes below, please name three or more foods that you occasionally eat and that you consider to be unhealthy and why:

It would not have been appropriate to code these results in the same way as the healthy foods ie in the five food groups of the balance of good health. This is because the foods specified were largely from the Fatty and Sugary groups of food in the Balance of Good Health. It was therefore felt to be more helpful to subdivide the fatty and sugary foods into the following categories, (a full breakdown of which foods feature in which category is provided as Appendix 6):

- Chocolate;
- Snacks – crisps, sweets;
- Fried foods – including chips.
- Processed foods – bacon, sausage, pizza;
- Outside the home – takeaways, fast food;
- Cakes, biscuits, desserts;
- Dairy foods – butter, cream, cheese;
- Meat – not including processed foods;
- Fizzy drinks;
- Pastry
- Miscellaneous – including curry, bread, pasta, sauces.
<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
</tr>
<tr>
<td>Chocolate</td>
<td>21%</td>
</tr>
<tr>
<td>Snacks</td>
<td>17%</td>
</tr>
<tr>
<td>Fried food</td>
<td>13%</td>
</tr>
<tr>
<td>Processed</td>
<td>10%</td>
</tr>
<tr>
<td>Outside the home</td>
<td>8%</td>
</tr>
<tr>
<td>Cakes, biscuits</td>
<td>13%</td>
</tr>
<tr>
<td>Dairy foods</td>
<td>8%</td>
</tr>
<tr>
<td>Meat</td>
<td>2%</td>
</tr>
<tr>
<td>Fizzy drinks</td>
<td>2%</td>
</tr>
<tr>
<td>Pastry</td>
<td>0%</td>
</tr>
<tr>
<td>Misc</td>
<td>5%</td>
</tr>
<tr>
<td>No answer</td>
<td>0%</td>
</tr>
</tbody>
</table>

The points of interest in the above table are that a higher percentage of mothers specified chocolate and snacks such as crisps as foods they perceive as unhealthy while a higher percentage of grandmothers specified cakes and biscuits. Also that more mothers mentioned food eaten or purchased outside the home (such as takeaways) than did the grandmothers. A small percentage of both groups perceived dairy foods such as full cream milk, cream or cheese as unhealthy.
Why are these foods unhealthy?

The second part of the statement asked participants to indicate why they consider these foods to be unhealthy. It became clear from analysis of responses that the reasons specified for why these foods were perceived as unhealthy could be divided into the following categories (again a full breakdown of the constituents of each group is given as Appendix 7):

- High in something bad
- Health detriments
- No nutritional value
- “fattening”

Table 3.18, below, gives a breakdown of the frequency with which the different terms were used by the two groups of women.

**Table 3.18 – Terms used to describe why foods are unhealthy**

<table>
<thead>
<tr>
<th></th>
<th>Mothers</th>
<th>Grandmothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>High in something bad</td>
<td>89%</td>
<td>75%</td>
</tr>
<tr>
<td>Health detriments</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>No nutritional value</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>“fattening”</td>
<td>3%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Table 3.18 above shows that a majority of both groups described foods as unhealthy because they contained an ingredient such as fat, salt, sugar, calories or saturated fat. This was undoubtedly the most important reason for perceiving a food as unhealthy by both groups. However, an interesting finding is the use of the term
“fattening”. It was a term used by both groups, but grandmothers used the term much more frequently than the mothers.

**Words or phrases that sum up healthy eating to you**

The last of the open questions asked participants to:

“Please write down 3 words or phrases that sum up healthy eating to you”.

As in the previous sections, there were a number of different terms used and again these were divided into themes using a similar format to previous questions as far as possible. The full details of what is included under each theme is provided as Appendix 8. The seven categories are as follows:

- 5 a day/Balance – balanced diet, 5 fruit and vegetables daily;
- Specific Foods eg. fruit and vegetables, meat, fish;
- Good Stuff – fresh, organic, tasty;
- Low in something bad – low fat, low sugar, low salt;
- Nutritional terms – vitamins, minerals, carbohydrates, protein;
- Regular meals – three meals a day, breakfast, lunch, dinner;
- Health Benefits – good for you, long life, good for heart.
Table 3.19: Terms used to describe what healthy eating means

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>G</td>
<td></td>
</tr>
<tr>
<td>5 a day balance</td>
<td>26%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Specific Foods</td>
<td>27%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Good Stuff</td>
<td>17%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Low in something bad</td>
<td>18%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Nutritional terms</td>
<td>3%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Regular Meals</td>
<td>2%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Health benefits</td>
<td>6%</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.19 shows that both groups used similar terms to describe what healthy eating means to them, but more mothers specified terms like “five a day” and “balanced diet” while more grandmothers referred to specific foods such as fruits, vegetables, fish or cereals.

Discussion

The results from the questionnaire as detailed above have given a comprehensive overview of some of the differences in attitude, perception and language that exist among two groups of women in different familial roles. What follows is a brief discussion of some of the points that have been raised in this phase of the study which will also serve as an introduction to the final phase of the project detailed in the next chapter. For ease of reference, the same headings that were used for the questionnaire have been used for the discussion.
Health Awareness

These statements were designed to measure the extent to which participants were aware of healthy eating guidelines and how this would link in to the dietary choices they make on a daily basis. Within this section, eight out of the nine statements were exploring participants' perceptions of their enjoyment of specific types of foods, and the choices they made. For both low sugar and low fat foods there was a significant difference between the two groups in that grandmothers were more inclined to say that they “always” enjoy low sugar and low fat foods, than the mothers. Reasons behind this could be that the widespread availability and accessibility of high sugar foods at least is fairly recent, and certainly processed foods which are often responsible for providing a large proportion of the fat and sugar in people's diets are also a recent phenomenon. Few families today do not rely on some processed foods in their weekly diet, be it a pizza, pie or jar of pasta sauce. The availability of processed foods has grown substantially in recent years and consumers today are choosing more processed foods than ever before (Olsen et al 2012).

For low salt foods, there was no significant difference between mothers and grandmothers in terms of their enjoyment of this group of foods. Evidence has reported links between salt intake and high blood pressure or hypertension, yet Hooper et al (2002) in their systematic review of the long term effects of reducing dietary salt intake found the evidence to be inconclusive. Among their reviews, a study also showed that 69% of individuals on a low sodium diet found it was difficult to adhere to in certain situations, specifically eating out. Many also found that stopping adding salt to foods at the table was not difficult, but that cutting down salt in cooking proved difficult. This would tie in with the current findings that both groups did not always enjoy low salt foods.
Interestingly, significant differences exist in that grandmothers’ responses indicated that they were more health aware than mothers. The ageing process inevitably impacts on many areas of health, and as people age they become more susceptible to specific problems linked with the cardiovascular, endocrine, gastrointestinal, musculoskeletal, nervous, renal and respiratory systems. However, evidence shows that with a healthy diet and lifestyle these problems can be minimised (de Morais et al, 2010). It could be, then, that among this group of participants, the grandmothers are more aware of the impact on their health of an appropriate diet and are therefore more motivated to make healthy choices, while mothers are lessadamant in their assertions. With the exception of the statement “I check the nutritional information on foods”, each other statement was agreed with less frequently by mothers than by grandmothers.

The responses to the question on food labeling were similar across the groups, with both stating that they sometimes or rarely check food labels when making dietary choices. However, nutritional labelling has been a matter of numerous consultations and government initiatives in recent years and food producers and health lobbyists have been working on an effective solution, most recently delivering a “traffic light system” on UK processed foods (NHS Choices, 2012). Although much research and development has gone into this system, there is no compulsion on food producers to comply with the recommendations and indeed some food producers have adopted a different approach, leading to further consumer confusion (British Heart Foundation, 2011). Cowburn and Stockley (2004) conducted a systematic review of consumer understanding and use of nutrition labelling and found that although many consumers report that they look at nutrition information, they do not process the information further. Also, they reported that “the label reading habits of older people is unclear”. The current study supports these findings, in that the mean response to this question was 2, with option 2 being “Sometimes check the nutritional information on foods” and option 3 being “Rarely check the nutritional information on foods”. The women in this study from both groups, therefore, reported that they did not routinely check nutritional labelling. This is important for health professionals and food
producers who could promote educational initiatives on nutritional labelling to improve the labelling literacy of their patients and consumers.

**Barriers to healthy eating**

This section of questions was looking at barriers to healthy eating, and what factors may prevent individuals from selecting healthy choices within their diet. Interestingly mothers indicated that they do not perceive healthy eating advice to be confusing. Yet, the British Dietetic Association (2009) state that there are "diet books............ with authors ranging from celebrities on a mission to help you to emulate them, to self-proclaimed 'experts' giving the low-down on their naïve narratives based on carefully-selected pseudo-scientific studies to banish all ills" and that "there are many sources offering advice about diet and health, sometimes leading to dangerous effects.................". Yet among this sample there is widespread disagreement about the perceived confusion that exists around healthy eating, particularly among mothers.

The statement "healthy food costs too much", was approaching a significant difference between the two groups responses in that grandmothers were more likely to disagree than the mothers. However, as detailed earlier, many more of the grandmothers lived in affluent postcodes which may indicate, therefore, that more of the grandmothers in this study do not perceive that they have budgetary constraints.
Food and Feelings

Three statements were provided which linked to perceptions of “emotional eating”, or the tendency to eat inappropriate foods during periods of negative emotion. Mothers were more likely to agree with the following statements than grandmothers:

- When I am depressed I eat more unhealthy foods;
- When I am stressed/anxious I tend to eat more unhealthy food;
- When I am angry I tend to eat more unhealthy food.

Thus suggesting that grandmothers are less inclined to eat inappropriately in response to stress than the mothers. This may be because grandmothers may be subject to less stress in their lives as they do not have children to care for full time or employment, both of which can exert conflicting demands which can be a source of stress. However, it could simply be that these women rely on food less in terms of emotional support,. Macht et al (2006) examined emotions among women after eating chocolate or fruit as a snack. They found that those who consumed chocolate experienced feelings of pleasure and even joy, likely due to sensory properties, while those who ate the fruit snack relieved their pangs of hunger as successfully as those who ate chocolate but did not experience the mood elevation of those who consumed chocolate. Macht et al (2006) provide no mechanism for this effect but do state that these positive emotional changes are almost cancelled out by the guilt experienced after the initial euphoria has subsided. They also state that anticipation and memory factors were not explored and would have been useful. Their study, then, suggests that there is a tangible benefit to women to indulge in foods such as chocolate to address an emotional or even physical need. However, why the mothers in the present study are more susceptible to this influence on their food choice than the grandmothers in this study is a matter for further research.
Dietary influences

Influences on dietary choice are diverse, and the participants in this study show that there are differences in influence between the women, depending on the familial role in which they find themselves. In terms of statistical significance mothers were significantly more influenced by media such as the internet, television and magazines. Media influence is undoubtedly important for many, but Cooper et al. (2011) in their study of the quality of dietary advice in UK national newspapers found widespread misreporting of dietary guidelines. This source of dietary influence is therefore unlikely to actively promote appropriate eating habits in the face of inconsistencies and misrepresentations. Further, mothers in this study reported an influence on eating habits of celebrity chefs. Again, television or media chefs rarely focus on the healthy eating aspects of the recipes they promote, which could contribute to the mixed messages that fail to support individuals in the pursuit of a healthy diet.

Family likes and dislikes were important influences to a majority of mothers and to some grandmothers. The choice of meals to be prepared for children can often be dominated by children’s tastes, rather than being determined by a mother’s desire to provide a healthy meal. Yet there is evidence to suggest that regular exposure to new foods can encourage consumption (Houston-Price et al 2009) – mothers might be inclined to introduce new foods if this phenomenon was incorporated more widely into health promotion activities. Family likes and dislikes also include those of husbands, and Murcott (1995) describes how what people say they eat is not necessarily what they would like to eat. She states that a woman’s dietary preferences are sometimes superceded by that of her husband and that a woman may be inclined to adjust to the preferences of others in order to fulfil her role as homemaker and to avoid arguments. So that children and partners can present a powerful barrier to healthy eating within families.
Beliefs and Behaviour relating to healthy foods

The final group of closed questions related to the perceived importance of specific foods and styles of eating in a participant’s view and also on the frequency with which the same food was included in their own diet. It revealed some interesting findings which will be discussed below.

Many terms were reported to be more important for a healthy diet by mothers than grandmothers, for example:

- 3 meals a day;
- Apples;
- Cooked dinner;
- Pasta;
- Eggs;
- Bottled water;
- Red meat;
- Roast meat.

This is likely due to the family cooking practices undertaken by the mothers which may be less common among grandmothers. Foods such as red meat, the cooked dinner, 3 meals a day are often promoted as important for family food provisioning and to provide the structure and nutrients that young children require. On the other hand, ready meals were reportedly more useful to grandmothers than mothers – these are most appropriate for individuals living and cooking alone, and also useful for those with limitations on their cooking ability or indeed on their physical capabilities to cook, as they age. The findings here, then, would seem to largely reflect the lifestyles and familial roles of the women in the study.
For salmon, there was no significant difference between the perception of its health value, yet grandmothers reported eating it more frequently than mothers. Cooked breakfasts on the other hand were more likely to be consumed by mothers – again likely due to cooking for a family – grandparents without children living at home are perhaps less likely to engage in the preparation of a cooked breakfast whereas those feeding a family may be more likely to do so.

Liver and Porridge were both consumed more frequently by grandmothers. This is as might be expected. Liver was once promoted as a nutritious food during pregnancy as a good source of iron and B vitamins. However, changes in farming methods have meant that liver now contains excessive levels of Vitamin A so that it is no longer appropriate for pregnant women – excess vitamin A can cause birth defects (BDA, 2011). These government recommendations have undoubtedly influenced liver consumption among the wider community. Liver comes from a group of organ meats and entrails termed “offal” and its popularity has waned in recent years partly due to concerns around BSE and foot and mouth disease outbreaks. It therefore might be expected that older women would be more inclined to consume these foods that they may have eaten previously, prior to concerns about their safety.

Porridge, too, might be expected to be more popular among older women. Again, porridge was a traditional breakfast food before the advent of mass produced breakfast cereals which only really started to take hold during the 1950s in the UK (BDA, 2011). Therefore many of the grandmothers in this study would have grown up with porridge or traditional breakfast foods rather than the new processed cereals. It is therefore to be expected that grandmothers might rely more on traditional breakfast foods than their daughters. The National Food Survey of 2009 (DEFRA, 2009) reflects these trends by reporting that between 2006 and 2009, the consumption of “sweetened breakfast cereals” increased by 19.3% so that it could be argued that it is the younger generation that is driving these consumption patterns.
Full cream milk was perceived as important and consumed more frequently by mothers. Following the same explanation as for porridge and liver, it might be expected that full cream milk would be consumed by more grandmothers than mothers owing to the relatively recent increase in availability and consumption of lower fat milks. However the opposite is true with more mothers perceiving full cream milk to be beneficial to health and more mothers including full cream milk in their diets. An explanation for this could lie in their status as mothers of young children. The Food Standards Agency recommend that children under the age of 2 should be given full cream milk, while children between 2 and 5 can be given semi-skimmed milk if they are eating well and growing normally. Skimmed milk is not recommended for children under the age of 5. Therefore, families may be inclined to rely on full cream milk for the whole family, regardless of age, to save the inconvenience of having different types of milk for different members of the family.

Snacks, pasta, eating between meals and bottled water were all perceived as more important for a healthy diet among mothers. Again, changes in consumption patterns as well as differences in family composition are likely to account for these differences. Snacks, for example, are often cited as useful for children as they have high energy needs but relatively small appetites at mealtimes so that to receive adequate nutrition, healthy nutritious snacks are encouraged by health professionals and schools (BDA, 2007). Yet, this is a relatively new development which has gone in tandem with a huge increase in the range and type of snack foods available which has also been a likely influence on their increased importance. Grandmothers will have grown up in very different times when snack foods, and opportunities, were limited. Also, pasta has not always been a feature of a traditional British diet and was not specified in the Family Food Survey until 2001. In the 2009 Survey, consumption had increased by 5% since 2006 and it is likely that the consumption increased dramatically in the previous 10 years. Therefore, it might be expected that grandmothers would rely less on pasta in their diets as it is only in recent years that it has become an important feature of British diets where it could almost be considered a staple food.
Bottled water was felt to be more important by mothers and it is they who reported consuming more of it. Again, bottled water is a relatively new innovation with the promotion of healthy eating and “detox diets” drinking water has become an important aspect of many people’s lives. The convenience and benefits of a portable plastic drinks container are more likely to be appreciated by a busy mother with young children, perhaps, rather than a grandmother who may spend more time at home or may be more inclined to consume drinks other than bottled water.

There were differences between the two groups of women in terms of types of foods consumed and beliefs about their healthfulness. Many of these differences are likely to be due to different lifestyles among the women in the familial role of mother or grandmother. For example, many more mothers stated that they consumed snacks than grandmothers. Women with young children are often advised by health professionals to ensure their children have regular snacks. This is because young children are usually unable to consume large meals and are often quite “fussy” in their food preferences, therefore nutritious snacks in between meals can be a useful tool in ensuring a satisfactory nutritional intake. A mother’s own dietary routines may follow that of their children, by including snacks in between meals. Similarly, mothers felt that red meat was more important to a healthy diet than grandmothers, likely due to awareness of the importance of red meat in the diets of children, and again their own diets following the patterns of their children’s diets.
Open Questions

The findings from the qualitative data presented above are discussed below. The discussion focuses on the commonalities and differences between the women who are mothers and the women who are grandmothers. To recap, the qualitative questions focused on three main areas – “three or more foods you consider to be healthy and why”, “three or more foods that you sometimes eat and that you consider to be unhealthy, and why” and “3 words that sum up healthy eating to you”.

Foods considered to be healthy and why

In terms of foods that are perceived as healthy and why, these were divided into the five main food groups as they appear in the balance of good health model. Fruit and vegetables was the first category and in this section, mentioned by both groups of women. This awareness could be explained by recent public health campaigns such as the “five a day” initiative which was launched in the UK in 2003 (Capacci et al 2010). Since the women in this study are parents or grandparents of school aged children, and because public health initiatives tend to focus on schools and on children, it could be that this is a reason for the awareness of fruit and vegetable among both groups.

However, awareness of guidelines alone is an ineffective indicator of consumption of appropriate foods. Wood et al (2010) found, in their study of low socioeconomic status mothers in Cardiff that familiarity with guidelines is widespread on a superficial level but without the confidence in their ability to provide a healthy diet. The authors state, therefore, that health behaviour change is unlikely in these circumstances. Yet, in making comparisons with a previous study from the 1980s they did find
improvements in attitudes towards healthy eating whereas in the earlier study, also in Cardiff, few women prioritised healthy eating. Their findings, therefore, are not dissimilar to those in this study – in that there is a wide acceptance and familiarity with publicised health promotion initiatives such as the “five a day” campaign and the importance of a balanced diet.

More grandmothers than mothers, however, stated that foods in the bread, cereals and potatoes group were important for a healthy diet (first response). Again, an interesting insight into how lifestyles may have changed in that starchy foods are not felt to be as important as they once were. Although the five a day message is well versed among the study population, it seems that other aspects of healthy eating like the second largest proportion of the diet coming from starchy foods, is not perhaps as familiar or acceptable to younger people.

In response to the question about why these foods are healthy, most participants quoted nutritional terms such as “vitamins” and “minerals” (nutrient terms) or other terms such as “healthy”, “wholesome” (“good stuff”) to describe why they perceive these foods to be healthy. These categories were used by a majority of women in both groups but mothers used these terms more frequently when referring to fruit and vegetables. “Low in something bad” such as fat, sugar or salt was the third most common terminology used to describe why foods are perceived as healthy. Again, health messages seem to be part of everyday conversation and something that most participants were acutely aware of.

However, differences did exist between the groups. For example more mothers used nutritional terms to describe why dairy products and meat, fish and alternatives were healthy foods, while more grandmothers used “good stuff” to describe why dairy products were perceived as healthy. More mothers used “low in something bad” to describe why bread is perceived as healthy, while more grandmothers used
“low in something bad” to describe meat. More grandmothers than mothers used terms describing the health benefits of milk, bread and meat.

These results are from qualitative data and conclusions cannot be drawn from them, however it is interesting to see that there are differences in the classifications and perceptions of foods by two groups of women in different familial roles. The mothers seemed more willing to use nutritional terms such as “protein, carbohydrate, iron, vitamins, minerals” to describe why they perceive foods in a certain way, while more grandmothers referred to the health benefits of foods. This might be expected because more of the mothers were educated to a higher level and would therefore be more informed about the nutritional terms used. While grandmothers, most being in an older age group, may be more concerned about their own health and therefore of the potential of food to promote positive health outcomes.

**Foods considered as unhealthy and why**

In this section of questions the foods most often cited as being unhealthy were foods perceived to contain fat and sugar. The food cited by the most mothers, by far, was chocolate, with nearly three times as many mothers mentioning this in the first instance than grandmothers, more mothers also mentioned snacks, while more grandmothers mentioned cakes and biscuits. This is likely due to changing eating patterns with the availability of chocolate being a relatively recent phenomenon while cakes and biscuits have been a component of the British diet for many years.

Foods such as eggs, meat, cheese and even milk were also perceived as unhealthy foods by these groups of participants. Also foods such as crisps, pizzas, pastry products, biscuits and anything fried were specified as food that they considered as unhealthy. Yet these foods are frequently consumed by much of the population. As an example, the National Diet and Nutrition Survey (2002) reported that biscuits are
consumed by 68% of women, with buns, cakes and pastries consumed by 62% of women. Indeed, the quantitative results of the present study also showed that many of the foods perceived to be unhealthy, are the very ones that are consumed frequently.

However, it is interesting to note that even foods such as eggs and cheese are perceived as unhealthy as well as meat products such as pies and pasties and seemingly any food is believed to be unhealthy if the method of preparation involves frying. Yet most foods containing fat do also convey some nutritional benefit in terms of additional macro and micronutrients that they may contain. It is more likely to be the frequency of consumption of these foods that deems them to be unhealthy rather than the foods themselves. Oakes (2004), in his study of undergraduate students’ perceptions of food, found that some of the participants held the belief that the presence of fat, sugar or salt actually lowered the vitamin and mineral content of the food concerned. He found that it was almost as if what he termed “reputable” and “disreputable” ingredients could not co-exist in the same food without destroying any benefits that the food may contain. Similarly in the current study sausages, pies, pasties and pizzas were all highlighted as unhealthy foods yet they all contain some nutritionally beneficial components and as part of a balanced diet they can certainly have a place. The difficulty arises when these foods become the biggest part of a diet or when they displace other foods that should ideally comprise bigger proportions of a balanced diet such as fruits and vegetables. But to demonize any foods is a mistake, and one of the limitations of the current study is that participants were asked to do just that by categorising foods in terms of perceptions of health benefits or detriments (healthy or unhealthy).

The challenge, then, is for manufacturers and health professionals to change the focus of their healthy eating communications. For a family to avoid foods such as pies because of the pastry, or a fried egg because it is fried, could deny the family a nutritious, cheap eating opportunity. Yet to eat cheap pies and deep fried foods daily is not recommended for health reasons, but a good quality, or home made meat pie
can offer nutritional benefits and useful calories if consumed as part of a balanced meal and diet that includes plenty of fresh fruit and vegetables. Equally, if a fried egg is cooked in spray oil or a tiny amount of polyunsaturated fat, then again it can be a useful addition to a family’s diet. However, this is a complicated message to convey but one that could also be overcome in some way by interventions to encourage cooking skills and making meals “from scratch”.

