Food

Poverty
fact or fiction?

Food Poverty and Policy in Northern Ireland
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Food |foōd|

noun
any nutritious substance that people or animals eat or drink, or that plants absorb, in order to maintain life and growth: cans of cat food | baby foods.

Phrases
food for thought something that warrants serious consideration.

Origin
late Old English fōda, of Germanic origin; related to fodder.

Poverty |ˈpävərtē|

noun
the state of being extremely poor: thousands of families are living in abject poverty.
- the state of being inferior in quality or insufficient in amount: the poverty of her imagination.
- the renunciation of the right to individual ownership of property as part of a religious vow.

Origin
Middle English: from Old French poverte, from Latin paupertas, from pauper ‘poor.’

06.11.2007

FOOD POVERTY

FACT OR FICTION?

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TOTAL COST: PEOPLE'S WELL-BEING
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Dr Harold Harvey	University of Ulster
Jorun Rugkasa	Institute of Public Health in Ireland
Kim Willis	Chartered Institute of Environmental Health

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Foreword

This welcome and insightful report comes at an opportune time in the development of Northern Ireland. As Northern Ireland moves towards more self determination it provides a case for the new administration to tackle the food poverty/insecurity and consequent social exclusion that impact on a large proportion of its population. It is important to remember that over half of Northern Ireland's population have incomes of less than £300 per week with a high concentration of individuals below the 60% of the United Kingdom median and 50% of the United Kingdom mean.[1]

Compared to the rest of the UK, NI's income distribution is biased towards the lower end. What this means is that there is a greater percentage on low incomes and dependant on benefits in NI than the rest of the UK.

The picture is complicated by the existence of areas of deprivation side by side with affluent areas in NI. These areas of deprivation have traditionally experienced the withdrawal of basic services and amenities, including the food retailers, who increasingly site their stores either out of town, for car owning consumers, or in areas where richer people live or work. Not all poor households live in such areas of multiple deprivation, but many do and the likelihood increases as income falls. Equally not all poor households experience an unhealthy diet, some by dent of personal skills, imagination and use of resources, such as growing their own food, eat well and clearly care about what they eat. But, in order to achieve this they have to adopt strategies that those in more fortunate circumstances do not have to resort to as a means for survival.

The great strength of this report is that it locates food poverty not within personal consumer or choice agendas but by using multiple data sets and perspectives it shows the complexity of the issues and points out that structures matter. While individual issues such as cooking skills can be a factor in acerbating food poverty they are not the only factor and simply tackling individual aspects of food poverty will not address the overall issue of moving people out of food poverty. It you are on the high end of the income scale and can't cook then you can buy your way out of the problem by buying healthy (processed) foods and fresh fruit, if you are poor, you can't afford to try out new things and if you can't cook then you have a double burden, but cooking skills will only help people manage in already dire circumstances. To get access to a healthy diet can necessitate the expense (in time as well as money) of travel by car or public transport. Thus the price of transport is an additional or externalised cost.

The important aspect here of food poverty, that no research can adequately capture, is the daily grind and struggle to manage on an inadequate budget and the effect this has on morale and self esteem. Food poverty is hidden from public view, it is hard to talk about not having enough while those around you seem to be partaking in a food culture that is exciting and built on excess.

The way forward demands a combination of policies and actions linked to these, so that the vulnerable in our society have sufficient resources to afford and access healthy food in line with their cultural and preferred tastes. Benefits and income levels should to be set against minimum healthy eating criteria, welfare schemes such as free school meals and the Welfare Food Scheme should be revised and extended to remove stigma. Tackling food poverty needs to be seen in a public health light where the benefits accruing from tackling food poverty are measured in future health gains.

The conclusions and recommendations to this report demand action and not just the development of another 'strategy'. There is clearly a lot of policy activity in NI and the solution lies in tying up the various policies to address food poverty and some other problems at the same time. The consequences of food poverty are enormous, we are in a situation where public spending is increasingly being devoted to risk aversion and the symptoms (e.g. preventing obesity) but not to risk prevention (such as public health or redistribution to rectify inequalities). Tackling food poverty needs to be re-conceptualised not as a cost but as an investment in the future health of vulnerable groups in our society.

Finally I wish to thank and congratulate the authors of this report for its clarity of vision and demonstration of a clear set of actions to tackle the problem, to paraphrase a famous philosopher, the point is not to describe the problem but to change it and this admirable report provides us with a blueprint to do exactly that.

Martin Caraher
Reader in Food and Health Policy
Centre for Food Policy
City University

[1]Department for Social Development (2007) Households Below Average Income: An analysis of the income distribution in Northern Ireland 2005/06. Belfast: Department for Social Development.


Low GI
Low sugar
Low fat
Action
is what the conclusions and recommendations to this report demand
on
Food Poverty

Foreword

'Everyone has the right to a standard of living adequate for the health and well being of himself and of his family, including food, clothing, housing and medical care and necessary social services.'

For most developed nations many health, social and economic indicators suggest things have never been better. Generally, life expectancy is high, national wealth is on an upward trajectory and food is in abundance. Why is it then, that in a rich country like Northern Ireland almost 30 percent live in poverty and many marginalised and socially disadvantaged groups are often without a nutritious and enjoyable diet, suffering the associated poor health and social consequences? Northern Ireland, like the Republic of Ireland, does indeed experience food poverty and this is shameful.

There is a misconception that poor dietary choice is the fault of the feckless poor. Individuals and families are embedded within social, economic and political systems that shape dietary choices. The experience of food poverty is strongly affected by structural, financial and psychosocial matters that often arise through exclusionary processes leading to unemployment, low incomes, poor housing and family breakdown. Unless policy and practice responses address these 'causes of the causes' and pay attention to structural and material factors, little impact will be made in the prevention of food poverty.

Colleagues in the Public Health Alliance, Ireland have compiled a rich and powerful report that supports such action on the societal causes of food poverty. It highlights that many of the causes of food poverty lie outside the health sector, with a clear need for joined up government action with community involvement. Together with the growing evidence base in the Republic of Ireland such as the food poverty work commissioned by the Combat Poverty Agency and the Standard of Healthy Living on the Island of Ireland study commissioned by the Food Safety Promotions Board, it will provide a scientific basis for public health action that goes beyond individual level skill development and will assist in striving towards social justice and health for all.

Sharon Friel PhD
Principal Research Fellow
WHO Commission on Social Determinants of Health


'Everyone has the right to a standard of living adequate for the health and well being of himself and of his family, including food, clothing, housing and medical care and necessary social services.'
1 of 5-a-day
= 100g serving
Sharon Friel PhD
Principal Research Fellow
WHO Commission on Social Determinants of Health
Each 100g serving contains
Calories
Sugar
Fat
Saturates
Salt

Chapter 1 - Introduction

The incidence of food poverty is intrinsically bound up with that of income, poor dietary intake, lifestyle patterns and health inequalities. While extensive research on this issue has been conducted in Great Britain and to some degree in the Republic of Ireland, food poverty in Northern Ireland has not been explored to any great extent.

This study aims to address this deficit and documents the current state of food poverty in Northern Ireland particularly highlighting inequalities in dietary behaviour. There are a number of specific objectives related to the project:

- To document the nature and extent of social inequality in food and food poverty in Northern Ireland using existing data;
- To identify and assess current policy responses to food poverty in Northern Ireland;
- To identify priority areas and make recommendations for current and future policy;
- To heighten awareness at both strategic and operational level of the issue of food poverty and the implications for public health and stimulate action on the same; and
- To provide clearer understanding and create opportunities for an all island collaboration to tackle food poverty.

