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Contents

Introduction

Our family relationships can have a strong influence – positive and negative – on our health, and on how we behave in relation to our health. This OpenLearn course explores how family life impacts on the health of individuals, and how the family is often the focus for health promotion initiatives, such as the national '5 A DAY' campaign. Many informal health care interventions are carried out in the family (in contrast to the formal care provided by hospitals and health centres). The course will examine the changing demands on families who care for one another during illness – for example, when a family member is diagnosed with Alzheimer's disease. Finally the course considers 'young carers': those children who take on the major responsibility of caring for a family member.

Alongside studying issues of family health, this course will introduce you to interpreting information given in graphs or charts. Working with statistical information is a key skill and the course will guide you in this through two structured activities. Activity 3 asks you to explore a website for information about family health. Again, a step by step approach is taken to guide you through this process.

This OpenLearn course provides a sample of level 1 study in Health & Social Care

Learning Outcomes

After studying this course, you should be able to:

- understand how ‘health intervention’ is targeted to change family eating habits
- understand the rise in obesity and how it can be linked to family lifestyles
- understand how families care for and cope with illness
- interpret information in graphical form and explore a website for information to support your understanding.

1 Learning health attitudes and behaviour

An important aspect of the family is the raising of children; indeed, many people would argue that this is what a family is for. This means not only children's physical care but also their 'socialisation'. This term is sometimes used to describe how people learn to interact in ways that are typical for the community in which they live, or the 'social norms'. Social norms are shared patterns of behaviour which are widely accepted as 'the right way to do things'. Through the process of socialisation, people learn the informal 'rules' that make it possible for us to live in society. Different societies, of course, have different expectations about behaviour, but the process of socialisation occurs in all societies.

Building on the work of the eminent American sociologist Talcott Parsons (1902–1979), socialisation is often described as being divided into three stages:

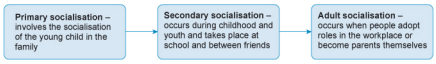

Figure 1 The three stages of socialisation

This section is mainly concerned with the first of these stages, primary socialisation. In particular, the focus is on how social norms within a family might affect health. Eating habits, which are often central to both family life and health, are used here to illustrate this relationship between families and health.

Across Europe, the social norm is that women are more likely than men to do the family shopping and prepare the food (European Food Information Council, 2012). As children learn these social norms about who does the shopping and cooking, this will have an impact on their future health. The European Food Information Council (2012) also reported that women generally eat more healthily than men, and that men eat more healthily when they are in a relationship with a woman. This social pattern is reflected in findings by the UK Food Standards Agency (Department of Health, 2003) that many men were not confident about meal preparation and were less aware than women of healthy eating messages. It could be argued that young boys grow up to understand that a concern for healthy eating is simply not part of being a man. They observe the gendered nature of food shopping and consumption in their family and reproduce parental behaviours in their adult lives.

1.1 The 5 A DAY campaign

One health intervention aimed at families is the '5 A DAY' campaign which encourages everyone in a family to eat five portions of fruits and vegetables a day. Since the 5 A DAY campaign started, the government has been gathering statistics about the consumption of fruit and vegetables.

The chart below illustrates the percentage of men, women and children who achieve 5 A DAY; the information is gathered from feedback given on one day each year from 2001 to 2011.

There now follows an activity which gives you the opportunity to think about how to read the information contained in a chart effectively, alongside learning about the percentage of

people in the UK who achieved 5 A DAY. The activity centres around the chart below in Figure 1.

Effective study: reading a bar chart

The chart in Figure 1 shows data collected in England from 2001 to 2011. It contains three main types of information:

- the percentage of a population sample achieving 5 A DAY
- the year of data collection
- the population categories of men, women and children.

