

FOOD STANDARDS AGENCY

**RESEARCH INTO FOOD POVERTY
AND HOMELESSNESS IN
NORTHERN IRELAND**

FINAL REPORT

21 August 2006

**Deloitte MCS Limited
19 Bedford Street
Belfast BT2 7EJ
Northern Ireland**

Acknowledgements

Deloitte would like to thank all those who have contributed to this report, namely:

- the homeless people staying in hostels across Northern Ireland who participated in the interviews;
- hostel managers for providing access in order to undertake the interviews;
- the Simon Community and Council for the Homeless who provided advice and assistance throughout the research; and
- those consulted as part of this research for giving of their time – NIHE, DHSSPS, HAZ, hostel managers and staff at the Simon Community and Salvation Army, the Homeless Healthcare Co-ordinator and Community Dietician (N&W Belfast Trust).

CONTENTS	Page
1. EXECUTIVE SUMMARY	1
1.1 Introduction	1
1.2 Approach	1
1.3 Sample Characteristics	2
1.4 Summary of Research Findings and Conclusions	2
1.4.1 Vulnerability to Poor Diet and Inadequate Nutrition	2
1.4.2 Issues Faced in Sourcing, Storing and Preparing Food	2
1.4.3 Barriers to Health Eating	2
1.4.4 Impact of Food Poverty on Health	3
1.4.5 Gaps in Food Provision	3
1.5 Recommendations	3
1.5.1 Recommendation 1 – Remit and Role of FSA	3
1.5.2 Recommendation 2 – Education	4
1.5.3 Recommendation 3 – Catered Provision	5
1.5.4 Recommendation 4 – Further Research	5
1.5.5 Recommendation 5 – Ability to Afford Healthy Food	6
1.5.6 Recommendation 6 – Advocacy	6
2. INTRODUCTION	7
2.1 Introduction	7
2.2 Food Standards Agency	7
2.3 Overview of Approach	8
2.4 Limitations	9
2.4.1 Sample	9
2.4.2 Food Frequency Questionnaire (FFQ)	10
2.4.3 Research Comparisons	10
2.5 Report Format	10
3. HOMELESSNESS AND FOOD POVERTY	12
3.1 Introduction	12
3.2 Homelessness - Overview	12
3.3 Assessing Homelessness	13
3.4 The Homeless Population in Northern Ireland	13

CONTENTS	Page
3.5 Homeless Accommodation	16
3.5.1 Rough Sleepers Support	17
3.6 Tackling Homelessness	17
3.6.1 The Homelessness Strategy	17
3.6.2 Promoting Social Inclusion Working Group on Homelessness	18
3.6.3 Rough Sleepers Forum	19
3.7 Food Poverty - Overview	20
3.8 Extent of Food Poverty	21
3.9 Tackling Food Poverty	21
3.9.1 Investing For Health	21
3.9.2 New TSN – The Way Forward Towards an Anti Poverty Strategy	22
3.9.3 Other Organisations – Research and Initiatives	22
3.10 Research on Food Poverty among the Homeless	25
3.11 Summary	27
4. RESEARCH FINDINGS	29
4.1 Overview	29
5. SAMPLE CHARACTERISTICS	30
5.1 Introduction	30
5.2 Gender and Age	30
5.3 Household Type	30
5.4 Duration of Homelessness	31
5.5 Accommodation Type and Location	31
5.6 Income	32
5.7 General Health Condition	32
5.7.1 Visits to Doctors and Dentists	33
5.7.2 Problems with Eating	33
5.7.3 Appetite Problems	33
5.8 Addictions – Drinking, Smoking, Illegal Drugs	33

CONTENTS		Page
6.	FOOD CONSUMPTION	34
6.1	Introduction	34
6.2	Body Mass Index and Blood Pressure	34
6.2.1	Body Mass Index	34
6.2.2	Blood Pressure	36
6.3	Food Intake	36
6.3.1	Results	36
6.3.2	Discussion	37
6.4	Nutrient Intake	38
6.4.1	Results	38
6.4.2	Discussion	41
6.4.3	Limitations	42
6.5	Summary	44
7.	INTERVIEW RESULTS	46
7.1	Introduction	46
7.2	Sources of Food	46
7.2.1	Shops and Supermarkets	47
7.2.2	Hostel Canteen/Day Centre	48
7.3	Food Preparation	49
7.3.1	Facilities Available	49
7.3.2	Cleanliness	49
7.3.3	Ability to Cook	50
7.4	Food Storage	51
7.4.1	Facilities Available	51
7.5	Expenditure on Food	52
7.5.1	Weekly Spending on Food	52
7.5.2	Issues Faced	53
7.6	Eating Patterns	54
7.6.1	Frequency of Eating	55
7.6.2	Problems Getting Enough Food	55
7.6.3	Balanced Diet	56
7.7	Summary	57

CONTENTS		Page
8.	ROUGH SLEEPERS	59
	8.1 Introduction	59
	8.2 Welcome Centre	59
	8.3 Home Plus	60
9.	CONCLUSIONS	61
	9.1 Introduction	61
	9.2 Vulnerability to Poor Diet and Inadequate Nutrition	61
	9.3 Issues Faced in Sourcing, Funding, Storing and Preparing Food	62
	9.4 Barriers to Health Eating	62
	9.4.1 Financial Situation	63
	9.4.2 Education	63
	9.4.3 Alcohol and Drugs	64
	9.4.4 Other Issues	65
	9.5 Impact of Food Poverty on Health	65
	9.6 Gaps in Food Provision	66
10.	RECOMMENDATIONS	67
	10.1 Introduction	67
	10.2 Recommendation 1 – Remit and Role of FSA	67
	10.3 Recommendation 2 – Education	67
	10.4 Recommendation 3 – Catered Provision	68
	10.5 Recommendation 4 – Further Research	69
	10.6 Recommendation 5 – Ability to Afford Healthy Food	69
	10.7 Recommendation 6 – Advocacy	70

APPENDICES

APPENDIX I – Interview Guide

APPENDIX II – Methodology

APPENDIX III – List of Consultees

APPENDIX IV – FFQ Results Tables

APPENDIX V – References

ABBREVIATIONS

Abbreviation	Full Title
BMI	Body Mass Index
COMA	Committee on Medical Aspects of Food Policy
DHSSPS	Department of Health, Social Services and Public Safety
DLA	Disability Living Allowance
DH	Department of Health
EAR	Estimated Average Requirement
EHSSB	Eastern Health and Social Services Board
EPIC	European Prospective Investigation into Cancer and Nutrition
FDA	Full Duty Applicant
FFQ	Food Frequency Questionnaire
FSA	Food Standards Agency
HAZ	Health Action Zones
HPA	Health Promotion Agency
JSA	Job Seekers Allowance
LRNI	Lower Reference Nutrient Intake
NDNS	National Diet & Nutrition Survey
NIAO	Northern Ireland Audit Office
NICHSA	Northern Ireland Chest Heart and Stroke Association
NIHE	Northern Ireland Housing Executive
NSIFCS	North/South Ireland Food Consumption Survey
NSP	Non-starch Polysaccharide
PSI	Promoting Social Inclusion
RNI	Reference Nutrient Intake
SCSH	Scottish Council for Single Homeless
SD	Standard Deviation
SE	Standard Error
TSN	Targeting Social Need
WHO	World Health Organisation
%	Per cent

DISCLAIMER

This report was prepared by the authors exclusively for the Food Standards Agency. We accept no duty of care or liability to any other party who is shown or gains access to this report.

1. EXECUTIVE SUMMARY

1.1 Introduction

Deloitte was commissioned by the Food Standards Agency (FSA/the Agency) to undertake research into food poverty and homelessness in Northern Ireland. In undertaking this research Deloitte was asked to deliver a better understanding of the impact of poverty and social exclusion on the diet of people who are homeless in Northern Ireland by:

- establishing the extent to which homeless people are vulnerable to poor diets and inadequate nutrition through a research design based on a recognised nutritional data collection methodology;
- exploring the issues homeless people face in sourcing, funding, storing and preparing nourishing food for themselves and/or their families through structured interviews with a sample of homeless persons;
- exploring issues of service use and service access by homeless people in Northern Ireland and develop a clear understanding of the barriers to healthy eating;
- identifying the impact of food poverty upon health and wider experiences of social exclusion;
- identifying gaps in current food provision for homeless people across a range of support services; and
- setting out policy options for FSA in Northern Ireland.

The findings from the research will be used to inform decisions about how FSA can strengthen partnerships with key stakeholders in supporting, encouraging and developing effective policy responses to tackling food poverty and homelessness.

1.2 Approach

This research collected information from homeless people staying in temporary accommodation and about rough sleepers, in order to gain an understanding of the issues faced by them in relation to food poverty.

For those staying in temporary accommodation, information was gathered about their food consumption, sources of food, food preparation and storage, expenditure on food and other issues in relation to food faced by them as a result of being homeless. For rough sleepers we sought to understand the issues they face and how these can impact on their diet.

The information for this research was collected in three ways:

- **homeless people staying in temporary accommodation** – an interview approach was developed which involved:
 - administering a Food Frequency Questionnaire (FFQ);

- a semi-quantitative discussion guide which asked questions about sourcing, preparing and storing food, expenditure on food, diet and health; and
- taking blood pressure, height and weight measurements;
- **rough sleepers** – managers and staff working for the Welcome Centre and HomePlus were interviewed; and
- **key service providers for the homeless** – representatives from homeless organisations and service providers were interviewed.

In addition to the primary research a review was also undertaken of relevant research, strategies, policies and legislative issues relating to food poverty and homelessness.

1.3 Sample Characteristics

Seventy-two interviews were undertaken with homeless people staying in temporary accommodation. The sample contained a broad mix of genders, age ranges and household types and was broadly consistent with NIHE statistics on homeless people in Northern Ireland.

1.4 Summary of Research Findings and Conclusions

This section summarises the main findings and conclusions of the research. These are focused around the aims of the research as set out in Section 1.1. Further detail on the findings and conclusions is provided in the main body of the report.

1.4.1 Vulnerability to Poor Diet and Inadequate Nutrition

A FFQ was used in this research to assess the vulnerability of participants to poor diet and inadequate nutrition. The key finding was that although most of the homeless people interviewed may be getting enough to eat, the quality of their diet was poor.

1.4.2 Issues Faced in Sourcing, Storing and Preparing Food

In relation to sourcing food the research did not indicate any particular issues for participants. In addition almost all of those interviewed had good access to facilities for preparing and storing food.

1.4.3 Barriers to Health Eating

The research highlighted that the key barriers to healthy eating were:

- **financial situation** - the results of the research clearly showed that the financial situation of those interviewed impacted on their diet;

- **education** - although all of the participants indicated that they could cook and had access to food preparation and storage facilities, it was evident from the results of the FFQ and from conversations with those working with hostel residents, that even though many perceived themselves to have good cooking skills, this may not actually be the case;
- **alcohol and drugs** - A large proportion of those interviewed drank alcohol and took illegal drugs. Alcohol can also have a significant affect on the ability to consume food, for example, by limiting intake because of feeling unwell, causing damage to taste buds and causing health problems such as liver disease. Alcohol and drugs can also result in a loss of appetite; and
- **other issues** - including image (particularly among young girls), peer pressure, and the view that food is not always as a priority.

1.4.4 Impact of Food Poverty on Health

Many participants advised that they had health problems and comparisons with other studies of the homeless population and the general population revealed that a greater proportion of participants in this study were classified as underweight.

Emotional problems were also an issue for some of the homeless people interviewed. Many respondents reported being depressed while others advised that at times they didn't feel like eating or couldn't be bothered cooking. Emotional problems also affected appetite, with participants advising that they suffered from lack of appetite because of problems such as stress, depression and nerves.

1.4.5 Gaps in Food Provision

As outlined above, the financial situation of participants impacted considerably on their ability to eat a healthy and balanced diet. Some hostels have tried to address this by contacting shops and supermarkets in order to encourage donations of food for their residents. However those interviewed reported several difficulties in dealing with shops and supermarkets, particularly around regulations and 'red tape' regarding the safe disposal of food. Although it is difficult for hostels at present to put arrangements in place with shops, those consulted with recognised the benefits of having these arrangements in place.