Oakes (2004), again, makes a seemingly outrageous claim that malnutrition may result when individuals choose foods based on their “reputations for healthfulness”. This may be an extreme observation, yet certainly the categorisation of foods as “good” or “bad” is not entirely helpful, when all foods convey some nutritional benefit and it could be argued that all foods have a place in a balanced diet, regardless of their perceived healthfulness or otherwise. This may well be a matter of consideration for health promoters to inform consumers of the health benefits of all foods, and to stress the importance of balance rather than focussing on types of food to avoid or encourage.

**Words or phrases that sum up healthy eating**

Many of the terms and words used to describe what healthy eating meant to the participants in the current study are terms which are likely to have come from health promotional messages; terms such as “balanced diet” or “5 a day” are relatively recent terms, well publicised in health promotion and in the population as a whole. Participants in the current study also mentioned specific foods, again using well publicised nutrition messages like “fruit and vegetables “, “skimmed milk” or “oily fish”. Others mentioned the regularity of meals and structure as being important.

In response to this statement, the percentages of each group using specific terms were comparable, with minimal differences between them. The only slight difference
was that a higher percentage of mothers mentioned “5 a day” or “balanced diet” while a high percentage of grandmothers mentioned specific foods in response to this statement. Overall, it appears, that health promotion terminology is familiar and well used within the study sample.

Further, Lake et al (2007) in their study of Healthy Eating: Perceptions and Practice found their participants to operate their own form of food classification based on cultural and social norms and on their personal understanding and values. Many of their results reflect those of the current study, although they were measuring awareness of healthy eating messages against BMI and socio-economic status. However, they found, as was found in the present study, that respondents’ perceptions and attitudes towards healthy eating largely echo and reflect current health promotion initiatives – a reassuring outcome perhaps, but as Lake states, this only indicates the continuous and increasing public interest in nutrition and diet which means that health promoters and professionals must be proactive in clarifying and reinforcing evidence based nutritional messages.

**Conclusion**

The findings from this part of the study, then, give a broad overview of some of the differences that exist between two groups of women at different stages of familial life. It reveals some interesting perceptions and attitudes which differ between the two groups, but more importantly, it shows the degree of commonality that exists between women as mothers and grandmothers. Although the language may be different, some of the terms used may be different and some of the foods consumed may be different the overriding finding of this part of the study is that everyone is familiar with health promotion terms and language, but that some of these key messages are becoming lost within the categorisation of “good” and “bad” foods. To categorise foods in this way may be useful to the well informed and educated
consumer, but can simply add to confusion and misunderstanding among those with less access to resources. Health promoters and educators need to be aware of this when embarking on nutrition education programmes.

Both mothers and grandmothers have an important role in developing the eating habits of the younger generation and opportunities to work together and share understanding could have a powerful influence on future eating habits. With new government policies aimed at encouraging mothers back into the workplace, and many grandparents involved in informal childcare, evidence is already available as to the potential of grandparents to influence children’s dietary outcomes. For example, Pearce et al (2010) in their analysis of the results of the UK Millenium Cohort study found that children in informal childcare (of which 75% were grandparents) were more likely to be obese than those enrolled in formal childcare arrangements. This influence is clearly not one to be encouraged, but shows the power of grandparents’ role. With intergenerational support and initiatives, the negative impact on body weight among children cared for by grandma could evolve into a positive learning environment for all generations.

The aim of this part of the study was to explore if differences exist between two groups of women in different familial roles in terms of their perceptions, attitudes and understanding of healthy eating. The differences, and commonalities, will be used to develop the focus group phase of the study, by using the questionnaire findings as a starting point to explore more around the explanations for the presence of commonalities or difference with a view to understanding the potential influence of familial role on food choice.
Summary

- The study used a sample of women from a diverse range of socio-economic and educational backgrounds;

- Grandmothers’ results suggested that they chose healthier foods more frequently than mothers;

- Neither group routinely check the nutritional information used to label food products;

- Grandmothers’ results suggested that they “enjoy” low sugar and low salt foods more frequently than mothers;

- Mothers’ results suggested that they were more inclined than grandmothers to eat certain foods in response to emotional or stressful cues, with reference to literature which found a tangible benefit to women who do so;

- The external influences on food choice vary widely between the two groups of women with mothers more receptive to these influences than grandmothers;

- Different types of food were reported to be consumed by the different groups of women eg. Porridge consumed by more grandmothers, pasta by more mothers;

- Both groups of women are familiar with health promotion recommendations for healthy eating with relevant terminology well used, although literature calls for a more proactive approach to health promotion;
Foods containing a nutrient perceived as “disreputable” such as fat or sugar were universally perceived in a negative light, which supports the literature that found that the consumers assume that the nutrient value of foods is assumed to be depleted in the presence of fat or sugar during processing or cooking.
Chapter 4

Focus Groups

Introduction

The previous chapters have described the findings from the first two phases of the current study. The first phase provided an insight into the issues of concern used around food by two groups of women in different familial roles, while the second phase highlighted some of the differences and commonalities that exist within these two groups. However, the final phase aimed to explore the differences and commonalities in order to uncover some of the reasons behind differences in perceptions between the two groups of women. In this way, a comprehensive picture can begin to emerge about the impact of familial role on food choice.

The previous phase, the questionnaire highlighted some specific areas of interest in the focus group as detailed below:

- What do they understand by the term healthy eating;
- Why is food used as an emotional support;
- What barriers do they perceive in preventing them from eating healthily;
- What external influences promote or deter healthy eating.

The final stage of the project involved running focus groups in order to explore the findings from the questionnaire to gain further insight into the issues stated above. Focus groups were used as a useful way to “explore questions that cannot be answered using quantitative research methods” (Borra et al 2000). The benefit of focus groups is that the interaction between participants is almost more important
than that of the researcher and participants, the researcher's role being one of facilitation rather than interviewing. This interaction, with participants asking questions and commenting on each other's experiences is particularly relevant to explore knowledge and experiences as well as how and why participants think in a particular way (Kitzinger 1995).

Focus groups were used as it was felt that the participants should take the lead in the discussion and for them to comment on aspects around healthy eating that they deemed to be important rather than being overly guided by the researcher (Krueger 1994). Powell et al (1996)(cited by Gibbs 1997) defined focus groups as “a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research”. Focus groups were also a useful way of incorporating triangulation into the study. In this project three research methods were used i.e. Interviews, questionnaires and focus groups to essentially explore the same aspects of familial role difference in healthy eating. By approaching the subject from different procedural directions, it allows a broader depth and breadth of information to be gathered.

Focus groups as an approach are valuable in eliciting responses and information from individuals in a group setting which allows attitudes, perceptions and experiences to be revealed in a way that would be too time consuming and cost prohibitive in an observational study and too interviewer led in an interview. They are not, of course, without disadvantages and being participant led it can be difficult to keep the group on track. They also take place in an environment that some individuals may find inappropriate – they may not wish to discuss personal matters with a group of colleagues, peers or indeed strangers. However, they do provide a forum for participant led interaction, and the researcher’s role as facilitator is key.

Focus groups are appropriate for conversations around dietary perceptions and attitudes whereas they may be less useful in more emotive subjects where participants may feel inhibited in a group situation. Although it could be argued that to some people diet is also an emotive subject, this discussion was not around
weight loss or obesity or specific issues around individual difficulties with food, it was more a general discussion around food in the wider context. So for the purposes of this investigation into some of the determinants of food choice among two groups of women, focus groups were the most appropriate method for the reasons stated above, and of course because it allowed the researcher to access the views of many more participants than could have been achieved by one to one interviews.

**Methods**

A number of different organisations were contacted, specifically those who had supported the project previously with the completion of questionnaires. The supermarkets were contacted via their human resources departments, the school via the headteacher and the Vale Older People’s forum via their co-ordinator. The Flying Start participants were contacted via the scheme’s manager. Five focus groups were run in the following locations:

1. Supermarket – grandmothers
2. Supermarket – mothers
3. Primary School – mothers
4. Older People’s Forum – grandmothers
5. Flying Start Mother and Toddler Group – mothers.

Contact was made by telephone and the human resources department of the supermarket identified five members of staff that would be willing to take part, during their working hours in a private meeting room within the office area of the supermarket. The headteacher of the school also identified mothers who would be available for the session and approached them on the researcher’s behalf. The co-ordinator of the Vale Older People’s Forum also identified participants as did the manager of the Flying Start Project. Each focus group eventually comprised four participants – five had been invited to attend but on each occasion only four arrived.
on the day. No specific instructions were given to the individual selecting the participants – it was a convenience sample of individuals who were felt to be reliable and most likely to attend the session. Participants were advised that the facilitator was a research student from the University of Wales Institute, Cardiff and were not informed of her status as a registered dietitian. This was felt to be important as knowledge of the facilitator’s background may have influenced the responses that were volunteered by the participants.

Each focus group took part in a private room away from the noise and disruption of the supermarket or school. The Vale Older People’s Forum focus group was run within a meeting room at the local council offices which was arranged by the co-ordinator. The Flying Start focus group was arranged to take place in a private room away from the mother and toddler group, but when the researcher arrived she was told that no room was available and that it would have to be carried out in a “quiet corner” of the main hall in which the mother and toddler group was being held. Unfortunately, the noise level was excessive and it meant that the recording was unintelligible on the digital recorder so that this focus group data could not be used.

On arrival at each venue, the project was explained to the participants and they were asked to read the participant information sheet and to sign a consent form. They were assured that if they did not wish to participate at any time then they were entitled to leave the focus group at any time, by simply indicating their wishes to the researcher. The recording machine was then switched on and the focus group commenced with the researcher saying “if I say the words healthy eating to you, what comes to mind”. The initial comment stimulated discussion and the role of the researcher was then to simply oversee the conversations that evolved, to keep time and to bring the group back on track if they seemed to be discussing areas that were not entirely relevant to this project.
The initial question was usually enough to stimulate a lively discussion within the focus groups. However, the researcher’s role as facilitator was important as the focus group would often begin discussing areas that were not relevant to this project – for example, one focus group began discussing exercise in relation to children and health. Although an interesting debate ensued, it was not entirely relevant to the attitudes towards healthy eating of mothers and grandmothers. Therefore the researcher brought them back to the topic under discussion with the use of probes and questions, linked to the key points outlined above. A focus group interview schedule is attached as Appendix 9. Not all questions were asked of each focus group, however, they were used only as necessary to keep the group on topic or to encourage discussion.

The time taken on each focus group varied from between 35 minutes and 90 minutes – although there was no time limit set, as the supermarket staff were being interviewed during their work time, their supervisor was keen that it should take little more than half an hour and indicated her desire for the focus group to finish at a specified time.

When discussions were becoming less relevant to the project the researcher interjected by summing up what had been discussed and asking for any final points to be mentioned before the transcribing machine was turned off. They were all thanked for their time, and the Older People’s Network asked that they be informed of some of the results of the project and the researcher has since produced two articles in this respect for their last two newsletters.

The audio files were then transcribed by the researcher to give a written record and these were analysed using thematic analysis.
Results

The findings from the focus groups are reported in this chapter, divided into two sections – common perceptions and familial role differences. The first part of the chapter guides us through the focus group themes that highlighted a number of shared perceptions, attitudes and ideas around food and eating behaviours among women in their role as mother or grandmother. The second part looks at the areas in which there were differences in perception or understanding of the issues among the two groups of women. They may have been discussing the same subject, but in quite different ways.

Focus Groups – Common Perceptions

Healthy Eating – Mothers and Grandmothers

In the thematic analysis of the transcripts, the conversations around terms associated with healthy eating such as balanced diet, fruits and vegetables, five a day and regular meals were identified as belonging to one theme entitled "healthy eating messages". These are widely publicised as important aspects of a healthy diet for all groups of the population and it was interesting to see that such terms were commonly used by both groups of women. In this study, both grandmothers and mothers expressed similar terms and there was a general consensus between them about their perceptions of healthy eating.
More specifically, both groups spoke about fruit and vegetables being important as well as foods like lean meat and fish. They spoke of the need for “balance” and “moderation” and “regular meals” or “three meals a day”, for example:

“A balanced diet, a bit of everything in moderation....a mixture of everything and chocolate every now and then as well” (M1)

“....a balanced diet, a bit of everything really and not overindulging in any of them” (G1)

“healthy eating........a little bit of everything, everything in moderation, not too much like just chocolate and crisps and no veg in your diet at all” (M4)

“......a first thing in the morning, a breakfast, .......like a light snack and then a meal in the evening.” (G5)

In summary, these quotations show that both groups of women are clearly aware of healthy eating guidance in terms of balance and moderation and some also talked about the importance of structure. The promotion of a balanced diet and healthy eating is seemingly within the public consciousness, at least among this group of women.

However, the definition of a balanced diet as described by the Eatwell Plate (FSA, 2011) may not be the concept that is being understood by the population at large. When the women are talking about “balance”, they seem to be discussing it in terms of the balance between all foods being equal ie. a “little bit of everything”, while the Eatwell plate is more complicated in that it recommends a diet with specific proportions of different food types, for example the proportions of fruit, vegetables and starchy foods are much greater than those of protein and dairy foods which in turn are much greater than the proportion of foods containing fat and foods containing sugar. So, although health professionals and promoters may feel confident that many people are aware of a “balanced diet” and therefore the message is getting through, the reality may be that an individual’s perception of balance is not the same as that of the health promoter. In the area of healthy eating,
then, the results of this study highlight the importance for clarification among the general public as to what a balanced diet actually means.

**Family Food Memories – mothers and grandmothers**

Changes in styles of eating were reflected through all the focus groups with both mothers and grandmothers. There was clear recognition that the style of parenting around food for children had changed dramatically in recent years. All groups talked in varying ways about how eating and feeding styles had changed since their childhood – including how they were encouraged to eat as a child, and also the types of foods that were included in their diets. These issues are key in understanding how early attitudes to food and eating behaviour may be shaped.

Several participants recalled how they were forced to eat specific foods as children:

“....I hate nuts, I hate raisins, I hate fruit and vegetables. I think it stems from being a child because like my generation you know you’re forced to eat your Brussels and your spinach and my nan would say to me right you can’t get up till you’ve eaten that...” (M2)

“and we were always told to eat it, it’s good for you, whether it was broccoli or cabbage, it was always “well you should eat it, it’s good for you.” (G6)

“I was one of four and there was always somebody there, the house was always full and we had to eat what was put in front of you or you went without because we never had the money or the storage, or like freezer facilities......my mum never cooked anything different and we all had to eat what my dad ate....(G6)

One mother described how her own eating habits as a child differed from those of her children:

“I would never come home from school and ask for a mars bar, it wouldn’t enter my head as you’d have to wait until your
dinner.......where now a kid will say I'll have an ice cream for dessert and then a couple of hours later can I have a bar of chocolate and a parent would say, well I would, yeah........but when I was younger I would never......."(M3)

The theme of changing eating and feeding styles was strong throughout the focus group interviews. There were many references to the different ways of cooking and eating across the generations with some interesting insights into how society has changed in terms of lifestyles and types of food available and consumed. Interestingly, both groups of women’s recollections and perceptions were very similar around the theme of family food memories. There is little doubt from the focus group data that mothers and grandmothers both had very similar eating experiences in different familial roles – the mothers as daughters and the grandmothers as mothers. There was a common perception that family food provisioning had changed since they were children and mothers, with ways of encouraging children to eat and ways of food preparation having changed dramatically.

**Family Meals – mothers and grandmothers**

Eating together was a theme that came up several times in the focus groups and refers to the aspirational ideal that many of the women, both mothers and grandmothers, expressed in terms of eating together as a family. It is an area of much research and the benefits to all participants of this form of family gathering in terms of communication, nutrition and behaviours generally are profound (Larson et al 2007). In the current study, both generations spoke about eating together and its importance, while others mourned their inability to do so regularly. One mother, supported by another mother, felt that this was because she was working, and that she never had time to think about what she eats, nor to eat as a family except at weekends:
“...when I’m not working and the children have got after school activities there’s always something going on, we don’t eat as a family you know sit down, we only manage to do that at weekends....”(M1)

“I’m like that, we never eat together........”(M2)

While a mother in a different group stated:

“.......I do try to make sure that everyone eats at least the same evening meal altogether....but most nights we can sit down and have a proper meal together which is always nice anyway......”(M2)

Grandmothers spoke of their own childhoods and how the day was organised around their father returning home from work for the family meal:

“my mum never cooked anything different and we all had to eat what my dad ate when he come home, ... (G2)

She continued:

“........when they come home from school they’re starving.......but don’t forget dad’ll be home at 7 o’clock and we’ll all be eating, ............”(G2)

While other grandmothers talked about the structured routine of their days as children, again which focussed around the return of the family from work or school:

“....teatime, I mean I cook teatime now but it was a different sort of way of doing things then because my father came home at dinner time there was set patterns for everything and my mother would be back in time to make the tea...........”(G5)

“it was like the pattern of the day, like you’d sit down in my house, I never had a school dinner because we all used to come home for dinner from work or college, wherever we were we always came home for dinner. So that was the way we were....”(G5)

Another grandmother stated that meal patterns are driven by the work patterns of family members who still live at home:
"well I've got just one boy that lives at home now, so if he's on an early shift and my husband gets home at 6, my son's home at half past five, so I will cook for all of us but if they're coming in in dribs and drabs ....." (G1)

While other grandmothers felt obliged to provide a meal for their families:

"well, it's like Sam, my daughter, she'll ring and say "aaaaaw I'll come down for tea mum" and then she'll say "can we have pudding though" or "can we have this for desert" and I think I'm not doing it but then because they're coming down I think I'd better do it......" (G3)

"If I'm in on a Sunday, they say "are you working Sunday mum?", "no" and all of a sudden it turns into this big three course meal....with everybody and their kids (laughter)" (G1)

One of the grandmothers summarised the feelings of the some of the group by saying:

"....but yeah I do like Sunday with the cooking and everything....but they don't know when to go home do they! (laughter)" (G3)

The grandmothers in this group then talked about lifestyles and the way that these have affected the way they eat:

"I do think it's a lot to do with the way we live, because you don't have the whole family sat down to dinner these days do you in the evening, not every night......" (G3)

While another grandmother, in the context of whether diets today are worse than when they were younger, talked about her own family situation with an adult child living in the family home:

"and we never sit at a table either. We can all be at the table but she has to be in her bedroom on her laptop eating her food or watching telly." (G2)
Family meals were universally perceived in a positive light, with both grandmothers and mothers reminiscing about circumstances when they were younger in which family meals were part of a family structure that is largely absent today. Both groups of women stressed the importance of family meal opportunities yet both groups also mourned the loss of these opportunities, with working lives presenting a seemingly insurmountable barrier. Again, much research has been conducted around family meals and the vital role they can play in family cohesion, childhood behaviour as well as nutritional benefits to all involved (Fruh et al 2011). However, without truly family friendly policies in the workplace and with more and more women being the major family earner, it is likely that family meal opportunities will become increasingly rare. Nutritional interventions need to address this area in order to take advantage of the real benefits of family meals.

*Family Shopping Memories – mothers and grandmothers*

Aspects of shopping were raised in every focus group and it is clear that the availability of food and accessibility to large supermarkets has had an influential effect on food provisioning behaviour. However, family food memories became important with references to the types of food and the ways of shopping when participants were younger.

One mother reminisced about when she was a child:

"well everything was fresh then wasn’t it, nothing was prepacked, going back to perhaps the wartime or later than that even, sixties and seventies more people were at home, more people could prepare....but everybody went out and bought fresh because we didn’t have prepacked meals." (M6)

Another mother recalled that shopping styles had changed since her childhood:

"when I was young my mum never shopped in a supermarket, it was always the market and the butchers, ....it was always on a Saturday"
morning we'd to go the market to get the meat from the butcher....and then it was the veggie shop and the fruit and I'd always get a big thing of grapes that would smell of perfume, I always remember that and I'd sit on the bus coming home eating all these grapes, but she never shopped at supermarkets.”(M3)

Grandmothers also spoke of supermarkets in the way that shopping habits have changed:

“going back to when I was younger I mean even then you had the corner shop and you only bought what you wanted on the day, there was nothing else in the house for you to eat. But now with the supermarkets you have to buy bulk because you have to take the car.”(G5)

While another grandmother agreed:

“and I think everybody was paid weekly and you'd have 10 bob on a Wednesday and that'd have to last you till Friday so you shopped according to your purse....but people get paid monthly and they buy in bulk for the month”(G6)

“....instead of walking to the shops and walking the kids to school like we used to when we were kids, people now they're picked up in the car, they come back home, the fridge is full of stuff from the supermarkets.........”(G5)

Family shopping memories were therefore described by the participants with some negativity expressed around the development of supermarkets and new ways of shopping which have become ingrained in current lifestyles – the working lives, the demands on time and the lack of structure – all contribute to the changes that have taken place in terms of shopping styles. Both groups described shopping memories in similar ways and it is interesting that they mourn the loss of the local shop and the demands that were required by buying foods fresh and of daily shopping. Yet, working lives and demanding lifestyles mean that supermarkets are responding to a need and that these new ways of living are unlikely to change. The challenge is to
ensure that new lifestyles and new ways of food provisioning are not detrimental to nutrition and to the social functions and benefits linked to food provision.

**Self Image – Mothers and Grandmothers**

Mothers and grandmothers highlighted the role of self image in determining food choice, especially among young people with celebrity culture felt to be to be blame for some of the negative self image issues that currently face young people:

"well they look at these supermodels and these celebrities and they look at magazines and they are meant to be looking gorgeous and thin and that’s what they think is lovely……."(M1)

A grandmother felt that body image concerns are not confined to the younger generation and that self image is more important than nutrition for some people:

"I mean your body image and everything else I mean people care more about youngsters, but it’s not just youngsters I mean just because you’re older it doesn’t mean you don’t care about your body image, you know they’re more worried about that than the actual nutrition bit." (G7)

One of the grandmothers felt that images of perfection transcend body image and are influential in all aspects of life, including diet:

"I think it’s all in society, I mean like people like Jordan are put on pedestals and young people look up to perfection....I think it covers everything in life" (G5)

While another grandmother felt that celebrities were to blame for some of the poor eating habits young people sometimes enjoy:

"I mean they see someone famous going out and getting bladdered, if you like, and they think oh well that’s all right, they can do it so can
I.......or if they’re eating a KFC, oh that’s alright then we can eat it.”  
(G6)

There was also concern that size issues have “gone over the top”, such as:

“what about people like Victoria Beckham and people like that, with not an ounce of fat on them, they think they’ve got to be like that don’t they.”  (G6)

“I mean healthy eating has got more to do with image and “I need to eat healthily because I’ll be a size 6”......that’s what the kids think, so I think the wrong messages are being sent out with....because did we have so much anorexia and that when we were young?......”(M2)

“healthy eating, people think you will lose weight and you’ll be a size 12 or whatever”  (M4)

Self image was raised in several of the focus groups as being a key determinant of food choice. There was a feeling among both grandmothers and mothers that people choose to eat what they perceive will improve their body shape in the hope of achieving an impossible ideal which has been promoted and perpetuated by the popular media. Again, the health professionals and promoters need to address this issue by educating and promoting the public about ideal body weights and what a healthy, nourished person actually looks like.

Certainly, the women in this project in the different familial roles both felt that the popular media and celebrities hold some responsibility for negative implications linked with self image, especially among younger people. However, this is not to say that mothers and grandmothers are immune to these influences and indeed one grandmother did state that it is not just a problem among the young. Everyone in society is subject to the same pressures and there needs to be a shift in focus from food choice being linked to superficial appearance and more focus on food choice for wellbeing and health promotion. Yet this is something that needs to permeate the media as well as the health professions, and it is massive shift in emphasis within society as a whole – something that may take generations to change.
Focus Groups – Familial Role Differences

This part of the chapter highlights the differences in perceptions and attitudes expressed by women in the different familial role of either mother or grandmother. Although the themes are broadly similar, it was found that the attitudes and perceptions differed between the two groups of women and that they differed in the way they described the specific themes.