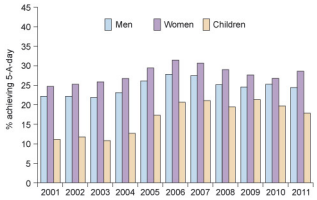

Figure 1 Consumption of fruit and vegetables in men, women and children in England, based on one 24 hour period

(Source: Defra, 2013, p. 61)

The label of the graph provides the additional information that the figures are based on one 24 hour period (i.e. one particular day).

When reading a chart such as a bar chart or pie chart, it is important to notice how the different elements are labelled. Here, the vertical axis shows the percentage 'achieving 5 A DAY'. The height of each bar therefore represents a percentage achieving five portions of fruit and vegetables a day. For each year from 2001 to 2011 (arranged along the horizontal axis), figures are given for men, women and children. The blue bar represents men, the purple bar represents women, and the yellow bar represents children. The title of the chart is also key to its interpretation.

Between 2001 and 2006, the percentage of men, women and children achieving 5 A DAY increased overall, but after 2006 the figures began to fall. Each year shows separate columns for men, women and children, so they can be tracked separately. You can tell, for example, that in 2001 about 22% of men and 25% of women achieved 5 A DAY and for children the figure was about 11%. Now try this activity which is based on the chart, Figure 1.

Activity 1: Exploring how many people achieved 5 A DAY

Allow about 10 minutes

Question 1

Look at Figure 1 and answer the following questions.

What happened to the percentage of children achieving 5 A DAY between 2001 and 2007?

- ☐ The percentage increased from 11% to 22%

- The percentage increased from 25% to 29%
- The percentage stayed the same
- The percentage decreased from 30% to 17%

Question 2

Which group consistently achieved 5 A DAY more than the other two?

- women
- men
- children
- all groups performed the same

Question 3

Can you think of one limitation of the information provided in the chart – in other words, is there a question you can think of that it does not answer?

Question 4

Discussion

You may have thought about how the information given in the chart cannot answer the question of *why* the trend is rising and falling in this manner. You were told in the introduction to the chart that the figures were collected after the 5 A DAY campaign started, so the increase could be due to the success of this campaign. This does not explain why the figures began to fall later on. You might also have wondered whether the same people were sampled each time, or whether they were different on each occasion.

1.2 Interpreting a pie chart

Now, have a go at interpreting a pie chart. The chart below shows how, in 2012, consumer spending on different types of food and drink for the household was spread between a range of different food types. If the whole 'pie' represents all the spending on food and drink, the segments show the portion of spending on each food type. Again, the figures are percentages. You can assume that the figures represent an 'average consumer'.

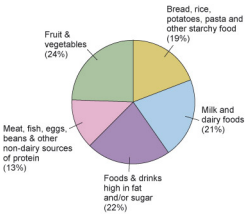

Figure 2 Consumer spending on food and drinks for the household, 2012

(Defra, 2013, p. 89)

Activity 2: Spending on different types of food

Allow about 20 minutes

Question 1

Look at the pie chart in Figure 2 and answer the following questions:

What type of food did the average consumer spend more on than any other type?

- ☐ Fruit and vegetables
- ☐ Milk and dairy foods
- ☐ Meat, fish, eggs, beans and other non-dairy sources of protein
- ☐ Foods and drinks high in fat and/or sugar

Question 2

What is the least amount spent on?

- ☐ Meat, fish, eggs, beans and other non-dairy sources of protein
- ☐ Milk and dairy foods
- ☐ Bread, rice, potatoes, pasta and other starchy food
- ☐ Foods and drinks high in fat and/or sugar

Question 3

As in Activity 1, can you think of a limitation about the information given in this pie-chart?

Discussion

A limitation of this pie chart is that the expenditure does not give a guide to the *amounts* of food bought or eaten. It also does not account for meals eaten in restaurants.

Graphs and charts provide a lot of information, but any results need to be interpreted with caution. When you read a chart or a graph, you want to know where the information has come from, so that you can make judgements about how seriously you should take the figures. As the charts in this section are based on government statistics you would expect them to have been compiled in a reasonably thorough way. If, however, a graph claims to show information about family life in the UK, and it was compiled from a survey of ten families in Scotland, you might be less confident of it indicating a general picture of the UK population. To be representative it would need to be a much bigger sample and include people from all over the UK.