1.5 Recommendations

1.5.1 Recommendation 1 – Remit and Role of FSA

It was clear from talking to consultees that there is limited knowledge and a certain amount of confusion about the work of FSA, in particular its remit in relation to other bodies (such as *Safefood* and the HPA), the Agency's role regarding food poverty and homelessness, and its fit with other homeless service providers in Northern Ireland.

We therefore recommend that FSA undertake work to raise its profile in Northern Ireland with homeless service providers and other stakeholders within the homeless sector. FSA should clarify its remit and role in general and in particular its role in relation to food poverty and social exclusion with these stakeholders. FSA has a clear role to play in helping to support, encourage and develop existing service provision and policy responses to tackle food poverty among the homeless population in Northern Ireland.

The completion of this research represents the ideal opportunity for FSA to organise a conference or information session, inviting key stakeholders across the homeless sector in Northern Ireland. FSA could use this event to disseminate findings, to present information about the types of support it provides and the work undertaken by FSA with other low-income groups e.g. students. The event could also be used to formulate an action plan in conjunction with other stakeholders to tackle food poverty among the homeless and developing on existing work in this area.

1.5.2 Recommendation 2 – Education

Our discussions with service providers revealed that several programmes and initiatives have been established in recent years to assist the homeless with budgeting, sourcing and preparing food including for example the *Cook It!* and Energise programmes. Consultees advised that these programmes were well received by homeless people. However some difficulties have occurred in securing attendance at courses by the homeless. Both these programmes have also been funded through National Lottery grants and are therefore short term in nature. It is understood that these programmes are currently in the process of being evaluated.

It was clear from the results of the interviews with homeless people that many still require assistance with budgeting, sourcing and preparing healthy food. There was also a perception among many participants that healthy food (such as fruit and vegetables) was expensive and therefore they choose cheap (but not nutritious) food instead. Consultees also acknowledged that more work needed to be undertaken in this area, but that it was often dependent on having the resources available to carry out this work. It was also suggested by some consultees that more work needs to be undertaken in educating the homeless about the negative impacts of not eating healthily – i.e. the potential risks of coronary heart disease, cancer and diabetes.

An opportunity exists for FSA to work with existing service providers in order to develop a longer term and sustainable programme to addressing food poverty among the homeless population. Any programmes or initiatives created should cover areas such as health, nutrition, life skills, budgeting and cooking. They should also be developed in partnership with existing providers and should also draw on lessons learned and findings from the ongoing evaluations of these programmes. A tailored and innovative approach will be required in order to address issues such as attendance and lack of interest from participants. Temporary accommodation staff should also be trained to deliver these programmes to both encourage attendance and ensure its sustainability.

We are aware that FSA has been working with low-income households and students, and therefore in developing an approach to food poverty among the homeless, there is an opportunity for FSA to draw upon the work it is currently undertaken with these groups. For example, in order to address the perception that healthy food is expensive, FSA could tailor the cookbook it is developing for students on low incomes for homeless people.

1.5.3 Recommendation 3 – Catered Provision

Although this research did not directly interview homeless people accessing catered accommodation/provision, those supplying catered services to the homeless (i.e. Extern, the Welcome Centre and HomePlus) were consulted. These providers indicated that they would welcome advice from FSA on how to provide healthy and nutritious food for those they cater for, in particular for rough sleepers who have specific needs.

FSA is currently, through its work with students, working with caterers at Queen's University and the University of Ulster and providing advice on preparing nutritious and affordable meals for students. There is an opportunity for FSA to adapt the work already undertaken with university caterers and work with service providers that cater for the homeless. In addition, although the above mentioned organisations catering for the homeless follow food hygiene standards, there may be an opportunity for FSA to provide additional advice on food safety issues and guidelines.

1.5.4 Recommendation 4 – Further Research

The undertaking of this study was welcomed by interview participants and consultees. A number of interview participants commented that it had made them think more about the food they ate, while consultees acknowledged that this research was important in order to understand in more detail the issue of food poverty among the homeless population.

Limited research has been undertaken in the area of food poverty and homelessness especially in Northern Ireland, and the majority of the studies undertaken have focused on examining the diet and nutritional status of homeless people. There are several limitations to this research, however, resources depending, we believe that there is the opportunity for FSA to undertake further research on areas not addressed in detail by this research i.e. rough sleepers and catered provision.

Many consultees expressed an interest in the findings of this research, and therefore as discussed above, we would recommend that FSA consider organising a conference or an information session for key stakeholders. It will also be important for the results to be fed back to the PSI Working Group on Homelessness in order to inform their future activities, strategies and recommendations to Government.

1.5.5 Recommendation 5 – Ability to Afford Healthy Food

Our research has highlighted that although participants had good access to shops and supermarkets many were choosing not to buy healthy and nutritious food (such as fruit and vegetables) because they found this type of food expensive.

We would therefore recommend that FSA consider a range of options in order to address the issue of affordability of healthy food for the homeless. These options could include:

- investigating the feasibility of assisting FareShare to establish in Northern Ireland. FareShare works with FSA in England (with food safety procedures and training on food safety guidelines) and therefore we recommend that FSA draw upon this relationship and actively encourage FareShare to locate in Northern Ireland; and
- utilising approaches that have been used in other projects that have aimed to address food poverty among the homeless – e.g. allotments¹ (to help residents grow their own fruit and vegetables) and box schemes (where residents pool money to buy fruit and vegetables).

1.5.6 Recommendation 6 – Advocacy

Through the consultations with service providers and other key stakeholders, it was emphasised that there is a need to further highlight the issue of food poverty among the homeless. We therefore believe that there is a role for FSA (in conjunction with other key stakeholders) to raise the profile of food poverty and homeless and to advocate to policy makers and government the need to address the issues involved. This should be done through existing structures such as the PSI Working Group on Homelessness and the Rough Sleepers Forum.

There is also a need to encourage policy makers to examine existing policies such as the Homelessness and Anti-Poverty strategies to ensure that future versions and any new policies contain reference to and actions for tackling food poverty among the homeless.

¹ Examples of allotment projects include: St Francis House, Oxford, The Porch Steppin' Stone Centre, Oxford and Homeless Action

2. INTRODUCTION

2.1 Introduction

Deloitte was commissioned by the Food Standards Agency (FSA/the Agency) to undertake research into food poverty and homelessness in Northern Ireland. In undertaking this research Deloitte was asked to deliver a better understanding of the impact of poverty and social exclusion on the diet of people who are homeless in Northern Ireland by:

- establishing the extent to which homeless people are vulnerable to poor diets and inadequate nutrition through a research design based on a recognised nutritional data collection methodology;
- exploring the issues homeless people face in sourcing, funding, storing and preparing nourishing food for themselves and/or their families through structured interviews with a sample of homeless persons;
- exploring issues of service use and service access by homeless people in Northern Ireland and develop a clear understanding of the barriers to healthy eating;
- identifying the impact of food poverty upon health and wider experiences of social exclusion;
- identifying gaps in current food provision for homeless people across a range of support services; and
- setting out policy options for FSA in Northern Ireland.

The findings from the research will be used to inform decisions about how FSA can strengthen partnerships with key stakeholders in supporting, encouraging and developing effective policy responses to tackling food poverty and homelessness.

2.2 Food Standards Agency

FSA was set up in April 2000 with the aim of protecting the public's health and consumer interests in relation to food. It is a UK-wide Government agency and as such is accountable to Parliament through Health Ministers and to the devolved administrations in Northern Ireland, Scotland and Wales. The Agency is a non-Ministerial department and comprises members with a wide variety of food related interests and diverse professional backgrounds. Its key aims are:

- to continue to reduce food-borne illness;
- to reduce further the risks to consumers from chemical and radiological contamination of food;
- to make it easier for all consumers to choose a healthy diet and thereby improve the quality of life by reducing diet related disease; and
- to enable consumers to make informed choices.

In 2002 FSA developed a Low Income Action Plan² which envisages improved dialogue with consumers on low incomes, a stronger evidence base for work in this area and strengthened partnerships in pursuit of a national strategy relating to low-income consumers and food³. In addition, in 2003 the Agency commissioned a review of existing UK work on food and low-income initiatives⁴.

FSA's current strategic plan⁵ emphasises that the Agency wants to make healthy eating choices easier for all consumers. Therefore through the above research and by listening to vulnerable and 'hard to hear' consumers the Agency will identify priorities for helping disadvantaged and vulnerable people to improve their diets. In addition, the strategy outlines that the Agency has considered the Government's principles for sustainable development, and in relation to combating poverty and social exclusion, priority will be given to initiatives which help disadvantaged and vulnerable consumers.

2.3 Overview of Approach

This research collected information from homeless people staying in temporary accommodation and about rough sleepers in order to gain an understanding of the issues faced by them in relation to food poverty.

For those staying in temporary accommodation, information was gathered about their food consumption, sources of food, food preparation and storage, expenditure on food and other issues in relation to food faced by them as a result of being homeless. For rough sleepers we sought to understand the issues they face and how these can impact on their diet.

The information for this research was collected in three ways.

- **homeless people staying in temporary accommodation** – an interview approach was developed which involved:
 - administering a Food Frequency Questionnaire (FFQ);
 - a semi-quantitative discussion guide which asked questions about sourcing, preparing and storing food, expenditure on food, diet and health; and
 - taking blood pressure, height and weight measurements.

A copy of the interview guide is attached at Appendix I.

- **rough sleepers** – managers and staff working for the Welcome Centre and HomePlus were interviewed;

² Cited in Food Standards Agency (2003b), *Consumer Committee Annual Report 2002-03*

³ Food Standards Agency (2003a), *Review of Existing UK Work on Food and Low-income Initiatives*

⁴ Food Standards Agency (2003a), *Review of Existing UK Work on Food and Low-income Initiatives*

⁵ Food Standards Agency (2005), *Strategic Plan 2005-2010, Putting Consumers First*

- **interviews with key service providers for the homeless** – we interviewed the following organisations and service providers:
 - the Northern Ireland Housing Executive (NIHE), the Department for Health, Social Services and Public Safety (DHSSPS), Council for the Homeless, Simon Community and North & West Belfast HSS Trust Health Action Zone (HAZ) and FareShare; and
 - hostel managers, community dieticians and the homeless healthcare co-ordinator for North & West Belfast HSS Trust.

The full list of the organisations we consulted with is available at Appendix III.

To supplement this overview, full details of the research methodology are outlined at Appendix II.

2.4 Limitations

As in any research study of this nature, there are a number of limitations to the conclusions that can be drawn. Key research issues for this study are highlighted below.

2.4.1 Sample

Temporary Accommodation

In undertaking this research we aimed to interview over 70 homeless people staying in temporary accommodation across Northern Ireland. While the final sample contained a broad mix of genders, age ranges and household types, all of the homeless people we interviewed were staying in self-catered temporary accommodation. However, discussions with service providers have indicated that in recent years there has been a move away from providing catered accommodation (by NIHE, Simon Community and the Salvation Army amongst others) in order to increase the independence of hostel residents and their ability to care for themselves once permanent accommodation has been found.

Rough Sleepers

Our original approach to this research was to interview 10 rough sleepers in Belfast using a similar approach to those staying in temporary accommodation. However, following the pilots (see Appendix II) it was concluded that the interview guide was not suitable to use with rough sleepers. Therefore it was agreed with FSA that the approach for this group should be altered and instead interviews were carried out with managers and staff working for the Welcome Centre and HomePlus in order to discuss the issues faced by rough sleepers and to obtain sample menus of the food provided to them.