1.1 Methodology

A number of different research tools were used during the course of this study:

(a) Analysis of existing food consumption and expenditure data:

An extensive review and analysis of a wide range of data sets relating to food consumption and expenditure patterns as well as data on consumer attitudes to food, diet and health. This data was collated, reviewed and analysed from the following sources:

- Expenditure and Food Survey (2005)[1]
- Food Standard's Agency Consumer Attitudes Survey (2005)
- Safefood Consumer Tracking Survey (2004)
- Health Promotion Agency's Health and Lifestyle Survey (2002)
- Invest NI and Bord Bia Periscope Research (2005)
- Bord Bia and Food Strategy Implementation Partnership (FSIP) Shopper Survey (2006)

(b) Analysis of the current policy environment

An extensive review of existing government policies considered relevant to food poverty, was undertaken. They related to diet, public health, health inequalities, poverty, education, sustainable development, agriculture, transport and social development and were examined with the following questions in mind:

- Is there any reference to diet / health / nutrition?
- Is there any specific reference to food poverty?
- Does the policy paper highlight / address any of the key factors contributing to food poverty?
- Is there any evidence of building on progress to date?
- Do the proposals documented in the policy paper go far enough?
- To what extent will these proposals affect the lives of those experiencing food poverty?
- Have any key issues been omitted?
- Is the focus of the policy paper on one particular area, with a lesser focus on other areas?
- Is there evidence of a joined up approach to tackling food poverty at a national / local level?
- Is food poverty being addressed within the context of health inequalities?
- Is there over emphasis on any one area of food poverty?
- What evidence is there of all island collaboration to address the issue of food poverty?

(c) Interviews with key stakeholders

The purpose of these interviews was to collate a wide range of perspectives on interviewees' knowledge and awareness of food poverty in terms of the contributory factors, its effects on health, those most at risk or likely to be experiencing food poverty, and the implementation of strategies and/or initiatives developed to tackle food poverty. Key stakeholders included representatives from the relevant government departments, statutory and public bodies, academics, private sector and the community and voluntary sectors (see appendix 1 for list of organisations represented).

A subsequent seminar for key stakeholders was held in October 2006. This event attracted wide representation from those who had previously participated in the interviews. A report was produced and disseminated to participants following the event.

(d) Focus groups comprising of people at risk or likely to be experiencing food poverty

A series of focus groups were conducted with those considered to be at risk or likely to be experiencing food poverty[2]. The purpose of the focus groups was to identify the dynamics of food poverty at micro level involving the complex life situations of people who experience food poverty and how they manage their diet in the context of competing demands in terms of economic, social and cultural factors.

A total of 10 focus groups were conducted, representing each of the target groups. Ethical approval was obtained from the University of Ulster Research Governance Filter Committee to conduct focus groups as part of this research study.

1.2 Structure of the report

The report starts off with an exploration of food poverty in Chapter 2. It looks at the incidence of poverty generally in Northern Ireland, explains what food poverty is and explains the link between food poverty and social exclusion.

Chapter 3 is devoted to the subject of health and how it is affected by food poverty. It provides detailed information on the nutrient and food consumption patterns of people in Northern Ireland analysed in a number of different ways: (a) by income (b) by employment status (c) by household composition and (d) by household reference person – referring to the age of the person who participated in the survey from that household.

The majority of this report is devoted to examining the factors that contribute to food poverty in Chapter 4. These are broken down into economic, social and physical factors and each section provides a comprehensive analysis touching on all the elements that affect or are affected by food poverty. At the end of the chapter, feedback from the focus groups held with key target groups is provided. This data paints a picture of the every day reality and issues experienced by the people of Northern Ireland who are particularly vulnerable to food poverty.

Chapter 5 documents and analyses the various Government policies and initiatives that have an impact on food poverty.

Finally, Chapter 6 draws a series of conclusions from the preceding chapters coupled with recommendations.

[1]*The Expenditure and Food Survey (EFS) is national survey of food expenditure patterns from which consumption data and nutritional intake can be determined. For the purposes of this research, the Northern Ireland data was extrapolated from the national UK sample. However, due to the way in which the data is analysed and made available, it is not possible to conduct any further statistical analysis of the Northern Ireland sub-set and therefore the results presented in this report are of a descriptive and comparative nature.*

[2]*Earlier analysis of the Expenditure and Food Survey data revealed that lone parent families, large families (4+ children), older people and low income households (particularly those where the head of household was unemployed) were most likely to have the poorest dietary intake and most likely to be spending the least amount of money, but greater proportion of their household budget on food. It was agreed that representatives from each of these target groups should be invited to participate in the focus groups.*

Chapter 2 - Understanding food poverty

2.1 Poverty in Northern Ireland

Central to the discussion around health inequalities and poor dietary intake, is the issue of low income and poor financial status. Efforts to reduce poverty and child poverty in particular, have been the Government's focus in recent year[1].

Findings of a study by Hilliard et al (2003) provide useful background information on current levels of poverty in Northern Ireland. The levels were measured on the basis of income and deprivation i.e. when people are deprived of items considered essential for a basic standard of living. Three of the deprivation items identified related to food, namely:

- whether a person has fresh fruit and vegetables every day;
- whether a person has a meal with meat, chicken or fish every second day;
- whether a person has a roast dinner once a week.

These were among the items used to construct the poverty index which was defined in terms of a household on low income (on average an equivalised income of £156.27/week) and lacking three or more of the deprivation items identified[2].

Using this index, 29.6% of Northern Ireland's population was considered to be living in poverty in 2002/03. This equates to 185,500 poor households, with over half a million people living in these households, of which almost 150,000 are children (aged 15 or under).

As a percentage of the total child population of Northern Ireland, 37.4% of children are growing up in poor households[3]. A further 12.1% were described as at risk of poverty in that their incomes were relatively low, but they did not currently lack three or more necessities.

As with any health and lifestyle determinant, some groups in society will be more at risk than others. The study by Hillyard revealed that of the poor households in Northern Ireland, the disabled are nearly twice as likely to be in poverty as the non disabled; the youngest groups of households are twice as likely to be in poverty as the oldest; and women are more likely to be poor than men.

The most recent research by Kenway et al (2006) reports that a higher proportion of families in Northern Ireland are living in poverty than in either Britain or the Republic of Ireland. The report concluded: "People living in low income households in Northern Ireland face higher risks of many aspects of disadvantage, including poorer local environment, reduced mobility, higher rates of premature mortality and poorer health[4]".

2.2 What is food poverty?

People who have a poor quality diet and do not have access to sufficient food necessary for a healthy life are said to be experiencing food poverty. Since the development of the term 'food poverty' many definitions have been put forward to encapsulate this concept. They largely relate to the inability to access an affordable 'healthy' diet.

In 1996 the delegates of the World Food Summit affirmed the 'right of everyone to have access to safe and nutritious food[5]'. However, in developed countries such as the UK and Ireland, a significant proportion of the population do not have access to nutritionally adequate food. It has been reported that four million people in the UK cannot afford to eat a healthy diet and therefore have an increased risk of developing conditions such as heart disease and cancer[6].

Food poverty - a definition…

"the inability to acquire or consume an adequate quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so".

The definition by Riches (1997)

Chapter 2 - Understanding food poverty

In a recent study of food poverty in Ireland, Friel and Conlon (2004) defined food poverty as *"the inability to access a nutritionally adequate diet and the related impacts on health, culture and social participation".* The definition by Riches (1997) goes somewhat further in suggesting that food poverty is *"the inability to acquire or consume an adequate quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so".*

An earlier definition by Anderson (1990) also captured the issues highlighted by more recent authors, with emphasis on the limited or uncertain availability of nutritionally adequate and safe foods and the inability to acquire acceptable foods in socially acceptable ways. Leather (1997) provides a more detailed definition of food poverty, with references to specific issues of price, income and money management, as well as geographical, social, practical and cultural access to good quality, affordable food.

Definitions by the Food Poverty Network and National Food Alliance (2000) describe food poverty as having a lack of money, inadequate shopping facilities and poor transport culminating in people being denied healthy food choices or being unable to eat an adequate diet.