Confusion – mothers

From the transcripts it became clear that misconceptions and misunderstandings had been expressed relating to food, nutrient quality or indeed information received from diverse sources including health professionals and the media. These issues were therefore collapsed into a single theme of confusion. This confusion permeated both groups of women, as detailed below.

Mothers talked about some foods not being healthy, even if they might be perceived as such:

"Even if it says it's healthy, it not always is, did you see that tv programme when people go for the salads and in fact the Macdonalds (burger) is healthier than a pasta salad....you think you're being healthy....you'd have been better off to grab the small burger from Macdonalds" (M3)

There was also the feeling that people do not understand what healthy eating is, that there is a lot of misunderstanding about types of fat, and about what foods are
“good” and which foods are “bad”. For example, one mother stated that she believed that eating fruit was better than eating sweets “because of the natural sugar” but in terms of fat she added:

“but then you get conflicts between good fats and bad fats” (M1).

Another mother perceived that edible fat was linked to body fat stores by stating:

“if you have no fat then you become ill if you have no reserves to........ you get these people who have got no reserves of fat and they fall ill” (M4).

The mothers in this study, then, did not explicitly state that they were confused about healthy eating guidelines, yet the statements they made and the assumptions they expressed, suggested that they were actually somewhat confused about some areas of healthy eating.

Confusion – Grandmothers

Grandmothers, on the other hand, spoke about confusion in different ways, as two of them felt that information could be misleading and confusing, for example:

“If they say something like if you eat too much red meat....” (G6)

“yeah, they change it every day....” (G5)

“or if you drink too much coffee....” (G6)

Neither of these women finished what they were saying but the sense of the conversation was in response to a discussion around healthy eating guidelines being confusing. They were referring to the amount of information that is circulated about specific foods and their influence on health. Overall, the feeling was that there is a
lot of information available but much of it changes frequently, with the common perception that 'experts keep changing their minds'.

Another grandmother concurred with the above by stating that she does not believe advice is confusing but that:

"sometimes you get these things like eating all these berries because of so and so, or have tomatoes because of this and that...." (G1)

Conflicting information was also seen as a problem by one grandmother when she spoke of advice being given by a practice nurse in her GP’s surgery which had gone against everything that she believed to be true about specific foods:

"....because we were going through all the diets and everything and she goes “too much sugar in those (Branflakes), you shouldn’t be eating them – cornflakes are better for you” ....so things like that can be quite confusing" (G2)

The same grandmother continued by expanding on the different sources of conflicting information:

"well that’s quite good with weightwatchers, you know, they do say like eat loads of fruit and then when I go to the doctors to have my check up they say not to eat too much fruit so you never know so that’s the bit that can be a bit you know.........(laughter)" (G2)

Confusion, then, was a feature of the focus groups with both mothers and grandmothers expressing their misunderstanding of healthy eating advice, but in different ways. The mothers talked about their own misperceptions of foods, which were sometimes compounded by media information, while the grandmothers were more focussed on the information given by "nutrition experts" and health professionals which they also found confusing. One of the grandmothers also felt that health professionals and slimming clubs offer conflicting advice. All these aspects among both groups of women can only lead to the development of further
and deeper misunderstandings around food. Health professionals need to work together to offer appropriate advice and guidance to the public and their patients. This includes doctors and nurses who are often at the “front line” working with patients and must have the nutritional knowledge available to provide consistent, evidence based advice and guidance.

**Food Practices – Mothers**

Eating outside the home was mentioned as a matter of concern by mothers in particular. Mothers stated that takeaways are an inevitable part of life, especially if they are working or eating lunch “on the go”:

“I mean when you’re out and about and in a rush it’s really hard to eat healthily, to grab a snack healthily then you need to get fast food, or even just sandwiches, but you can’t automatically get a healthy lunch when you’re on the go, in a rush.”(M1)

Another mother talked of the availability of fruit and vegetables in cafes and restaurants:

“and also do you find when you go into cafes and you think oh I want a bit of fruit and all there is is two brown bananas and it’s about a pound and you could go and buy about five apples for that, so I think the price stops you buying as well, and the quality.”(M3)

One of the mother’s groups comprised working women who talked at length about eating outside the home, specifically takeaway foods:

“\textquote[I think if they had you know healthy eating takeaways....you finish work around 9 and you don't want to go home and cook healthy....you're going to go out and get a takeout aren't you. If there's an option to get a healthy takeout then....]”(M5)
Another mother agreed with this by adding:

"I've always thought that (about Weightwatchers) because they bring out their own range of food don't they obviously and when you're on that diet you know how much you're having, so why couldn't they open a restaurant where you could go in and say right I know exactly how much I'm eating, exactly if I'm having too much, you know."

(M6)

Takeaway food generally was felt to be something that encourages people not to cook as it is 'too easy'. Mothers also stated that it would be easier to eat healthily if someone else did the cooking for them especially when they were working late into the evening. They felt that a healthy eating takeaway chain would help them to make healthier choices yet expressed difficulties with making healthier choices even if they were available.

Takeaway food was considered a necessary part of modern life even though participants were acutely aware of the poor nutritional quality of the food and would prefer to make healthier choices. They are, however, prepared to sacrifice a healthy diet for the convenience and availability of takeaway food.

Food Practices - grandmothers

One grandmother talked about time pressures and that this meant healthy eating was not a priority for many:

"but I think women these days have got a lot of free time and they think everything has got to be quick and instant so when they go to the supermarket they buy the thing that is quickest and I don't know what they do with the rest or their time......... (G5)
The same grandmother went on:

"I was watching a programme on television once and there was this couple they were saying they couldn't afford to feed their children, and they were so stupid they had a candle in front of them because they couldn't pay the electric and they had cans and cigarettes and they had egg and chips every day and they were drinking and smoking and I thought for what you'd pay for egg and chips you could have a decent meal every day if you knew what you were putting together you know........." (G5)

She was partially talking about people needing education but also that these people were not prioritising healthy eating – she noticed they drank alcohol and smoked cigarettes, and yet stated they could not afford to eat properly.

Another grandmother talked about convenience foods and that it was even possible to buy frozen sandwiches. She talked of people not “wanting” to spend time preparing something as simple as a sandwich if they are working full time:

"but if you’ve got a full time job you might not want to go home and make sandwiches." (G7)

While another grandmother continued with the theme stating:

"....and when they come home the mums don’t really want to cook or never really learnt how to cook a good basic meal with roasties and that.” (G6)

Grandmothers were specific about their views on prioritising healthy food – they spoke of their own children or grandchildren and described their experiences:

"My son’s wife can’t cook and when he’s away they live on sausage roll and crisps..........when (name) was still a baby about 7 or 8 months, I’d say do you want to give the baby some dinner and she’d say no I’ve got her lunch with me .........and she pulled out a packet of crisps and that’s what she gave her for her lunch” and also that “my
sister doesn’t cook and her kids lived on waffles and beans and we were both taught to cook.........” (G5).

Both groups of women talked about changes in lifestyle from when they were children and to a large extent blamed the change in lifestyles for detrimental effects on family food provision. They spoke of working women and how working women have conflicting priorities when previously mothers had just two priorities - home and family. Their discussion highlights the pressures that mothers are under with demands from media portrayals of the ‘ideal mother’ with a career, children, a beautiful home, a fresh, home-cooked meal on the table for the family to eat together before spending quality time with the children at bedtime. Combined with this are the pressures to ensure a social life for your child and to support them with school work. In addition, there is the aspiration for mothers to have a social life of their own. The pressures are great and the changes in lifestyle have been necessary to facilitate the additional demands of modernity.

Working lives – Mothers

Priorities as a theme came out of the transcripts as many participants expressed difficulties with the time required to cook, or the skills required to cook or indeed the need to relax in the evening after work rather than spend time creating a home-cooked meal. It refers to the hierarchy of tasks and chores required of women and suggests that women need to prioritise all of these tasks every day. What came through the transcripts was an overriding feeling that healthy eating was often not a priority, and this held true for women in either familial role, with both talking of healthy food and cooking healthy meals as being something that involved effort and planning.
Among some of the mothers healthy eating was not seen as a priority in view of working patterns and time constraints:

"....you finish work around 9 and you don't want to go home and cook healthy or otherwise, you're going to go out and get a takeout aren't you...." (M5)

She continued by saying:

"....we're not going to stand cooking for two hours are we, we want to cook for half an hour to an hour, dish it up and be sat down by half seven eight o'clock.........and mum's at work and by the time she comes home, it's put the washing in, dinner, take the washing out........bath the kids....so there isn't a lot of time really........we're like let's hurry up and eat and chill out a bit, so we'll go to the fish shop or Macdonalds, go home and eat and chill out rather than be in the kitchen for an hour or two" (M5)

The same mother also felt that younger women do not prioritise healthy eating:

"....I mean we're a lot older but you look at 30 and under now and I don't know there's a lot of people just don't care, they have kids and they just don't care, they'll stuff them with chips and burgers and fish and whatever from the fish shop because they just cannot be bothered ...." (M5).

On the one hand she is saying that people do not prioritise healthy eating because of the lack of time and the fact that they do not want to spend time cooking for the family, and yet on the other hand she perceives that people younger than her use takeaways and inappropriate foods because they "cannot be bothered".

One mother stated that mothers who are not employed also find it difficult to cook:

"....but I don't work but when your children get older.......if they have an interest.......I go home and do a bit of ironing and clean what I can....but once I pick up (son) my life is just full....so I have to think of something that I can put in the oven that can be reheated....." (M2)
Another mother felt that time spent cooking was time that took her away from being with her daughter:

"as soon as (daughter) comes home since she's on her own unless I put the television on she's like mummy can you do this, can you do that, can you play this, can you play that and it's like she doesn't have a sibling so either I sit down with her and do stuff with her which means I can't be in the kitchen or I've got to put the television on and go in the kitchen......" (M4)

Working lives, then, were perceived by the mothers in this study to have a negative impact on their food provisioning and ways of eating, but also that time spent cooking could have a negative impact on parenting skills. These quotes highlight some of the pressures that women find themselves facing, whether they are in paid employment or not.

Working Lives – Grandmothers

Grandmothers talked about changing lifestyles and how women are employed outside the home:

"more couples need to work these days, when you had housewives who stayed at home, looking after the home and the kids, you don't have that anymore do you."(G1)

"I remember when I was a kid, no mums ever worked, they were always home, always but now........."(G3)

The grandmothers who worked in a large supermarket felt that retail opening hours had influenced a change in family life:

"It makes a difference, I think, if you think back to when we were kids we had dinner on a Sunday, you know, Sunday was a family time,"
Sunday roast lunch and stuff like that but now it's not, it's retail twenty four seven, isn't it...and people go to work obviously, we've lost our family life, though." (G1)

While another grandmother talked about women's role in the home:

".........I mean like years ago women used to stay at home like my mother she'd be doing the ironing, the washing but the day would be full because you didn't have washing machines...but I think women these days have got a lot of free time and they think everything has got to be quick and instant so when they go to the supermarket they buy the thing that is quickest........."(G5)

There was a feeling among some of the grandmothers that although they mourned the loss of family life and the lack of cooking skills among younger people, they also saw the change in women's role as something that they would encourage:

"I'd hate to think of women being stuck at home I really would, because I think women, all right for some women who want to be, fine, but I think women really.........yeah, you know, and I think even if you've got children you don't have to be in that "at home" situation, you can be out of the home as well"(G7)

"I think sometimes it's for the better because women are the not the stay at home type anymore but at the same time because they're not at home the children are eating more junk if you like because they don't know any different."(G6)

A grandmother also saw time as a barrier to healthy eating, due to lifestyle factors:

"and I think a lot of mothers today, perhaps they're the only breadwinner and they've got to go out to work, you know to keep things ticking over while they haven't got the time then."(G6)

This was echoed by a mother who spoke about how women's roles have changed with increasing time pressures:
"......looking back, our grandmothers were at home, they were there all day, they could cook they could do what they had to do, where we’re out at work all day......that’s the other reason I think it’s all changed, because of the fact that women work now, have kids, have families, have homes to look after – we don’t have the time" (M5)

Whereas another grandmother felt that circumstances had moved on and that work and family life can be a successful partnership:

"they allow it more than when I was younger and my son, his wife’s a social worker and he works in the tax office in Cardiff and he works like flexi hours so he comes home and takes the little boy ........so he had to change his hours and the thing is you never know what’s round the corner so you’ve always got to be ready to adapt haven’t you so...." (G5)

The same grandmother expanded on the changing role of women:

"Society’s changed so much I think it’s different, it’s difficult comparing like my mother, my generation and my children’s generation. I think since the war everything sort of changed completely, I mean the women went out to work, they found their independence........in the sixties you know women got the right to do things but that’s how he saw it, but then I think what happened, a lot of women went out to work after the war........and I think society flipped at that point........" (G5)

In summary, both generations therefore seem to believe that in modern society cooking is something they are not able or not willing to do, or at least not spend too much time doing. They state that they ‘can’t be bothered’ or that they feel pressurised by the demands of childcare or paid work.

Some of the mothers and grandmothers felt that there was a lack of priority given to healthy eating among themselves and others in society. There was a perception that time pressures were contributing to less family cooking. However when talking about their own situations, they also felt that they often chose not to cook because they would rather purchase takeaway or processed foods to free up time for family activities or household chores.
Children - Mothers

The subject of children inevitably came up frequently throughout the focus groups, largely due to the sample comprising mothers and grandmothers. There was the perception that when children are young it is easy to enforce appropriate foods on them, but as they get older it becomes more difficult. Children was one of the themes in which mothers and grandmothers expressed different viewpoints, largely related to the concern they currently felt for their children's diets. For example, the perception that young children will eat healthily while older children refuse:

"and you know when they're young you can add your bits and pieces but when they're older I mean many a time I've done a casserole and they've gone "I'm not eating that" (M3).

"but at our age (children under 5) with like (names), it's easy to control what they eat and what they like but towards the teenage years, but even me as a teenager I would em I didn't want to do ballet anymore, I didn't want to do guides anymore...." (M1)

The mothers were somewhat fatalistic about their approach to children's foods, with a perception that as children reach adolescence, there is little point in encouraging healthy eating as, by that time, they will be in control of their own diet and therefore beyond parental influence.

Children - Grandmothers

In contrast, grandmothers were more circumspect about children's diets:

"....I was very conscious of it and then the kids just do their own thing but after a while it comes back and they start eating healthy again
............. I think adolescents will do anyway, I think they're all over the place, you know the hormones are all over the place, their food habits
are all over the place, they sleep all day and you know you basically encourage them to eat sensibly and they’ll make their own choices when they get older” (G6)

“so I think sometimes you can be worrying too much about what they eat but I think when they grow up they sort of pick what they think is right.” (G5)

A grandmother spoke of the importance of encouraging different tastes at an early age:

“......I think it’s really, it’s actually parents or whatever, it’s actually trying them with different tastes and different foods so they get the idea that everything isn’t the same.” (G7)

These quotations show that mothers of young children are concerned about their children’s eating habits and what they are eating. The grandmothers were more relaxed with comments like “you just have to encourage adolescents to eat sensibly” and “you can worry too much about children”. These ideas represent the potentially cyclical nature of generational difference – when the grandmothers were mothers themselves they worried about their children’s diets. Yet, having gone through the process of bringing up and feeding their own children, they are now more circumspect about how to approach children’s diets.

This theme, more than any other, highlights that the two groups of women do possess different perceptions and attitudes around healthy eating. It is interesting that it is in the area of children that these differences come to the fore. This is likely due to the sample selection which included women who were mothers or grandmothers of school-aged children. It seems that both these groups of women have strong views about the influence of children, but the value of grandmothers’ life experience is clear.
Cooking Skills - Mothers

Cooking skills was another theme that came up frequently with mothers talking about it in terms of their own experiences, with one explaining that :

"I'm really rubbish when it comes to like .... I'll look in the fridge and I think what the hell am I supposed to do with all that stuff....I eat loads of different stuff it's just cooking it, I just don't know how to cook it." (M4)

She continued, after being asked if she was taught to cook as a child:

"my mum's cooking's delicious and I'll go to her now and ....she will actually go through it with me so I do have three dishes now that I can cook that my daughter will actually eat." (M4)

A mother who grew up in a Greek family explained:

"my situation was different but erm because I was made to do housework and cook and whatever from a very young age, I was like 9 when....and I learned to cook watching my mum from the age of 9....so I had to help her being the eldest because she was out working all the time....so the burden fell on me basically so I learned really early how to cook so I can cook, I would say, very well....but like my daughter who is now 24 only learned to cook 4 years back and that was only because she was very independent and very stubborn and did not want to do it before then....but then when she met her boy and moved in with him she then decided she wanted to learn to cook and she'd be ringing me up saying mum, how do I do this, and how do I make that, you know so she's learnt on her own and she's learnt differently as well so yes, that's how it was." (M5)

While another mother stated that she never cooked at home as a child, and now she works in a kitchen she was beginning to learn new skills:

"the only cooking I did was like done in school and that was about it....well being in the canteen now I'm like oh this is easy to make, that's easy to make." (M7)
The mother with the Greek background continued that learning to cook is a cultural obligation within a Greek family:

"I don't know how it works with your kids but with our kids once they leave home they are to an extent expected to know how to cook Greek food and whatever and they do learn on their own if they haven't at home, and that's the thing." (M5)

An interesting viewpoint from a mother experiencing different cultural expectations, she expressed her experiences in a very positive way, and was proud of her upbringing and the skills that have resulted from it. Certainly, of the other mothers that took part in this study, several of them stated that they have difficulty in creating homecooked meals and were never taught to cook when they were younger.

**Cooking skills - grandmothers**

Grandmothers, on the other hand, did not talk about their current situation but were quite clear of the benefits of teaching children to cook at a young age. It also appeared that teaching children cooking skills is an activity undertaken by grandparents and not parents.

"and I like cooking and I always have and my mum enjoyed cooking so I used to, she taught me to cook and I've taught my girls to cook and I think that's a good thing" (G7).

She continued talking about her daughter...

."because talking to my daughter yesterday she's got four children, all from aged 11 down, the youngest is 3 and they're on a tight budget....she said people don't realise, my age, she said, that it is cheaper to go out and buy fresh, like a pound of mince from scratch like a Bolognese...." (G7)
While another grandmother in the same group felt that knowing how to cook is a real barrier for some:

"I think a lot of people, though, don't know how to cook, so therefore they buy something that is simple, or like ready made and they say they haven't got the money to eat healthy but I think it's the other way around, it's knowing what to cook." (G5)

One grandmother felt that cooking with children was important for many reasons:

"....my grandson who's seven, enjoys cooking alright, and they do cooking at home, just basic stuff and they make cookies ....and my older grandson will start making Bolognese and stuff like that now, and I think that's encouraging them.... to cook and it's a confidence building thing, it teaches them maths, it teaches them to weigh things, all about the different fruit and vegetables...." (G7)

While another grandmother also felt that cooking with children could be viewed as a learning experience:

"....and you've got the timing of the oven and the temperature and that....and not everything comes out of a packet....you want an apple tart you make it from scratch, you buy the apples, you make the pastry and that...." (G6)

One grandmother summed up the views of the group about cooking skills by saying that:

"yeah, I mean food is for life isn't it really, it's an important element, it's the basic skills to survive I suppose." (G5)

One grandmother spoke of cooking with her grandchildren –

"We have competitions with our kids to see who makes the most mess, you know" (G6).
She created a lovely image of cooking together and talking together, with cooking together viewed as a binding force of cohesion within the family:

“and then they start talking to you about their day and if they’ve got a little problem or something you know you share it, and then I say when we’ve finished cooking and washing up then we’ll go and have a nice cuppa and a nice sit down and a natter....(G7)

Another grandmother also spoke of the rituals associated with cooking in her childhood such as when her father came home with a chicken:

“I can always remember he’d have a chicken and he’d say come and have a look at this....he’d show me how to gut a chicken....he had the patience to show me” (G6)

In summary, then, the grandmothers talked about cooking as a pleasurable activity and something which provided cohesion with the family - the father showing his daughter how to pluck a chicken and the grandchildren chatting with grandma after the washing up was done. Mothers, on the other hand, talked less of teaching children to cook themselves and felt that it was something that should perhaps be done in school or an activity that was not appropriate or safe for children to undertake in the home. Again, this is an important finding as cooking skills could be a key factor in improving nutritional understanding and help to overcome some of the barriers to healthy eating that have been highlighted around time and work pressures. If children were taught simple, basic cooking skills at an early age, they could avoid relying on takeaway or processed foods when they become responsible for their own food provisioning. However, if working mothers find it difficult to cook themselves it is unlikely that they would be able to allocate time in their pressured lives to teach their children to cook.
Inconsistency - mothers

Many participants talked about the parental role in children’s diets and yet there were also comments around mothers indulging in foods that they deny their children - this inconsistency by parents forms the basis of this theme. Women in both familial roles shared general perceptions around inconsistency but mothers were more focussed on inconsistencies with regard to their children’s diets, while grandmothers were more concerned with their own diets.

One mother stated that although much of her diet comprised unhealthy foods she tried to hide this from her children. This inconsistency can give mixed messages to children and could imply that her children’s health is valued more highly than her own:

“I like too many cakes, chocolate and pastry; I just live on them even though I try to tell my kids (laughter) not to, to keep them healthy” (M5)

Another mother talked about difficulties of eating out with her child and some of the inconsistencies that exist when eating away from home which prove difficult to overcome:

“when you’re with a child and everyone’s eating fish fingers and chips it’s hard to say why don’t you have fish fingers and carrot batons and instead of a doughnut why don’t you have that little grape and apple bag.” (M3)

While another mother talked of similar inconsistencies:

“I’m sure we all know but we can’t do it. I mean I did A level in food and nutrition so I do know what to do but I don’t do it, because I can’t do it.” (M2)
Inconsistencies featured among the mothers in this study both in their own experiences of knowledge versus behaviour and also in terms of what they permit their children to consume as opposed to what they consume themselves, often out of site of their family.

**Inconsistency – grandmothers**

A grandmother, whilst talking about what constitutes a healthy diet added:

"it's what you drink as well, drink plenty of water (laughter) yeah we know it all (laughter)...but I need a cup of coffee with my breakfast." (G1)

While another added:

"but it's whether you do it!(laughter)". (G3)

The laughter was interpreted as being a way for participants to use humour to justify their inconsistent behaviour - what they know is right and how they actually behave.

Among the grandmothers, one felt that she would find it easier to eat healthily and thereby prioritise healthy eating in the following scenario:

"If someone says to you that it's bad for your health, that you shouldn't have it for your health, that's another thing." (G4)

However, she pauses for a moment and then immediately contradicts herself by saying:

"...........but saying that I'm a diabetic and...........(G4)
There are contradictions here in that she does not prioritise healthy eating but would do if she had a health problem, and then recalls that she does actually have a chronic health problem – an interesting insight into how people perceive they might behave in a given set of circumstances then realising that their actual behaviour in those circumstances is quite different. This adjustment of values in accordance with a change in circumstances can be explained, in some part, by the concept of response shift (Sprangers 1999). In this example the participant felt that she would perhaps change her dietary habits if she found “that you shouldn’t have it for your health”. She then recalls that she is a diabetic, but still has not made changes. Earlier on in the focus group, when discussing whether food was sometimes used as an emotional support in times of negative emotions, the same participant stated that she does not rely on foods in this way:

“I don’t because I reach for a packet of fags.” (G4)

Inconsistency was a theme that many of the participants raised, both in terms of their own inconsistency with themselves or with their own children. They spoke of knowing what they should do, but of not being able to carry it out long term, or of only serving their children certain foods, whilst eating other foods themselves. This inconsistency could suggest that mothers are putting their children’s health needs above those of their own. Among the grandmothers, also, the understanding of what is needed for a healthy diet, combined with a frequent inability to follow it. Inconsistencies, in this way, may cause confusion and mixed messages for children who are most influenced by the behaviour of their parents (Campbell & Crawford, 2001).