2.4.2 Food Frequency Questionnaire (FFQ)

The limitations of the dietary assessment tool used in this study must be taken into account when considering the results. In general, FFQs have many advantages, they are relatively quick to administer, place a modest burden on the respondent in terms of time and energy, are relatively inexpensive, are generally quicker to code and analyse than other dietary methods and are reasonably reproducible. The main limitations of FFQs are that their utility for estimating the nutrient intakes of groups can be poor, they depend on the ability of the participant to describe their diet (some respondents find them difficult to complete because it requires a person to break down composite foods into component parts) and they may not represent usual foods or portion sizes chosen by respondents. Furthermore, intake data can be compromised when multiple foods are grouped within single listings⁶.

In order to make more meaningful comparisons of nutrient intake between sub-groups of homeless people, a larger sample size would be required. Furthermore, whilst the sample was representative of the homeless population in Northern Ireland in terms of age and sex, participants were living in hostels, receiving social security benefits and had been homeless for less than a year. Their food and nutrient intake, therefore, may well be very different from individuals who are, for example, sleeping rough and use begging as a source of income. Participants with a longer history of homelessness or alcoholism may have poorer nutritional intake.

2.4.3 Research Comparisons

Throughout this report reference is made to other research that has been undertaken in relation to food poverty among the homeless. It should however be noted that in referencing other research it is difficult to make direct comparisons due to differences in each study's approach (i.e. use of FFQ, recall methods and interviews), subject group (i.e. type of homelessness – e.g. rough sleepers, temporary accommodation, catered / self-catered) and sample size. Therefore these considerations should be taken into account by the reader.

2.5 Report Format

The remainder of this report is set out as follows:

- Chapter 3 Homelessness and Food Poverty;
- Chapter 4 Introduction to Research Findings;
- Chapter 5 Sample Characteristics;
- Chapter 6 Food Consumption – results of the FFQ;

⁶ Lee RD and Niemen DC.(2003) *Nutritional Assessment – Third Edition*

Chapter 7	Interview Results;
Chapter 8	Rough Sleepers;
Chapter 9	Conclusions; and
Chapter 10	Recommendations.

3. HOMELESSNESS AND FOOD POVERTY

3.1 Introduction

This chapter provides background information on the issues of homelessness and food poverty.

In relation to homelessness, we examine how it is defined and assessed in Northern Ireland, current government statistics, and the support available to those that are homeless. We also look at the policy context and government initiatives developed to address homelessness.

Similarly for food poverty, we consider how food poverty is defined, the extent of food poverty in the UK and its resulting impact on diet and health. We also look at the policy context and outline the organisations and initiatives that have been set up to tackle the issue of food poverty.

The final section aims to provide an overview of previous research undertaken in relation to food poverty, diet, and nutrition among the homeless.

3.2 Homelessness - Overview

The definition of homelessness used in Northern Ireland, as outlined in the Housing (NI) Order 1988⁷, states that:

- a person is considered homeless if he has no accommodation in Northern Ireland; and
- a person shall be treated as having no accommodation if there is no accommodation which he, together with any other person who normally resides with him as a member of his family or in circumstances in which it is reasonable for that person to reside with him.

The definition also takes into account those who are:

- actually homeless – this would include anyone sleeping rough or anyone without shelter at that time;
- deemed to be homeless – this includes situations where the person has the right to occupy accommodation but it is not deemed to be reasonable to expect the person to occupy it – either because of disrepair or in cases of abuse; and
- threatened with homelessness – this includes people currently occupying their own accommodation but where it is foreseen that this situation will change within 28 days.

⁷ The Stationary Office (1988), *The Housing (Northern Ireland) Order 1988*

3.3 Assessing Homelessness

As the regional housing authority for Northern Ireland, NIHE became responsible for a range of duties in relation to homeless households in line with the provision of the Housing (NI) Order 1988. This included the requirement to assess homeless applications according to the three “tests” set out in the legislation. In February 2003, the Housing (NI) Order 2003 amended the 1988 Order and introduced the requirement on the Housing Executive to determine eligibility for homelessness assistance.

The aim of the above mentioned tests is to determine if the applicant is:

- homeless
 - in priority need
 - unintentionally homeless.
- } and eligible for assistance;

Having determined those cases where applicants are assessed as homeless, NIHE identify those in priority need (e.g. pregnant women, dependant children), and vulnerable people (due to old age, mental or physical disability or other special needs). Where an applicant is homeless, in priority need, and eligible for assistance, there is a requirement on the Housing Executive to provide temporary accommodation pending the completion of its enquiries. This duty also exists where the Housing Executive is making enquiries into homelessness, priority need and eligibility.

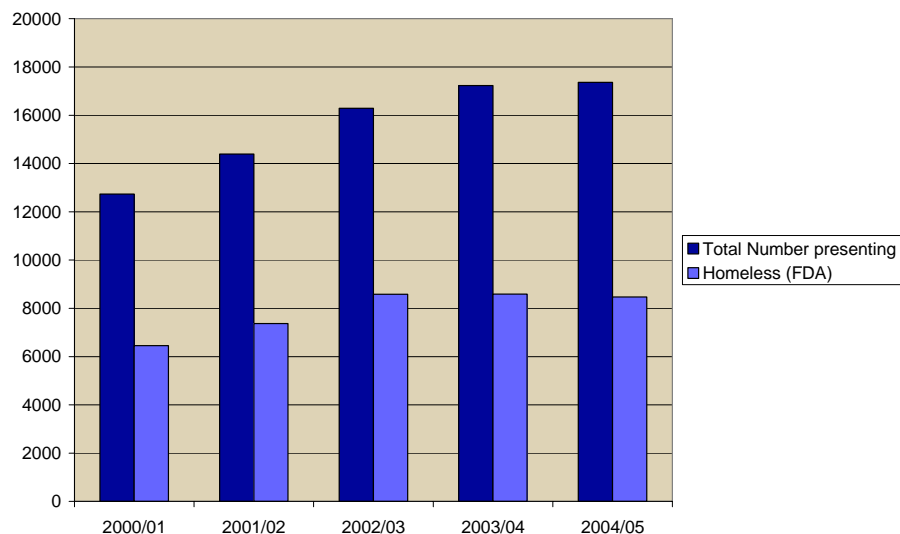
Applicants meeting all three tests and deemed to be eligible for assistance are awarded Full Duty Applicant (FDA) status and NIHE is required to secure temporary accommodation for that person. However, all applicants (homeless and otherwise) are assessed across a range of factors that determine their total points, so those meeting FDA status will not automatically have a higher ranking than other non-homeless applicants. Individuals may stay in temporary accommodation for some time if no suitable permanent accommodation is available. The location in which housing is available is often the main issue as regards suitability of housing.

3.4 The Homeless Population in Northern Ireland

NIHE records statistics each year on the number of people presenting and those accepted as homeless in Northern Ireland.

Since 2000/1 there has been a yearly increase in the number of households presenting as homeless, with a total of 17,362 presenting in 2004/5. Of these 8,470 were awarded priority status (i.e. FDA). Figure 3.1 provides an overview of statistics from 2000/1 to 2004/5.

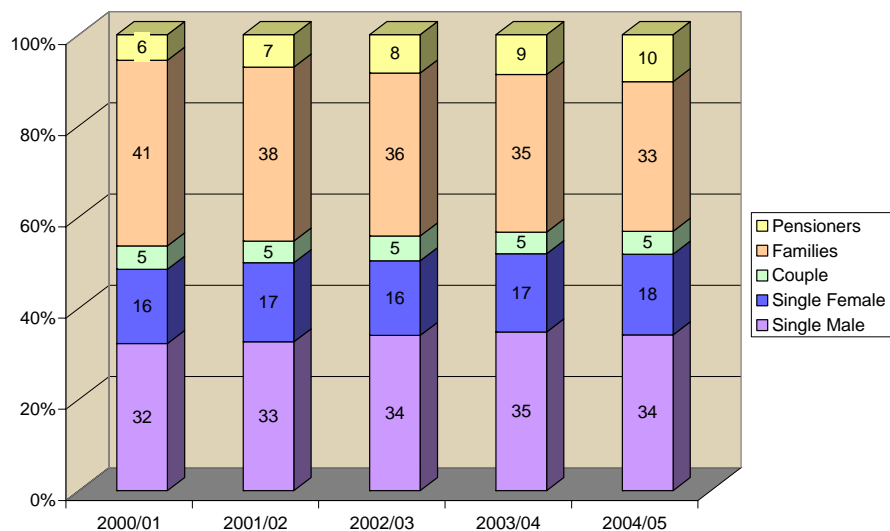
Figure 3.1
Homeless Figures - 2000/1 – 2004/5



Source: NIHE

Of those presenting, the largest proportion each year are single people followed by families. In 2004/5 single people accounted for 52% of those presenting and families accounted for 33%⁸. Figure 3.2 provides details of the household types presenting to NIHE between 2000/1 and 2004/5.

Figure 3.2
Presenters by Household Type - 2000/1 – 2004/5



⁸ In addition 5% were couples, and 10% were pensioners

Table 3.1 outlines the age range and gender of single people presenting to NIHE in 2004/5. The figures indicate that homeless males are more likely to be aged between 26 and 59, and homeless females are likely to be younger, between the ages of 19 and 59.

Table 3.1
Gender and Age of Single Homeless

Gender \ Age	16-18	19-25	26-59	Total Number
Male	194	1,772	3,962	5,928
Female	306	1,441	1,324	3,071
Total	500	3,213	5,286	8,999

Source: NIHE

Note: male, n=5928; female, n=3071.

NIHE also records information in relation to reasons for becoming homeless for those awarded FDA status. The most common reason stated for becoming homeless in recent years was due to a sharing breakdown/family dispute (approx 20%). Other reasons included the loss of rented accommodation (12% in 2004/5), marital/relationship breakdown (11% in 2004/5), and accommodation not reasonable (22% in 2004/5).

Rough Sleepers

The Rough Sleepers Unit within the NIHE has responsibility for calculating the number of rough sleepers in the Belfast area⁹. NIHE have advised that the exact number of rough sleepers is difficult to calculate given the transient nature of people who sleep rough, however a person is considered to be a “core rough sleeper” if they are contacted on the streets of Belfast by an outreach worker 100 or more nights in the year.

In 2004, there were 14 individuals who fell into this category (10 male and 4 female) and in 2005 there were eight individuals (six male and two female).

Consultations with other homeless service providers¹⁰ indicated that there may be a higher number of rough sleepers in Belfast. However in order to minimise numbers a coordinated street outreach service actively engages with rough sleepers throughout the day and night and helps them access temporary accommodation or ‘emergency crash’ facilities.¹¹

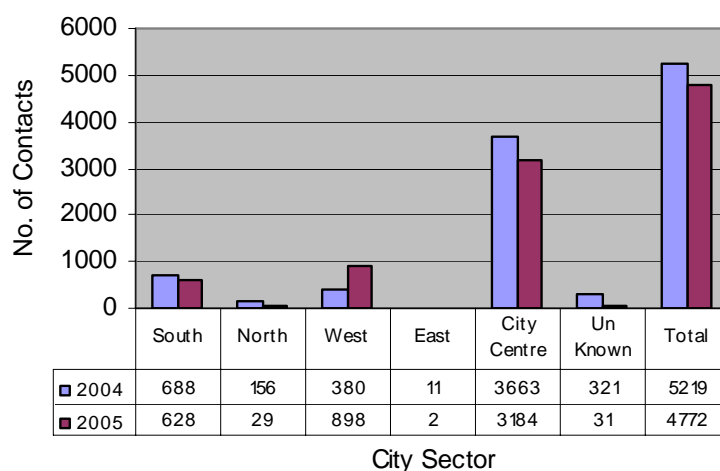
NIHE currently capture and monitor the number of contacts made by outreach workers each night, this information gives an indication of the rough sleeping population in Belfast and informs the planning of services. Figure 3.3 shows the number of contacts made by outreach workers with rough sleepers in different areas of Belfast during 2004 and 2005. Almost 4,800 contacts were made in 2005 of which the majority were in Belfast City Centre.