With many definitions highlighting the negative aspects and effects of food poverty, in contrast, Maxwell (1996) considers the issue in terms of food security. He describes food security as *"access to sufficient, affordable, safe and nutritious food necessary and appropriate for a healthy life, and the security of knowing such access is sustainable in the future".*

It is important to take account of the latter part of this definition, and consider the implications for sustaining a healthy diet, especially for low income consumers. Measures can be put in place to alleviate the immediate effects of food poverty, but addressing the longer term issues, presents a particular challenge for Government and those working directly with individuals and communities experiencing food poverty.

Food poverty is a complex and multi-factorial issue. Food poverty does not only negatively affect dietary intake, but has important implications in terms of lifestyle patterns, social interaction and ultimately health status.

2.3 Factors contributing to food poverty

Food poverty is determined primarily by issues of access and availability and the factors contributing to food poverty can be broadly categorised as economic, social and physical (see Chapter 4).

The inability to access the necessary finance, coupled with inadequate physical resources and networks (i.e. local supermarkets, access to transport) are at the centre of the food poverty issue. Availability of information to facilitate healthy food choices, the variety of food products available for purchase and the skills and facilities available to prepare and cook food from fresh, raw ingredients are also important in determining dietary intake. In addition to these factors, the inability of consumers to purchase and eat food in a way appropriate to their culture and societal norms is now considered a major determinant of food poverty.

With a wide and varied range of factors contributing to food poverty, it is impossible to quantify the effect of each on dietary intake and nutritional status. Some authors argue that economic considerations have the greatest impact on food purchased and consumed[7], whilst others would place considerable emphasis on the impact of radical changes in food retailing on the dietary intake of consumers[8].

2.4 Food poverty and social exclusion

Food poverty is a not an isolated issue that results in poor dietary intake and subsequent ill health. Food poverty is an outcome of the wider effects of social exclusion. Social exclusion is a combination of linked problems such as unemployment, discrimination, poor skills, low incomes, poor housing, high crime, bad health and family breakdown[9]. Just as income poverty has a constraining effect on the way people live their lives, so food poverty affects social behaviour and causes or exacerbates social exclusion.[10]

The Social Exclusion Unit located in the Office of the Deputy Prime Minister, London (2004) highlighted the five key problems that continue to drive social exclusion.

These are:
- low educational attainment among some groups;
- economic inactivity and concentrations of worklessness;
- health inequalities;
- concentrations of crime and poor quality environments in some areas; and
- homelessness.

The key drivers of social exclusion also contribute to the prevalence of food poverty in disadvantaged communities. Dowler (2003) has commented that poverty and deprivation have contributed synergistically to food poverty. This view is endorsed by several UK authors who have argued that social exclusion is an integral part of food poverty because those affected are forced to adopt food consumption patterns and food acquisition strategies that fall outside social norms.[11]

Cornell et al (1996) add to the discussion, by highlighting that the social and contextual pressures make the exercise of individual choice more difficult for some people than others. Dowler (2001) suggests that the focus of attention needs to be firstly, on accessibility, affordability and practicality. Secondly, there is the challenge of relevance and motivation: how to enable participation and ownership of practices and activities whose purpose is often future well being, as well as present pleasure, for those whose main focus is survival, both of the household unit, and in terms of daily living.

Food poverty constitutes a major barrier to consuming and sustaining a healthy diet and ultimately securing good health status and is therefore inextricably linked to social exclusion.

2.5 Summary

- People living in poverty are particularly at risk of poor dietary intake and health inequalities.
- 29.6% of Northern Ireland's population was living in poverty in 2002/2003.
- Some groups are more at risk than others such as people with disabilities, the youngest groups of households and women.
- Food poverty is about the inability to access an affordable 'healthy' diet. It is a complex and cross cutting issue touching on finance, education, transport, literacy, culture, retailing and planning.
- Food poverty is an outcome of the wider effects of social exclusion resulting from problems such as unemployment, poor skills, low incomes, poor housing, high crime, bad health and family breakdown.

In both the north and the south of Ireland, the all causes mortality rate in the lowest occupational class was 100 - 200% higher than the rate in the highest occupational class.

Institute of Public Health (2001)

Chapter 3 - Food poverty and health

There are many factors which affect our health, including: income, early life experience, education, employment, housing and environmental conditions, stress, social support and food and nutrition.[12] The impact of these influences on health is greater for some groups in society than others. People on low incomes, with poor employment opportunities or low levels of education are at an increased risk of ill health and likely to experience signifigant inequalities in terms of their health status. This is what is known as health inequality i.e. poorer health and a shorter lifespan as a result of being less well off.

Inequalities in health emerge as a result of many aspects of daily life and in particular though poor dietary intake and inadequate nutritional status. In the evidence presented to the Independent Inquiry into Inequalities in Health, by Sir Donald Acheson, Nelson (1999) reported *"there is good evidence that inequalities in access to and consumption of a healthy diet lead to inequalities in health".* This has been endorsed by James et al (1997) with evidence from past studies concerned with variations in health across a range of nutritional exposures.

Potential health issues which may arise through poor diet as a result of not being able to access good quality, nutritious food i.e. food poverty, is likely to result in a range of other health problems. Typically, diet related health problems include hypertension, diabetes, heart disease, stroke and some cancers.[13]

Dietary consumption patterns which are more likely to contribute to the onset of these conditions and diseases, are typified by high intakes of fat, sugar and salt and low consumption of essential vitamins, minerals and dietary fibre. Diets of this nature tend to be more prevalent among low income consumers and are generally comprised of low cost energy from foods that are high in fat and refined sugars and low in vegetables and fruit.[14]

James et al (1997) have reported that such diets are lower in essential nutrients such as calcium, iron, magnesium, folate and vitamin C. This study also noted that new nutritional knowledge on the protective role of antioxidants and other dietary factors suggests that there is scope for enormous health gain if a diet rich in vegetables, fruit, unrefined cereal, fish and small quantities of quality vegetable oils could be made more accessible to those who are less well off.

Whilst obesity is not a direct outcome of food poverty, it is clear that there are strong associations between both. The causes of overweight and obesity are well understood and widely documented. A diet high in fat and sugar, coupled with little or no physical activity, results in an energy imbalance and ultimately excessive weight gain over time.

Research suggests that overweight and obesity is more prevalent among those in the lower income groups and with low levels of education[15]. The inability to access nutritious, affordable foods often results in an over reliance on low cost, high energy alternatives. These foods typically comprise ready meals, processed meat products and snack foods such as crisps, confectionary, cakes and biscuits. Based on these observations, parallels can be drawn between the incidence of food poverty and obesity.

The extent of the emerging obesity epidemic has received much publicity in recent years. Overweight and obesity among adults and children is a growing problem, which appears to have reached epidemic levels.[16]

A major study by the Food Standards Agency (FSA) in 2007 (Low Income Diet and Nutrition Survey – LIDNS) which investigated the dietary habits and nutritional status of the low income population in the UK provides valuable data not previously available with such a large sample. It revealed the following key dietary patterns among the low income population sample:

- Consumption of oily fish is substantially lower than the current recommendation by FSA to consume at least one portion a week.
- Younger children (aged 2-10 years) tended to consume more whole milk, yogurt and other dairy products than older children.
- Older children (aged 11-18 years) had a higher consumption of processed meat products compared to younger children.
- People on low incomes were less likely to consume wholemeal bread and vegetables.
- People on low incomes tended to consume more fat spreads and oils; non diet soft drinks; red meat; pizza; processed meats; whole milk; and sugar.
- People on low incomes consumed fewer portions of fruit and vegetables than the general population.

fruit and vegetables of the EU member states.[17] Surveys in 15 EU countries show that low income households have the lowest fruit and vegetables intakes.[18] Findings from the WHO Global Burden of Disease study estimated that the current low fruit and vegetable intake causes up to 31% of heart disease and 19% of stroke.[19]

The awareness of the health benefits of fruit and vegetable consumption has been increasing over the last decade, with clear evidence of the protective effect for coronary heart disease, stroke, diabetes, obesity and some cancers. Studies show that people who consume larger amounts of fruit and vegetables have lower rates of coronary heart disease and that there are also beneficial effects in reducing rates of disease recurrence.[20]

However, consumption of the recommended intake of fruit and vegetables and other 'healthy' food products remains low among low income consumers in particular. The reasons for low intakes of good quality, nutritional food are many and are an important consideration in the existence of food poverty in developed societies.