Social norms around food shopping, cooking and eating are important in setting the scene for children's learning of appropriate eating behaviour. But have changes in families had an effect on eating and health (and, if so, what)? We will go on to consider this question in the next section.

2 Changing mealtime routines

In postwar Britain, from the mid twentieth century, families tended to eat meals together as far as other commitments such as work and school permitted, which allowed parents to supervise their children's diet and encourage regular eating habits. Many observers of childhood obesity criticise modern family life for increasingly ignoring traditional mealtimes and allowing children to 'graze' unsupervised, or to eat while watching the television. Both these activities could disrupt the relationship between parents and children that is seen as so important in the development of healthy eating.

On the other hand, some observers of eating disorders such as anorexia nervosa (in which people restrict their food intake excessively) place family mealtimes at the root of the problem. Children, at least in their early years, have very little say in what they are given to eat. Mealtimes, if taken as a family, can be potentially difficult occasions where family tensions and rivalries may erupt. If eating becomes linked with family problems, then eating can itself become a problem. Also, children may begin to use eating (or not eating) certain foods as a way of testing the power of their parents. Not eating is often the only thing that children can do to exert control over their lives, and if this pattern of using food to control one's life is continued into adolescence and adulthood it may result in an eating disorder. This does not mean, of course, that every argument at the dinner table results in anorexia – but that mealtimes are important family occasions where existing tensions may surface as disordered eating behaviour.

Before thinking about this further, what do we know about the diversity of family life today? When looking at family composition (diversity) in the twenty-first century, a significant change from the 1980s and 1990s is the increase in one-parent families, which now total almost two million. Of these one-parent families, 9 out of 10 households are headed by mothers (Beaumont, 2011). Women also tend, in general, to eat more healthily than men, so it might be supposed that children who live with their mothers will begin to learn healthier eating habits. However, this is likely to be outweighed by the fact that the majority of one-parent families are on low incomes and so it can be more difficult for them to afford and prepare healthy food.

Changes in roles within the family are also likely to have negative as well as positive results. In many modern families, both parents work, making it difficult for the family to cook and share meals together on a regular basis. The growth in the sales of fast food, such as pizza and ready meals, would seem to support this (particularly if meals need to be primarily convenient rather than nutritious). However, an increasingly shared approach to childcare may result in less constraining roles for all and less tension associated with family responsibilities. Children may be beginning to have more influence within the family, choosing what and when to eat, and possibly buying their own snacks and drinks. This would be positive if children had already learned healthy eating messages, but this independence and choice may simply make children more vulnerable to the marketing and advertising of unhealthy foods.

The next section goes on to consider the link between obesity and health.

3 Obesity and health

Obesity is a serious health concern in the UK, strongly related to eating habits. In addition, the fascination with celebrity culture (female celebrities in particular are purposely thin), lack of exercise and a fast food diet can all have an impact on childhood obesity. As an illustration of the scale of the problem, the box below shows some key facts about obesity in England in 2010. The information selected here gives an idea of aspects of obesity that are significant to health – the proportion of adults and children who are obese, the amount of exercise people get, diet, and need for medical treatment.

You will notice that the '5 A DAY' campaign is identified as an important factor in relation to obesity. You will also notice that there is a distinction made between 'overweight' and 'obese', and this will be explained further on. As you read this closely, also look out for the increase in hospital admissions for obesity over the ten years since 2000. The number of prescriptions for obesity is also an indication of its impact on health.

Read the box below outlining some key facts on obesity and then have a go at answering the questions in Activity 3.