⁹ At present NIHE do not record figures for rough sleepers outside of Belfast

¹⁰ Welcome Centre and Homeplus

¹¹ An emergency crash facility provides only a bed for the night. Those using the facility must leave by 9.00am

Figure 3.3
Rough Sleeper Contacts by Outreach Workers – 2004 and 2005



Source: NIHE (Rough Sleepers Unit)

3.5 Homeless Accommodation

A range of accommodation for homeless people currently exists in Northern Ireland. NIHE manages 24 hostels across Northern Ireland which provide temporary accommodation to those meeting FDA status. In addition, NIHE fund a further 70 voluntary sector managed hostels which provide additional temporary accommodation for those who are homeless but have not been awarded FDA status. Other providers include:

- **Simon Community** – provide direct access / emergency accommodation / move on flats to single people between the ages of 17 and 64 who are homeless. There are 10 hostels across Northern Ireland and six move on flat accommodation centres;
- **The Salvation Army** – provide three temporary accommodation sites in Belfast. One of these centres caters for single homeless men and the other two are family centres (which are only available by referral); and
- Extern (Belfast), Morning Star (Belfast), Northern Ireland Women’s Aid Federation (various locations); Lee Hestia Association, The Clarendon Shelter (Derry), and MUST hostel (Cookstown) – these facilities provide a mixture of catered and self-catered accommodation for residents either in shared or individual accommodation units.

3.5.1 Rough Sleepers Support

Support for rough sleepers in Belfast is available from several providers:

- **The Welcome Centre** – this day centre is located close to St Peter’s Cathedral off the Falls Road. The Centre provides food, clothing, showering facilities and other support for a number of rough sleepers across Belfast (further details are provided in Section 8.2);
- **Home Plus** – provides night-time support to rough sleepers across the City. Outreach workers provide food, clothing and support to those sleeping on the streets of Belfast (further details are provided in Section 8.3);
- **outreach workers** – NIHE has recently appointed four new outreach workers to assist rough sleepers during the day. A key priority for the outreach workers is to access services such as primary health care, day centre provision and mental health and addiction services; and
- **North & West Belfast Trust** – the trust employs a Homeless Healthcare Co-ordinator who is dedicated to providing support to the homeless and rough sleepers.

3.6 Tackling Homelessness

Several key strategies, working groups and programmes have been introduced in recent years with the aim of tackling homelessness in Northern Ireland. The following sections outline details of these initiatives.

3.6.1 The Homelessness Strategy

In the late 1990s there was growing concern about homelessness in Northern Ireland; in order to address these concerns, NIHE initiated the Homelessness Strategy and Services Review in 2001. The review involved broad consultation across statutory, voluntary and community sector organisations that have contact with homeless people. The review culminated in the publication of the Homelessness Strategy¹².

The strategy sets out a revised approach to tackling homelessness, which is based around three key strands i.e. primary prevention, the provision of high quality temporary accommodation with needs assessment and support requirements and the provision of “floating” support to help sustain tenancies and prevent recurrence of homelessness. The strategy includes recommendations to meet the needs of particular groups, namely:

- families and single parents;
- victims of domestic violence;

¹² NIHE (2002), *Homelessness Strategy, Making a Real Difference to People’s Lives*

- young people and single homeless;
- those with physical disabilities and those with mental ill health or addictions;
- rough sleepers;
- people leaving the criminal justice system and people leaving care; and
- sex offenders.

An implementation plan was developed for the Homelessness Strategy and this also took account of the findings of the NI Audit Office (NIAO) investigation of NIHE homelessness services and the Social Development Committee's Inquiry into Homelessness, both of which made similar recommendations to the NIHE's Homelessness Strategy and Services Review.

Underpinning the recommended service improvements, legislative changes, strategic developments and research activities, is the commitment to work collaboratively across the statutory and non-statutory sectors, and to involve service users and key stakeholders in service planning and projects. Homelessness Action Plans have been developed for each NIHE area.

3.6.2 Promoting Social Inclusion Working Group on Homelessness

The Social Development Committee's Inquiry into Homelessness recommended that homelessness should be included in the New Targeting Social Need (TSN) action plans as a Promoting Social Inclusion (PSI) target. To this end, an interdepartmental working group was established at the beginning of 2003/04. This working group comprises officials from a number of departments and representatives for the statutory agencies and the voluntary sector¹³.

The working group was tasked to consider how government departments and other relevant agencies can best work together to ensure:

- that the risk of homelessness is reduced; and
- that the full range of appropriate services is available to those who find themselves homeless, so that they can make the choices required to play a full part in society.

The working group produced a draft policy and a co-ordinated strategy document for public consultation in November 2004¹⁴.

¹³ Working group members include: DSD, Probation Board for NI, NIO, OFMDFM, DHSSPS, NIHE, Housing Rights Service, DEL, SHSSB, Simon Community NI, Council for the Homeless, DE, NI Federation of Housing Associations and First Housing Aid and Support Services.

¹⁴ Department for Social Development (2002), *Promoting the Social Inclusion of Homeless People Addressing the Causes and Effects of Homelessness in Northern Ireland*

The objective for the group was to research the issue of homelessness and ways to address it, and to make recommendations for the development of a more strategic approach to tackling homelessness. The recommendations sought to go beyond ‘bricks and mortar’ issues, by considering the social factors that lead to and result from homelessness, considering the needs of particular groups and suggesting how access to health and social services can be improved for all those faced with or threatened with homelessness. It builds upon the recommendations of the NIHE Homelessness Strategy, the NIAO report and Committee for Social Development inquiry referenced above.

The PSI working group’s report states¹⁵:

“Homelessness is therefore not an isolated problem, but part of a broader phenomenon of social exclusion. Research across Europe suggests that there is persuasive evidence about the relationship between homelessness and other factors which are either an indicator of social exclusion or associated with high social risk. Two such factors are poverty and long-term unemployment.”

The working group has made a number of recommendations for the prevention of homelessness, or the improvement of services effectively to address homelessness. These include the following:

- that awareness should be raised within the health and social services of opportunities to prevent homelessness;
- that existing models of good practice should be considered for roll out across Northern Ireland, at a level proportionate to the incidence of risk of homelessness in each Trust area. Homeless people should be identified as being at increased risk of mental and physical ill health, and services should be developed to address that level of risk; and
- there should be a statutory requirement for the NIHE to ensure that advice and information about homelessness, and the prevention of homelessness, is available free of charge to any person in Northern Ireland.

3.6.3 Rough Sleepers Forum

The Rough Sleepers Forum was established in 2002 and provides an inter-agency approach to tackling the needs of rough sleepers in Belfast in a strategic and co-ordinated way. The forum is led by NIHE with representation from the Council for the Homeless, the Welcome Centre, HomePlus, North & West Belfast HSS Trust, South and East Belfast HSS Trust, the Probation Board for Northern Ireland and the Housing Rights Advisory Service. The Forum meets regularly and works towards meeting the needs of rough sleepers in Belfast.

¹⁵ Department for Social Development (2002), *Promoting the Social Inclusion of Homeless People Addressing the Causes and Effects of Homelessness in Northern Ireland*

3.7 Food Poverty - Overview

In this section we examine food poverty, considering how food poverty is defined, the extent of food poverty in the UK and its resulting impact on diet and health. We also look at the policy context and outline the organisations and initiatives that have been set up to tackle the issue of food poverty.

Food poverty can be defined as¹⁶:

“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.”

A report carried out for FSA in 2003¹⁷ outlined that previous research in the UK with people experiencing food poverty documented that there were three key barriers faced in accessing food for a healthier diet, namely:

- **financial** – for example:
 - not having enough money to buy the foods that make up a balanced diet for good health;
 - buying ‘stodgy’, calorie-heavy foods such as chips, biscuits and ‘fast-foods’ as this is a cheaper way to keep hunger at bay than buying fresh fruit and vegetables, fibre-rich foods and whole-foods; and
 - lack of adequate kitchen equipments can force people to eat convenience foods and take-aways, however these foods tend to be lower in nutrients than meals prepared from fresh ingredients;
- **physical** – e.g. not having a car and unreliable public transport; and
- **skills-based / information barriers** – e.g. lack of information, too much conflicting information, lack of cooking skills.

Research carried out in the Republic of Ireland by Combat Poverty, Crosscare and the Society of St. Vincent de Paul¹⁸ highlighted similar issues and found that living in poverty and social disadvantage imposes constraints on food consumption in three main ways:

- it affects food affordability through the choice and quantity of food that can be bought and the share of the household budget that is allocated to food;
- it impacts on access to food through the retail options available and the capacity to shop in terms of transport and physical ability; and

¹⁶ Riches, G. (1996) *Hunger, Food Security and Welfare Policies: Issues and debates in first world societies*, paper presented to Nutrition Society Summer Meeting, June 1996; cited in Food Standards Agency (2003), *Review of existing UK work on food and low-income initiatives*

¹⁷ Food Standards Agency (2003a), *Review of existing UK work on food and low-income initiatives*

¹⁸ Combat Poverty Agency (2004), *Summary of Food Poverty and Policy*

- psychosocial factors such as personal skills and knowledge or cultural norms determine food choice among socially disadvantaged groups.

The study concludes that social inequality in dietary behaviour exists in the Republic of Ireland and socially disadvantaged groups in the population experience various aspects of food poverty indicating that these groups:

- eat less well compared to socially advantaged groups;
- have difficulties accessing a variety of nutritionally balanced good quality and affordable foodstuffs;
- spend relatively more money on food; and
- know what is healthy but are restricted physically and mentally by a lack of financial resources.

3.8 Extent of Food Poverty

It is difficult to measure how many people are suffering from food poverty in the UK due to the complex range of factors that contribute to household food insecurity¹⁹, however in 2000 research carried out for the Joseph Rowntree Foundation estimated that around “four million people in the UK are not properly fed by today’s standards”²⁰. Another estimate puts the number of people suffering from malnutrition in the UK at 3.3 million²¹.

3.9 Tackling Food Poverty

Locally, in Northern Ireland, tackling food poverty forms part of the wider health and anti-poverty agenda. In recent years a number of key strategies and initiatives have been developed and these are briefly discussed below.

3.9.1 Investing For Health

Investing for Health²² is a strategic approach to health improvement in Northern Ireland. It aims to improve the health of the population in general and in particular that of groups at greatest risk. It recognises that good health and well-being encompasses physical, mental and social well-being, and improved quality of life.

In relation to poverty, Investing for Health determined that poverty is the greatest risk factor for health in a number of different ways, for example:

- poor people have less to spend on the physical determinants of health, such as good food, warm and comfortable housing;

¹⁹ Food Standards Agency (2003a), *Review of Existing UK work on food and low-income initiatives*

²⁰ Joseph Rowntree Foundation (2000), *Findings – Poverty and Social Exclusion in Britain*

²¹ Malnutrition Advisory Group. Cited in Food Standards Agency (2003), *Review of Existing UK work on food and low-income initiatives*

²² Department of Health, Social Security and Public Safety (2002), *Investing for Health*

- they are excluded from many activities which others take for granted; and
- they are more likely to live in insecure and unsafe environments, facing a greater risk of crime, violence, traffic accidents and pollution.

Investing in Health brings together a range of factors that impact on health, for example, housing, environment, education and employment. Therefore a partnership approach is taken to implementation, including the establishment of Investing for Health partnerships in each of the four Health and Social Services Board areas. These partnerships comprise the key statutory, community and voluntary interests in the area together with the social partners with a role to play, including representation from the NIHE.

3.9.2 New TSN – The Way Forward Towards an Anti Poverty Strategy

In April 2004 the Secretary of State launched a consultation document outlining a proposed framework for the development of a high level strategy to combat poverty in Northern Ireland²³. Since then large scale consultation has taken place and in June 2005 the strategy was put into the public domain for further consultation²⁴. The overall strategic objective of the Anti Poverty Strategy is to improve income and living conditions of the most disadvantaged by tackling three high level priorities namely:

- building capacity to participate in the labour market and building capacity to benefit from greater participation in social and cultural life of the community;
- increasing employment opportunities and reducing barriers to employment; and
- dealing with financial hardship.