3.1 Diet and food consumption

The 2005 Expenditure Food Survey (EFS) (Office of National Statistics) is a survey of food expenditure patterns across the UK which assists in identifying food consumption patterns and nutritional intake. For the purposes of this study, the data for Northern Ireland (NI) has been extracted from the main data set in order to allow specific analysis. The survey found an overall general trend emerging of a high intake of saturated fat and protein, lower than recommended intake of fibre and high salt consumption. When the data for NI is considered, it can be seen that:

- **The overall sample population of Northern Ireland has a higher than recommended energy intake when it came to food and drink eaten outside the home.**
- **Protein intake was over one and a half times the recommended intake.**
- **Consumption of sodium was twice the recommended intake.**
- **The energy intake from fat was one and a half times the recommended allowance.**
- **Energy intake from carbohydrate was also higher than the recommended intake.**
- **Fibre intake was just over three quarters of the recommended daily allowance.**

The data was also examined across a range of variables to compare and contrast the diet and food consumption patterns of people living in different situations. The categories chosen were (a) Income (see Table 1) (b) Household Composition (c) Employment Status (d) Age of Household Reference Person. [3]

Chapter 3 - Food poverty and health

The following sections present the analysis of the data specific to NI as extracted from the EFS according to the four variables outlined on the previous page. For each parameter, the data is summarised under two headings, namely (i) overall nutrient intake and (ii) food consumption (i.e. information relating to the specific type of foodstuffs that are consumed and contribute towards overall diet).

3.1.1 Income

Table 2 Nutrient intake by income (see diagram opposite)

(a) Nutrient intake

Evidence from the EFS showed that as a person's income increased, their energy intake decreased except for those in the highest income bracket (as shown in Table 2).

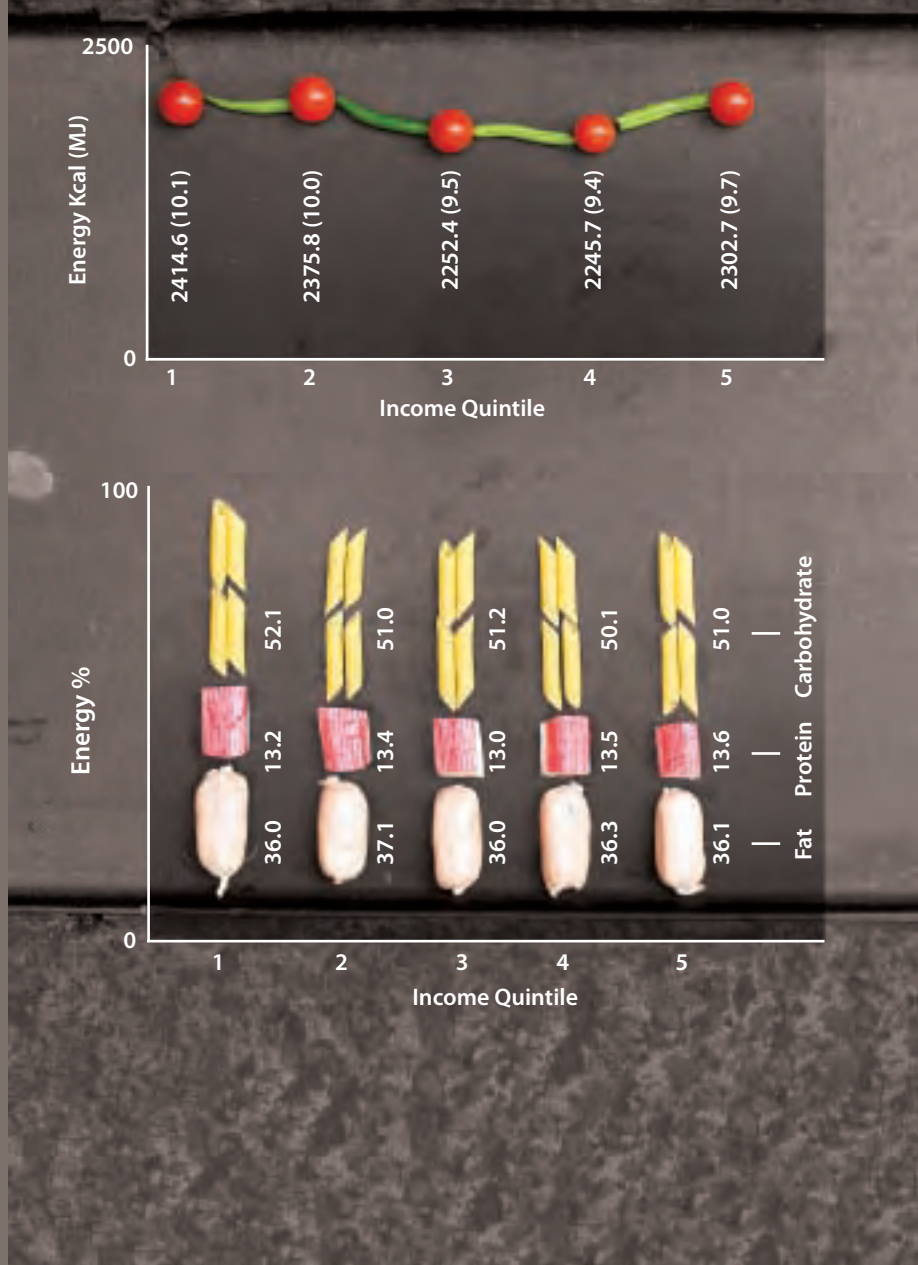
People in income bracket 2 had the highest energy intake from fat while those at the higher end of the income scale had the highest energy intake from protein. This suggests a higher intake of meat, meat products and/or fish which are good sources of protein.

People at the lower end of the income scale had the highest energy intake from carbohydrate sources and also had a high consumption of fibre, both of which could indicate a high intake of bread and cereal products. These are a cheap source of energy requiring minimal storage and preparation and therefore indicative of higher consumption patterns.

Although not documented in detail in this report, interestingly, it is the middle earners people in the third income bracket – that had the lowest daily nutrient intake. There is a considerable body of evidence to suggest that as socio economic status increases dietary intake improves.[21] However, based on this data set, there is no consistent pattern in relation to improvements in nutrient intake as income increases.

For the middle income earners, this could be attributed to a number of factors: they are more likely to be families who have other household expenses such as a mortgage, childcare, cars and education which draws on resources which would otherwise be used to purchase more nutritious

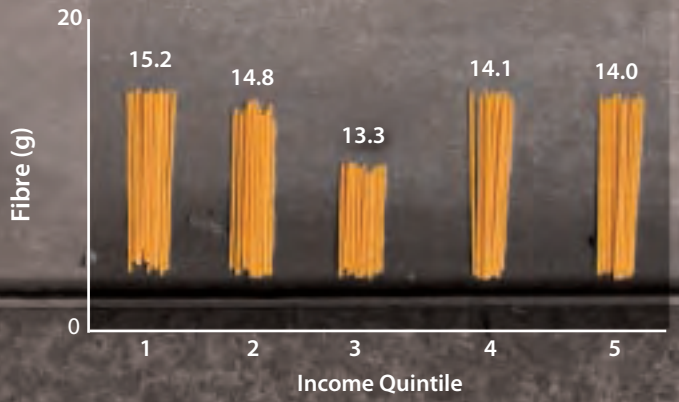
Table 2 Nutrient Intake by Income



[3]Age of Household Reference Person refers to the age of the person who participated in the survey from that household. Results relating to age of household reference person should be interpreted with caution since younger age groups will have more children in the household, while older groups may not and this in turn may skew the findings. These limitations are taken into account in the analysis.