*Emotional Eating – mothers*

Emotional eating emerged as a theme in the focus groups among both grandmothers and mothers. It is a term used to describe how an individual may eat specific foods or types of foods in response to emotional stimuli such as anger,
frustration or unhappiness. Both groups of women highlighted the relevance of emotional eating or "comfort food" but they described it in quite different ways.

Among the mothers "hormones" were mentioned as being part of the trigger for eating inappropriate foods:

"you do, you know when it's the time of the month you could eat anything, sometimes I could eat that chair, you know!" (M6)

Another mother believed that certain foods contain or promote the production of hormones that make you feel good:

"it's comfort food, and it's the feelgood factor – it gives you that feelgood hormone thing" (M4)

The mothers also talked about feeling cold or tired and craving sweet foods, but also needing to justify this by stating that this is not usual behaviour or that consumption is followed by guilt:

"I mean last night I was shattered and freezing and all I wanted and was craving was chocolate........I mean I never have sweets normally but when I'm cold or down or tired or whatever I crave sweety things" (M1)

"well it makes you feel better, then afterwards you wish you hadn't and you feel guilty. I feel that every time I have a cake and that's about four times a day! (laughter)" (M5)

The same mother continued, by explaining a scenario in which both her husband and herself were stressed and worried and in this set of circumstances chocolate seemed to be the right thing at the right time, a form of comfort when they were feeling low:

"but I found the other night I was stressed about my daughter........and then (husband) woke up....and he goes yeah I
can't sleep either.......so I gets up makes the coffee and find a bar of chocolate.....so it was 3 o'clock in the morning, we were sat up in bed talking and eating chocolate" (M5)

One mother likened eating inappropriate foods “for comfort” to that of smoking a cigarette:

“People that smoke will have a cigarette and coffee and it gives you the same sort of thing ....when you stop you crave sweet stuff instead” (M2)

Mothers, then, spoke of eating in response to stressful situations or using food as a comfort in response to perceived hormone imbalances at different times in the menstrual cycle.

**Emotional eating – grandmothers**

Grandmothers did talk of comfort food, but in a different way to the mothers. As might be expected, there was no mention of hormones in terms of diet but some of the grandmothers stated that they used certain types of food to ease their mood:

“I think it sometimes depends on the mood....when I'm really fed up I think that’s it, I just want chippy, I want pie and chips, I'm not cooking, I can't be bothered....the easy option I suppose” (G1)

She is using different foods to suit her mood and also as we have seen earlier, healthy eating is perceived to involve effort, so that by not cooking, this grandmother is using her mood as an excuse not to eat healthily. It is also about the type of food chosen, and she seems to be selecting hot, filling, satisfying foods at times when she is feeling emotionally and physically low. Another grandmother stated that:
“if I have a bad morning downstairs in the café and someone has done my head in, I will go and have a cake” (G2)

While a different grandmother tried to explain why she might do this by saying:

“yeah, you think oh, that’s nice and then.......it calms you down a little bit.” (G3)

An alternative explanation was offered by another grandmother:

“but I think it’s because you know you’re being naughty and you know it’s naughty and it’s that that makes you feel good and you really enjoy it and you think “that was lovely”. (G2)

Other grandmothers tried to explain why they might choose fatty foods at certain times:

“well it just makes you feel nice, doesn’t it, when you feel down in the dumps you reach for a bar of chocolate.” (G5)

“it’s nice, you just put it in your mouth and let it melt mmmmmmmmm.” (G7)

Yet in this group, particularly among two of the women, the concept of comfort food was far more linked to childhood and the comfort offered by food that was enjoyed during childhood:

“........and my son........if he’s not well........when he was a little boy I used to make him rice pudding and he used to like custard creams...........and he was depressed just before Christmas....and he lost his job....and I took him up rice pudding and custard creams...........it’s the comfort part of it” (G5)

The same grandmother explained that her husband always reminisces about food provided in his childhood, and never about food that she has provided since their marriage. The two women tried to explain the reasons behind this by stating:
“I think when you’re eating it you go back to, oh my mum made me this ....and I think that comfort can help at the time, you know like you said that comfort.... (G6)

“yes, like my husband going back to when he was a child when he had somebody to look after him so em....yeah, like my husband likes mash, everything mashed like babyfood....it’s just because that’s what he likes, it’s nice and soft and comforting”(G5)

It is interesting here that these two women both talk about food providing comfort to men in their lives when women are normally perceived to have more of an emotional relationship with food. Although it is possible that the women are interpreting the male need for comfort, when the need may not exist in the same way as it does for women. It is, however, interesting to see the importance of food as comfort to both generations, but in quite different ways.

Emotional eating, then, was described by both mothers and grandmothers. Mothers spoke in terms of their own diets and their own need for “comfort” when stressed or anxious, while grandmothers recognised the phenomenon of comfort food, yet did not only use it for their own comfort, but also used food as a way of providing comfort to others. They also described it in terms of calming them down, and using the food as a tool to reward themselves after a bad experience, for example.

**Responsibility – grandmothers**

Responsibility was a theme that came up only in the grandmother focus groups as statements around the women blaming environmental or personal issues for their inability to make healthy choices. Both groups of women talked of difficulties with eating healthily being caused by forces beyond their control. They felt that if the food was not made available then they would not consume it. They perceived that they are unable to control their impulses if the food is in their immediate environment. It is
interesting that this is a theme that did not feature in the transcripts of the mothers’ focus groups, illustrating a clear difference in viewpoint of the two groups.

One group of grandmothers, during a discussion about factors that would help them to make healthy choices explained:

“not having things there, looking at you (laughter)....” (G1)

“I think if I don’t buy it in at home....” (G4)

“when you go shopping, something tempts you in the aisles and you think “ooooooh”....” (G3)

Also when discussing children and healthy eating, they felt that central government must take some responsibility for lack of cooking skills among children:

“because looking at younger children and in the secondary schools, let them do cookery, it all seems to be stats for this, stats for that and I think the government has lost its way as far as looking at just keeping things simple.” (G3)

This group were also concerned about the differential in costs between foods perceived as “healthy” like fruit and vegetables and those considered less healthy such as processed foods:

“and prices as well because a lot of it they’ve had promotions on say ready meals for a pound whereas they might be advertising a cauli for £1.50 and people you know they’ll say I’m not going to buy that cauli for £1.50 when I’ve got a meal there for a pound, that could be high in saturated fat.” (G6)

“yes like yesterday £1.89 for a cauliflower and then I mean you’ve got no chance have you....and in Iceland you could buy two individual ready meals....for £1.50” (G7)

In this way, the pricing structure of foods is seen as a justification for some people’s dietary choices, and they continued by suggesting:
"...but the thing is if they want to encourage people to eat more vegetables in that respect,...why don't the government actually subsidise the price of vegetables, why don't they do that, you now....you know to actually encourage." (G7)

Government intervention was also felt to be appropriate in other ways:

"well they say about people being fat and they say about exercise and yet they plant schools right out far away where people can only get to them by car and ....doing this centralising the schools and the supermarkets and then having a go at us for being fat....but they're the ones that are encouraging it" (G5)

Another grandmother continued by stating that lack of exercise among children was also due to government policy:

"yes and they're building all these new academies like your school academies and stuff but I mean ....the playing areas and the playing fields and stuff like that where the kids had so many hours a week and that, they've actually taken away a lot of those areas....but there's not the....they don't have the time in school" (G7)

The same grandmother also took issue with local government and their policy for allowing food premises to open in certain areas:

"the government can turn round and say we all want you to eat healthy all the time and we go and give our kids this and that but unless they actually start not allowing like A3 premises for takeaways everywhere....government are going to allow that to happen and they're not going to help like little vegetable shops and stuff like that instead of all these A3 type takeaways." (G7)

She continued by saying that:

"I think they've actually got to turn around when they've actually got to take on board some responsibility for what we have in our communities as well." (G7)
Another grandmother agreed that the government must take some responsibility for many issues instead of blaming individuals:

"...the thing is we get the blame for it, and I think there's like a guilt culture like we're in the wrong if we don't put our green boxes out and they're the ones who started it off in the first place." (G5)

Grandmothers spoke about the role of government in preventing people making healthy choices by raising issues such as subsidising the price of vegetables, not teaching children to cook in schools, not helping small vegetable shops and encouraging out of town supermarkets. They also felt that local government had to take some responsibility for giving consent for takeaway food shops in deprived areas.

The concept of lack of responsibility which is highlighted above in the quotations by the grandmothers ties in well with the findings from Barker et al (2008), cited earlier in Chapter 1. Barker et al found in their sample of mothers with low socio-economic status that many of them perceived a lack of control in their food choices. This lack of control was caused by children and partner demands, perceptions about price of healthy foods, difficulties when being at home surrounded by food and a lack of experience and skills with food. These feelings meant that even if they wished to consume healthy diets for themselves and their family, they were constrained by the demands of everyday life. Although Barker's study focussed on the socio-economic status of mothers in this regard, it showed that a lack of responsibility and lack of control are clear difficulties faced by mothers and grandmothers. These concepts need to be considered in interventions, policies and practices around dietary choice.
Commonalities

Healthy Eating

The areas in which there was agreement between the two groups and in which there were similarities in the ideas and perceptions are around healthy eating, where both groups expressed their knowledge of healthy eating guidelines with terms such as "balance" and "five a day" being embedded in their consciousness and being terms with which they were all very familiar. This may be a comfort to health professionals and promoters who may be reassured that healthy eating messages are getting through. However, this should be seen in the context of the confusion that the women also expressed in terms of mixed messages, contradictions in their own knowledge and behaviour and a perception that advice can be inconsistent. Indeed, in the previous chapter we saw how many women rely on the popular media for their dietary advice. Yet Basu and Hogard (2008) found that the reporting of nutrition research in the UK tabloid press was at best not balanced or contextualised, and at worst inaccurate. Others, like Mosca et al. (2006) found that 49% of their respondents cited confusion in the media as barriers to heart health improvement strategies. On the surface, then, health messages are widely accepted in the nation’s psyche and many are well versed in catchphrases such as "five a day" and "balanced diet". However, this must be viewed against a backdrop of consumers "being bombarded with advice from various sources offering quick fix cures or the latest fad diets............backed by unsubstantiated health claims or spurious scientific evidence" (British Dietetic Association 2008).
**Family food memories**

These perceptions and interpretations of contemporary nutritional concepts were expressed along with “family food memories”. Again both groups discussed this theme in similar terms with a strong emphasis being placed on how food provisioning has changed since they were in different familial roles as mother and daughter, rather than grandmother and mother. There was a degree of reminiscence and a sense that they mourned the loss of some of the structures and routines associated with earlier food provisioning, with a feeling that eating styles were superior in the past, and that some of the recent developments in family food provision have not always been perceived positively. Family meals were also mentioned by both groups with again a general sense of loss that opportunities to eat together as a family were rare with the demands of family and of patterns of work. Yet, eating together as a family unit was much more common when they were younger and one mother spoke of the routine and structure surrounding mealtimes in which the return of the male parent determined the structure of the after school period. They spoke of the situation now, however, in which families eat at different times, sometimes in different rooms with working, social or sporting commitments taking priority over family meals (Neumark-Sztainer et al 2010).

**Eating together**

Eating together as a family is an area that the participants in this study felt was important, but an event that was difficult to achieve in practice. Yet the evidence points to real benefits to the families who do manage to fit this into their busy schedules – but to those who fail to do so it can become yet another source of guilt or another demand on their already fraught lives. Sweetman et al (2011) found that in pre-school children, eating the same food as parents had a positive influence on
vegetable consumption and there were also positive implications for vegetable consumption when children were given meals made from scratch. There is also much evidence of the beneficial influence that family mealtimes have on adolescent diet and behaviour patterns (Neumark-Sztainer (2008), Gilman (2000)). The participants in this study expressed disappointment and a sense of loss of communal eating opportunities as it was something they felt to be important in terms of encouraging fussy eaters and in terms of the social importance of eating together.

**Family shopping memories**

Family shopping memories also featured in the focus groups with both mothers and grandmothers reminiscing about childhood memories of shopping before the advent of supermarkets and internet shopping. Again, there were references to the different shopping practices in which food shopping was carried out daily, and locally, and that fresh foods were purchased. Both groups of women spoke about the previous lack of processed foods and that buying in bulk was not possible then, but that the situation now often demands bulk buying of foods, travelling to and from the supermarkets by car and filling the freezer with processed foods, to enable family members to eat at different times of the day.

**Self image**

Self image was another topic that emerged in the focus groups among both mothers and grandmothers. Both had concerns about the influence of celebrity culture and impossible perceptions of body shape on younger people, especially young women and felt that this was a difficult aspect of modern life and one which could compromise healthy eating advice as they perceived younger women to use healthy eating as a tool to become impossibly thin. This, of course, was never the intention of the concept of healthy eating, but there seems to be the perception among this
group of mothers and grandmothers that healthy eating has become little more than another “fad” diet.

Self image was mentioned in all of the focus groups, and usually in terms of concern over children’s eating behaviour and how this is determined by body image rather than in terms of nutrition. As seen earlier in terms of mothers expressing that they felt able to control the diets of their young children but that as they approach adolescence it was difficult to impose healthy eating. This is likely due to the additional influences on diet of “peer status as an important source of social reinforcement” which undoubtedly impacts on eating behaviour as well as attitudes and perceptions (Wang et al 2006). Anschutz et al (2008) explored the eating behaviour of young women after exposure to television advertisements. In their study they found that exposure to advertisements using slim models and diet products meant that the restrained eaters were inhibited and ate much less. They do concede, however, that their findings are contrary to other studies using similar methods in that other studies have consistently found that restrained eaters are largely disinhibited by exposure to slim models and diet products which actually leads them to eat more. Regardless of the influence, however, these studies show that exposure to television images can directly influence dietary behaviour, either positively or negatively.

Wang (2006) also found that peer-perceived popularity was a significant predictor of dieting behaviour, suggesting that the influence of peers in pursuit of the ideal body shape was a key factor. Yet by restricting their intakes in a desire to achieve an idealised view of body shape and weight, healthy eating is not the priority, while calorie restriction is. Healthy eating, although promoted throughout childhood through the education system and through government health promotion initiatives is a message that is being lost to adolescents who are subject to seemingly more powerful messages transmitted through the media and from peers. Parents undoubtedly also have a role to play, however, and Huon and Walton (1999) found that girls who are more compliant and conform to parents’ wishes are more likely to
initiate dieting behaviour. So that even though the mothers in the present study appeared fatalistic in their assessment of a perceived lack of control over adolescent diets, Huon et al demonstrate that parental influence can remain a strong determining factor in the dietary choices made by adolescents.

It is interesting that both groups discussed these aspects in similar ways and in similar terms. Seemingly women in both familial roles, as mother or grandmother, hold similar views and opinions about healthy eating, family food and shopping memories, eating together and self image. They give insight into how lifestyles have undergone significant changes in the last 50 years but with the most significant changes likely to have taken place since the mid 1990s when Sunday trading was made legal and which has undoubtedly impacted on the working and family lives of many shopworkers which has in turn affected the lifestyles of many families with the subsequent demise of the “Sunday roast”, a traditional family eating opportunity which, as described by the participants in this study, is becoming less and less frequent.

Familial role contrasts

There were a number of areas of difference between the two groups of women, but more in the way that ideas were expressed rather than the ideas themselves, so that “contrasts” is a more appropriate way to express the findings. For example, confusion and misinterpretation of information or indeed misinformation were issues that came up frequently in different focus groups. Yet mothers described scenarios and perceptions around food and eating which were evidently wrong or misunderstood – they may have believed in the information they were discussing yet their interpretations were often in need of clarification. Grandmothers, on the other hand, also talked about confusion and misinformation but they saw it as an issue with health professionals or “experts” who cannot agree on appropriate dietary advice and give conflicting information to patients and consumers. So, confusion
was certainly a feature of both women's experience yet one that was described in quite different ways.

Confusion

The perception that health professionals do not agree, however, should be unfounded as Stockley (2000) reported that in fact dietary guidelines the world over display a considerable degree of consensus. If health professionals are rigid in their adherence to dietary guidelines, confusion should be minimised. Stockley concedes, however, that scientific knowledge does of course change and that dietary guidance should never be static and requires regular revision. She also points to a problem with media reporting in that it often focusses on “fringe messages” which detract from the core of well-founded dietary guidance. An example of this is the women in the current study who talk about specific foods such as tomatoes, berries or coffee being beneficial or detrimental to health (as reported by the media). Yet, in the context of a healthy, varied, balanced diet based on fruit and vegetables there is little need to be concerned with consuming excessive quantities or indeed avoiding specific foods.

The simplest message is the most effective and the balanced diet message is the only message that people should be concerned with, and one that is often overlooked by the media or self proclaimed health experts who are eager to take advantage of the commercial value of the weightloss industry, an industry estimated to be worth over £11.2 billion (Truby et al 2006). Yet if any of the numerous interventions, slimming clubs, books, DVDs and the like were effective, the industry would collapse. It seems from the current study that healthy eating has become little more than a diet itself, with people feeling they have to “focus” and “be really strong” to adhere to guidelines. Until healthy eating becomes everybody's default option, it is unlikely that the obesity statistics will improve. The diet industry, however, with their resources and nutritional expertise could be at the forefront of a shift in the
culture surrounding dietary attitudes in the UK – not just targeting the obese but the community as a whole.

**Family food practices**

Family food practices were also discussed in the focus groups, but again in different ways. Mothers talked about their own family eating habits, with the necessity of eating out or using takeaways to cope with time or work pressures. Grandmothers, on the other hand, talked about younger women being unwilling to cook for numerous reasons and felt that eating outside the home or buying takeaway food had become an easy option for many when this option was not available when they were bringing up their own young children. So, mothers talked about food practices in terms of their own situations while grandmothers spoke in terms of describing younger people.

In terms of family eating habits and some of the work and time pressures that women are under, Carrigan et al (2006) report that the traditional perception of "proper food" or meals is an aspirational ideal and one that, in practice, cannot be achieved by many women. They go on to explain that for women to produce "proper" family meals they must overcome time shortages and be involved in complex scheduling. The role of convenience foods is one that "buys time" on the various stages of the preparation process and also that they allow mothers to pander more easily to the diverse requirements for different meals which exist in many families. There are also different perceptions of convenience foods with takeaway foods being the ultimate labour saving family treat, and price being an important indicator of quality with cheap convenience foods being viewed negatively.

Women in this project also spoke of a lack of priority given to cooking skills as another reason why many women are unable to prioritise healthy eating as they lack
confidence in their ability to produce a healthy meal. The participant from a Greek family described how she had been expected to cook for the family, and taught to do so, from an early age. She expressed alarm that a woman could decide to have children without having any cooking skills with which to feed them. A lack of cooking skills was mentioned by many women when referring to other friends or family members who “don’t cook”. There seems to be an acceptance that some women do not cook while others do. Yet this would seem to be unacceptable in other countries such as Greece where there is the expectation from an early age that a woman should be able to cook for her family. There are seemingly no similar expectations in the UK.

There are undoubtedly many pressures on women today to spend “quality time” with children and partners, preparing healthy nutritious meals, eating together as a family and ensuring everyone is nourished appropriately in line with recommendations – and all this whilst holding down a full time occupation and running a home. It is no surprise that some motherly obligations may have to be the subject of compromise by using convenience foods for example. In this study convenience foods and takeaways were largely considered a necessary evil. Other studies support this finding (Ana et al 2007, van der Horst et al 2010) by reporting that ready meals are largely viewed negatively in terms of nutritional value but, as might be expected, positively in terms of convenience. Van der Horst found, interestingly, that men and young people had a more positive view of ready meals than women.

Children and partners

Again, when children were being discussed, mothers spoke in terms of their own children and how they deal with fussy eaters or how they encourage healthy eating, while grandmothers, as might be expected, talked not about their own children but about children in general. Mothers expressed concern about the quality of their children’s diets while grandmothers appeared more relaxed and, with the benefit of
their own experiences, were able to suggest that children’s diets should not be the focus of too much concern among mothers as children come around to good eating habits as they progress into adulthood.

The focus group participants frequently spoke of the influence of partners and children on their own eating habits. As might be expected with children living with them, the mothers were more concerned about this influence and generally saw it as negative with an almost fatalistic view that it is possible to enforce healthy eating with young children but that as they become teenagers it becomes more difficult. Partners, too, were important with one grandmother stating that her diet is so tightly bound up with that of her partner that she would find it impossible to eat healthily “unless I lived with a health freak……………and then I would only eat what he would eat”.

The literature reflects the influence of family support and partners on women’s food choice with John and Ziebland (2004) finding that one of the main barriers to healthy eating for women was that children and male partners were obstructive in their attempts. Conversely, the men in their study reported that their female partners were largely supportive of dietary change.

**Inconsistency**

Inconsistencies came through many of the transcripts – but again in different ways depending on the familial role to which the women belonged. Mothers expressed inconsistencies in terms of the situation between them and their children. The way in which some mothers ate inappropriate foods themselves yet would not allow their children these foods, and would hide them to ensure that the children did not consume them is almost as if their children’s health is more important than their own (Alderson & Ogden 1999). Grandmothers, on the other hand, expressed
inconsistencies in their own diets. They talked about being knowledgeable about healthy eating yet being unable, or unwilling, to follow recommendations.

**Emotional eating**

Emotional eating was a feature of both mothers and grandmothers experiences of eating. However there was a difference in emphasis between them as mothers spoke more about hormonal links with food being used when feeling cold or fed up. Grandmothers spoke more about the value of food as a “treat” or as something to soothe after a hard day’s work, or as an expression of love or care for an adult child. They are similar descriptions of emotional eating, but the familial differences are highlighted in the slightly different emphasis from both groups.

Emotional eating in the current study is perceived as something within oneself that means food becomes an emotional prop, even though the actual cue to this behaviour is external. Rose et al (2010) found in their study of chocolate consumption and depression, that those who were displaying more depressive symptoms consumed more chocolate. Depression is an internal response to external conditions in the same way as some of the participants in the current study, stated they eat inappropriate foods (often chocolate) when feeling pressured emotionally.

Eating in response to emotional cues such as anger, frustration or depression was a common feature of the focus groups for women in both familial roles, but grandmothers spoke more about food as a comfort in terms of childhood foods bringing comfort to their children in times of need.
Elfhag et al (2008) found emotional eating and sweet intake to be most associated in women and less so in girls. These authors refer to the soothing, pleasurable and rewarding properties of sweets that sweet foods possess which can encourage their consumption. They talk about physiologically rewarding foods and that the use of these foods for comfort is a learned behaviour that is culturally acceptable in our culture. It is also one that is reinforced by advertisements for products such as confectionery which are often marketed as a treat, a reward at the end of a busy day or to be used as a well deserved break in a frenetic workplace. This learned behaviour is one that is likely to continue as Elfhag et al also found that the most important determinant of children’s eating behaviour is that of their parents. With the continued acceptance of emotional eating and reinforcement by advertisers coupled with the strongest influence on children’s eating being their parents, it is likely that many women will have their food choices determined by emotional cues. Further, many families, and institutions such as schools, may be inadvertently promoting the food and emotions link by following many cultural norms surrounding special foods at birthdays and Christmas for example, or by rewarding a child with sweets for good behaviour. Children therefore can grow up to associate unhealthy foods with positive social experiences which perpetuates the emotional attachment to food which can last a lifetime, particularly among women.