Obesity: Key facts

In 2010:

- Just over a quarter of adults in England were classified as obese. Around three in ten children (aged 2 to 15) were classed as either overweight or obese (29 per cent of girls and 31 per cent of boys).
- 41 per cent of respondents in the national travel survey (including all ages from 2 upwards) made walks of 20 minutes or more at least three times a week and an additional 23 per cent said they did so at least once or twice a week. However, 20 per cent reported that they took walks of at least 20 minutes 'less than once a year or never'.
- 25 per cent of men and 27 per cent of women consumed the recommended five or more portions of fruit and vegetables daily.
- Patient admissions in NHS hospitals with a primary diagnosis of obesity among people of all ages was 11,574 in 2010/11. This is over ten times as high as the number in 2000/01 (1,054).
- There were 1.1 million prescription items for the treatment of obesity.

(Based on NHS Information Centre, 2012)

Activity 3: Check the facts

Allow about 5 minutes

Insert the correct word or words into the missing spaces in each phrase or sentence.

Just over a quarter

41 per cent

27 per cent

11,574

Match each of the items above to an item below.

Approximately how many adults in England were classified as obese?

How many respondents in the national travel survey made walks of 20 minutes or more at least three times a week?

How many women consumed the recommended five or more portions of fruit and vegetables daily?

What was the number of patient admissions in NHS hospitals with a primary diagnosis of obesity?

3.1 The body mass index

The body mass index (BMI) links weight and height to determine whether someone is an ideal weight, overweight or obese. This measurement is now used by the World Health Organization to make global comparisons about levels of over- and under-nutrition for people in different countries (Webb, 2008). The table below shows how different BMI scores relate to weight classifications, and you will see that the distinction between 'overweight' and 'obese' is actually a very precise difference in the BMI. 'Overweight' is classified in cases where the BMI is in the range 2530, and 'obese' is classified for BMIs above 30. Obesity becomes 'severe' at a BMI above 40.

World Health Organization BMI classifications

BMI value: weight (kg)/height (m^2)	Classification
Under 18.5	Underweight
18.5–25	Ideal range
25–30	Overweight
Over 30	Obese
Over 40	Severely obese

BMI measurements need to be applied carefully, however. The same volume of muscle tissue is heavier than that of fat, so an athlete with well-developed muscles and little excess body fat is likely to be heavier than someone of the same size who has more fat and less muscle. The BMI measurement for the athlete is therefore likely to be abnormally high and would not provide a good guide to their possible health risks.

3.2 Change4Life

Obesity is such a great concern because it is linked to serious and life-limiting conditions such as type 2 diabetes, cardiovascular diseases, cancer and disability (NHS Information Centre, 2012). With obesity in mind, you will now consider how a government-led initiative might influence families to change their diet and exercise.

Considering the importance of the family in influencing children's eating habits, the government's 2005 Action Plan included a number of key interventions to promote healthier eating habits within families. These included campaigns to support health

education using advice and guidance (such as the 5 A DAY campaign you have already explored). The next activity will involve you finding information about a current health campaign aimed at families.

Activity 4: Browsing the Change4Life website

Allow about 15 minutes

Browse the Change4Life website by clicking on the link to find some tips (aim for five) for enabling families to adopt healthy eating habits and increase the amount of exercise they take.

Click on the discussion to view some observations.

Discussion

You probably found your way to sections which offer advice such as how to cut back on fat, sugar and salt, and ideas for taking exercise – for example, walking or cycling instead of travelling by car or public transport. Other sections of the site are aimed at making it easier to change by encouraging families to get involved in local activities.

The next section moves on to consider how the family is affected by illness.

4 The family, illness and care

Families are not only important in establishing healthy lifestyles, they also play a crucial caring role in cases of illness or disability. Over recent years in the UK, rising numbers of people are living alone and there is an increasingly ageing population. Both these changes raise questions about whether the family is viable as a basis for informal health care provision.

Illness in the family can affect the whole family. The onset of illness in a family has both practical and emotional consequences that may affect individuals as well as the family dynamic (the way the family works and who fulfils particular roles). Additionally, the role the family assumes in informal care for its members influences the care they receive.