[4]Readers are referred to EFS and www.dardni.gov.uk for further information.

[5]Carcass meat is defined as boned, unprocessed, raw meat (includes minced meat).



food; alternatively, this could reflect that the middle income earners are perhaps endeavouring to balance a busy home/work life schedule and therefore are more reliant on convenience foods which are often of poor nutritional quality, resulting in lower than expected nutrient intake.

(b) Food consumption

Note: A diagramatical analysis of high patterns of food consumption accross each of the four variables can be found on page xx.

Persons in the lowest income bracket had a higher than average intake of milk and cream than those in all other income brackets. The opposite was observed for consumption of cheese, with those at the top end of the income scale consuming the greatest quantity. This could be attributed primarily to the cost of cheese and it's availability as a speciality item which costs more.

Interestingly, the largest average weekly intake of all carcass meat (it should be noted that carcass meat includes minced meat) was consumed by people in the second lowest income bracket. There was a trend towards increased consumption of bacon, ham and canned meats by lower income earners, which could be attributed to ease of storage and preparation. Larger quantities of mutton, lamb and pork were consumed by people at the higher end of the income scale.

Consumption of prepared meats, pies and sausage rolls was similar across all income brackets with people in the second highest income bracket likely to consume ready made meals. The high consumption is likely to be due to minimal preparation and cooking, as a result of limited time to prepare a meal from fresh, raw ingredients.

There was also a greater consumption of takeaway meat based meals and pizzas as income quintile increased. This is likely to be due to the additional disposable income available to purchase ready prepared foods in addition to a lifestyle requirement for convenience. Again, this could be attributed to the demand for convenience among 'cash rich, time poor' consumers. Intake of chips cooked at home and takeaway chips was highest among people in the lower income categories and lowest among people in the

highest income bracket. This could be attributed to a number of factors, including lower levels of knowledge of good dietary intake among lower income groups, or an inclination towards chips as a convenience food.

In terms of processed potato products, consumption of crisps and potato snacks was highest amongst income bracket 4. Similarly, average weekly consumption of vegetable based ready meals was greatest amongst income bracket 5.

Fish consumption varied across the income quintiles, with people in the middle income bracket having the greatest average weekly intake of total fish. This finding contrasts quite significantly with the general dietary patterns of this group.

Consumption of sugar and preserves is greatest amongst people on lower incomes with a greater intake of bread, sweet breads, cakes, buns, pastries and biscuits. Consumption of breakfast cereals varied, with a trend towards increased consumption as income quintile increased. The same was also observed for consumption of rice and pasta.

Consumption of canned vegetables such as peas and baked beans decreased as income increased. Overall consumption of green vegetables and salads was highest amongst those at the higher income level. Consumption of ready prepared fresh leafy salads was greatest in income brackets 4 and 5. This may be due primarily to the cost of these food items and the level of convenience associated with prepared salads, which is attractive to the 'cash rich, time poor' consumer.

Consumption of vegetables such as mushrooms, stir fry vegetables and stem vegetables. Consumption of these foods was most common among those at the higher income levels which are indicative of the lifestyle patterns, increased variety within the diet and a wider range of cooking methods used by higher income consumers.

Fruit intake was similar across all income categories for oranges, apples, pears and bananas. Notable differences were observed however in relation to consumption of stoned fruits, grapes, soft fruits and melon, with a tendency towards increased consumption among those on higher income. This could be attributed to their high cost of these particular fruits compared to oranges, apples, pears and bananas.

Consumption of hot beverages was greatest amongst people on the lowest incomes. This may be because many people in this income bracket are retired and are more likely to have a higher intake of hot beverages, in conjunction with high intakes of bread, cakes and pastries. Consumption of these food types is consistent with perhaps linked social and cultural activities such as meeting with friends etc. Alcohol intake was highest among income bracket 4 and lowest in 1 and 2, which is likely to be due to the increased income among the higher income quintiles.

3.1.2 Household composition

Table 3 - Nutrient intake by household composition. See opposite page.

(a) Nutrient intake

Persons in households with two adults and four or more children had the lowest energy intake. This could be attributed to the number of persons in the household, placing additional strain on perhaps already limited resources for food. Similarly, lower energy intakes were also observed among households with children compared to those without. This was also evident in households with four or more adults, which may typically represent student households with limited finances for food.

The lowest proportion of energy from carbohydrate was evident in households with two adults and one child whilst the highest carbohydrate energy source was apparent in households with one adult and one child. This could be attributed to high consumption of bread and cereals which are inexpensive, versatile, high energy foods, which are readily available, requiring minimal storage and preparation.

The lowest intake of fibre was apparent in households with 2 adults and 4 or more children whilst the highest intake was in single adult households.

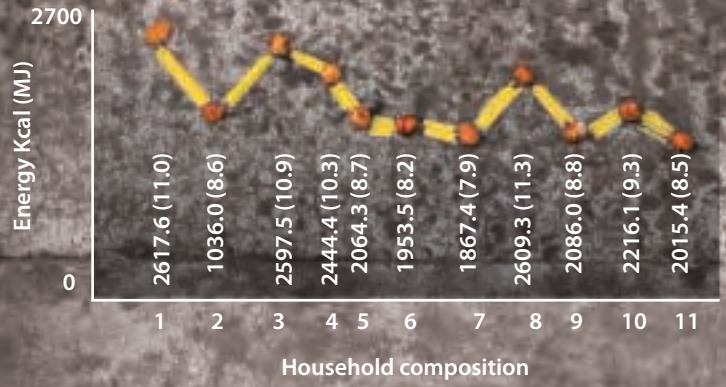


Table 3 Nutrient intake by household composition

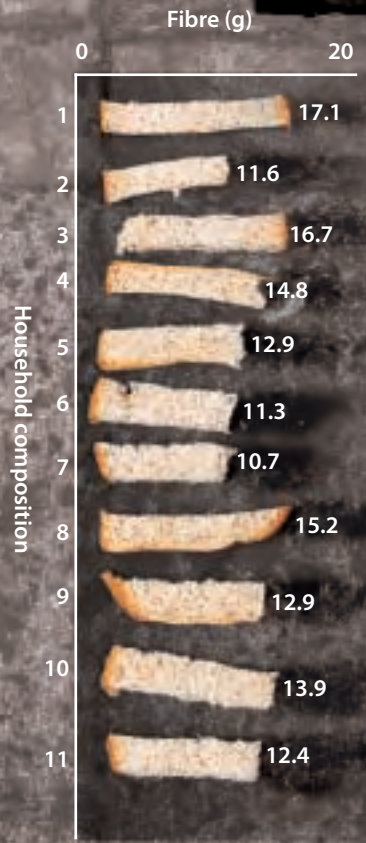


Table Key

1 1 adult

2 1 adult & 1+ children

3 2 adults

4 2 adults & 1 child

5 2 adults & 2 children

6 2 adults & 3 children

7 3 adults & 4+ children

8 3 adults

9 3 adults & 1-2 children

10 3 adults & 3+ children

11 4+ adults

Finally, vitamin and mineral intakes tended to be higher among adult only households and those households with three or fewer children. It was particularly evident that households comprised of two adults and four or more children had the lowest intakes of all vitamins and minerals. Households comprised of one adult and one or more children demonstrated a similar trend, with lower nutrient intakes than all other households.[6] In both cases these findings can be attributed to the limited resources available to spend on good quality nutritious food and the difficulty experienced in physically accessing fresh, nutritious food items.