Responsibility

Responsibility for healthy eating was something that only arose during the grandmothers focus groups. They spoke of supermarkets and local and national government being responsible for some of the nutritional problems that families face. They felt that supermarkets should take some responsibility for providing inappropriate foods, and frequently putting them on special offer to encourage their purchase. They also felt that local and national government policy on planning permission for takeaway premises and for school food needed to be addressed.
There was a general feeling, largely among the grandmothers, that if unhealthy food was not available, then they would not be tempted to eat it. It is as if there is an unknown power that prevents them from making healthy choices – and this power is not something they can do anything about. Another way of explaining this concept is to use the construct of locus of control (Sarafino 1998) – the extent to which a person believes that his or own actions influence events in the surrounding environment, as opposed to powerful others or chance. So that in this instance it would be the extent to which an individual believes they are able to make different dietary choices.

Having said it is an unknown power, Vereecken et al (2010) found that if parents deliberately restrict the availability of unhealthy food, and avoid it themselves, adolescent diets can certainly be seen to improve. The argument that if personal restriction of unhealthy foods during purchasing opportunities is carried out it would limit consumption, is certainly borne out in the literature. This may seem an obvious observation, yet this is a practice that, given the environment by which they are surrounded, the participants in the present study found very difficult to achieve. Rather than parents feeling that adolescent diets are beyond help, it appears that even in adolescence, parents have a key role to play in the promotion of healthy eating.

The focus group participants also felt that supermarkets and government at all levels should take some responsibility for the poor eating habits of the population – they perceived that it is not an individual’s fault if the food environment is not conducive to healthy eating. Indeed, Story et al (2008) talk about the contribution of food and eating environments to the obesity epidemic. They recommend ensuring that homes, communities and institutions provide a context in which healthy behaviours become the ‘optimal default’.
Governments have made efforts to improve the home food environment by restricting television advertisements of foods high in fat and sugar at times when children might be watching (Ofcom 2007), and there is frequent publicity around the potential to apply additional taxes to foods that are high in fat and sugar to make their price prohibitive. However, plans are underway in Romania to apply taxes to fatty and sugary foods yet there are those who state that this sort of intervention would confuse consumers and have a greater impact on the most vulnerable who may rely on fatty and sugary foods most. Nutritionists there also state that any tax of this nature must be accompanied by a comprehensive nutritional education scheme (Holt 2010) – but whether any government is inclined to make the investment and commitment required for such a programme remains to be seen.

Denmark introduced such a tax on fatty foods in 2011, with plans in place to introduce a similar tax on sugary foods in 2013. However, in view of difficulties which are reported to have resulted in job losses, and high tax administration costs coupled with a reduction in profits for Danish retailers, as consumers travel to Germany to secure cheaper fatty foods, the tax has been removed and the sugar tax will not now be introduced (Food Manufacture, 2012). So the expected behaviour change did not result, or was the tax not in place long enough for results to be evidenced? Indeed, the power of food manufacturers and producers cannot be underestimated in this, and to perhaps introduce mandatory fat and sugar limits on food manufacturers is the way forward. They certainly need to be involved and to take some responsibility for the diets of their consumers.

In the context of the focus groups and participants involved in the current study, supermarkets and local government were felt to be at fault. Many participants blamed supermarkets for offering unhealthy foods at discounted prices and local government for giving planning permission to additional takeaway food outlets. The food environment at home or in the community is perceived as key to the participants and one that will need addressing if consumers are to be encouraged to make healthy choices.
The aim of this final phase of the three phase study was to consolidate the findings of the earlier phases and draw together all the issues raised in phase one, the commonalities and differences highlighted in phase two, with a view to providing a coherent insight into the factors that determine dietary choice among women in different familial roles. The first phase was an ideas collection exercise which informed the design of the second phase – the questionnaire which aimed to identify differences between the two groups of women. The final phase, the focus groups, aimed to explore the differences identified in the questionnaire.

This study has clearly shown that some differences exist between the two groups of women but also that women in different familial roles share a common awareness of healthy eating guidelines and mourn the loss of eating and shopping styles that existed when they were younger. The differences highlighted in the questionnaire were largely related to healthy food choices, emotional eating and external proinfluences on diet. All these aspects were explored in the focus groups and it became clear that many aspects were accounted for by changes in lifestyles and working patterns – environments seem to have exerted the most influence on the dietary choices of these groups of women. It is interesting that this did not come across strongly through the questionnaire results, but was a key component of all of the focus groups. One of the benefits of a focus group is that it gives participants “a voice” and it is clear from the focus groups that they were able to explore and discuss their own views in an open and honest way, which has provided valuable insight into their experiences.

The focus groups consolidated the findings from the first two phases of the study by providing a broad insight into some of the issues affecting the dietary choices of women in different familial roles – as mother or grandmother. It provides a comprehensive exploration of eating habits and gives valuable insight which will be a useful starting point for further research. Research into the underlying factors determining food choices, attitudes and perceptions can only add to the wealth of
literature in the area of diet. Yet the area of familial roles is underrepresented in the literature and an area that requires further research with a view to understanding the complexity of influences surrounding food choice.

Summary

- Healthy eating knowledge and terminology is familiar and embedded in the language of many women with different familial roles as mothers or grandmothers;

- Both groups of women frequently reminisce about family food practices that were common when they were either children or mothers of young children;

- Both groups mourn the loss of lifestyles that facilitate regular family meal opportunities;

- Both groups expressed some reservations about recent developments in shopping styles, again reminiscing about childhood food shopping experiences;

- Self image was a concern for both groups of women, especially concerns around children and young people’s desire for perfection which could be potentially detrimental to their nutritional health;
• Confusion existed among both groups about nutrition – with mothers expressing information that was clearly incorrect and grandmothers feeling that experts could not be trusted;

• Food practices such as eating out were an important feature of mothers' food provisioning, while grandmothers talked about the importance of cooking skills;

• Working lives were mentioned frequently by both groups, with mothers talking about their current experiences and grandmothers commenting on difficulties faced by working women;

• Mothers expressed concern about the diets of their children as they grow up, while grandmothers felt that if given a healthy diet at an early age they would always return to it;

• Mothers often lacked confidence in their own cooking skills while grandmothers often took on the role of cooking with their grandchildren, which became a cohesive activity involving aspects of communication and education;

• Some mothers expressed inconsistency with their own diet and that of their children by sometimes hiding their consumption of certain foods from their children. Grandmothers stated they were well aware of dietary recommendations yet used humour to justify their lack of success in following them;
- Emotional eating was a feature of the mothers' focus groups in terms of eating in line with perceived hormonal demands, while some grandmothers spoke of providing food as a comfort to others;

- Grandmothers talked about a lack of responsibility in terms of food choice, and that supermarkets, local, national government and schools should all take some of the responsibility for the nation’s poor eating habits.
Chapter 5 – Discussion

Introduction

The preceding chapters have described the three phases of research that were undertaken with the aim of producing a comprehensive analysis and exploration of the factors affecting food choice among women in different familial roles. The objectives were to conduct face to face interviews to begin to understand the issues, concerns and language used around food, by these women, then to develop a questionnaire based on these findings with a view to highlighting any differences or commonalities that exist between the two groups, and the final phase was to hold focus groups which would enrich the questionnaire data and provide further insight around the findings of the questionnaire and potentially explore some of the reasons that might exist for differences within the two groups of women in different familial roles.

The present study was undertaken in response to the under-researched issue of familial role difference in attitudes and perceptions towards healthy eating. It is suggested that the importance of familial role has been largely underestimated in research into dietary behaviour, and that this is a crucial environmental factor that may potentially exert a powerful influence on the everyday food choices that are made. The study as a whole gave an insight into the differences that exist in attitudes and perceptions of women in different familial roles – mother and grandmother – with a view to developing interventions that could harness the positive components within each group in a way that could benefit both groups, and some ideas of how to execute this are provided later on in this discussion. The results could also be a useful resource for health professionals in supporting their understanding of the numerous and complicated influences on food choice. The
more information that dietitians and health professionals have in their repertoire, the more effective behaviour change interventions are likely to be.

Throughout the study, women as mothers and grandmothers expressed different views, attitudes and perceptions. In the quantitative phase there were a number of significant differences, and within the interviews and focus groups differences also emerged. However, there were also many areas of commonality which are important in gaining an understanding of influences and behaviours governing food choice. Identification of these differences could be a powerful tool in developing interventions to address the misunderstandings expressed by both groups with two generations of women effectively learning from each other. While similarities, too, can be an important adjunct to health promotion activities which may need to adopt a “whole family” approach to healthy eating, for example, by involving all generations of a family in behaviour change initiatives.

**Summary of differences and commonalities**

The demographic range of the participants of this study was diverse and spread quite evenly across the groups. However, it is worth noting some of the differences between the two groups in that there were similar numbers of both groups living in the most deprived quintile, while over twice as many grandmothers as mothers lived in the least deprived quintile. Also, as might be expected, more mothers were in employment and more grandmothers had retired from employment.

A summary of findings from the questionnaire chapter is detailed below:

- Grandmothers made more healthy choices and enjoy healthy choices more;
Mothers were more confused by healthy eating and used food in response to stressful situations;

Mothers were more influenced by numerous external stimuli such as the media, celebrity chefs and the like while grandmothers were only more influenced by seasonality;

There were numerous differences in the types of foods that the different groups perceived as healthy with porridge, honey, liver and ready meals being favoured by the grandmothers while mothers stated apples, cooked dinners, pasta and bottled water as being more important;

Foods that were consumed frequently by both groups also differed again with honey, liver and porridge being preferred by the grandmothers and full cream milk, bottled water and pasta being favoured by the mothers.

From the focus groups the following was found:

Reminiscence about earlier food practices when participants were younger was a feature of the focus groups both in terms of cooking and shopping practices;

Both groups had concerns about self image and it’s undue influence on eating habits of young women, in particular;

Grandmothers felt that “experts cannot be trusted” and that teaching cooking skills was highly important;

Mothers, as might be expected, were very concerned about the diets of their children;

Mothers lacked confidence in their own cooking skills;
Both groups highlighted inconsistencies in their own diets and that of their children in relation to nutritional knowledge;

- Mothers used foods as a comfort to themselves on occasion while grandmothers used food to provide comfort to others;

- Among grandmothers there was a belief that government policy was responsible for many of the dietary problems that currently exist.

The above is a very brief summary of the findings which are detailed in the relevant chapters.

What follows is a discussion of some of the results as reported with reference to the relevant literature and also a contribution to the debate around obesity, diet and healthy eating. It begins with an overview of the changes in family roles and lifestyles which may have influenced some of the differences that exist between the two groups. It then moves on to discuss the findings of the study more specifically, in terms of healthy eating messages and emotional influences. During the course of the discussion the importance of psychological and sociological insights is highlighted, and how these are inextricably linked with behaviour. It continues to develop this further with a proposed link between the psychological aspects and social theory, culminating in an interpretation of the findings in relation to Gidden's theory of structuration.

Changing Lifestyles and familial roles

Familial roles have undergone significant changes in recent years, since Murcott's (1982) symbolic portrayal of women as the provider of food and childcare while their
husbands went out to earn the money. This hierarchy of industry over domesticity (Kemmer, 2000) is not so prevalent in the Britain of 2012 on a number of levels. The research cited earlier by Murcott (1983) and also that by Charles and Kerr (1988), both used data from the seventies and eighties and, as argued by Kemmer (2000), these works must be seen in their historical context with due consideration given to the structural changes that have taken place since then, and also since Kemmer’s work itself which was conducted over a decade ago. So that even with the longstanding, deep-seated attitudes and behaviours around gender roles that the research above has highlighted, in an environment where the UK economy is slipping back into recession and unemployment is increasing, gender roles are in a state of flux.

Familial roles have undergone extraordinary changes in recent years and it is likely that the grandmothers in the present study were in a quite different position within the family from the mothers in the present study. As has been shown above, many of the grandmothers were likely to have been involved in the Murcott arrangement, while the mothers in the present study are in quite a different familial role, and many of the differences that exist between them are likely to be explained, in part, by this.
Healthy Eating messages

Healthy eating messages were well known, and perceived to be well understood by the participants in this study, as evidenced at each phase in the earlier chapters. However, it became clear, mainly from the focus group data that knowledge does not necessarily translate into behaviour. Chapter 4 showed mothers behaving inconsistently with their children – hiding their own consumption of certain foods which they would not allow their children to eat. Grandmothers, too, spoke knowledgeably about healthy eating recommendations and yet used humour to justify a lack of success in adhering to them. The very fact that the terminology promoted by health professionals and the media around healthy eating is very much in the public’s psyche could perhaps serve to reassure that messages are “getting through”. Yet, the obesity epidemic and the unbalanced nature of many diets would suggest otherwise. Is the use of terms such as “five a day”, “balanced diet” or “healthy eating” little more than individuals making use of formulaic language, or “a sequence, continuous or discontinuous, of words or other elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar” (Wray 2002).

Research into formulaic language has tended to focus on the areas of Alzheimer’s disease and language education. However, there may be a place for it in the dietary field as the terminology around diet is so embedded in the language of the UK that people use these terms with little knowledge or understanding of their meaning. These terms quickly come to mind during a conversation (interview or focus group) yet it could be that they are just terms often used without due regard to their understanding.

As an example of the potential for formulaic language to play a part, Parmeter et al (2000), in their study of 1040 UK adults, found a general awareness among their
participants, of the major guidelines on healthy eating, and they were also knowledgeable about the types of foods they should consume more, or less, of. However, when examining areas such as low fat foods, or selecting appropriate snack foods there was much confusion and misunderstanding even though they concede that their sample was biased towards women, older people and those with high SES and education – the very sample type that is often cited as having better nutrition knowledge than other groups (Buttriss 1997). Young adults’ understanding of messages was also examined by Herbert et al (2010) in their study of 40 undergraduate students. They found a general awareness of healthy eating messages such as 5 a day but “widespread confusion regarding the detail”. Both of these studies found women to be more accepting of healthy eating messages than men which certainly adds to the evidence for more targeted dietary interventions for men, but with both sexes not really “getting it”, there should be no complacency when it appears that individuals are aware of messages when they are clearly not translating knowledge into behaviour.

During the first phase of the current study, the ideas collection interviews, a number of the participants expressed their distrust of dietary advice. There was a reliance on “instinct” to determine what was appropriate dietary advice or not. This reliance on instinct is was also found by O’Key and Hugh-Jones (2010) who looked at the mistrust that many mothers have for dietary information and for healthy eating initiatives. They found that mothers perceived themselves to be the experts in their own children’s diets and that they reject healthy eating messages “on the grounds that they are at best, inconsistent and at worst, grossly contaminated by stakeholder bias”.

The concept of common sense and instinct has been reported previously (Borra 2000) and is one that should not be underestimated. It is especially salient in an environment in which “the public are increasingly being bombarded with advice from various sources offering quick fix cures or the latest fad diets” (British Dietetic Association, 2008). Even in an environment offering information, advice and
knowledge at all levels, individuals still rely on their own instincts and judgements in food choice.

However, Pollard et al (2009) in their Australian study found that awareness of increasing fruit and vegetable consumption and actual consumption had increased during the period 1995 to 2004. Yet they indicate that complacency around fruit and vegetable intake exists with many individuals having an optimistic assessment of their own intakes.

In all phases of the current study, both groups of women displayed a lack of understanding and confusion around healthy eating messages – the mother in chapter 2 (one to one interviews) who believed it was good for her health to consume large quantities of water, only to be puzzled by a media report of a death caused by excessive water consumption. In chapter 3 (questionnaire) we saw the terms used to describe the unhealthy qualities of some foods indicate a misunderstanding – that too much yogurt, for example, can upset the delicate balance of gut flora. In chapter 4 (focus groups), participants were clear in their assertions as to the composition of a healthy diet – but talked about “balance” in terms of “moderation” or “a mixture of everything, and chocolate now and then as well”. One of the focus group participants also stated that there are “conflicts between good fats and bad fats” while another one suggested that fat in the diet is related to fat reserves in the body which she felt were essential to avoid illness. This is not to say that these perceptions of a healthy diet are necessarily wrong, but they are not accurately describing the “Balance of Good Health” that is widely used in health promotion and describes the components of a healthy diet in quite specific proportional terms.

Yet, Carruth and Skinner (2001) report in their longitudinal study of 72 white mothers that the information they receive from professionals decreases dramatically when their child reaches the age of 2 years, but that advice from relatives remains
constant throughout, while information from newspapers, television and friends becomes more significant as the child grows older. This is an interesting example which can likely be applied to many age groups and gives valuable insight into the fluidity of information exchange, which develops through different life stages. What is particularly interesting about Carruth and Skinner’s observations is the presence of conflicting information received from different sources, as well as the influential role of the grandmother in providing advice and support to mothers in terms of diet for the youngest members of the family.

Combining Carruth and Skinner’s observations with the findings of the present study, we can perhaps begin to see how multifaceted and complicated the influences on food choice and behaviour are - perhaps unsurprising in a climate of misinformation, mixed messages and conflicting advice. Carruth and Skinners’ findings reflect the findings of the current study as the mothers and grandmothers talked about conflicting information from different sources and a reliance on peers and family (family likes and dislikes were the most common influences on dietary choice in the questionnaires of the current study).

Even when individuals do not rely on the factors above, it can be difficult to know where reliable information can be obtained. Basu & Hogard (2008) in their review of the nutritional information provided by tabloid newspapers found that although members of the public saw the value of these sources of information, they also presented a negative attitude towards some of the material contained within them. They saw tabloid newspapers as misusing an opportunity to educate and inform and that registered dietitians should make their expertise more accessible to journalists.

The term “media literacy” is used by Goldberg and Sliwa (2011) in their assessment of the challenges and opportunities offered by nutritional information. They state that the media are an important source of communicating nutritional messages but that the media should be seen in the context of the evolving scientific evidence around
diet, the amount of different sources of information and their specific motivations and also, of course, the diversity and differences that exist among individuals in relation to food choice.

The wide availability of healthy eating information is taken for granted, then, and many of the messages are well known – but is it the misunderstanding of these messages that makes them so difficult for individuals to instigate? It is unlikely that this alone can account for the obesity epidemic and it is necessary, therefore, to look far more deeply into the individual and environmental aspects to try and gain an understanding of the complicated, interacting factors that work together in determining an individual’s food choice.

Cost as a barrier to healthy eating

The current study explored some of the perceived barriers to healthy eating stated by the female participants. Many of these related to time and lifestyles, with cost being mentioned in passing by a grandmother who said that having sufficient financial resources allowed her to prioritise healthy eating more. Both groups also talked about cost, but not in the sense that they found healthy eating to be expensive, but more that they blamed supermarkets for promoting unhealthy foods over, for example, fruit and vegetables. Several participants highlighted concerns about the promotions on processed foods which make them more affordable than fruit and vegetables. They felt that this made prioritising healthy eating difficult. Several of the mothers also talked about poor quality fruit and vegetables being affordable but that consumers need to pay more for fruit and vegetables that taste acceptable. They also felt that supermarkets are to blame for selling vegetables out of season which makes them prohibitively expensive.
The above shows that there were some concerns about the cost, particularly of fruits and vegetables. However, O'Neill (2004) studied attitudes within a disadvantaged community in South Wales and found that cost could not be used as a barrier to healthy eating. As one of his participants stated "the cost of fresh fruit and veg is not an obstacle because people have enough money to buy brand name products like trainers.”

**Emotional Influences**

Throughout the present study, a number of the interview and focus group participants and the questionnaire respondents, talked about or responded to, statements about the potential of food to be used to satisfy an emotional need either in themselves or others, and also the potential of food to convey feelings of guilt or regret after their consumption. The link between strong emotional attachments and food is not a new phenomenon and might be expected, particularly among female participants.

Emotional eaters are defined as those who have a tendency to overeat in response to negative emotions and there has been much research in this area. Specifically, Rose et al (2010), in their American cross-sectional study, looked at over a thousand men and women and found a significant relationship between depressed mood and chocolate consumption, although the authors are keen to preclude any suggestion of causality. Interestingly, it is often assumed that women have more of an emotional relationship with food yet Rose et al’s study included men, and the findings were not dependent upon gender.

Macht (2008) in his proposal for a five way model of how emotions affect eating examined the literature and found evidence for a link between emotional eating and obesity, particularly in terms of binge eating. Further, they cite Wansink et al (2003)
who found in their animal studies that consumption of high fat and high carbohydrate "comfort food" actually inhibited the physiological response to stress and therefore in a way eased the feelings of stress in the animals studied. Further Macht found that negative mood in humans is immediately improved by eating palatable food. They conclude that there is a link between eating high fat and high sugar foods among emotional eaters and that they also eat in order to reduce negative emotions, while normal eaters may also eat occasionally to cope with negative emotions.

Certainly the women in the current study were subject to these influences on their food intake, but interestingly the mothers were more likely to report emotional eating than the grandmothers. Also grandmothers seem more inclined to use foods to support others emotionally, by providing childhood foods to their adult children in times of stress or emotional need. But is this because their grown up children need this type of nurturing and care at difficult times, or is it because the grandmothers themselves need to reassert their position as primary caregiver at a time when adult children usually do not need this type of attention? The familial roles become diluted as age progresses with motherhood becoming less clearly defined as children develop into individuals themselves, and it could be many years before they attain the role of grandmother, if ever. So that when they do reach grandmotherhood, their need to nurture and care is rediscovered, and translated into food provision which resorts back to the food provisioning that occurred when their own children were young. This leads to the "treating" of grandchildren, and the potential for supporting adult children emotionally with childhood foods.

Negative emotions, then, can influence dietary choice among women (and men) at all stages of the life course. However, as the grandmothers in the present study sometimes held the perception of childhood foods as being "comforting" to their adult children, so throughout the study there were many references by the women about certain types of food having specific effects on the consumer.
**Perceptions of food**

There was a frequent perception that starchy foods convey a feeling of "sluggishness" or "heaviness". It is interesting that starchy foods are perceived in this way by women, when in 1983 Mildred Blaxter and Elizabeth Paterson (Murcott 1983) described the meanings of food to two generations. At that time the grandmothers they studied talked about potatoes, porridge, cereals and puddings as being foods that were perceived as "good" or part of a "proper meal" for themselves and their families. There was no mention, at that time, of sluggishness or of heaviness being caused by starchy foods, which were deemed to be an important and crucial aspect of food provisioning at that time. So, in just over 25 years, the perceptions of starchy foods seem to have changed from being described in positive terms such as "solid" or "proper" to now being described in negative terms. This negative view of carbohydrates may originate from the changes in lifestyles which have become far more sedentary, so that high carbohydrate diets combined with lack of physical exercise may be a factor in the incidence of obesity.

The Atkins Diet gained popularity in the late 1990s and although low carbohydrate diets have been in existence since the 1860s (Astrup et al 2004) it was the Atkins diet that raised the public's consciousness to the potential for dramatic and fast weightloss by the stringent restriction of carbohydrates, even though medical evidence as to its effectiveness and health implications remains inconclusive. Yet, it seems that its influence has remained, in that carbohydrates are viewed negatively. However, it may be that the women in the current study who reported that carbohydrates are heavy or cause sluggishness may be women who restrict carbohydrate as a matter of course yet are inclined to overeat when the opportunity arises – thereby causing the negative feelings they report. Whether this is the case for the women in this study cannot be elucidated from the current data, but would certainly be an area for further research.
Having said that dietary perceptions have seen a shift in emphasis since the 1950s (the era referred to by the grandmothers in Mildred Blaxter’s work cited earlier), these are relatively insignificant influences when compared with psychological and sociological viewpoints frequently used to explain food choice.