If, for example, a father has been the main earner in a family, and becomes ill for a long period of time, the family income may drop. Family members may resort to a poorer quality diet, use little heat in the home, and reduce or abandon holidays and family outings. The mother and older children may possibly seek additional paid work. If an elderly and infirm grandmother can no longer look after herself in her own home, she may move in with the family of one of her offspring, disrupting bedroom accommodation and family interactions. Apart from these practical consequences, illness brings physical and emotional stresses. Watching a loved one in pain, coping with a depressed spouse and dealing with the physical exhaustion of being available 24 hours a day, all take their toll on family life as well as on the individual who is ill.

In UK society, if family members are able to care for their relatives, they are usually expected to do so unless professional caring is necessary. Family members make many practical interventions to support the health of their relatives, whether children, spouses, parents and grandparents, or the wider family. This is because family relationships are often the closest relationships people have, and carry with them high levels of responsibility. When people are ill they usually expect that those they are closest to will rally round and support them. When a family member becomes ill other family members tend to feel responsible for that person and feel that they are morally obliged to care for them. This is most evident in the care of people with a long-term illness or disability. It can be surprising to discover that in England and Wales about six million adults care for a family member with a long-term illness or disability (White, 2013). It is estimated there may also be approximately 150,000 children in England and Wales who care for their ill or disabled parents in some way (Social Care Institute for Excellence, 2005). Research undertaken by Professor Saul Becker points to a hidden army of young carers with the number being four times that officially recorded. You will read more about his research in the section about young carers.

Caring is a complex emotional task. Sometimes the experience of caring is extremely rewarding. It may satisfy deep needs by helping some people to achieve the sense of success and satisfaction that may not be available to them in other ways. Sometimes, however, carers find the experience of caring difficult and depressing, and might become resentful of the fact that they had no choice but to take the role on. Care obligations can lead to exhaustion, disrupt normal family relationships, and leave people feeling isolated (Carers UK, 2012). Giving a thankful child a cuddle and applying some plasters to a cut is one thing; providing 24 hour care to a disabled and irritable elderly parent is quite another.

Recently, concerns have been expressed about what might happen if family carers begin to find their task too demanding, especially as the percentage of the population over 60 is

set to increase. The audio case study below provides a helpful illustration of the issues carers can face.

Audio content is not available in this format.
Case study: Sheila, the carer

BBC News, 2012

Of course, if the number of people over the age of 60 increases, then so do the number of cases of illness associated with old age. One of the most distressing illnesses of old age is Alzheimer's disease, which often places extreme pressures on family carers because of the damage not just to the individual sufferer but to the relationships she or he has.

Around 500,000 people have Alzheimer's disease in the UK (Alzheimer's Society, 2012). Although it can sometimes affect young adults, it is more likely to develop in older people and affects around 20 per cent of the population aged over 80. The problem is a worldwide one, although it has greatest impact on developed countries, partly due to their ageing populations.

The next activity contains an information box which explains Alzheimer's disease, followed by an interactive activity to check your understanding.

4.1 Alzheimer's disease

Activity 5: What is Alzheimer's disease?

Allow about 30 minutes

Read the four paragraphs in the box below (What is Alzheimer's disease?). You may need to read them more than once to develop your understanding.

What is Alzheimer's disease?

Paragraph 1 Alzheimer's disease is the most common type of dementia and usually occurs most in people over 65 years old. Dementia is described as the loss of brain function, and symptoms can include memory loss, confusion, personality changes and problems with speech. People in the advanced stages of Alzheimer's disease may find it difficult to perform the everyday tasks most of us take for granted, and they may no longer recognise their family members or their surroundings. Alzheimer's is a progressive disease, which means that gradually, over time, more parts of the brain are damaged, and as the brain declines, the symptoms become more severe.