3.9.3 Other Organisations – Research and Initiatives

Food Standards Agency

In 2003, FSA commissioned a Low Income Diet and Nutrition Survey in order to provide for the first time robust, nationally representative, baseline data on food consumption, nutrient intake and nutritional status, and factors affecting low-income consumers in the UK. Over 3,600 people, both adults and children, were surveyed throughout the UK, of which 400 were in Northern Ireland. Detailed quantitative information on food consumption and nutrient intake was gathered (using the 24 hr recall method) as was information on physical measurements (height, weight and blood pressure).

²³ Office of the First Minister and Deputy First Minister (2004), *New TSN – The Way Forward Towards and Anti-Poverty Strategy*

²⁴ Office of the First Minister and Deputy First Minister (2005), *New TSN – The Way Forward – A Consultation Document Phase 2*

In addition blood samples were taken from participants to analyse nutritional status indices, and a detailed interview was conducted to collect information on socio-economic, demographic and lifestyle characteristics, and assess physical activity and oral health.

The fieldwork for this research was completed in 2005 and the results are expected in Autumn 2006. Data from the survey will feed directly into work by the Agency, other Government departments and non-Government bodies to understand and address barriers to the uptake of a healthy balanced diet by low income groups.

Health Promotion Agency

The Health Promotion Agency for Northern Ireland (HPA) is an agency of the DHSSPS and provides regional leadership, strategic direction and support to all those involved in promoting health in Northern Ireland.

In recent years HPA has facilitated the *Cook It!* programme, a community based nutrition education programme targeted at lower income groups, including the homeless. The programme runs for six weeks and aims to provide practical experience of food preparation for participants. A number of homeless hostel staff, health visitors, and community development workers have been trained to deliver the programme.

Food Safety Promotion Board

Safefood, the Food Safety Promotion Board, is a cross-border implementation body responsible for the promotion of food safety in Northern Ireland and the Republic of Ireland. Other additional functions include research into food safety; communication of food alerts; surveillance of foodborne disease; and a general remit to act as an independent source of scientific advice.

In November 2004, *Safefood* commissioned the Public Health Alliance to undertake research into food poverty in Northern Ireland. The project aims to determine the nature and extent of food poverty in Northern Ireland with a view to developing policies and practical initiatives to tackle the issue and increase awareness of the importance of food and nutrition from a low-income perspective. It is hoped that this project will heighten awareness at both strategic and operational level of the issue of food poverty and the implications for public health.

This research is currently ongoing and will be completed in November 2006.

Northern Ireland Chest, Heart and Stroke Association (NICHSA) / Simon Community

The *Health and Homelessness/Energise* project (funded by the Big Lottery) is a partnership between NICHSA and the Simon Community. The programme (which is delivered in the EHSSB area) focuses on new ways of introducing health and lifestyle information to the homeless. The programme is run approximately every three months for eight weeks in hostels and is targeted at families and pregnant women who are homeless. The programme consists of the following elements: cooking, nutritional awareness and complementary therapy. The aim of the programme is to increase confidence and empower the participants by encouraging them to learn about nutrition and how to cook.

FareShare

FareShare is a national organisation which was established in 1995 with the aim of redistributing surplus food from the food industry to vulnerable people (including the homeless) in the community. FareShare works with over 100 food businesses (such as supermarkets and manufacturers) to minimise food waste by providing practical solutions to help ensure that the maximum amount of 'fit for purpose' food is consumed wherever possible. FareShare currently operates in England and Scotland and in 2005 redistributed over 2,000 tonnes of food to 12,000 disadvantaged people each day in 34 cities and towns across the UK.

At present FareShare does not operate in Northern Ireland, however they have indicated that they are aiming to start operating in Northern Ireland in the next three years, subject to the availability of funding and establishing an agreement with a partner organisation locally.

Health Action Zones (HAZ)

The HAZ initiative was set up to target areas of disadvantage in the community where there was greatest need to address public health issues and an opportunity to make significant improvements. The initiative recognises the impact of social deprivation on health and the need to tackle the root causes of ill health.

The purpose of a HAZ is to act as a catalyst to bring together in a working partnership all those contributing to the health of their local population (including health organisations, District Councils, other statutory organisations and the voluntary, community and private sectors) to implement locally agreed strategies for improving health.

The first two HAZ were established in April 1999, one in North & West Belfast and the other in Armagh & Dungannon to tackle health in a holistic way. Two more were created in 2001, covering priority neighbourhoods and population groups in the Northern and Western Health and Social Services Board areas. All four HAZ's are working to tackle health inequalities by focusing programmes on the wider determinants of health – poverty, unemployment, housing issues as well as lifestyle factors such as diet, drugs and alcohol misuse, mental health etc.

3.10 Research on Food Poverty among the Homeless

Several studies have been conducted in recent years in the UK and Ireland, Europe, USA and Canada that have examined the issues of food poverty among the homeless. The majority have focused on examining diet and nutritional status and have primarily used FFQs and recall methods (such as 24hour or 7-day). Table 3.2 outlines examples of some of the research undertaken. Several of these studies are referenced in Chapter 6 in order to compare our findings to that of previous research.

Table 3.2
Examples of Previous Research on Food Poverty among the Homeless

Title / Location of Study	Author/Year	Purpose
Homeless youth in Toronto are nutritionally vulnerable (Canada)	Tarasuk <i>et al</i> (2005)	To characterise nutritional vulnerability among a sample of homeless youth in downtown Toronto
Hungry for change: Social exclusion, food poverty and homelessness in Dublin.	C. Hickey C and D. Downey /Focus Ireland (2003)	To explore issues of food poverty among the homeless in Dublin
Breadline, health and social exclusion briefing. London (UK)	Centrepoint (2002)	To explore young people's experiences of food poverty
Dietary inadequacies observed in homeless men visiting an emergency night shelter in Paris (France)	Darmon <i>et al</i> (2001)	To assess the dietary intake and the nutritional status of homeless men
Nutrition and health in an adult urban homeless population in Germany	Langnäse and Müller (2001)	To assess the association between nutrition and health in an adult urban homeless population
Food, health and eating among single homeless and marginalised people in London (UK)	N.S. Evans and E.A. Dowler (1999)	To investigate dietary patterns and food sources of day centre and soup run users
The nutritional status and dietary adequacy of single homeless women and their children in shelters (Kansas, USA)	Mary Anne Drake (1992)	To provide information on the dietary adequacy of a single homeless women and their children
Assessment of the nutritional status of urban homeless adults (New York, USA)	Luder <i>et al</i> (1989)	To provide data on the adequacy of diet and nutritional status of the homeless in New York

One of the key elements of this research is to examine issues faced in relation to sourcing, funding, storing and preparing food. However throughout the literature review we have sourced only one major study that has examined similar issues to this research. It was carried out by Focus Ireland in 2002 and 2003 among homeless people in Dublin²⁵. The objectives of the study were:

- to establish the extent to which individuals out-of-home are vulnerable to poor diets and inadequate nutrition;
- to explore the difficulties that homeless households face in sourcing, funding, storing and preparing nourishing food for themselves and/or their families;
- to explore issues of service use and service access by individuals experiencing homelessness and to explore the coping mechanisms employed by homeless adults when food services are restricted, closed or inaccessible to them; and
- to set out policy options for homeless service providers to tackle food poverty in a co-ordinated way, as well as input into national strategies to tackle food poverty among socially excluded groups in Ireland.

The research conducted 72 interviews with homeless people staying in temporary accommodation or sleeping rough in Dublin. The study used a FFQ and a qualitative interview guide to gather information about socio-demographic characteristics, food consumption and dietary patterns; food purchases, expenditure and preparation; general health; and general comments and observations about the lived experience of food poverty. In addition a short self-completion survey was sent to homeless food service providers in Dublin city in order to gather information on service provision.

Key findings of the research were that:

- homeless adults were vulnerable to poor diets and inadequate nutrition;
- homeless adults face significant difficulties in sourcing, funding, storing and preparing nourishing food and the study found a strong link between accommodation type and food poverty;²⁶
- participants used a combination of food outlets including dedicated homeless food services, commercial cafés and often relied upon family and friends for their meals;
- food shopping was determined by a number of factors including mobility, location and the ability to store and prepare food in accommodation; and
- participants regularly reported that they experienced difficulties in reconciling their tight budget with the principles of healthy eating.

²⁵ Hickey C, Downey D (2003). *Hungry for change: Social exclusion, food poverty and homelessness in Dublin*

²⁶ It should be noted that the Focus Ireland sample included homeless people staying in Bed & Breakfasts, hostels, night shelters and rough sleepers. Only 40% had access to kitchen facilities

A smaller scale study by Centrepoin²⁷ in 2002 was carried out with young people using their accommodation facilities in London²⁸. The study looked at inequalities and food poverty, health education and learning opportunities, poor diet and health, and food provision in hostels. Interviews were carried out with 30 young people and 10 staff members in catered and self catered accommodation. The study found that:

- the amount and quality of relevant health education received at home and at school had an important role to play in influencing young people's eating habits and behaviour - young people who had been fed fresh healthy food by their parents tended to have received more support in developing cooking skills and understanding the importance of a balanced diet;
- all of the young people interviewed placed a high level of importance upon the need to develop cooking skills in order to look after themselves, be independent, survive on a low income and make their money stretch;
- young people who regularly felt hungry and skipped meals for economic reasons described feeling tired, getting headaches, feeling depressed and losing weight. Several who were hungry at night were unable to sleep and therefore slept more during the day. Others who did not eat lunch (at college) because of lack of money advised that this had an impact on their ability to concentrate and socialise with other young people; and
- limited budgets meant that young people were often unable to afford to buy and cook the food they wanted to eat; this meant that they were forced to consider the price of food before its nutritional value. For many young people the enjoyment factor was completely removed from food as they ate food they did not like because it was cheap and it filled them up – this can have an impact on a young person's self-esteem and their ability and motivation to overcome barriers.

3.11 Summary

This chapter has aimed to examine the issues of homelessness and food poverty in Northern Ireland.

In relation to homelessness, NIHE statistics show that there were over 17,000 people who claimed to be homeless in 2004/5 and of these 8,470 were found to be homeless and awarded FDA status. It is also estimated that there are between 10 and 40 people sleeping rough on the streets of Belfast at night. In relation to tackling homeless, NIHE's Homelessness Strategy, the PSI Working Group on Homelessness and Rough Sleepers Forum aim to address the issues associated with homelessness.

²⁷ Centrepoin is a national charity working to improve the lives of socially excluded, homeless young people.

²⁸ Centrepoin (2002), *Breadline, health and social exclusion briefing*, Winter 2002

Similarly for food poverty, we considered how food poverty is defined, the extent of food poverty in the UK and its resulting impact on diet and health. There is no specific food poverty strategy in Northern Ireland, however Investing for Health (DHSSPS) and the draft Anti-Poverty Strategy (OFMDFM) aim to tackle poverty among the general population. There are also a number of organisations and initiatives (such as the *Cook It!* and the Energise programmes) operating across Northern Ireland that aim to help homeless people by providing them with information about diet and nutrition, teaching cooking skills and promoting health awareness.

Finally we summarised other research (undertaken in the UK and Ireland, Europe, USA and Canada) which has examined the issues of food poverty among the homeless. A variety of research has been carried out which has primarily focused on examining the diet and nutritional status of the homeless; however only two studies (in Dublin and London) have examined some of the issues covered by this research, namely, sourcing, funding, storing and preparing food.

4. RESEARCH FINDINGS

4.1 Overview

The following chapters of this report outline the results of the research, namely:

- the 72 interviews conducted with homeless people staying in temporary accommodation across Northern Ireland; and
- interviews with staff who provide services to rough sleepers in Belfast.

Our findings are presented as follows:

- interviews with homeless people staying in temporary accommodation:
 - Chapter 5 presents information about the socio-demographic profile, accommodation status, homelessness history, income and health status of participants;
 - Chapter 6 presents the results of the first part of the interview, the Food Frequency Questionnaire;
 - Chapter 7 presents the results of the second part of the interview which asked participants questions in relation to areas such as sources of food, food preparation and storage, expenditure on food and diet; and
- Chapter 8 presents the findings of the interviews with rough sleeper service providers.