**Psychological perspectives**

Psychological constructs have been widely used and applied to explanations of food choice – and certainly in the present study there are a number of insights into the psychological influences at play with this group of women. Some of the participants talked about a lack of confidence in their own cooking ability, or about the difficulties associated with trying to provide healthy family foods. The concept of self-efficacy could be important here in explaining why individuals hold perceptions of this type.

Self-efficacy is one of many constructs under the umbrella theory of social cognition. Specifically, it refers to an individual’s belief that they are able to behave in a certain way, or that they believe they have the capacity or power to act upon or fulfil certain obligations in their own life (Thirlaway and Upton 2009). In terms of the results of the present study, it can clearly be applied to some of the participants’ lack of confidence in their own cooking or food provisioning ability. Some of the participants talked about barriers to healthy eating, which are perceived as originating from a number of sources. Yet they all have something in common, in that although they are blaming external influences on their behaviour, everyone is subject to similar barriers and yet not everyone finds difficulty with providing healthy choices for their family.

Therefore, it is argued that the women in this study who are reporting difficulties in terms of cooking ability, family support, lack of resources and the like are the participants who are subject to low self-efficacy – they do not hold the belief or conviction that they have the power to overcome these barriers in order to provide
the diet they know that they need to be healthy. Self efficacy has been widely researched in terms of its presence being implicated in promoting behaviour change – for example, Luszczynska et al (2004) found in their intervention to increase fruit and vegetable consumption, that the enhancement of self-efficacy was a strong predictor of behaviour change. Indeed, all their intervention participants were in receipt of email correspondence to target self-efficacy and as a result increased their fruit and vegetable consumption. Van't Reit et al (2010) also looked at the responsiveness of individuals to health messages around salt, and whether messages that promoted the benefits or those that highlighted the detriments of a high salt diet, would be most effective. They found that the detrimental messages were most effective – but only in the participants who possess high self-efficacy to reduce their salt intake.

In the present study, it is likely that some of the barriers to healthy eating suggested by the participants are related less to the external stimuli that they perceive, but more to their own personal perceptions about their own ability and capability to make appropriate dietary choices – their self-efficacy. Therein lies a problem, however, in that some individuals may display self-efficacy, may believe in their ability to provide and consume a healthy balanced diet yet, as Kearney et al (1999) found in their EU consumer attitude survey, 70% of European participants believe that their diet is already healthy. This is against a background of other research (eg. Welsh Health Survey 2010) that states that few people can truly claim that their diets are within recommended guidelines. Kearney’s participants, then, may well have displayed self-efficacy in dietary provision and consumption but this was seemingly misguided and gives more credence to the complex and multi-faceted issues facing health professionals and, indeed, individuals when promoting dietary behaviour change. Within the focus groups of the present study, there were misconceptions and misunderstandings around diet, specifically in terms of dietary fat. Yet these women displayed a confidence and a belief in their own knowledge which could suggest the presence of high self-efficacy. Yet their misunderstandings meant that high self-efficacy did not necessarily relate to appropriate dietary choices, and therefore its importance should not be overestimated.
Further, self-efficacy alone is not sufficient explanation for the choices and perceptions women have around food and diet. Indeed, Guillaumie et al (2010) found, in their systematic review of the psychosocial determinants of fruit and vegetable intake that habit, motivation, knowledge and taste were the most consistent variables cited in the research they reviewed. Aikman et al (2006) also found that individual perceptions of the health quality of a food were not related to nutritional content, nor did they relate to how often the food is eaten. These investigators, along with others (Tuorila et al, 1988, Kristal 1990) have found that taste or “hedonic preference” is the most significant predictor of food choice. Whilst Lennernas et al (1997) found that the most important determinants of food choice are quality or freshness, price, taste, trying to eat healthily and family preferences. In common with their findings, Chapter 3 of the current study describes the results of the questionnaire in which mothers stated family preferences as a key influence in dietary choice, and both groups specified freshness, taste and nutrition as important aspects of healthy eating.

Social Cognitive insights

However, there must be more to the exploding obesity problem than merely that people choose foods that taste good. Indeed, social cognitive theory has applied a number of other models to predict people’s dietary choice and behaviour. Models such as The Theory of Planned Behaviour (TPB) (Conner et al 2002, Fila et al 2006), and the Health Belief model (Garcia et al, 2003) have all been applied to healthy eating and lifestyle behaviours.

The TPB is based on the premise that a person engages in behaviour because of an intention to do so. Intention is governed by perceived behavioural control (the perceived ease or difficulty in performing a behaviour (Ajzen, 1988)), attitudes (if the
outcomes of performing the behaviour are evaluated as positive) and subjective norms (if an individual feels that significant others would want them to perform the behaviour) or the extent to which an individual feels this behaviour is within their control (Conner et al (2002)). They concluded that health promotion activities should seek to target attitudes, subjective norms and perceived behavioural control to increase healthy eating intentions. Indeed, the results of the current study would also point towards this approach as being a starting point in targeting behavioural change as attitudes and perceptions seem to be the basis of behaviours.

Psychological perspectives then, have a place in the current study, but it could be argued that the evidence that has emerged suggests that it is sociological or environmental perspectives that are paramount. Within the interviews, questionnaires and focus groups, the overriding influences on food choice were reportedly external and included family preferences, the media and the environment and conditions in which individuals live and work. Mela (1999) describes just such a situation thus: “the range of items typically chosen and consumed within a given population is largely determined by interaction of the external environmental context with guiding sets of implicit and explicity social and psychobiological “rules”.”

The Structuration Perspective

Environmental influences have recently been given more consideration by, for example, the coining of the phrase “obesogenic environment” – “an environment in which influences, surrounding opportunities or conditions of life combine to promote weight gain in individuals or populations” (NHS 2011). As the briefing paper highlights, much of the research in this area has focussed on individual-level determinants, such as knowledge, attitudes, practical skills and motivation to lose weight. Certainly, from the researcher’s personal experience as a practicing health professional (dietitian), much of dietetic practice has been based on these very aspects, until recently when behaviour change initiatives have become more readily
available and utilised in the clinical setting. Yet, individual level factors are always going to be an unsatisfactory explanation for dietary choice as they fail to take into account the immense, complex and intertwined external and environmental factors at play, and to which we are all exposed. Hence a more holistic, systematic approach is called for.

Several participants in the current study stated that they found it more difficult to eat healthily when working or when trying to fulfil family commitments such as after school activities. Current lifestyles, working patterns and the availability of alternative options, mean that many people are faced with difficult, everyday choices – to spend time cooking and shopping or to purchase takeaway or fast food or to choose something in between like a “ready meal” that requires minimal preparation. It could be argued that if the obesogenic environment did not exist then people would make healthier choices. But the obesogenic environment is here to stay, and individuals are therefore faced with challenges should they wish to choose the healthier option. At the present time, the healthy choice is not the default choice – and without a strong commitment from government at local and national level, it is unlikely ever to be.

Many of the participants in the current study, particularly grandmothers, spoke about the responsibility held by local government in giving planning permission to fast food outlets – an example of enriching the obesogenic environment which is seemingly being endorsed by government policy. Such action not only serves to make it harder for individuals to make healthy choices, but is also giving out “mixed messages” and inconsistencies to the public and consumers. On the one hand they are being told to eat 5 a day and cook healthy family meals, and on the other hand they are being confronted by opportunities to eat unhealthily around virtually every corner.

It can be argued, then, that dietary choice is certainly about personal preference, power and choice, determined by constructs such as self-efficacy, and those with a
social cognitive basis. But, in addition to this, the external environment is undoubtedly exerting an overwhelming influence on dietary choice. This was summarised by Anthony Giddens in his theory of structuration (1984). Giddens is keen to make a differentiation between structuration and structuralism, with structuralism referring to larger social structures but without the influence of individuals. Structuration as a theory proposed by Giddens addresses the dualism offered by other concepts under the umbrella term of “social theory”. Social theory uses as its basis “agency” and “structure”, with agency being an individual's voluntary action and structure being the rules and resources surrounding this action. Giddens proposed that this duality is flawed and within structuration theory has attempted to incorporate both agency and structure into a single theory. He suggested that behaviour is strongly influenced by the “flow of daily life” or “in context” which is also a key finding of the present study. Specifically relating to women’s role in society and their working patterns and lifestyles – their behaviour is determined to a greater or lesser extent by the environment and contexts in which they operate. For example, the participant who stated that if she worked late and felt tired as a result, she would be more inclined to buy a takeaway on the way home. This illustrates that the working environment has influenced her behaviour as, too, has the wider environment in the locality which has provided opportunities for takeaway food consumption. Another participant explained that she found it very difficult to eat healthily on days that she worked, whereas during holiday times (she worked part time as a school teacher) – again the working environment is determining her behaviour.

Delormier (2009) looked at eating patterns as social phenomena and proposed that, along the lines of social theory, families are social systems or institutions and within these systems there are many components. As an example, and as elucidated by the women in the present study, interpretive schemes and terminology like “healthy”, “junk” or “traditional” and “processed” are used to categorise foods into their health related properties and are part of the rules and resources that constrain or enable family food choice.
Social theory provides us with an opportunity to see dietary choice in the social context in which it exists, rather than food choice being determined solely by an individual's rational choice as proposed by social cognitive approaches. Giddens’ approach is also a cyclical one in which social structure not only determines individual action, but that individual action in turn supports, and can potentially change the social structure. Slater et al (2011) in their study of employed mothers’ experiences of food provisioning in Canada, describe the conflict that exists between women who on the one hand are keen and driven to take on the role of the “good mother” whilst on the other hand are also equally keen to develop an “independent self” with their own earning power and career. These conflicts take place within the much larger structures of the food system itself, sociocultural norms and also the workplace and thereby begin to have a bearing on those same structures and begin to alter and develop them.

In an attempt to describe this phenomenon in the context of the present study, respondents gave the example where they worked, collected children from childcare immediately after work, transported them to numerous social or academic activities only to arrive home close to bedtime. At this point the mother was expected, in the role of “good mother”, to begin cooking a wholesome meal, from scratch, using fresh ingredients, preferably that she has grown herself. In reality, some of the features of a “good mother” cannot be sustained in the face of the time pressures put on her by her desire to also have an “independent self” who works at a demanding and satisfying career that also brings more money into the family. This is where the wider structures come into play, and why environmental factors are so crucial in such scenarios. If “fast” or “processed” foods were not available, then the family in this scenario would have no option but to rearrange their social and working lives to somehow incorporate the provision of a meal into the time-scarce schedule. Yet the food system and the socio-cultural norms that are in place mean that other options are available to the mother in the above scenario – she can prepare something “quick” out of the microwave, or call in for some fast food. Insodoing, she has partially satisfied her desire to be a good mother by collecting her children and providing them with a healthy, balanced social life while at the same time maintaining
an independent self with earning power and the independence provided by a career. Something, however, has to give and in view of the wider environment being conducive to finding alternatives to cooking a meal “from scratch”, these alternatives sometimes become the best option.

Participants in the current study certainly concurred with this scenario as one of them stated that when she was “out and about or in a rush” that she found it very difficult to eat healthily, and that would be the time that she might buy sandwiches or fast foods as there were limited opportunities to eat healthily on such occasions. While another mother stated that if she finishes work late, that would be the time she would purchase a takeaway as she was tired and did not wish to spend her time at home cooking. One participant also felt that there should be “healthy eating takeaways” to address such a need and to facilitate healthy eating. A number of other participants reflected these comments, so that it seemed to be a general trend that in certain circumstances the ready meal or the takeaway was an unavoidable necessity.

The concept of “time scarcity”, the feeling of not having enough time to do what needs to be done (Jabs et al 2006) was also a major factor in many of the participant’s lives, particularly if working. Jabs et al (2006) in their overview of time scarcity in relation to food choices suggested that many time pressures could be linked to the role expectations that individuals are presented with. They refer to the pressures that “roles” can exert upon individuals. For example, the familial role of mother, or grandmother, combined with numerous other roles including worker, parent, housekeeper and wife can create strain and conflict within families as they attempt to manage the competing demands on time and energy.
Convenience

All the mothers and grandmothers in the present study spoke in negative terms about processed foods or fast foods, yet they all admitted they had used them on occasion, usually in exactly the scenario described above. Interestingly, the negativity surrounding such foods is not new as Murcott (1982) quoted an old-fashioned Greek description of quickly prepared dishes as ‘prostitute’s food’ (Hirschon, 1978). This is also what Giddens (1984) was suggesting when he talked about the “duality” of structure – the mother is influenced strongly by the structures afforded by family, work and food systems yet these are equally influenced by her actions. The food system that has developed in recent years with the wide availability of “quick fixes” for meals meaning that families are almost perpetuating the development of the no-cook culture. Although they may talk in negative terms about fast or processed foods, they still use them and are therefore encouraging these food systems (structures) to flourish and thrive.

Dietetic practice and health promotion has largely relied on individual influences on food choice with insufficient regard for the wider structure and systems in which individuals exist. It could be argued that the future of tackling obesity and encouraging healthier eating habits is looking bleak, largely because the social structures and sociocultural norms of food and eating are so embedded in our culture and society. To make the huge cultural shift, back to the “good old days” talked about by some of the participants in the present study – with mother at home full time, spending her days producing home cooked, healthy foods for her husband and family – is an unrealistic expectation and one that even with the will of individuals and government at a local and national level, is not likely to happen. Lifestyles have changed beyond recognition since the grandmothers in this study were mothers, and the cycle of change shows no signs of abating. As described earlier, lifestyles are simply feeding this change, however negatively we may view it
– by using fast food or processed foods, even occasionally, we are simply endorsing this behaviour as a socio-cultural norm – and once it has become embedded in this way, it is extremely difficult to break the mould.

**Familial Role**

Familial role, mentioned earlier in relation to time scarcity, reflects the "socially defined, expected behaviour patterns that provide identification and status and give purpose, meaning and guidance to life" (Merton 1957, Moen 2003 cited by Jabs et al 2006). The participants in the present study were all subject to the demands determined by the above definition. Specifically the “expected behaviour patterns” could become a source of conflict as women try to achieve the behaviour patterns expected of a mother, but are also aspiring to achieve the behaviour patterns “expected” of an employee, housekeeper or wife.

Having described how the current situation may have developed, based on structuration theory, it is also important not to overlook the differences between women in different familial roles that have emerged in the present study. These, differences between the two groups, in terms of attitudes and perceptions towards healthy eating, were largely linked with the changes in food provisioning styles and resources that have developed over the last fifty years. The mothers and grandmothers had different ideas about which foods they perceived as healthy or important for a healthy diet and they reported different choices of specific foods. Since the sampling criteria were based upon familial role and not on age, many of the mothers and grandmothers were from the same age group. It can be assumed, then, that it is familial role rather than generational position that determines attitudes and perceptions among this group. Certainly, women in the role of mother or grandmother of school aged children, are likely to be striving to achieve the expected behaviour patterns of that role, regardless of chronological age. Of course, neither
group of women are homogenous but the influences upon them are similar and the structures around them are similar, and it is these that have a profound influence.

The structures that exist at a given time, then, are going to influence food choice to a great extent. This assumption gives credence to the results of the present study and could account for the existence of some of the reported differences between mothers and grandmothers. Mothers and grandmothers both exist within structures – mothers within the family, home and possibly work structures while grandmothers could exist or have, throughout their lives, operated under a diverse set of arrangements depending on marital, career and social status. As a mother’s focus is often the home and family, even if she works and has a social life, she is likely to be influenced by the food choices of her children and partner – but in addition is subject to the influence of time scarcity and the desire to fulfil multiple roles. Grandmothers may be subject to similar influences if they work, are married or living with grown up children, but without the undeniable time, money and attention demands presented by young children. Grandmothers could potentially be less influenced by children’s preferences but are subject to other influences which could account for their different ideas and attitudes around food.

Having said that both groups of women are influenced by their environment, Murcott (1995) reinforced this with her alternative model of food choice in which she argued that what people say they eat is not necessarily what they would actually prefer to eat. She cites evidence that married women do not always eat what they would like, and that their husband’s preferences take precedence over their own as part of the wife’s responsibility to manage the home and avoid arguments. More recently, the British Social Attitudes Survey (2006) reflects the differing gender roles as it states that attitudes towards gender roles have changed, but that behaviour has not. It goes on to explain that although women do not feel it is their “job” to carry out all the housekeeping duties if they work full time, they still end up doing a much greater percentage of these tasks than men in the household, including cooking and food provision. Some of these issues were highlighted in the chapter 1.
The grandmothers in the present study, then, may have lived through very different child rearing experiences than the mothers in this study – their familial role of mother was subject to more traditional expectations and demands than mothers of today. However, the transition into grandmotherhood puts their role on quite a different footing, and offers the potential for increased freedom and creativity in their own food choice. Hence the grandmothers in the present study feel they can enjoy a different range of foods, and choose to eat a different range of foods and also have less concerns about the diets of their grandchildren. It seems that without the demands and pressures of motherhood, grandmothers can take a step back and have a much more relaxed view of their own diets and that of their grandchildren as suggested by the participant who felt that if children were introduced to healthy eating at an early age “they will come back to it when they’re older”.

**Generativity**

Several grandmothers in the present study spoke fondly of the cooking experiences they shared with their grandchildren, and this was often described in terms of the cohesiveness and communication opportunities that such activities promoted. This was in sharp contrast to many of the mothers who felt they lacked the time to cook for the family, let alone cook with the family. The grandmothers who took part in such activities appeared to be actively involved in a concept, developed by Erikson in 1963, called Generativity. The concept, as part of his psychosocial theory and the lifecourse, describes the nurturing, caring role taken on by some individuals during midlife and beyond in which the older generation passes on their knowledge and experience to the next generation. Cooking with the grandchildren is a prime example of generativity and one which could potentially have profound benefits to both the grandchildren and the grandparents themselves. Generativity is part of the continuous change that occurs through the lifecourse and its absence can be replaced with stagnation. There is a paucity of evidence on the concept of
generativity and cooking but it would be an interesting area of future research – it is anticipated that by forging links between grandparents and grandchildren in this way both generations could gain from an understanding of each other as well as an increase in wellbeing of the grandparents and an avoidance of stagnation as described by Erikson (1963).

Indeed, Schoklitsch and Baumann (2012) talk of grandparenthood giving individuals a second chance at generativity, and they cite Erikson (1986) who described the relationship grandmothers sometimes have with their grandchildren as “warm, relaxed, and mutually respectful and satisfying — quite unlike the relationship she had with her own children”. But not everyone has the resources or opportunities to be “generative”. Indeed, Schoklitsch and Baumann (2012), again, talk of the manifestation of generativity only being possible if certain environmental factors are available such as volunteer services and community engagement activities. They argue that stagnation is likely to result if poverty, isolation and ageism continue to inhibit the development of generativity.

Generativity in changing societies as described by Cheng et al (2008) highlighted that the older generation in their study in Hong Kong felt obsolete in terms of education and technical knowledge. They were experiencing stagnation as they felt unable to contribute to the lives of the younger generation. They felt limited as their children were better educated and more technologically capable than they were, and felt their contribution to the lives of their children had been curtailed in many ways. They did, however, feel that they still had a role to play in passing on their moral and behavioural codes to the younger generation. Generativity still existed, therefore, but it was in conflict with stagnation.

The concept of generativity has been measured and Cox et al (2010) report that there are links between generativity and volunteering, church attendance and community involvement. They also report that those who have high generativity
report improved well-being, and psychosocial adaptation to later life. Cox et al also talk about the key components of generativity such as parenting, mentoring and taking on responsible adult roles.

The evidence is there, then, for the benefits of generativity and grandparents are well placed to enjoy the benefits that this concept may bring. Cooking is an activity in which many of the grandparents in the present study excelled and enjoyed carrying out with their grandchildren. There is very limited literature in the area of generativity and cooking or diet so it is an area ripe for future research.

It is certainly a concept that could benefit from further study if we are to avoid the older generation (not just grandparents) experiencing feelings of obsoletion or uselessness ie. stagnation in later life which can only have detrimental effects on both physical and mental wellbeing.

Practical insights from findings

The two phases of the study that were seeking to identify differences between the generations did highlight some interesting points – areas of commonality and areas of diversity. Looking at some of the findings from the questionnaire and the focus groups together, allows a much wider view to emerge of some of the interacting factors at play.

The questionnaire revealed that the grandmothers in this study were reportedly more likely than the mothers, to choose and enjoy low sugar and low salt foods and that more grandmothers than mothers reported finding healthy eating advice confusing. Mothers, on the other hand, were more likely than grandmothers to report being influenced by all the external influences on food choice. It could be that if mothers really are more reliant upon external sources of information about diet, this translates
into misinformation and misinterpretation, which is reflected in their less frequent adherence to recommended guidelines, as detailed in the results of the questionnaire. Grandmothers were more likely than mothers to report being confused by healthy eating guidance, so, perhaps the mothers believed their diets were already healthy, by behaving in accordance with advice and guidance from the popular media. When in reality, they reported less health awareness, choosing healthy choices less often, and experiencing less enjoyment of healthy food than the grandmothers. Lappaleinen et al (1998), found a similar phenomenon in their study of European adults in which 70% of people believed their diets were already healthy and did not need improving. Having said this, de Almeida et al (2001) found in their study of the eating habits of European elderly people, that 86% of their sample believed that they already ate healthily. The literature suggests, then, that there is a potential difficulty in individuals facing the reality of their diets while the current study also highlighted some inconsistencies as detailed in the focus group analysis.

The section above gives interesting insight into some of the issues that exist around individuals’ beliefs about the healthiness of their own individual diets, and how that may be related to the external influences that can impact on food choice. Bringing these together to target personal beliefs about diets and the quality of information being distributed in the popular media is a difficult challenge for health educators and professionals, but one that needs to be addressed.

Further, mothers were more likely than grandmothers to report using food in times of stress or anxiety and being more influenced by the popular media including celebrity chefs, newspapers and magazines. Grandmothers, on the other hand, reported lower levels of emotional eating and the only major external influence on their food choices was the seasonality of food. Mothers, then, perhaps have a different view of food, due to the influence of external forces. Grandmothers rely more on the seasons, perhaps linked to the freshness and the quality of the food itself and are less inclined to follow the guidance offered by the multitude of different external sources of information in the popular media. The first phase of the current study
highlighted that instinct was a key determinant of food choice among the participants, so perhaps grandmothers are relying on instinct and confidence in their own knowledge while mothers are seeking reassurance from other sources of information. This desire for reassurance from external sources could be linked to a lack of confidence in their own knowledge and abilities, thereby driving the emotional eating that featured in many participants’ relationship with food.

Mothers and grandmothers, then, do seem to have different perceptions of diet and eating, possibly due to the influence of external forces. Grandmothers appear to be focusing more on the food itself, for example in the questionnaire it was the grandmothers who mentioned health benefits of food more than mothers while mothers used more nutritional terms to describe foods. Nutritional terms may or may not be accurate but they are potentially meaningless without a context of dietary recommendations. While the health benefits of a food are a tangible concept easily translated into behaviour, for that reason health promotion has largely tried to distance itself from using “nutrients” to describe foods, yet the mothers in the current study seem familiar with such terms and they were embedded in the language around healthy eating. This is perhaps due to the way that nutrition is taught in schools with an emphasis on the science of food, rather than the practicalities of food preparation that existed when the grandmothers learned about nutrition.

Whether an emphasis on nutrients is helpful is questionable, but it certainly might raise concerns when messages like 5 a day are well known yet widely misunderstood. Therefore, the wide acceptance of nutritional terms may not be accompanied by the nutritional knowledge that needs to underpin it.