Paragraph 2 The disease was discovered in 1907 by Alois Alzheimer. He studied the brain tissue of a woman with dementia and discovered two microscopic abnormal protein structures in the form of plaques and tangled fibres. Since that time, knowledge and understanding of the disease has gradually developed. It is thought that the plaques and tangled fibres block the transport of vital nutrients to the brain cells so neurons (nerves) become damaged and can no longer transmit messages effectively, interfering with brain function.

Paragraph 3 It is likely that the disease is caused by a number of factors rather than a single factor and researchers have explored, for example, the possible role of toxins such as aluminium, and excessive dietary intake of saturated fats, calories and alcohol. A strong case is also building for genetic inheritance of the disease in addition to environmental or lifestyle factors. Twice as many women as men are affected by the disease, which suggests a possible link with female hormones. Indeed, scientists have demonstrated that the female hormone oestrogen has a protective effect on the brain. It is thought that after the menopause, when oestrogen levels fall, women are more at risk of developing Alzheimer's disease.

Paragraph 4 Research continues into an effective treatment to alleviate or reduce the damaging effects of this disease. Various treatments and preventive measures are being investigated, including the use of hormone replacement therapy, vaccines and substances that aim to break down the protein deposits in the brain.

Now, using the labels below, identify the main focus of each paragraph.

Description

Discovery and key features

Causes

Treatment

Match each of the items above to an item below.

Paragraph 1

Paragraph 2

Paragraph 3

Paragraph 4

Although Alzheimer's has terrible effects on the sufferer, a carer's life is also severely affected. The pressure of providing care at the level needed by people with Alzheimer's can disrupt the carer's life in profound ways. It is not only adults who are carers – children can also find themselves in situations where they are caring for an ill or disabled parent or sibling.

4.2 Children as carers

The following information on young carers may surprise you. As you read this and work on the activity you will gain an understanding of children as carers in the UK. First, to gain a sense of what the experience can be like, read this poem written by a young carer:

A Star

Young Carers might be what we are

But I think we're more like a star

We light the dark and twinkle brightly

Being happy and being sprightly

Then in the day we disappear

Being seen is what we fear

Acting normal, Coping well
Hiding all, please don't tell
My mum and me we are the best
She does her bit I do the rest
We live our life and we get by
It can be tough we sometimes cry
It's not always fair but we'll always be there
Children that share and children that care
At the end of the day it'll be night
We'll come out again and we will shine bright
YES a star that's what we are

(Source: Children's Society Young Carers Initiative, 2005)

One of the most prominent researchers looking at the plight of young carers is Professor Saul Becker from the University of Nottingham. Becker defined young carers as:

> children and young persons under 18 who provide or intend to provide care, assistance or support to another family member. They carry out, often on a regular basis, significant or substantial caring tasks and assume a level of responsibility that would usually be associated with an adult. The person receiving care is often a parent but can be a sibling, grandparent or other relative who is disabled, has some chronic illness, mental health problem or other condition connected with a need for care, support or supervision.
>
> (Source: Becker, 2000, p. 378)

Becker's collaborative study with the BBC in 2010 received much attention in the media when it revealed that the number of young carers in the UK was much higher than originally thought. Professor Becker said his findings revealed 'a hidden army' of young carers throughout the UK today (Howard, 2010). The Children's Society has recently published an updated report, 'Hidden from view: the experiences of young carers in England' (2013) and in the following activity, you can read the report.

Activity 6: The hidden lives of young carers

Allow about one hour

This is a two-part activity. First, you will watch a video sequence about young carers and then you can read the latest report from the Children's Society.

The video has been produced by the NHS to raise awareness and assist understanding of the issues young carers face today. The Children's Society's report from 2013 will further develop your understanding of young carers. Follow both the links below to watch and then read about the types of caring activity these young people undertake

- First, watch the young carers' video
- Then read the The Children's Society report from 2013.