5. SAMPLE CHARACTERISTICS

5.1 Introduction

This chapter outlines information about the 72 homeless people that were interviewed as part of this research. Information was recorded in relation to their gender, age, household type, duration of homelessness, accommodation, income and health status. These facts were gathered in order to understand the profile of those interviewed and to help contextualise the answers provided throughout the remainder of the interview.

5.2 Gender and Age

Of the 72 people that were interviewed, 39 (54%) were male and 33 (46%) were female. Thirty-eight (53%) were aged between 16 and 24, and 34 (47%) were over 25 years of age. Table 5.1 provides details of the gender and age range of those interviewed. This sample is broadly consistent with NIHE statistics on homeless people in Northern Ireland.

Table 5.1
Age and Gender

Gender / Age	<19	19-24	25-34	35-49	50-64	Total Number
Male	3	13	10	11	2	39
Female	6	16	5	5	1	33
Total	9	29	15	16	3	72

5.3 Household Type

We aimed to interview single people, couples and lone parents for this research. The majority of the sample (n=50) were single and of these approximately three quarters were males.

The remaining 22 participants (31%) were either living as a couple or were lone parents; all except one were female.

Table 5.2
Household Type

	Single	Couple, no children	Couple, with children	Lone parent	Total Number
Male	38	0	1	0	39
Female	12	2	1	18	33
Total	50	2	2	18	72

5.4 Duration of Homelessness

All participants identified for interview had been homeless for a period of at least one month before the interview. Overall the length of time that participants had been homeless ranged from less than six months to eighteen years. Half of the sample (n=36) interviewed had been homeless for up to six months with a total of 50 participants (69%) having been homeless for up to a year. Therefore the duration of homelessness within the sample was for a relatively short period. There were some participants (n=12) however who had been homeless for more than three years, in one case for 18 years.

5.5 Accommodation Type and Location

Table 5.3 outlines the types of accommodation used by those interviewed. The majority of participants (n=52) were residing in hostel accommodation, with 20 others living in either a flat or house at the hostel / temporary accommodation site.

Table 5.3

Accommodation Type

	Total Number
Hostel	52
Flat / house on hostel / temporary accommodation site	20
Total	72

Table 5.4 shows the locations across Northern Ireland where interviews took place. Approximately half the interviews were undertaken in Belfast, while the remaining interviews were undertaken in Derry, Bangor, Newry and Strabane.

Table 5.4

Accommodation Location

Location	Total Number	% of Sample
Belfast	37	51
Outside Belfast	35	49
Total	72	100
Outside Belfast (details)		
Bangor	13	18
Derry	11	15
Newry	8	11
Strabane	3	4

5.6 Income

Almost all of those interviewed (93%/n=67) stated that their main source of income was from social security and benefit payments such as Job Seekers Allowance (JSA), Child Benefit, Income Support and Disability Living Allowance (DLA). For the remaining 7% (n=5) their main source of income was from employment.

As Table 5.5 shows, there was a wide variation in the average weekly income of participants, which ranged from £26 to £281 per week. The majority of participants had very low weekly incomes, with 19 receiving less than £50 per week, 25 receiving between £50 and £100 and 18 between £100 and £150. Of those receiving in excess of this amount, this was due to receiving benefit payments (such as child benefits or DLA) or payments from employment. There were no significant differences in the average weekly income between male and female participants.

Table 5.5
Average Weekly Income

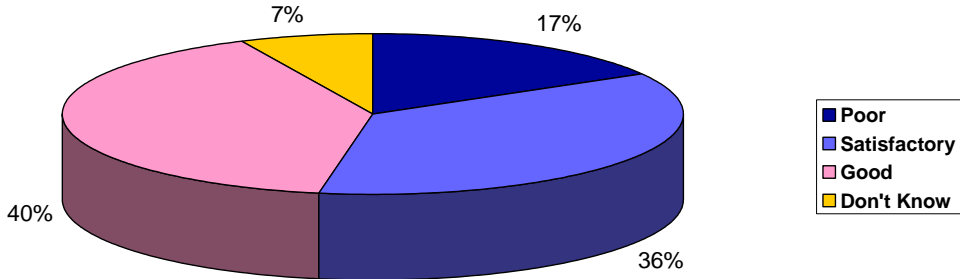
Average Weekly Income	Single	Couple, no children	Couple, with children	Lone parent	Total Number
£0-£49	17	2	0	0	19
£50-£99	20	0	1	4	25
£100-£149	10	0	0	8	18
£150-£199	2	0	1	4	7
£200-£249	0	0	0	0	0
£250+	0	0	0	2	2
Total	49	2	2	18	71

Note: n=71, 1 interviewee could not recall their weekly income

5.7 General Health Condition

A large proportion of those interviewed (76%/n=55) rated their health status as satisfactory or good (as can be seen from Figure 5.1).

Figure 5.1
Current Health Status of Participants



Although only 38% (n=27) were concerned about their health, 63% (n=45) advised that they had health problems. Common conditions cited included depression (n=29), arthritis (n=5) and other mental health problems (n=5). A number of other conditions were also cited in smaller numbers such as diabetes, angina, high blood pressure, anaemia and fibromyalgia.

Of those with health problems, 32 (71%) were taking prescribed medication for their condition.

In addition, 38% (n=27) of all participants complained of having problems with their teeth; these included abscesses, fillings, sore gums and rotten teeth.

5.7.1 Visits to Doctors and Dentists

Over three quarters of those interviewed (n=55) had been for a general check up and 44 (61%) had been to see a dentist since becoming homeless, or in the last three years, whichever period was longer.

In terms of how participants accessed these services, the majority (79%/n=57) made the appointments themselves, however some did have assistance from staff at the hostel (18%/n=13), through a caseworker (1%/n=1) or from family and friends (6%/n=4).

5.7.2 Problems with Eating

Only a small number of participants (15%/n=11) advised that they had problems with what they ate. Of these, five suffered from food allergies (such as nuts, pasta, bread and dairy products) and three of the participants were diabetics.

5.7.3 Appetite Problems

53% of participants (n=38) suffered from lack of appetite. The reasons given for this included emotional problems (such as stress, depression, nerves) (n=10), alcohol (n=8), medication (n=4) and drugs (n=3). A few commented that they didn't feel hungry sometimes therefore didn't eat, while one responded that sometime they suffered from a lack of motivation to eat.

5.8 Addictions – Drinking, Smoking, Illegal Drugs

We also asked participants whether they smoked, drank alcohol or took illegal drugs. The findings showed that a high number were smokers (83%/n=60) and 72% (n=52) drank alcohol. In addition, 18% (n=13) admitted to consuming illegal drugs. Ten of those using illegal drugs claimed to smoke cannabis with small numbers of other participants stating that they used other drugs such as Ecstasy, Speed and/or Cocaine and Diazepam.

6. FOOD CONSUMPTION

6.1 Introduction

This section of the report presents the results from the FFQ that was administered as part of the interview. It also presents the findings of the blood pressure, height and weight measurements taken from each participant.

The FFQ method involves participants recalling food and drink intake over a selected period (in this case one month). The questionnaire consisted of a list of approximately 140 food items with nine pre-coded classifications of frequency of consumption ranging from ‘never or less than once/month’ to ‘six or more times per day’.

A copy of the FFQ is attached at Appendix I. The methodology for administering the questionnaire and analysing the results is outlined at Appendix II.

6.2 Body Mass Index and Blood Pressure

The following sections outline key findings in relation to Body Mass Index (BMI) and blood pressure readings from participants.

6.2.1 Body Mass Index

BMI is the measure most often used to define underweight, normal weight, overweight and obesity and was calculated using the weight and height measurements taken from participants [$\text{weight(kg)/height}^2(\text{m}^2)$]. The BMI distribution of the sample according to age and sex is shown in Table 6.1.

Table 6.1
BMI^{1,2} by Age and Gender

	<19 yrs	19-24 yrs	25-34 yrs	35-49 yrs	50-64 yrs	Total Number
Male						
Underweight ³	2	1	-	3	-	6
Healthy ⁴	3	8	5	3	1	20
Overweight ⁵	1	-	4	2	1	8
Obese ⁶	-	1	1	3	-	5
Female						
Underweight ³	4	1	-	1	-	6
Healthy ⁴	7	2	5	2	1	17
Overweight ⁵	2	2	-	2	-	6
Obese ⁶	2	2	-	-	-	4

¹ BMI categorized according to World Health Organization recommendations (WHO, 1998);

² Note: n=24 (33%) participants were wearing shoes for height and weight measurements; n=13 (33%) males and n=11 (33%) females

³ Underweight = BMI \leq 18.49 kg/m²

⁴ BMI = 18.5-24.9 kg/m²

⁵ BMI = 25.0-29.9 kg/m²

⁶ BMI \geq 30 kg/m²

The distribution was similar for males and females. In comparison with other studies of the homeless in Dublin²⁹ and Paris³⁰ and the general population³¹ (see Table 6.2), a greater proportion of participants in this study were classified as underweight. A greater proportion of participants were also classified as obese compared to either the Dublin or Paris study, however, levels of obesity in this homeless group were still lower than those encountered in the general population in the North/South Ireland Food Consumption Survey (NSIFCS).

Table 6.2
BMI Classification of Participants Compared with Results from Other Studies

	Current study (n=72) %	Hungry for¹ change (n=71) %	Homeless men Paris² (n=97) %	NSIFCS³ (n=1379) %
Underweight ⁴	16.7	8	7.3	<1.0
Healthy ⁵	51.4	66	58.3	42.4
Overweight ⁶	19.4	15	30.2	39.0
Obese ⁷	12.5	9	4.2	17.8

Notes:

¹Hickey C, Downey D. Hungry for change: Social exclusion, food poverty and homelessness in Dublin. Focus Ireland, 2003.

² Darmon N *et al.* Dietary inadequacies observed in homeless men visiting an emergency night shelter in Paris. Public Health Nutrition 2001;4:155-161.

³ McCarthy SN *et al.* Analyses of the anthropometric data from the North/South Ireland Food Consumption Survey. Public Health Nutrition 2001;4:1099-1106.

⁴ BMI categorized according to World Health Organization recommendations (WHO, 1998); Underweight = BMI \leq 18.49 kg/m²

⁵ BMI = 18.5-24.9 kg/m²

⁶ BMI = 25.0-29.9 kg/m²

⁷ BMI \geq 30 kg/m²

BMI was significantly associated with systolic blood pressure (r=0.243, p=0.040) but was not significantly associated with diastolic blood pressure, age, duration of homelessness, or intake of any nutrient. Furthermore, there was no significant difference in the BMI of drinkers versus non-drinkers or smokers versus non-smokers.

²⁹ Hickey C, Downey D. (2003) *Hungry for change: Social exclusion, food poverty and homelessness in Dublin.*

³⁰ Darmon N, *et al.* (2001) *Dietary inadequacies observed in homeless men visiting an emergency night shelter in Paris*

³¹ McCarthy SN, *et al.* (2001) *Analyses of the anthropometric data from the North/South Ireland Food Consumption Survey*

6.2.2 Blood Pressure

Table 5 (Appendix IV) shows descriptive statistics for blood pressure measurements by age group and sex and in comparison with surveys of the general population. Mean systolic and diastolic blood pressure in this group of homeless people was similar to values obtained in national surveys³². Mean systolic blood pressure was significantly higher in men compared with women (P=0.030) and was significantly higher in the total sample of 50-64 year olds compared with the <19 year old age group (mean \pm SD: 112 \pm 7.6 mmHg vs 135.3 \pm 14.4 mmHg respectively; P=0.038). Blood pressure did not differ by alcohol consumption, smoking, BMI, duration of homelessness or income and was not significantly correlated with intake of any nutrient.

6.3 Food Intake

6.3.1 Results

Tables 6 to 14 (Appendix IV) summarise the frequency of consumption of common foods according to the FFQ categories for the total group and by age and sex.