Self-image was also a topic of discussion through the focus groups, with participants concerned about the impact of the celebrity culture and unattainable ideals of body shape on their children. However, once again, mothers were more influenced by the popular media than the grandmothers. Giddens (1984) duality of structure again becomes relevant as the environment and culture within which the participants exist is one in which the popular media is utilized and relied upon as a source of
information. This, however, is combined with messages from the same popular media about body image and celebrity culture. The two aspects of the popular media – as a transmitter of knowledge and as a transmitter of unacceptable influence to children – do not sit easily together. Yet mothers’ use of the popular media for the first reason (knowledge) is perpetuating the transmission of the unacceptable messages, perceived to negatively influence self image in the young. Using the media for one purpose is inadvertently promoting and feeding the continuation of the media for the other purpose.

Inconsistency was another aspect which featured regularly throughout different areas of the study. Women in the focus group spoke of their own inconsistencies with their diets and that of their children while grandmothers stated that they were inconsistent in following dietary guidance – they felt they knew what to do, but were unable to implement it. There was also the perception, even from the first phase of the study, that “experts keep changing their minds” with one mother being puzzled as to whether to drink water, having read a media report about too much being potentially fatal. The inconsistency in participant’s diets could potentially be due to the inconsistency and misinformation to which they are exposed on a daily basis.

The studies included in this thesis therefore introduced some insightful observations and findings which would be a useful starting point for further research and interventions in the area of familial role which could potentially harness the knowledge, attitudes, culture and experiences of both groups.

*Implications for dietetic practice*

The studies described above originated from the author’s professional background as a dietitian, and a desire to understand more about all aspects of influence on dietary choice. The findings from the present study largely illustrate the similarities
and differences that exist between two groups of women in different familial roles, as mother or grandmother. These issues are important if the diets of the whole population are to be improved in the face of growing health problems, many of which are linked to poor lifestyle choices. By addressing the perceptions and attitudes of the women who have a key influence on the diets of children, it is hoped that the diets, and therefore health outcomes, of their children will, in the long term, also benefit.

Dietetic training focuses heavily on “an holistic approach” to patient care. We are encouraged to look at the full picture of someone’s lifestyle and environment in order to incorporate dietary advice within these structures, thereby encouraging compliance. In doing so, compliance can be encouraged as advice has been tailored and planned to dovetail into existing lifestyles. However, it is often difficult in a time-poor consultation situation to make a comprehensive holistic assessment of value. This is where the value of the research cannot be underestimated.

The current study provides valuable insight into the lifestyles and practices of women from different backgrounds and with different educational attainment with the common theme of being mothers or grandmothers of school aged children. Certainly, it is likely that practitioners may seek information from patients about their family or home situation, or working patterns but this may not extend to gaining insight into extended family obligations such as regular involvement in childcare by grandparents for example. Although this may not seem relevant when discussing an individual’s diet, it may be appropriate to consider that this information be “family friendly” and adaptable to providing food to the wider family even though the individual may be an older person living alone.

Further, by encouraging individuals to eat the same food, together as a family, cohesiveness and communication can be improved. By encouraging individuals that healthy eating really is for everyone, not just for those with weight or health
problems, then dietary attitudes can really begin to change. For example, if grandma returns from her dietitian appointment for her diabetes with diet sheets of what she can and cannot eat, then this can lead to mixed messages for those around her. If the advice given is pragmatic and adaptable to family life then that message is less open to misinterpretation.

Of course, few dietetic departments would produce a diet sheet with “do's and don'ts” such as that described above, and indeed it is likely that much of the information provided is produced in the appropriate way. However, we need to be giving the same information to everyone, be they children, mothers, grandmothers, men or women, single, married, with children or without.

In dietetic practice, there is largely a consensus about healthy eating and little doubt in the minds of dietitians about what it comprises, but the challenge for dietitians is to disseminate this message to the wider population, and to other health professionals. In the current study there were instances of nurses and other health professionals offering opposing advice to individuals, and this is often at the root of misunderstanding and confusion. This is compounded by the unregulated dietary experts that proliferate in the popular media yet often offer advice that is neither evidence-based nor peer reviewed.

In dietetic training, then, the findings of this study could be incorporated in the following ways:

As part of the “Diet through the life cycle” module, instead of focusing on the diets of specific groups of the population such as babies, children or the elderly, a new session could be included on “changing lifestyles”. This session could incorporate the traditional models, but bring them up to date by focusing on the way that grandmothers may often be child carers and mothers may be working full time, for
example. To incorporate these ideas in dietetic training may support newly qualified dietitians to appreciate the different lifestyles that exist and foster an understanding that exploring the diets of elderly people (for example) needs more insight than simply focusing on those with medical conditions or suffering with appetite problems.

By incorporating some aspects of marketing and public relations within the course, and perhaps media training, dietitians could start to use the media more effectively to ensure that it is dietitians who speak with authority on diet, and no-one else – this could go some way to overcoming misunderstandings by individuals over what they see or hear in the popular media;

There is a tendency to study different groups of the population as separate entities which of course they are. Yet the current study has shown that there are many similarities between groups and to look more at the similar needs and demands of different groups which would foster a mutual understanding and also support dietitians in behaviour change initiatives whose success depends on support for individuals outside of the clinic situation – and it is the wider family and social networks that will provide this support, so they need to be included or at the very least considered in dietetic interventions.

*Ideas for interventions*

The results of the current study show that women in different familial roles share many similar attitudes and perceptions, but also displayed differences. In terms of similarities, both groups of women were familiar with health promotion terminology and were keen to discuss how lifestyles, eating and shopping styles had changed. Both groups also mourned the loss of the family meal and expressed concern about the impact of media on self-image which they felt was linked with diet and a desire
for young women to achieve unattainable body shapes through restricting their consumption of food.

Differences were evidenced by grandmothers espousing the virtues of a previous lifestyle when they or their mothers did not work and had time to cook meals from scratch and look after the home, while mothers talked about their own current lifestyles with extreme time pressures having negative influence on their eating habits. Mothers also talked about constraints imposed by partners and children and some displayed inconsistencies with their own choices of food and the food they provide for others. Grandmothers were also circumspect about the diets of children while mothers were concerned and anxious about their own children's diets.

All the above aspects would translate well into intergenerational interventions. There are many organisations offering cooking skills (eg. Sure Start Get Cooking) but they are usually confined to specific groups of the population, such as cooking for young mothers, cooking or the elderly or cooking for children. However, to bring together all these group in a cohesive, community based "whole family" approach could bring benefits on a number of levels. The deficiencies in cooking skills that many mothers said they had, the time pressures, the constraints or lack of control imposed by family members and lack of cooking skills could all be addressed in this way. Further, the grandmothers experience and expertise could be tapped into by the younger generation, while the mothers more up to date knowledge about "nutrition" rather than "food", as evidenced by the questionnaire, could be of great benefit to all.

A local school could become involved and the group could make use of their facilities to have a family friendly cooking session, as inclusive as possible to encourage the passing on of cooking skills, and the informal transmission of positive attitudes and ideas around food in a relaxed environment overseen by a dietitian but with other health professionals invited to give informal input or question and answer sessions over a shared eating experience to finish off the session. These sessions could be
organised with the support of the Healthy Schools Network, groups such as the Women’s Institute and Age Concern as well as the Parent Teacher Association of the school involved.

The benefits of these sessions would be several-fold in that they would encourage community cohesiveness, communication between generations and inspire an interest in healthy eating and promote the concept of healthy eating among all members of the population. Parents will pick up tips and ideas for cooking on a budget or in a rush, while grandparents will not only gain up to date nutritional information but may benefit from the positive benefits of generativity where they begin to feel they are giving something to the next generation.

**Summary**

In summary, the current research sought to explore the concepts of healthy eating and how they relate to women in different familial roles – that of mother or grandmother. The study highlighted inchanging lifestyles and how they have influenced dietary practices, and how the resources and rules surrounding food provisioning have altered dramatically in recent years. The women from both generations talked about the time pressures associated with working, and there was an overriding finding that many women still strive to be the “perfect mother” whilst maintaining their own “independent self”. These two identities are intertwined yet very challenging to maintain. Many grandmothers felt less driven to achieve these ideals, likely due to their present familial role, but there was still a recognition of this among both groups, and a mutual understanding of the difficulties it may bring. Murcott (1982) describes how women, in her earlier study of the “cooked dinner”, found that “preparation of the cooked dinner is women’s work, while the man’s is the job that brings in the money”. This now seems a very outmoded way of viewing family life in the year 2012, yet this ideal of the cooked dinner persists and many in the present study described the cooked dinner as the epitome of a healthy family
meal. However, the preparation of the cooked dinner often remains women's work, as described by Murcott, with the key difference in the present study being that a woman's role is often, also, to bring in the money.

The current research has given some valuable insights into the attitudes and perceptions of mothers and grandmothers in relation to diet and healthy eating. However, more than that, it has provided a clear message that dietary choice is much less about personal choice, and more about environments, sociocultural norms and the resources and structures in which women exist. As stated earlier, for the dietary problems facing the UK to be addressed, there is a need to examine the much wider issues surrounding the obesogenic environment. As Blake et al (2011) state in their exploration of family food choice coping activities, "understanding the contexts in which families make food choices can enhance the ability of dietetics practitioners to foster healthy dietary practices for parents and their children".

**Future research, policy and practice**

The current study has allowed insights to be gained into the multifaceted and complex influences that impact on food choice among mothers and grandmothers. By applying an interpretation of Gidden's Structuration theory, it allows a broader understanding of the environmental basis of many decisions linked with diet. When these environmental influences are set against the backdrop of widely researched and developed psychosocial theories, it gives a powerful basis from which to embark on an understanding of some of the determinants of food choice. By examining the structures that surround women in different familial roles, the influence of these roles can be identified. There is certainly a dearth of literature in the area of women in different familial roles and the potential influence of this on diet, while there is much literature on gender roles and family composition. With the older generation living longer and healthier lives, and with their potential to contribute fully in society well into old age, the time is right to make better use of them as an underused resource.
in the fight against obesity. Concepts like generativity could be explored and exploited as having the potential to benefit the health and wellbeing of all generations. Further, by adopting a "whole family" approach to healthy eating there could be substantial benefits for the time scarce parent as well as the retired grandparent.

In terms of clinical practice, too, practitioners need to be mindful of the environmental influences that are at play in individual’s lives, and to have some insight into these issues when giving dietary advice. They could also draw on the “whole family” concept by involving grandparents in health promotion activities – to benefit from the cohesiveness it promotes between generations and to share some of the burdens imposed by childcare within families. Future research should focus on interventions that involve the whole family in the promotion of healthy eating and in healthy cooking and food provisioning for families – obesity is a universal problem and needs to be addressed in an holistic way by involving everyone involved in a family’s daily routines.

**Limitations of current study**

There were a number of limitations of the current study which are detailed below according to each phase.

**Phase 1 – interviews**

The participants were mothers and grandmothers from different social backgrounds, but in order to participate, the headteachers of the schools insisted on selecting participants themselves. This was for data protection purposes largely. This does mean that the participants were “those who would be interested in the subject”. To
have been able to access participants in a different way may have given more perspective to the study. However, a positive aspect of this is that they were a diverse group in many ways from very young mothers to older mothers. The interviews were also very different in that some of the participants spoke freely for an extended period with very limited input from the interviewer, while others needed a lot of probing and prompting.

The current study is not representative of the wider population, although it has drawn participants from a diverse demographic range which was largely in line with that of the local area. However, by selecting only women for this investigation into familial roles, the researcher has inadvertently reinforced gender stereotypes by making the assumption that women are the key players in food provisioning (Kemmer 2000). Future research in this area must include men in the equation. It has been identified that gender roles have changed in recent years, leading to an change in familial roles but to underestimate the position of men is to ignore an important source of influence within families.

Phase 2 - questionnaire

The questionnaire was undoubtedly too long at 9 pages which was likely to have impacted on the response rate of 30% for this phase.

The attempt to extract information about consumption patterns was useful but did make the final questionnaire somewhat unwieldy. Further, the inclusion of the open questions proved very interesting and produced some rich, valuable data. However, these were very difficult to analyse effectively and it may have been more appropriate to have developed a purely quantitative questionnaire.

Initial response rates were poor and this was when the prize draw was incorporated which did improve take up of the questionnaire. Recruitment was conducted by the
researcher who spent time explaining the study to individuals and groups, and then often the questionnaires were completed in-situ. This approach encouraged participation but was time consuming. To overcome some of these issues it would be advisable to have developed an online version of the questionnaire which could have been completed at home and returned by email. This would not only have saved time for both researcher and participant but would have potentially increased the response rate by widening participation in the project. This would have been additional to the paper questionnaire as described by Burgess et al (2012) in their description of a study of response rates to a questionnaire in primary care. They found that mixed mode studies with online versions followed up by postal reminders gave higher response rates than postal questionnaires alone and they also cite other studies that report increased response rates for electronic delivery alone.

The sample for the questionnaire was selected from a number of different settings including schools (parents), supermarkets (staff), charity shops (staff), older people’s forum (members) and Flying Start (parents and grandparents). However, as detailed in the results, over half of the mothers were in paid employment with the next largest group being those who are looking after the home or family. The results may therefore be biased towards working women. To have been able to access more unemployed women would have perhaps offered different insights into the issues of familial role. For the grandmothers, the largest proportion were retired from paid work, but a number were also working. However, no data was collected about whether the women worked full time or part time and this, in hindsight, would have been useful.

Having said this, the demographic composition of the respondents was wide with the highest number from the most deprived areas based on the Townsend Index. However, no information was asked about marital status or household incomes which, again, would have given further insight into individual circumstances. Yet, it must be remembered that the focus of the study was the difference between women in different familial roles in relation to diet and healthy eating. It was not necessarily
an exploration of these aspects in terms of socio-economic status. Although, it is conceded, that an individual’s employment status and income may have had a bearing on the results which could have been explored, had the information been requested.

Phase 3 - Focus Groups

The focus group participants were selected from the same schools, supermarkets and older people’s forum that had been used to access the questionnaire sample. Therefore many of the issues raised above about working women biasing the sample remain valid for this phase.

Other issues specific to the focus groups were that the focus groups that two of the focus groups took place in the workplace with the support of the Human Resources Department. However, all the women who took part were doing so during their working day, and time was limited. More data could have potentially been gathered had the group taken place away from the workplace where time was not an issue. Having said this, it is likely that recruitment for this phase would have been more challenging, had the participants not been taking part during their shift.

Focus groups, more generally, have their disadvantages. Certainly, in one of the mothers’ focus groups particularly, a participant did not engage with the group, and seemed inhibited. As a result she made little contribution, even though the researcher attempted to bring her into the discussion. This is always a potential problem with focus groups and one which had not been anticipated. It would have been appropriate to have conducted focus groups as well as interviews in Phase 3 in order to encourage participation of those who may feel uncomfortable in the group setting.
Overall, the study did undoubtedly have limitations and there are aspects that would need revision if replicating the study, as detailed above. However, a diverse sample was achieved with a wide demographic profile, which is not representative of the population as a whole, but represents a range of women who share the familial role of mother or grandmother.

Conclusion

The current study has identified some important issues around food choice in relation to two groups of women in different familial roles. It has identified that attitudes and perceptions are shared in many aspects of nutritional practices, yet it has also highlighted differences which were at least partially determined by familial role. The research has encompassed a variety of perspectives whilst drawing on similarities, thereby providing a comprehensive insight and acknowledgement of the demands of women's familial role. Using this insight to adopt a "whole family" approach to tailor interventions that involve all members of the wider family, and potentially the community, health professionals could harness a powerful tool in tackling nutritional issues. There are areas in the present study, for example cooking skills where mothers lacked confidence and grandmothers excelled. Bringing the groups together to learn from each other in this way, could bring positive benefits to both groups nutritionally and in terms of the cohesiveness and communication within families and communities. It could also offer powerful benefits to the ageing population in terms of health and wellbeing, to counter the potential for stagnation in later life. By introducing some of the issues relating to diet and familial role the research provides insight which offers the potential for further research and interventions in this area.
**Final Summary**

The discussion above has incorporated the following aspects:

- The significance of differences and commonalities between women in different familial roles in terms of dietary choice;
- How changing lifestyles and gender roles have impacted on dietary choices;
- The widespread acceptance of healthy eating messages, but potential for misunderstanding and confusion;
- Cost as a barrier to healthy eating;
- A exploration of the emotional influences on dietary choices for women in different familial roles;
- Dietary change and perceptions of food – how lifestyles and food practices have changed;
- An insight into the psychological perspectives of the project;
- Structuration theory – analysis of the present study and how it relates to Gidden's (1984) theory of structuration which emphasizes the influence of environments on behaviour;
- Familial role and how it impacts on dietary behaviour;
- An exploration of generativity and how this is an area highly relevant to the present study and how it could be used to develop further research initiatives in relation to ageing and diet;
- Limitations of the present study were also highlighted.
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Phase 1 – Interview Schedule

What do you eat that helps you to stay healthy?

How do you feel about what you are eating

How do you feel about healthy eating

Do you eat the same as you did as when you were a child

Do you think that diet helps you to feel better

What makes it difficult for you to eat healthily

Where do you learn about healthy eating

Can you remember the most recent thing you learned about diet

Who or what would you believe most about dietary information

How important is it for your family to eat a healthy diet

Do you think that what children eat can influence long term health
APPENDIX 2

PARTICIPANT INFORMATION SHEET & CONSENT FORM

INTERVIEWS AND FOCUS GROUPS
Healthy eating questionnaire

I am undertaking a research project looking at the perceptions of healthy eating among two generations of women in the Vale of Glamorgan. I would be grateful if you could complete this questionnaire. The questionnaire is anonymous and you can write exactly what you feel. No-one else will see your questionnaire answers. There is not right or wrong answer: it is your opinion that is important.

Thank you for your help.

Deborah Kwan

(please note that the questionnaire is on both sides of the paper)

If you return the questionnaire you can be included in a prize draw to win shopping vouchers. If you wish to be included please tick the box below and fill in your contact details and put them in the envelope provided and return with your complete questionnaire. The prize draw will be drawn during August 2009.

I wish to be included in the prize draw and have included my contact details in the envelope provided

About you

1. My postcode is ..............................................

2. My year of birth is ...........................................

3. Are you a mum of children under 18 or a grandmother of children under 18?

<table>
<thead>
<tr>
<th>Mum</th>
<th>Grandmother</th>
</tr>
</thead>
</table>
Using the grid below each statement, please indicate how often you do the following:

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

4. I choose to eat low fat foods

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

5. I enjoy low fat foods

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

6. I choose to eat low sugar foods

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

7. I enjoy low sugar foods

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

8. I choose to eat low salt foods

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

9. I enjoy low salt foods

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

10. I check the nutritional information on food packaging

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

11. I consider healthy eating when choosing what to eat

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>

12. I am very concerned with the nutritional content of foods

<table>
<thead>
<tr>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
</table>
Dietary influences

13. Please indicate below how great an influence each of the following have on what you choose to eat:

Very weak influence 1 ............. 2 ............. 3 ............. 4 ............. 5 Very strong influence

1 ............. 2 ............. 3 ............. 4 ............. 5 Celebrity Chefs
1 ............. 2 ............. 3 ............. 4 ............. 5 TV programmes
1 ............. 2 ............. 3 ............. 4 ............. 5 newspapers
1 ............. 2 ............. 3 ............. 4 ............. 5 magazines
1 ............. 2 ............. 3 ............. 4 ............. 5 Internet
1 ............. 2 ............. 3 ............. 4 ............. 5 Cookery Books
1 ............. 2 ............. 3 ............. 4 ............. 5 my mother’s cooking
1 ............. 2 ............. 3 ............. 4 ............. 5 family likes and dislikes
1 ............. 2 ............. 3 ............. 4 ............. 5 health professionals
1 ............. 2 ............. 3 ............. 4 ............. 5 friends
1 ............. 2 ............. 3 ............. 4 ............. 5 The weather
1 ............. 2 ............. 3 ............. 4 ............. 5 What food is in season

Other influences:

__________________________________________________________
14. Please indicate below how important you think each of the following are for a healthy lifestyle and how often you include them in your diet.