(b) Food consumption

Note: A diagramatical analysis of high patterns of food consumption accross each of the four variables can be found on page xx.

The average weekly consumption of milk and cream products was highest among single adult households. Similarly, consumption of cheese was highest among one and two person households.

Households with three adults and up to three children have the highest consumption of beef and veal, whilst consumption of mutton, lamb and pork was highest amongst households with two adults and one child. Consumption of carcass meat was lowest for households with two adults and four or more children. This could be due to limited resources as carcass meat is generally more expensive than processed meat products.

In terms of prepared meat products, such as sausage rolls, meat pies, ready meals and takeaway meat products, the general trend would suggest high intake among households with three adults, with the same group also having the overall highest intake of non carcass meat.

Consumption of both homemade and takeaway chips was highest amongst households with one adult and one or more children. Total consumption of processed potato products was also highest amongst these households.

Consumption of pizza, pasta and takeaway rice was highest amongst households with 4 adults. Whilst further investigation is needed to determine the age and employment status of these adults, early indications would suggest that these dietary patterns would reflect the diet and lifestyle patterns of students or young professionals.

Consumption of fish was highest among single person households, with lowest average weekly intake among households with one adult and at least one or more children.

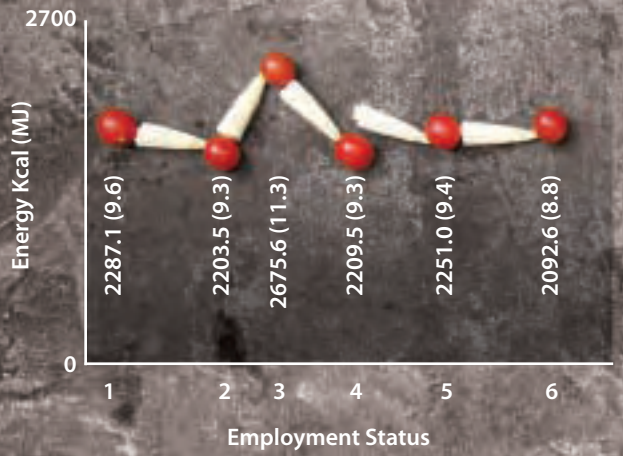
Fruit intake was lowest amongst households with one adult and one or more children and highest for one and two adult households.

Interestingly, the highest consumption of potatoes was in households with two or three adults, whilst households with children tended to have the lowest intake of potatoes. Similarly, consumption of fresh green vegetables and other fresh vegetables was higher in one and two adult households.

There was a trend for high bread consumption among single adult households (many of which could be comprised of older persons), particularly brown and wholemeal varieties. A similar trend was also observed in relation to consumption of cakes, buns and pastries with the highest intakes reported in households with two and three adults. Consumption of sugar and preserves was highest amongst single adult households (many of which could be comprised of retired persons).

Households comprised of one or two adults had the highest consumption of muesli and high fibre breakfast cereals, whilst households with one adult and at least one child had the highest intake of sweetened breakfast cereals. Overall, single adult households had the highest consumption of breakfast cereals, whilst households with two adults and four or more children had the least. This observation contrasts with expected high levels of breakfast cereals among households with children.

Consumption of hot beverages was highest amongst single adult households. This finding coincides with the observations and earlier comments in relation to high intakes of bread, preserves, cakes, buns and pastries among the same group all of which tend to be eaten with hot beverages.



[6]Readers are referred to EFS and www.dardni.gov.uk for further information.

Table 4 Nutrient intake by employment status

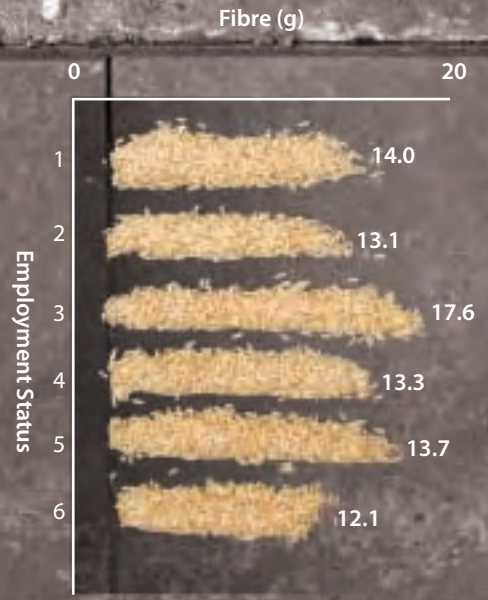


Table Key

1 Full Time

2 Part Time

3 Retired

4 Retired under age

5 Self employed

6 Unemployed

Households with one adult and at least one child had the highest intake of soft drinks, almost twice the intake of households with two adults only. Consumption of chocolate bars tended to be higher in households with children and overall consumption of confectionery was highest in households with two adults and two children.

Alcohol intake was highest amongst households with three adults and three or more children, also having the highest intake of lagers, table wine and champagne. The highest intake of beer was observed among households with four adults, with the assumption that these households may be as previously suggested, comprised of students or young professionals.

3.1.3 Employment status

Table 4 - **Nutrient intake by employment status. See previous page.**

(a) Nutrient intake

The highest energy intake was reported among retired persons, whilst unemployed persons had the lowest calorie intake. It is worthy of note that those in the unemployed group had the lowest percentage energy intake from protein sources and the highest from carbohydrate sources compared with other groups. This is comparable with findings from the previous sections, where it was observed that lower income households appeared to be more reliant on bread and cereal products, which are inexpensive, easy to access, store and prepare and possibly less able to afford meat, chicken or fish which are good sources of protein.

Vitamin and mineral intakes were similar for all employment groups, although, retired persons generally had a higher intake than all other groups. Retired persons had a notably higher intake of fibre, compared to all other persons, which correlates with the high consumption of bread and cereal products. Sodium intake was also highest amongst retired persons but all consumers groups had a higher than recommended intake.[7]

(b) Food consumption

Note: A diagramatical analysis of high patterns of food consumption accross each of the four variables can be found on page xx.

Consumption of milk and cream was highest among retired persons and the lowest consumption was observed among fulltime employees. Cheese consumption was highest amongst full time employees, whilst unemployed persons had the lowest intake.

Total consumption of carcass meat was highest amongst retired persons and the lowest intake was reported among unemployed persons. Retired persons also had the highest consumption of bacon and ham and cooked poultry, whilst those in the unemployed category tended to have the lowest consumption.

There was a trend for unemployed persons to have a higher consumption of meat pies, complete ready meals and other convenience products. Consumption of the same was also high for full time employees. It could be concluded that ready meals and similar convenience type products may be purchased by the unemployed due to lack of skills and/or lack of motivation to prepare a meal from fresh, raw ingredients, whilst for fulltime employees, limited time and a busy lifestyle may lead to a greater reliance on convenience foods.

Consumption of all fish was highest amongst the retired group and lowest amongst unemployed persons.

Retired persons also had the highest consumption of eggs, all fats, sugar and preserves, cakes, pastries and biscuits. The lowest consumption for these food categories was evident amongst unemployed persons.

Consumption of homemade chips was highest amongst the unemployed group. A similar pattern was evident in relation to intake of crisps, with the highest consumption reported in the unemployed group and the lowest intake reported among the retired group.

A clear trend was apparent in terms of fruit consumption with retired persons having the highest consumption of nine out of ten fruits, and similarly unemployed persons having the lowest consumption for the same proportion of fruit. In contrast, those in the unemployed category had the highest consumption of tinned fruit and fruit products, in particular fruit juices.