Foods that were rarely eaten (never or <1/month) by 90% of the sample are listed below:

Liver	Peanut butter	Watercress
Potato salad	Grapefruit	Avocado
Brown rice	Dried fruit	Tofu
Wholemeal pasta	Spinach	Decaffeinated coffee
Single cream	Spring Greens	Coffee whitener
Greek yogurt	Marrow	Horlicks
Cottage cheese	Celery	Port
Marmite	Beansprouts	

³² Bajekal M, *et al.* (2003) Health Survey for England 2001.

Ruston D, *et al.* (2003) The National Diet and Nutrition Survey: Adults aged 19 - 64 years.

Foods that were eaten frequently (i.e. once a week or more by > 50% of the sample) are listed below:

Beef	Chips	Carrots
Beefburger	Pasta	Peas
Chicken	Cheese	Tomatoes
Bacon rashers	Butter	Baked beans
Ham	Vegetable soup	Cooked onion (females)
Sausages	Chocolate biscuits	Green salad (females)
Savoury pies (males)	Chocolate bars	Beer (males)
White bread	Added sugar	Spirits
Other breakfast cereals ³³ (females)	Crisps	Fizzy drinks
Potatoes	Bananas (females)	Water
Roast potatoes		

Fish Consumption

15% of the sample (n=11) met the government recommendation of two portions of fish a week, one of which should be oily fish.

Milk Consumption

Tables 13 and 14 (Appendix IV) describe the type and quantity of milk consumed by participants respectively. In comparison with the National Diet and Nutrition Survey (NDNS) of adults aged 19-64 years³⁴ fewer of the sample consumed no milk at all, a larger proportion consumed whole milk and a similar proportion consumed semi-skimmed milk.

As shown in Table 14 (Appendix IV), approximately a quarter of the sample consumed more than one pint per day (more males than females fell into this category – 33% males versus 15% females consumed > 1 pint/d), and 43% consumed a quarter to half a pint per day.

6.3.2 Discussion

In terms of food intake, most of the foods that were consumed frequently were foods that are generally characteristic of a less healthy dietary pattern (red meat, processed meat, white bread, chips, chocolate, crisps, fizzy drinks and alcohol). In contrast, fruit, vegetables and ‘healthier’ options such as wholemeal bread, brown rice and high fibre fortified cereals were consumed relatively infrequently by the sample. These results are consistent with other studies of the homeless³⁵. Fish consumption was also low, with only 11% of the sample meeting the target of two portions of fish per week (one of which should be oily).

³³ Other breakfast cereals were defined as anything other than porridge, Readybrek and Weetabix

³⁴ Henderson L, et al. (2002) *The National Diet and Nutrition Survey: Adults aged 19 - 64 years*

³⁵ Hickey C, Downey D. (2003) *Hungry for change: Social exclusion, food poverty and homelessness in Dublin*.

Evans N, Dowler E. (1999) *Food, health and eating among single homeless and marginalized people in London*

Bananas were the only fruit that was frequently consumed and then only by females. The only vegetables that were consumed by more than half the sample more than once a week were carrots, peas, tomatoes and baked beans. Poor intake of fruit and vegetables has also been noted in other similar studies³⁶.

The number of foods consumed by more than half the sample at least once a week was quite limited and indicates a lack of variety in the diet.

6.4 Nutrient Intake

6.4.1 Results

The energy and nutrient intakes for the total sample and according to sex, age and duration of homelessness are given in Table 15 (Appendix IV).

The mean daily macronutrient intake was compared with recommended intakes for the UK³⁷ and results from the NDNS³⁸ and North/South Ireland Food Consumption Survey (NSFCS)³⁹ (Table 16, Appendix IV).

Contribution of alcohol, carbohydrate and sugar to energy intakes was significantly higher for females versus males ($P = 0.008$, $P=0.001$ and $P=0.004$ respectively). Energy intake (kcal) was significantly lower in females versus males ($P=0.014$).

Energy intake in the current study was 500-900 calories greater than that observed in either the NDNS or the NSFCS. Mean total calorie intake was below the estimated average requirement in both the NDNS and NSFCS but well above the estimated average requirement (EAR) in this group of homeless people. There was a large variation in energy intakes in the current study; total calorie intakes ranged from 1357 to 7614 (mean 3155 ± 1400) kcal/d for males and from 801 to 6824 (mean 2402 ± 1125) for females. The corresponding ranges for calories from food only (i.e. excluding alcohol) were 1353 to 6958 (mean 2978 ± 1353) kcal/d for males and 801 to 6425 (2334 ± 1086) kcal/d for females. Energy intakes were in excess of 4000 kcal/d for 14% of the sample, $n=8$ (20.5%) males and $n=2$ (6.1%) females.

³⁶ Langnäse K, Müller MJ. (2001) *Nutrition and health in an adult urban homeless population in Germany*. Evans N, Dowler E. (1999) *Food, health and eating among single homeless and marginalized people in London*

³⁷ Department of Health. (1991) *Dietary reference values for food energy and nutrients for the United Kingdom: Report of the Panel on Dietary Reference Values*

³⁸ Henderson L, et al. (2003a) *The National Diet and Nutrition Survey: Adults age 19 to 64 years, Volume 2: Energy, Protein, Carbohydrate, Fat and Alcohol intake*. Henderson L, et al. (2003b) *The National Diet and Nutrition Survey: Adults age 19 to 64 years, Volume 3: Vitamin and Mineral intake and Urinary Analytes*

³⁹ Galvin MA, et al. (2001) *The North/South Ireland Food Consumption Survey: the dietary fibre intake of Irish adults*.

Harrington KE, et al. (2001) *Macronutrient intakes and food sources in Irish adults: findings of the North/South Ireland Food Consumption Survey*.

According to the NDNS of adults, total fat intake in men contributed 35.8% of food energy and 34.9% of food energy for women. On average, therefore, women in the UK are meeting the government recommendation that a maximum of 35% of food energy should come from fat, whereas the average fat intake of men is close to, but slightly above, this level. Similarly, women in this sample from the homeless population were meeting the government recommendation for total fat; however, intakes for males were higher than the 35% recommendation and higher than those observed in males in the NDNS or the NSIFCS.

As shown in Table 16 (Appendix IV), the average contribution made by saturated fat to food energy was well above the 11% food energy recommendation in men and women in both the NDNS and this study of the homeless. Percentage contribution of monounsaturates to food energy was met by men, but not women, in the current study and was higher than corresponding figures for the NDNS. The mean percentage contribution of polyunsaturated fat to food energy was met by men, while women were close to the target of 6.5%; figures were comparable to those from the NDNS.

The target of 50% of food energy from carbohydrate was met by women in the sample, but not by men whose carbohydrate intake contributed 47% of food energy. Percentage contribution of carbohydrate to food energy in the current study exceeded that observed in either the NDNS or the NSIFCS.

Mean energy derived from alcohol in the current study was similar to, and not higher than, corresponding figures from representative samples (i.e. samples that represent the population from which they are drawn in important characteristics, such as geographic area, age, sex, race/ethnicity, income, and education level) in the UK and Ireland. Alcohol intakes were highly variable as evidenced by the large standard deviations associated with alcohol intake (see Table 15, Appendix IV).

For adults, the recommended average intake of non-starch polysaccharide (NSP) for the population should be 18g/day. The mean NSP intake in the homeless was 16.2g/d. In general NSP intakes were higher in the homeless than those observed in the general population.

Micronutrient intakes were also compared with UK Dietary Reference Values⁴⁰. The Reference Nutrient Intake (RNI) and Lower Reference Nutrient Intakes (LRNI) for relevant vitamins and minerals are summarized in Tables 17-20 (Appendix IV). The RNI is the amount of a vitamin or mineral that is enough to meet the needs of about 97.5% of the people in a particular group, intakes above this level will almost certainly be adequate. On the other hand, the LRNI is the amount of a vitamin or mineral that is enough for only the small number of people who have low needs, about 2.5% of people in a particular group. These measures allow some assessment of the adequacy of the diet.

The nearer the average intake of the group to the RNI, the more likely it is that the intake of that group is meeting their requirement. The nearer the group average to the LRNI, the greater the probability that a proportion of the group will have an intake below their requirement; intakes below the LRNI level are almost certainly inadequate for most individuals.⁴¹

The mean intakes of all micronutrients met or exceeded the RNI with the exception of Iodine for both males and females (mean intake = 74.3% and 70% of the RNI respectively), magnesium for females (mean intake = 97.4% RNI), potassium for females (mean intake = 78.7% RNI) and vitamin A for both males and females (mean intake = 96.4% and 99.3% of the RNI respectively).

Tables 21 and 22 (Appendix IV) show the proportion and number of participants in each age category whose intake of key vitamins and minerals respectively was below the LRNI compared with data from the NDNS⁴². It should be noted that these comparisons are based on very low numbers of participants and so should be viewed with caution. In accordance with the NDNS, micronutrients of potential concern, because a substantial proportion of participants had intakes below the LRNI, include potassium (women), iron (women), magnesium, riboflavin (women) and vitamin A. For all other nutrients only very small numbers of participants were consuming less than the LRNI. Only two female participants aged 17 and 20 years were consuming 400µg folate per day or more, the amount recommended to women who could become pregnant in order to reduce the risk of neural tube defects are advised⁴³. 75% (n=54) of the sample [n=32 (82%) males and n=22 (66.7%) females] were exceeding the government target for salt of 6g/d (2.4g/100mmol sodium)⁴⁴. It should also be noted that this figure does not take discretionary salt (i.e. salt added in cooking and at the table) into account.

For the group as a whole, there was no significant correlation between income, duration of homelessness, age, BMI, blood pressure and intake of any nutrient (macro and micronutrient). When the nutrient intake of males and females was examined as two separate groups, intake of all nutrients, except alcohol and vitamin A, was significantly inversely associated with age (i.e. as age increased, nutrient intake decreased) in males but not females ($r = -0.591$ to -0.301 , $P < 0.05$). BMI was inversely associated with total energy, food energy, fat (total, monounsaturated, polyunsaturated and saturated), total carbohydrate, sugar and calcium intake in males ($r = -0.249$ to -0.409 , $P < 0.05$), but there were no significant correlations for females.

⁴⁰ Department of Health. (1991) *Dietary reference values for food energy and nutrients for the United Kingdom: Report of the Panel on Dietary Reference Values*.

⁴¹ Department of Health. (1991) *Dietary reference values for food energy and nutrients for the United Kingdom: Report of the Panel on Dietary Reference Values*.

⁴² Henderson L, et al. (2003b) *The National Diet and Nutrition Survey: Adults aged 19 - 64 years, Volume 3*

⁴³ Department of Health. (2000) *Folic Acid and the Prevention of Disease*

⁴⁴ Scientific Advisory Committee on Nutrition. (2003) *Salt and Health*

Duration of homelessness was inversely associated with food energy, protein, fat (total, monounsaturated, polyunsaturated and saturated), potassium and vitamin E intake in males ($r = -0.317$ to -0.451 , $P < 0.05$), but there were no significant correlations for females.

Examining males and females as two separate groups did not reveal any statistically significant correlations between income, or blood pressure, and nutrient intake.

There was also no significant difference in nutrient intake between drinkers and non-drinkers, smokers and non-smokers. Drug users, compared to non-drug users, had significantly higher ($p < 0.05$ or less) intakes of all nutrients (data not shown) with the exception of Vitamin E, however 80% of drug users, versus 50% of non-drug users, were male. When the nutrient intake of male drug users was compared with male non-drug users, drug users had significantly higher ($P < 0.05$) intakes of some nutrients including total energy, food energy, fat, carbohydrate, alcohol, potassium, calcium, magnesium and vitamin B6 (see Table 23). It was not possible to statistically examine differences in nutrient intake between female drug users and female non-drug users because subject numbers were too low ($n = 2$ for female drug users).