Unimportant 1…………………2…………………3…………………4…………………5 Very important

Never………………Rarely……………..Monthly………………Weekly……………..Daily

For example, if you think Apples are very important for a healthy lifestyle and you rarely eat them, you would fill it in as follows:

<table>
<thead>
<tr>
<th>1...2...3...4...5</th>
<th>Apples</th>
<th>N.....R.....M.....W.....D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1...2...3...4...5</td>
<td>Apples</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Oranges, satsumas, mandarins</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Salmon</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Roast meat</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Ready meals (eg. that go straight from fridge or freezer into oven or microwave)</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Cooked dinner (eg meat, potatoes and vegetables)</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Bottled water</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>3 meals a day</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Eating between meals</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Cheese</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Liver</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Pastry eg. pies, pasties</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Snacks</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Eggs</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>White meat (chicken, turkey)</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Red meat (pork, beef, lamb)</td>
<td>N.....R.....M.....W.....D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Porridge</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Cooked breakfast (eggs and bacon or something similar NOT porridge)</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>White bread</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Wholemeal bread</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Green vegetables</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Pasta</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Full cream milk</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Semi-skimmed milk</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Cream</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>honey</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Butter</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Dried beans &amp; pulses, eg lentils, split peas, chickpeas etc</td>
<td>N...R...M...W...D</td>
</tr>
<tr>
<td>1...2...3...4...5</td>
<td>Yogurt</td>
<td>N...R...M...W...D</td>
</tr>
</tbody>
</table>
Healthy eating

15. Please write down 3 words or phrases that sum up healthy eating to you:


16. In the boxes below, please name three or more foods that you regularly eat and that you consider to be healthy, and what is healthy about this food:

<table>
<thead>
<tr>
<th>Food you think of as healthy</th>
<th>What is healthy about this food</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. In the boxes below, please name three or more foods that you sometimes eat and that you consider to be Unhealthy and what is Unhealthy about this food:

<table>
<thead>
<tr>
<th>Food you think of as UNhealthy</th>
<th>What is UNhealthy about this food</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Barriers to healthy eating

Using the grid below each statement please indicate how strongly you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

18. Healthy eating advice is too confusing

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>
19. Healthy food takes too long to prepare

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

20. Healthy food costs too much

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

21. Nobody I know eats a healthy diet

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

22. Slim people don't need to think about eating healthily

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

23. Eating healthily takes a lot of effort

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

24. Healthy foods are unappetising

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>
### How food makes you feel

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

25. When I eat healthy food I feel happier

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

26. Healthy food makes me feel fitter

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

27. I often feel unwell after eating unhealthy foods

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

28. I sometimes feel a “bit down” after eating unhealthy foods

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

29. Unhealthy foods give me more energy than unhealthy foods

| Strongly disagree | Disagree | Undecided | Agree | Strongly agree |
30. I sometimes have unhealthy foods as a “treat”

| Strongly disagree | Disagree | Undecided | Agree | Strongly agree |

31. When I am depressed I eat more unhealthy foods

| Strongly disagree | Disagree | Undecided | Agree | Strongly agree |

32. When I am stressed/anxious I tend to eat more unhealthy foods

| Strongly disagree | Disagree | Undecided | Agree | Strongly agree |

33. When I am angry I tend to eat more unhealthy foods

| Strongly disagree | Disagree | Undecided | Agree | Strongly agree |
34. To which of these ethnic groups do you consider you belong? Tick one only:

<table>
<thead>
<tr>
<th>Mixed</th>
<th>White or Asian or Asian British</th>
</tr>
</thead>
<tbody>
<tr>
<td>White and Black Caribbean</td>
<td>Indian</td>
</tr>
<tr>
<td>White and Black African</td>
<td>Pakistani</td>
</tr>
<tr>
<td>White and Asian Bangladeshi</td>
<td>Pakistani</td>
</tr>
<tr>
<td>Any other mixed background</td>
<td>Any other Asian background</td>
</tr>
<tr>
<td>Black or Black Caribbean</td>
<td>Chinese</td>
</tr>
<tr>
<td>African</td>
<td>Any other ethnic group</td>
</tr>
<tr>
<td>Any other black background</td>
<td></td>
</tr>
</tbody>
</table>

35. Which of these descriptions applies to what you were doing last week? **Tick first to apply**

<table>
<thead>
<tr>
<th>Going to school or college full time</th>
<th>Intending to look for work but prevented by temporary sickness or injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>In paid employment or self employment</td>
<td>Permanently unable to work because of long term sickness or disability</td>
</tr>
<tr>
<td>On a government scheme for employment training</td>
<td>Retired from paid work</td>
</tr>
<tr>
<td>Doing unpaid work for a business that you own or a relative owns</td>
<td>Looking after the home or family</td>
</tr>
<tr>
<td>Waiting to take up paid work already obtained</td>
<td>Doing something else</td>
</tr>
<tr>
<td>Looking for paid work or a Government training scheme</td>
<td></td>
</tr>
</tbody>
</table>

36. Which of these qualifications do you have:

Tick all the qualifications that apply or, if not specified, their nearest equivalent:

<table>
<thead>
<tr>
<th>1+O levels/CSE/GCSE (any grade)</th>
<th>1+A levels/AS levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>5+O levels, 5+CSEs (grade 1) 5+ GCSEs (A-C), School Certificate</td>
<td>2+A levels, 4+AS Levels, Higher school certificate</td>
</tr>
<tr>
<td>NVQ Level 1, Foundation GNVQ</td>
<td>First degree (eg. BA/BSc)</td>
</tr>
<tr>
<td>NVQ Level 3, Advanced GNVQ</td>
<td>Higher Degree (MA,PhD, PGCE post grad cert)</td>
</tr>
<tr>
<td>Other qualifications (eg. city and guilds/RSA/OCR/BTEC/Edexcel)</td>
<td>NVQ Level 2, Intermediate GNVQ</td>
</tr>
<tr>
<td>No qualifications</td>
<td>NVQ Levels 4-5, HNC, HND</td>
</tr>
</tbody>
</table>

Many thanks for your time!
APPENDIX 4

SPSS OUTPUT FILES
## Mann-Whitney Test

### Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>I choose to eat low fat foods</th>
<th>I choose low sugar foods</th>
<th>I choose low salt foods</th>
<th>I check the nutritional information on food packaging</th>
<th>I consider healthy eating in choosing what to eat</th>
<th>I am very concerned with the nutritional content of foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>8549.500</td>
<td>8353.500</td>
<td>8268.000</td>
<td>10226.000</td>
<td>8643.000</td>
<td>8516.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>20177.500</td>
<td>20134.500</td>
<td>20049.000</td>
<td>19817.000</td>
<td>20424.000</td>
<td>20144.000</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.002</td>
<td>.001</td>
<td>.001</td>
<td>.003</td>
<td>.003</td>
<td>.003</td>
</tr>
</tbody>
</table>

*a. Grouping Variable: Mother or Grandmother*

### Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>I enjoy low fat foods</th>
<th>I enjoy low sugar foods</th>
<th>I enjoy low salt foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>8462.000</td>
<td>7866.500</td>
<td>8888.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>20090.000</td>
<td>19342.500</td>
<td>20213.000</td>
</tr>
<tr>
<td>Z</td>
<td>-3.234</td>
<td>-3.883</td>
<td>-2.221</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.001</td>
<td>.000</td>
<td>.026</td>
</tr>
</tbody>
</table>

*a. Grouping Variable: Mother or Grandmother*
### Test Statisticsa

<table>
<thead>
<tr>
<th></th>
<th>Healthy eating advice is too confusing</th>
<th>Healthy food takes too long to prepare</th>
<th>Healthy food costs too much</th>
<th>Nobody I know eats a healthy diet</th>
<th>Slim people don't need to think about eating healthily</th>
<th>Eating healthily takes a lot of effort</th>
<th>Healthy foods are unappetising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>8454.000</td>
<td>10018.500</td>
<td>9155.500</td>
<td>9813.000</td>
<td>9960.500</td>
<td>10232.500</td>
<td>9912.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>19930.000</td>
<td>21343.500</td>
<td>18746.500</td>
<td>21289.000</td>
<td>21436.500</td>
<td>21708.500</td>
<td>21388.000</td>
</tr>
<tr>
<td>Z</td>
<td>-2.895</td>
<td>-0.522</td>
<td>-1.772</td>
<td>-0.737</td>
<td>-0.736</td>
<td>-0.280</td>
<td>-0.784</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.004</td>
<td>.602</td>
<td>.076</td>
<td>.461</td>
<td>.462</td>
<td>.779</td>
<td>.433</td>
</tr>
</tbody>
</table>

*a. Grouping Variable: Mother or Grandmother*

### Test Statisticba

<table>
<thead>
<tr>
<th></th>
<th>When I eat healthy food I feel happier</th>
<th>Healthy food makes me feel fitter</th>
<th>I often feel unwell after eating unhealthy foods</th>
<th>I sometimes feel a bit down after eating unhealthy foods</th>
<th>Unhealthy foods give me more energy than healthy food</th>
<th>I sometimes have unhealthy foods as a treat</th>
<th>When I am depressed</th>
<th>When I am stressed/anxious I tend to eat more unhealthy food</th>
<th>When I am angry I tend to eat more unhealthy food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>9458.500</td>
<td>9101.000</td>
<td>10113.000</td>
<td>9425.000</td>
<td>9814.500</td>
<td>9188.000</td>
<td>7394.500</td>
<td>7742.000</td>
<td>7391.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>18911.500</td>
<td>18554.000</td>
<td>21288.000</td>
<td>18878.000</td>
<td>21139.500</td>
<td>18504.000</td>
<td>16710.500</td>
<td>17195.000</td>
<td>16844.000</td>
</tr>
<tr>
<td>Z</td>
<td>-1.381</td>
<td>-1.890</td>
<td>-.028</td>
<td>-.975</td>
<td>-.716</td>
<td>-.2153</td>
<td>-4.498</td>
<td>-4.047</td>
<td>-4.350</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.167</td>
<td>.059</td>
<td>.977</td>
<td>.330</td>
<td>.474</td>
<td>.031</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

*a. Grouping Variable: Mother or Grandmother*
<table>
<thead>
<tr>
<th></th>
<th>How great an influence are celebrity chefs on what you choose to eat</th>
<th>How great an influence are tv programmes on what you choose to eat</th>
<th>How great an influence are newspapers on what you choose to eat</th>
<th>How great an influence are magazines on what you choose to eat</th>
<th>How great an influence are internet on what you choose to eat</th>
<th>How great an influence are cookery books on what you choose to eat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>7651.500</td>
<td>6709.000</td>
<td>8605.000</td>
<td>8417.500</td>
<td>6321.500</td>
<td>8134.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>19279.500</td>
<td>18185.000</td>
<td>20081.000</td>
<td>20198.500</td>
<td>15501.500</td>
<td>19160.500</td>
</tr>
<tr>
<td>Z</td>
<td>-4.335</td>
<td>-5.521</td>
<td>-2.689</td>
<td>-3.194</td>
<td>-5.055</td>
<td>-3.145</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.007</td>
<td>.001</td>
<td>.000</td>
<td>.002</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Mother or Grandmother

<table>
<thead>
<tr>
<th></th>
<th>How great an influence is your mothers cooking on what you choose to eat</th>
<th>How great an influence is what food is in season on what you choose to eat</th>
<th>How great an influence is the weather on what you choose to eat</th>
<th>How great an influence are friends on what you choose to eat</th>
<th>How great an influence are health professionals on what you choose to eat</th>
<th>How great an influence are family likes and dislikes on what you choose to eat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>8833.000</td>
<td>7564.500</td>
<td>10225.000</td>
<td>9490.000</td>
<td>10436.500</td>
<td>7501.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>19711.000</td>
<td>17294.500</td>
<td>21550.000</td>
<td>21118.000</td>
<td>22064.500</td>
<td>18676.500</td>
</tr>
<tr>
<td>Z</td>
<td>-2.031</td>
<td>-4.366</td>
<td>-.185</td>
<td>-1.548</td>
<td>-.074</td>
<td>-4.236</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.042</td>
<td>.000</td>
<td>.853</td>
<td>.122</td>
<td>.941</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Mother or Grandmother
**Test Statistics**

<table>
<thead>
<tr>
<th></th>
<th>How important are oranges satsumas mandarins for a healthy lifestyle</th>
<th>How important is salmon for a healthy lifestyle</th>
<th>How important is roast meat for a healthy lifestyle</th>
<th>How important are ready meals for a healthy lifestyle</th>
<th>How important are cooked dinners for a healthy lifestyle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>8447.500</td>
<td>8836.000</td>
<td>9101.500</td>
<td>7898.000</td>
<td>7512.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
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<td>19567.000</td>
<td>18417.500</td>
<td>18924.000</td>
<td>17103.000</td>
</tr>
<tr>
<td>Z</td>
<td>-2.794</td>
<td>-1.966</td>
<td>-1.384</td>
<td>-3.326</td>
<td>-4.034</td>
</tr>
<tr>
<td>Asympt. Sig. (2-tailed)</td>
<td>.005</td>
<td>.049</td>
<td>.166</td>
<td>.001</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Mother or Grandmother

**Test Statistics**

<table>
<thead>
<tr>
<th></th>
<th>How important is bottled water for a healthy lifestyle</th>
<th>How important are three meals a day for a healthy lifestyle</th>
<th>How important is eating between meals for a healthy lifestyle</th>
<th>How important is cheese for a healthy lifestyle</th>
<th>How important is liver for a healthy lifestyle</th>
<th>How important is pastry ie pies pasties for a healthy lifestyle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>6138.000</td>
<td>8601.000</td>
<td>8197.500</td>
<td>8936.000</td>
<td>8675.000</td>
<td>9945.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>16434.000</td>
<td>19776.000</td>
<td>18782.500</td>
<td>19962.000</td>
<td>18266.000</td>
<td>19398.500</td>
</tr>
<tr>
<td>Z</td>
<td>-5.581</td>
<td>-2.862</td>
<td>-2.679</td>
<td>-1.714</td>
<td>-2.075</td>
<td>-0.90</td>
</tr>
<tr>
<td>Asympt. Sig. (2-tailed)</td>
<td>.000</td>
<td>.004</td>
<td>.007</td>
<td>.086</td>
<td>.038</td>
<td>.928</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Mother or Grandmother
### Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>How important are snacks for a healthy lifestyle</th>
<th>How important are eggs for a healthy lifestyle</th>
<th>How important is white meat for a healthy lifestyle</th>
<th>How important is red meat for a healthy lifestyle</th>
<th>How important is porridge for a healthy lifestyle</th>
<th>How important is a cooked breakfast (eggs and bacon) for a healthy lifestyle</th>
<th>How important is white bread for a healthy lifestyle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>6566.000</td>
<td>8599.500</td>
<td>9690.500</td>
<td>7555.000</td>
<td>8645.000</td>
<td>9346.000</td>
<td>8406.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>17151.000</td>
<td>19477.500</td>
<td>20275.500</td>
<td>17995.000</td>
<td>17981.000</td>
<td>19931.000</td>
<td>18417.000</td>
</tr>
<tr>
<td>Z</td>
<td>-5.145</td>
<td>-2.245</td>
<td>-3.87</td>
<td>-3.326</td>
<td>-2.051</td>
<td>-.791</td>
<td>-1.434</td>
</tr>
<tr>
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<td>.025</td>
<td>.699</td>
<td>.001</td>
<td>.040</td>
<td>.429</td>
<td>.152</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Mother or Grandmother

### Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>How important are green vegetables for a healthy lifestyle</th>
<th>How important is pasta for a healthy lifestyle</th>
<th>How important is full cream milk for a healthy lifestyle</th>
<th>How important is butter for a healthy lifestyle</th>
<th>How important is yogurt for a healthy lifestyle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>9883.000</td>
<td>7790.500</td>
<td>7612.000</td>
<td>8750.000</td>
<td>9324.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>21058.000</td>
<td>18816.500</td>
<td>18052.000</td>
<td>18066.000</td>
<td>20055.000</td>
</tr>
<tr>
<td>Z</td>
<td>-.707</td>
<td>-3.537</td>
<td>-3.492</td>
<td>-1.690</td>
<td>-1.042</td>
</tr>
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<td>.000</td>
<td>.000</td>
<td>.091</td>
<td>.297</td>
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</table>

a. Grouping Variable: Mother or Grandmother
### Test Statistics\(^a\)

<table>
<thead>
<tr>
<th></th>
<th>How often do you include oranges, satsumas, mandarins in your diet</th>
<th>How often do you include salmon in your diet</th>
<th>How often do you include roast meat in your diet</th>
<th>How often do you include ready meals in your diet</th>
<th>How often do you include cooked dinners in your diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>8486.500</td>
<td>9353.500</td>
<td>6940.500</td>
<td>8569.000</td>
<td>9651.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>17939.500</td>
<td>19793.500</td>
<td>17818.500</td>
<td>17749.000</td>
<td>19104.500</td>
</tr>
<tr>
<td>Z</td>
<td>-2.344</td>
<td>-0.786</td>
<td>-4.820</td>
<td>-2.339</td>
<td>-0.923</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.019</td>
<td>.432</td>
<td>.000</td>
<td>.019</td>
<td>.356</td>
</tr>
</tbody>
</table>

\(a\). Grouping Variable: Mother or Grandmother

### Test Statistics\(^a\)

<table>
<thead>
<tr>
<th></th>
<th>How often do you include bottled water in your diet</th>
<th>How often do you include three meals a day in your diet</th>
<th>How often do you eat between meals in your diet</th>
<th>How often do you include cheese in your diet</th>
<th>How often do you include liver and pasties in your diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>6531.000</td>
<td>9009.500</td>
<td>6290.500</td>
<td>9498.500</td>
<td>6747.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>15711.000</td>
<td>18325.500</td>
<td>15606.500</td>
<td>18814.500</td>
<td>17922.000</td>
</tr>
<tr>
<td>Z</td>
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<td>-5.714</td>
<td>-1.058</td>
<td>-5.229</td>
</tr>
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<td>.000</td>
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<td>.000</td>
<td>.290</td>
<td>.000</td>
</tr>
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</table>

\(a\). Grouping Variable: Mother or Grandmother
<table>
<thead>
<tr>
<th></th>
<th>How often do you include snacks in your diet</th>
<th>How often do you include eggs in your diet</th>
<th>How often do you include white meat in your diet</th>
<th>How often do you include red meat in your diet</th>
<th>How often do you include porridge in your diet</th>
<th>How often do you include cooked breakfast in your diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>5846.500</td>
<td>10100.500</td>
<td>9022.500</td>
<td>8996.000</td>
<td>7882.000</td>
<td>7827.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
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<td>19830.500</td>
<td>18752.500</td>
<td>18587.000</td>
<td>18908.000</td>
<td>17557.500</td>
</tr>
<tr>
<td>Z</td>
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<td>-1.941</td>
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</tr>
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<td>.052</td>
<td>.001</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Grouping Variable: Mother or Grandmother

<table>
<thead>
<tr>
<th></th>
<th>How often do you include cooked breakfast in your diet</th>
<th>How often do you include white bread in your diet</th>
<th>How often do you include wholemeal bread in your diet</th>
<th>How often do you include green vegetables in your diet</th>
<th>How often do you include pasta in your diet</th>
<th>How often do you include full cream milk in your diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>7827.500</td>
<td>7631.500</td>
<td>8598.000</td>
<td>8745.000</td>
<td>7371.500</td>
<td>8159.000</td>
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<tr>
<td>Wilcoxon W</td>
<td>17557.500</td>
<td>16947.500</td>
<td>19476.000</td>
<td>19920.000</td>
<td>17101.500</td>
<td>17889.000</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
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<td>.003</td>
<td>.012</td>
<td>.007</td>
<td>.000</td>
<td>.001</td>
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</tbody>
</table>

a. Grouping Variable: Mother or Grandmother
<table>
<thead>
<tr>
<th>Test Statistics*</th>
<th>Mann-Whitney U</th>
<th>Wilcoxon W</th>
<th>Z</th>
<th>Asym. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you include yogurt in your diet?</td>
<td>10,101,000</td>
<td>19,831,000</td>
<td>-4.90</td>
<td>.000</td>
</tr>
<tr>
<td>How often do you include dried beans and pulses in your diet?</td>
<td>8,883,000</td>
<td>20,058,000</td>
<td>-2.157</td>
<td>.031</td>
</tr>
<tr>
<td>How often do you include semi skimmed milk in your diet?</td>
<td>7,509,500</td>
<td>18,934,500</td>
<td>-1.768</td>
<td>.077</td>
</tr>
<tr>
<td>How often do you include cream in your diet?</td>
<td>6,922,000</td>
<td>20,947,000</td>
<td>-4.227</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Grouping Variable: Mother or Grandmother
### OPEN QUESTIONS

### PHRASES CATEGORISED UNDER FOLLOWING TERMS:

#### NUTRITIONAL TERMS

<table>
<thead>
<tr>
<th>Carbohydrate</th>
<th>Calcium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>Fibre</td>
</tr>
<tr>
<td>Vitamins</td>
<td>Antioxidants</td>
</tr>
<tr>
<td>Minerals</td>
<td>Omega 3</td>
</tr>
<tr>
<td>Folic acid</td>
<td>Iron</td>
</tr>
<tr>
<td>Potassium</td>
<td></td>
</tr>
<tr>
<td>Vitamin C</td>
<td></td>
</tr>
</tbody>
</table>

#### GOOD STUFF

<table>
<thead>
<tr>
<th>Nutritious</th>
<th>Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 a day</td>
<td></td>
</tr>
<tr>
<td>Balanced diet</td>
<td></td>
</tr>
<tr>
<td>Good for you</td>
<td></td>
</tr>
<tr>
<td>Fresh</td>
<td></td>
</tr>
<tr>
<td>enjoyable</td>
<td></td>
</tr>
</tbody>
</table>

#### HEALTH BENEFITS

<table>
<thead>
<tr>
<th>Good for your heart</th>
<th>Keep you full for longer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keeps you regular</td>
<td></td>
</tr>
<tr>
<td>Lowers cholesterol</td>
<td></td>
</tr>
<tr>
<td>Good for joints</td>
<td></td>
</tr>
<tr>
<td>Purifies blood</td>
<td></td>
</tr>
</tbody>
</table>

#### LOW IN SOMETHING BAD

<table>
<thead>
<tr>
<th>Low calorie</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low fat</td>
<td></td>
</tr>
<tr>
<td>Low sugar</td>
<td></td>
</tr>
<tr>
<td>Low salt</td>
<td></td>
</tr>
<tr>
<td>Low saturated fat</td>
<td></td>
</tr>
<tr>
<td>Low glycaemic index</td>
<td></td>
</tr>
</tbody>
</table>
### OPEN QUESTIONS

**PHRASES CATEGORISED UNDER FOLLOWING TERMS (UNHEALTHY FOODS):**

**Foods eaten/prepared outside home**

<table>
<thead>
<tr>
<th>Takeaways</th>
<th>Takeaway curry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take-out</td>
<td>Fish shop fish and chips</td>
</tr>
<tr>
<td>Kebabs</td>
<td></td>
</tr>
<tr>
<td>Chinese takeaway</td>
<td></td>
</tr>
<tr>
<td>Fast food</td>
<td></td>
</tr>
<tr>
<td>Chip shop meal</td>
<td></td>
</tr>
</tbody>
</table>

**Snacks**

<table>
<thead>
<tr>
<th>Crisps</th>
<th>Nuts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sweets</td>
</tr>
</tbody>
</table>

**Processed foods**

<table>
<thead>
<tr>
<th>Pies</th>
<th>Pizza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sausages</td>
<td>Bacon</td>
</tr>
<tr>
<td>Burgers</td>
<td>Convenience foods</td>
</tr>
<tr>
<td>Ready meals</td>
<td></td>
</tr>
</tbody>
</table>

**Cakes, biscuits**

<table>
<thead>
<tr>
<th>Cakes</th>
<th>Biscuits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Puddings</td>
</tr>
</tbody>
</table>

**Dairy foods**

<table>
<thead>
<tr>
<th>Butter</th>
<th>Ice cream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheese</td>
<td>Cream</td>
</tr>
<tr>
<td>Full fat milk</td>
<td></td>
</tr>
</tbody>
</table>

**Fried foods**

<table>
<thead>
<tr>
<th>Chips</th>
<th>Fried breakfast</th>
</tr>
</thead>
</table>

**Chocolate**

<table>
<thead>
<tr>
<th>Chocolate</th>
<th></th>
</tr>
</thead>
</table>

**Meat**

<table>
<thead>
<tr>
<th>Red meat</th>
<th>Fatty meat</th>
</tr>
</thead>
</table>

**Fizzy drinks**

<table>
<thead>
<tr>
<th>Fizzy drinks</th>
<th>Ginger beer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coke</td>
</tr>
</tbody>
</table>

**Pastry**

<table>
<thead>
<tr>
<th>Pastry (not including pies)</th>
<th></th>
</tr>
</thead>
</table>
APPENDIX 7

OPEN QUESTIONS

PHRASES CATEGORISED UNDER FOLLOWING TERMS (REASONS FOR FOODS CONSIDERED UNHEALTHY):

High in something bad

<table>
<thead>
<tr>
<th>High fat</th>
<th>High salt</th>
<th>High sugar</th>
<th>High calorie</th>
</tr>
</thead>
</table>

Health detriments

<table>
<thead>
<tr>
<th>High cholesterol</th>
<th>Bad for teeth</th>
<th>Bad for skin</th>
</tr>
</thead>
</table>

No nutritional value

<table>
<thead>
<tr>
<th>Lack of nutrients</th>
<th>No nutritional value</th>
<th>No goodness</th>
</tr>
</thead>
</table>

“fattening”

<table>
<thead>
<tr>
<th>Fattening</th>
<th>Puts on weight</th>
<th>Weightgain</th>
</tr>
</thead>
</table>
**OPEN QUESTIONS**

**PHRASES CATEGORISED UNDER FOLLOWING TERMS (TERMS THAT SUM UP HEALTHY EATING):**

**5 a day/balance**

| Moderation | Varied diet |
| 5 a day    |             |
| Balanced diet |           |

**Specific foods**

| Fruit and veg | Salads |
| Low fat meat  | Fish   |
|               | Water  |

**Good stuff**

| Good for you | Fresh produce, well cooked |
| Tastes good  | Nutritious                  |
| Fresh        | Wholesome                   |
| In season    | Homecooked                  |

**Low in something bad**

| Low fat |           |
| Low salt|           |

**Nutritional terms**

| Vitamins | Carbohydrates |
| Protein  |              |

**Regular meals**

| Regular meals | Eat at the right time |
| 3 meals a day |                     |

**Health benefits**

| Long life | Keeps you slim and fit |
| Control of sugar levels | Lowers cholesterol |
FOCUS GROUP SCHEDULE

- What comes to mind when I say the words healthy eating
- Do you find healthy eating guidelines confusing
- What helps you to make healthy choices
- Do you enjoy healthy eating
- Is healthy eating too expensive
- Why is there an obesity problem in the UK
- Are diets now worse than they used to be
- What would make you improve your diet
- What mostly influences what you eat
- What about comfort food
- Were you taught to cook as a child