Retired persons consumed almost twice the quantity of potatoes and vegetables compared to unemployed persons. A similar pattern of consumption was also apparent in relation to intake of vegetables such as turnips, swede, other root vegetables, onions, leeks and mushrooms, with retired persons having the highest intake and unemployed persons having the lowest intake.

Overall consumption of bread was highest among the retired and unemployed groups. Retired persons had the highest consumption of brown and wholemeal bread varieties, whilst those in the unemployed group had the highest consumption of white bread, approximately four times greater than the Northern Ireland average.

People in part time employment have the highest intake of breakfast cereals whilst those in the unemployed category had the lowest intake. Consumption of rice and pasta was highest amongst full time employees, whilst pizza consumption, both home cooked and takeaway, was highest in the unemployed sector.

Consumption of hot beverages such as tea and coffee was highest amongst retired persons and lowest amongst the unemployed sector. In contrast however, unemployed persons had the highest consumption of soft and alcoholic drinks, in particular beer and lagers. In fact, those in the unemployed sector had a higher alcohol intake compared with those in full time employment.

[7]Readers are referred to EFS and www.dardni.gov.uk for further information

3.1.4 Age of household reference person

Table 5 - **Nutrient Intake by Age of Household Reference Person.**

See next page

(a) Nutrient intake

Total nutrient intake among the 65 – 74 age group was highest in relation to energy, protein, fat, carbohydrate, cholesterol and fibre. The over 75 age group had a lower energy intake from fat and protein but a higher intake from carbohydrate sources. This could be due to the fact that older persons may be no longer able to prepare meals and are more reliant on bread and cereal based products to form the greatest part of their diet.

The 65 – 74 year old group also had the highest intake of all vitamins and minerals. However, a higher than recommended intake of sodium was also observed. The youngest age group appeared to consume the least amount of vitamins and minerals.

(b) Food consumption

Note: A diagramatical analysis of high patterns of food consumption accross each of the four variables can be found on page xx.

Consumption of milk and cream was highest amongst those aged 65-74, with the lowest consumption reported among those aged 40-49. Intake of all cheese was lowest amongst the youngest age group (under 30) and highest amongst those aged 50-64.

Consumption of all carcass meat tended to be higher among older consumers. In particular, intake of beef and veal and mutton and lamb was highest amongst those aged 65-74 and lowest amongst those under 30. Pork intake was highest in age group 50-64 and also lowest in the under 30 age group. People over the age of 75 had the highest intake of bacon and ham, cooked poultry and canned meats with youngest age group having the lowest intake.

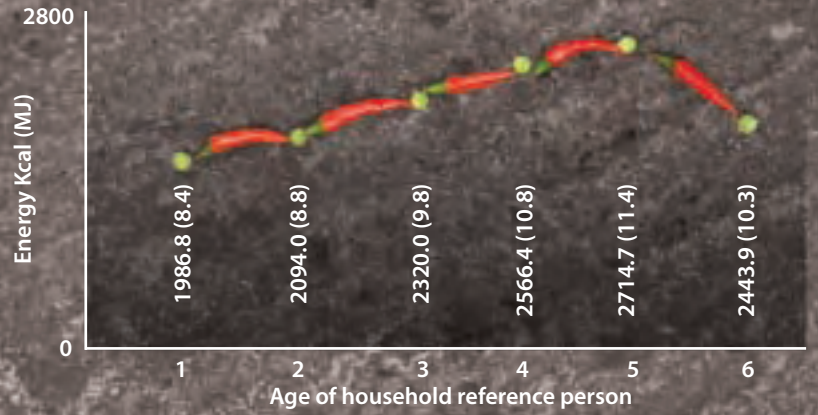


Table 5 Nutrient intake by age of household reference person

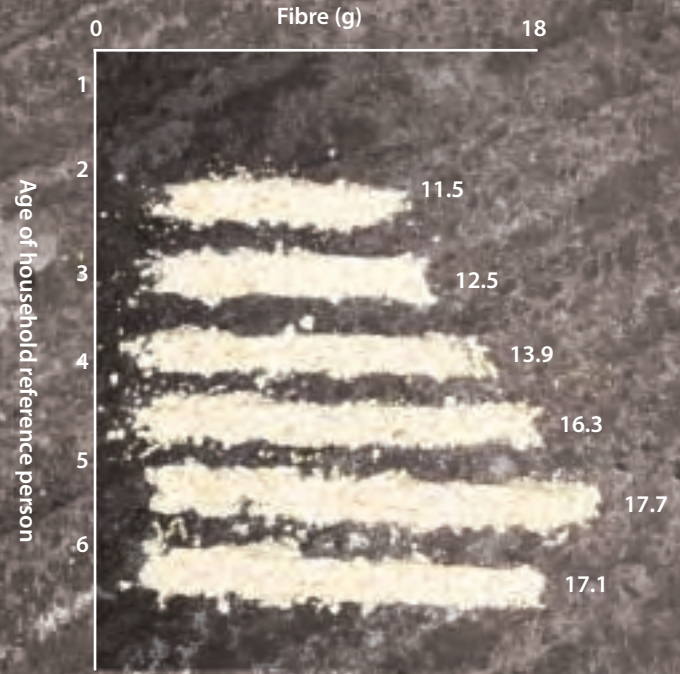


Table Key

1 Under 30

2 30-39

3 40-49

4 50-64

5 65-74

6 75+

Consumption of takeaway foods, chips, crisps, ready meals and burgers was lowest amongst those aged 65 plus and highest in younger age groups. Similarly, consumption of home cooked and takeaway pizza was also highest among the under 30 age group.

Consumption of fish was highest amongst those aged 65-74 and lowest among the 30-39 category.

Intake of fat, particularly saturated fat, such as butter, was higher by those in the age group 65+. Consumption of sugar and preserves was higher among those aged 65 or over and lowest among those aged under 39. These findings are comparable with those relating to employment status which revealed a high intake of sugar and preserves among retired persons and single adult households.

Consumption of potatoes was also reported to be highest amongst older persons, with those aged over 75 consuming over twice the quantity of potatoes compared with those aged under 30. A similar pattern of consumption was also apparent in relation to intake of fresh vegetables.

It was also observed that older persons had a higher intake of vegetable based ready meals and takeaway vegetable products. This could be attributed to the minimal preparation required with such products. In addition to older consumers having a higher intake of vegetables, the same also had the highest intake of fruit, whilst those under age 30 had the lowest intake.

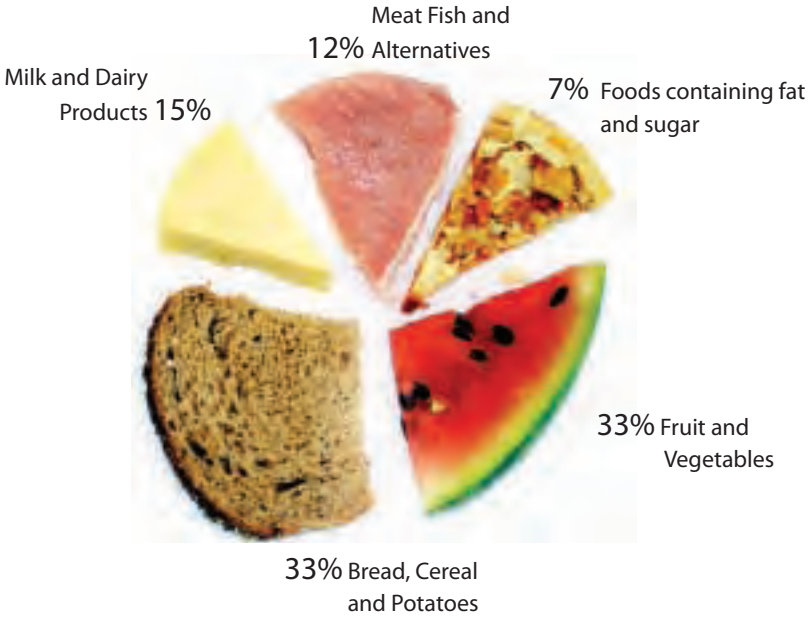
The same trend was also apparent in relation to consumption of bread including white, brown and wholemeal varieties. Consumption of cakes, buns, pastries and biscuits was also higher among older people. Intake of breakfast cereals, in particular sweetened breakfast cereals was higher among the under 30 category. Rice and pasta are the main sources of carbohydrate intake for younger consumers.