Discussion

The collaborative research undertaken by Professor Becker and the BBC in 2010, concluded that there were likely to be as many as 700,000 young carers today in the UK. This suggests that many young carers are ‘hidden’ and not showing in the census figures. The 2013 report from The Children’s Society makes it clear that it is parents or adults who complete census forms and not children, making the reported census figure not truly representative of the number of young carers in society today.

5 Conclusion

In this course you have studied some aspects of the relationship between the family and health. You have seen how people learn attitudes and behaviours regarding health within families. You have also thought about the impact of obesity on health, and explored some campaigns (such as 5 A DAY and Change4Life) aimed at families to improve their health. When people are ill, family members, including children, are frequently involved in giving informal care.

You should now be able to describe these influences and interventions and to begin to think about how health and the family interact. Through undertaking the activities focussed on interpreting statistical information, you should also have begun to develop an understanding of how evidence is used to provide information about the link between families and health.

You have also engaged with theory (socialisation, obesity, Alzheimer's disease), government health improvement campaigns aimed at families (5 A DAY and Change4Life). and experiences of people – including young people – who are carers in families. You have also spent some time interpreting numerical data in different formats. Now that you have completed this Open Learn course, it is a good idea to pause and reflect on the experience.

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References

Alzheimer's Society (2012) *What is Alzheimer's Disease?* [Online]. Available at https:/www.alzheimers.org.uk/site/scripts/documents_info.php?documentID=100 (Accessed 09 January 2013).

BBC News (2012) *Case studies: Life in the system* http://www.bbc.co.uk/news/uk-18198380 (Accessed 09 January 2013).

Beaumont, J. (2011) *Households and Families*, Office for National Statistics.

Barnardo's (2012) 'Young carers' [Online]. Available at http://www.barnardos.org.uk/what_we_do/our_projects/young_carers.htm (Accessed 12 April 2012).

Becker, S. (2000) 'Young carers', in Davies, M. (ed) *The Blackwell Encyclopedia of Social Work,* Oxford, Blackwell.

Carers UK (2012) 'What is caring' [Online]. Available at http://www.carersuk.org/help-and-advice/quick-guide-to-caring/item/483 (Accessed 20 March 2013).

Children's Society Young Carers Initiative (2005) *Young Carers Poetry Book 2005* [Online]. Available at http://www.youngcarer.com/sites/default/files/imce_user_files/Resources/E-bulletins/poetry_book_2005.pdf (Accessed 23 March 2012).

Department of Health (2003) *Food and Health Action Plan – Food and Health Problem Analysis for Comment*, The Department of Health.

Department for Environment Food and Rural Affairs (2013) *Family Food 2012* [online]. Available at https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs.

European Food Information Council (2012) 'Fruit and vegetable consumption in Europe – do Europeans get enough?', [Online]. Available at http://www.eufic.org/article/en/expid/Fruit-vegetable-consumption-Europe/ (Accessed 19 March 2013).

Howard, D. (2010) 'Cameron warns on child carer cuts', *BBC News* [Online]. Available at http://www.bbc.co.uk/news/education-11757907 (Accessed 21 March 2012).

NHS Information Centre (2012) *Statistics on Obesity, Physical Activity and Diet: England, 2012*, The Health and Social Care Information Centre.

Social Care Institute for Excellence (2005) *The Health and Well-being of Young Carers* [Online]. Available at http://www.scie.org.uk/publications/briefings/briefing11/ (Accessed 09 January 2013).

The Children's Society (2013) 'Hidden from view: the experience of young carers in England' [Online]. Available at https://www.interfaceenterprises.co.uk/assets/news/brochures/bp/Hidden-from-view-Young-Carers-Report.-The-children-society-May-2013.pdf (Accessed 4 November 2013).

Webb, G. (2008) *Nutrition: A Health Promotion Approach*, 3rd edn, London, Hodder Arnold.

White, C. (2013) *2011 Census Analysis: Unpaid Care in England and Wales, 2011 and Comparison with 2001*, Office for National Statistics.

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