Consumption of hot beverages, in particular, tea, was highest among the over 75 age group. Soft drinks consumption was highest for those aged 40-49 and under 30. Alcohol intake, especially beer, lager and ciders was highest amongst those under 39, whilst intakes of wine were highest in the age groups 50-64. These groups also had the highest overall consumption of alcohol, whilst the over 65s had the lowest consumption.

3.3 Diet comparison with healthy eating guidelines

The Balance of Good Health Guidelines was first published by the Health Education Authority in consultation with the Department of Health and in co-operation with regional health departments for Scotland, Wales and Northern Ireland in 1994. The guidelines have since been published by the Food Standards Agency in conjunction with the Department of Health to help people to understand and enjoy healthy eating.

The Guidelines recommend the following food categories should form the identified proportion of the diet:



Chapter 3 - Food poverty and health

The Friel et al (2005) report – Standard of Healthy Living on the Island of Ireland, clustered households for the purpose of data analysis. Six clusters were identified:

Cluster	Key Social Characteristic
Cluster 1	Smaller households Lowest quintile for income
Cluster 2	Unskilled occupational class 'Other' social class categorisation
Cluster 3	Managerial households 'Other' social class categorisation
Cluster 4	Professional households
Cluster 5	Large households Professional households
Cluster 6	Large households Alcohol consumption

Table 6 Household cluster - Standard of healthy living

The report then went on to document the contribution of various food groups to the diet of each of the clusters, as illustrated in the following chart.

Respective Contribution of Food Group to Cluster Diets in Northern Ireland

Table 7 Respective contribution of food group to cluster diets in Northern Ireland

Table Key

- Foods high in Fats and Sugar
- Meat, Fish and Poultry
- Milk, Cheese and Yogurt
- Fruit and Vegetables
- Cereals, Breads and Potatoes

All clusters, except cluster 6 are meeting or exceeding the recommended intake of bread, cereals and potatoes. In terms of fruit and vegetables intake cluster 4, 5 and 6 have a higher consumption than clusters 1, 2 and 3. These upper end clusters tended to be comprised of professional households, with higher disposable income and better levels of education, both of which are correlated with increasing fruit and vegetable consumption. It should be noted however, that none of the clusters are meeting the recommended daily fruit and vegetable allowance as recommended by the Guidelines (33%).

Milk, cheese and yogurt intake formed a greater proportion of the diet for all clusters, especially clusters 2, 3, 4 and 6. The findings reported earlier in this chapter noted that the intake of whole milk and cream tended to be higher among lower income groups and consumption of cheese was greater in the higher income groups. In the above chart, the data are presented collectively and therefore, it is not possible to distinguish between income groups in terms of their consumption of specific dairy products.

Consumption of meat, fish and poultry was at the recommended level or just in excess of the recommended dietary intake. The proportion of foods high in fat and sugars was almost twice the recommended intake for all clusters, highlighting that foods in this category form a disproportionately high part of the diet of the whole population of Northern Ireland.

3.4 Summary

- People on low incomes with poor employment opportunities or low levels of education are at an increased risk of ill health and likely to experience inequalities in terms of their health status.
- Potential health issues which may arise through poor diet as a result of not being able to access good quality, nutritious food i.e. food poverty, can include hypertension, diabetes, heart disease, stroke and some cancers.
- A diet high in fat, sugar and salt and a low consumption of essential vitamins, minerals and dietary fibre, is more likely to contribute to the onset of these conditions and diseases.
- While obesity is not a direct outcome of food poverty, it is clear there are strong associations between both.
- People on low incomes have a high consumption of: milk and cream; bacon, ham and canned meats; crisps and other potato snacks; foods high in fat and oils; sugar and preserves; bread, cake, buns; canned vegetables, fruit (apples, pears, oranges, bananas) and hot beverages.
- People at the higher income levels have a high consumption of: cheese and yogurts; carcass meat; takeaway meals; vegetable based ready meals; cereals; rice and past; green and other fresh vegetables; prepared salads; soft and stoned fruits (grapes, melons).
- The highest energy intake was reported among retired persons, whilst unemployed persons had the lowest calorie intake. The same trend was observed in relation to protein, fat, carbohydrate and fibre.
- People who are unemployed consume high proportions of: milk and cream; meat products (pies, sausages, burgers, sausages); takeaway meals; chips; crisps and snacks; ready meals; pastries.
- People in the 65+ age group consequently consumed high levels of: milk and cream; carcass meat; bacon, ham and canned meats; potatoes; ready made meals; fish; sugar and preserves; breads; pastries; vegetables; fruit and hot beverages.
- At the other end of the scale, people under the age of 30 consumed large amounts of: take away meals; chips and other snacks; canned vegetables.
- People in Northern Ireland are not meeting the recommended daily fruit and vegetable allowance as recommended by the Balance of Good Health Guidelines. They are however, by and large, meeting the recommendations with regard to consumption of bread and potatoes.

Did you know that in the United Kingdom…

20% of adults eat less than 1 portion of fruit and vegetables per day. Cereal food choices for people on low incomes are dominated by white bread, biscuits, breakfast cereals (not wholegrain or high fibre), buns, cakes and pastries.

The majority of fat spreads used by people on low incomes are not polyunsaturated. Children are more likely than adults to eat sausages (45% versus 31%), coated chicken and turkey (40% versus 13%) and burgers and kebabs (28% versus 14%).

Bananas were the fruit most commonly eaten by adults (35%), whilst in children it was apples and pears (not canned) (41%).

People aged 50 and over were at least twice as likely to consume oily fish dishes compared with other age groups.

Men consumed more foods from the meat and potato groups and wholegrain and high fibre breakfast cereals than women.
Women consumed more water, skimmed milk, yoghurt, dairy desserts, salad, raw vegetables and "other fruits" than men.[8]

[8]This data is extracted from the most recent survey (2007) of the Food Standard's Agency entitled 'Low Income, Diet and Nutrition Survey'. The data presented represents a UK wide sample

Table 8 High consumption patterns

It should be noted that the table only indicates high consumption patterns.

Chapter 3 - Food poverty and health

	Income Quintile								
	1	2	3	4	5	1A	1A1C	2A	2A1C
Milk and Cream	x					x			
Yoghurt and fromage frais				x					
Cheese					x	x	x		
Carcass meat (ie boned, unprocessed raw meat)	x							x	
Bacon, ham and canned meats	x								
Meat products (Pies; sausages; burgers; sausage rolls)									
Takeaway meat based meals and pizzas		x	x						
Chips (home cooked and takeaway)	x					x	x		x
Crisps and other potato based snacks		x			x		x	x	x
Solid fats and oils	x	x							
Potatoes		x						x	
Ready meals		x				x		x	
Vegetable based ready meals				x					
Fish			x			x			
Sugar and preserves	x					x			
Breads						x		x	
Sweet breads; cakes; buns; pastries and biscuits	x					x		x	
Breakfast Cereals					x	x			
Rice and pasta					x				
Canned vegetables	x								
Green vegetables					x	x		x	
Other fresh vegetables (mushrooms; stem veg etc)			x	x		x			
Prepared leaf salads			x	x					
Fresh Fruit (apple;pear;orange;banana)				x		x			
Soft and stoned Fruit (dates; grapes;melon etc)			x						
Hot beverages (tea and coffee)	x								