6.4.2 Discussion

Although the proportion of overweight and obese individuals in this group was lower than figures obtained from nationally representative studies of the general population in the UK and Ireland, total energy intake as well as energy intake from foods was high in comparison with the NDNS and NSIFCS and a study of the homeless in Paris⁴⁵. A recent pilot study of the diet of the homeless in Dublin, found that although the median intake for men was within the recommended daily range of 2000-2500 kcals/d, median intakes for women were higher than the daily recommendation⁴⁶.

The high total energy and food energy intake observed in the present study may represent an overestimation of energy intake by the FFQ method (see discussion on FFQs in Section 2.4.2), or may reflect a high level of energy expenditure, for example, because of walking. The physical activity levels and patterns of this population group are not well characterised and should be investigated in order to better assess their true energy requirements.

Comparison of the nutrient intake of key vitamins and minerals with the LRNI indicated that the homeless people in this study may be vulnerable to low intake of certain micronutrients, notably iron, potassium, magnesium, riboflavin and vitamin A.

⁴⁵ Darmon N, et al. (2001) *Dietary inadequacies observed in homeless men visiting an emergency night shelter in Paris*

⁴⁶ Hickey C, Downey D. (2003) *Hungry for change: Social exclusion, food poverty and homelessness in Dublin*

However, these comparisons should be viewed with caution as the main sample was subdivided by age and sex for this purpose and therefore the numbers of participants in each sub-category are small. A study of homeless men visiting a night shelter in Paris found evidence of low intakes of potassium, calcium, zinc, vitamins B1, B2 and niacin using a 48-hr recall as the dietary assessment method⁴⁷, whereas a Dublin study using a 130-item FFQ found lower median daily intakes of vitamin A, vitamin D, vitamin E and folate, and also iron and selenium for women⁴⁸. The few studies that have examined the nutritional status of the homeless have studied a very small number of micronutrients and generally indicate that thiamin, vitamin C, folate and iron status may be low in this population⁴⁹. Given the inherent problems associated with dietary assessment techniques (see Section 2.4.2), a more detailed biochemical examination of nutritional status would be useful in terms of identifying nutrition priorities for this section of the population.

There was no significant difference in the nutrient intake or BMI of smokers versus non-smokers or alcohol drinkers versus non-drinkers, although differences in these groups have been noted in other studies of the homeless⁵⁰ where the participants have tended to be homeless for longer than participants in the current study. The significantly higher intake of nutrients by drug users versus non-users in this study can probably be mainly attributed to the fact that 80% of drug users, compared to 50% of non-drug users, were males. When the nutrient intake of male drug users was compared to male non-drug users, intake of the former group was found to be significantly higher for a number of (but not all) nutrients (similar analysis for females was not possible due to low numbers). Dublin-based researchers Hickey & Downey⁵¹, did find that drug use was a significant factor in the consumption of a range of macro and micronutrients, with higher intakes among drug users versus non-drug users. As only 13 participants in the current study were drug users, this particular issue would need to be investigated further in a larger sample size.

6.4.3 Limitations

A number of limitations to this research were outlined in Section 2.4.2. In addition the following points should be noted.

⁴⁷ Darmon N, et al. (2001) *Dietary inadequacies observed in homeless men visiting an emergency night shelter in Paris*

⁴⁸ Hickey C, Downey D. (2003) *Hungry for change: Social exclusion, food poverty and homelessness in Dublin*

⁴⁹ Darnton-Hill I, Truswell AS. (1990) *Thiamin status of a sample of homeless clinic attenders in Sydney*
Drake MA, (1992) *The nutritional status and dietary adequacy of single homeless women and their children in shelter.*

Laven GT, Brown KC. (1985) *Nutritional status of men attending a soup kitchen: a pilot study*

⁵⁰ Langnäse K, Müller MJ. (2001) *Nutrition and health in an adult urban homeless population in Germany*
Darmon N, et al. (2001) *Dietary inadequacies observed in homeless men visiting an emergency night shelter in Paris*

⁵¹ Hickey C, Downey D. (2003) *Hungry for change: Social exclusion, food poverty and homelessness in Dublin*

Overall, alcohol intake in this study was lower than has been observed in previous studies of the homeless⁵². One potential explanation for this may be that the FFQ did not adequately capture alcohol intake for consumers at the high range of intakes. The upper frequency category in the FFQ was ≥ 6 times per day, so, taking beer as an example, the unit of measurement for beer was half a pint, with a frequency of ≥ 6 per day, this would equate to three pints a day or 21 pints per week, a quantity that was exceeded by some homeless people in the current study. The FFQ therefore may underestimate alcohol consumption for some people which may be especially important in a group such as the homeless where alcoholism can be a problem.

This study used a slightly modified version of the EPIC (European Prospective Investigation into Cancer and Nutrition) food frequency questionnaire, which is one of the most extensively used and validated FFQs available. This questionnaire has previously been validated both directly, using 24-hour urinary nitrogen and potassium and serum vitamin C and carotenoids as biomarkers⁵³, and relatively in comparison with other dietary methods such as weighed records⁵⁴ and the 7-day food diary⁵⁵ in the UK, and multiple 24-hour recalls in other European countries. Results from validation studies using this questionnaire are in keeping with results from other similar studies of FFQs.

In general, validation studies indicated that the FFQ gave significantly higher values for most nutrients than either weighed records or food diaries. Like other FFQ's⁵⁶, this FFQ tends to overestimate fruit and vegetables, added fats and fish more than other food items and thus intakes of β -carotene and vitamin C⁵⁷.

⁵² Darmon N, *et al.* (2001) Dietary inadequacies observed in homeless men visiting an emergency night shelter in Paris

⁵³ McKeown NM, *et al.* (2001) *Use of biological markers to validate self-reported dietary intake in a random sample of the European Prospective Investigation into Cancer United Kingdom cohort*

⁵⁴ Bingham SA, *et al.* (1997) *Validation of dietary assessment methods in the UK arm of EPIC using weighed records, and 24-hour urinary nitrogen and potassium and serum vitamin C and carotenoids as biomarkers*

⁵⁵ McKeown NM, *et al.* (2001) *Use of biological markers to validate self-reported dietary intake in a random sample of the European Prospective Investigation into Cancer United Kingdom cohort*

⁵⁶ Shu XO, *et al.* (2004). Validity and reproducibility of the food frequency questionnaire used in the Shanghai Women's Health Study.

Marks GC, *et al.* (2006) Relative validity of food intake estimates using a food frequency questionnaire is associated with sex, age, and other personal characteristics.

⁵⁷ Margetts BM, Pietinen P. (1997) *European Prospective Investigation into Cancer and Nutrition: Validity studies on dietary assessment methods*

Bingham SA, *et al.* (1997) *Validation of dietary assessment methods in the UK arm of EPIC using weighed records, and 24-hour urinary nitrogen and potassium and serum vitamin C and carotenoids as biomarkers.*

Correlation coefficients between nutrients assessed from the FFQ and from the weighed records and 7-day food diary were generally of the order of 0.4-0.7 and are similar to correlations obtained elsewhere in comparative validation studies⁵⁸.

In terms of classification of nutrient intake into the same or extreme quartiles of intake for the FFQ and 7-day food diary, extreme misclassification (>5%) was observed for energy and starch in men and for protein, sugar, sodium and vitamin E in women. Classification into the same quartile ranged from 28% for β -carotene to 69% for alcohol in men and from 32% for protein to 79% for alcohol in women⁵⁹.

In terms of validation using biomarkers, correlation coefficients between urinary nitrogen, potassium and sodium and dietary intakes were much lower for the FFQ than the 7-day food diary. With respect to plasma ascorbic acid, the FFQ and 7-day food diary provide a similar ranking of participants according to vitamin C intake⁶⁰. The magnitude of correlation coefficients between plasma ascorbic acid and vitamin C intake was similar for the FFQ and food diary. Correlations between dietary intake and plasma carotenoids was somewhat lower; the correlation between plasma β -carotene and dietary β -carotene from weighed records was 0.48, but 0.15 the FFQ⁶¹.

The mean reproducibility for the FFQ was moderate to high (0.64 for men and 0.74 for women)⁶².

6.5 Summary

In conclusion, as noted in other studies, although most homeless people may be getting enough to eat, the quality of their diet may be poor. A high proportion of the group were underweight compared to other studies of the homeless or studies of the general population. However, some participants were also overweight or obese and, therefore, the homeless represent a diverse group in terms of their energy requirements.

⁵⁸ Bingham SA, *et al.* (1997) *Validation of dietary assessment methods in the UK arm of EPIC using weighed records, and 24-hour urinary nitrogen and potassium and serum vitamin C and carotenoids as biomarkers.*

⁵⁹ McKeown NM, *et al.* (2001) *Use of biological markers to validate self-reported dietary intake in a random sample of the European Prospective Investigation into Cancer United Kingdom cohort*

⁶⁰ Ibid

⁶¹ Bingham SA, *et al.* (1997) *Validation of dietary assessment methods in the UK arm of EPIC using weighed records, and 24-hour urinary nitrogen and potassium and serum vitamin C and carotenoids as biomarkers.*

⁶² McKeown NM, *et al.* (2001) *Use of biological markers to validate self-reported dietary intake in a random sample of the European Prospective Investigation into Cancer United Kingdom cohort*

Intakes of energy and fat, particularly saturated fat, were higher than recommended and intakes of NSP were lower than recommended. Few participants consumed fish frequently or met the government target for two portions of fish (one of which should be oily) per week. Fruit and vegetable consumption was low, as was intake of 'healthier' alternatives such as wholemeal bread, high fibre cereals, brown rice and wholewheat pasta. Only 25% of the sample were meeting the current government target for salt of 6g/d⁶³.

Participants tended to consume a relatively small number of foods on a regular basis and so variety appeared to be lacking in their diet. Many of the foods consumed frequently by this group were high in fat and/or sugar such as fizzy drinks, crisps, chips and chocolate. Given such a dietary pattern, this group may be vulnerable to low dietary intakes of a number of micronutrients; in particular iron, potassium, magnesium, riboflavin and vitamin A were highlighted as potential causes for concern.

⁶³ Scientific Advisory Committee on Nutrition. (2003) *Salt and Health*

7. INTERVIEW RESULTS

7.1 Introduction

This chapter presents the findings from the second part of the interview with homeless people. Participants were asked questions about their sources of food, how they prepared and stored food and how much they spent on food. Eating habits and diet was also discussed.

7.2 Sources of Food

This section of the questionnaire aimed to establish where participants were sourcing their food. Questions were asked about where they sourced food (e.g. from hostels, cafés and supermarkets), how often they ate or bought food there, and which meals they ate or sourced at these locations.

All of the interviews were conducted in temporary accommodation centres that provided self-catering facilities, and residents were therefore responsible for sourcing and preparing their own food. As a result, findings show that the main source of food for all participants was shops and supermarkets. In addition fast food outlets, family and friends and commercial restaurants/cafés were also used (see Table 7.1).

Table 7.1
Sources of Food

Source	Number	%
Shops/Supermarkets	72	100
Fast Food Outlet	47	65
Family/Friends	45	63
Commercial Restaurant/Café	42	58
Hostel/Temporary Accommodation Canteen	3	4
Day Centre	1	1
Other	2	3

Note: Total exceeds 72 as food was sourced from various locations

Of those using shops and supermarkets (n=72), 21 participants (29%) visited once a week, with a further 39 (54%) visiting two or more times a week. Twelve others (17%) visited less than once a week. All bought food for some or all of their meals at these shops.

Of the participants who ate from fast food outlets (n=47), 14 (30%) bought food there once a week and 16 (34%) two or more times a week. However the remaining 17 participants (36%) bought food there less than once a week. Dinner and lunch were the main meals sourced at fast food outlets.

A similar pattern was found with those that sourced food from family and friends (n=45). Of these 19 (42%) ate with family and friends once a week and 15 (33%) ate there more frequently. Eleven (24%) ate with them less than once a week. Dinner was the main meal eaten with friends and family.

Although commercial cafés and restaurants were used by 42 participants, they were used less frequently than the other sources of food outlined above. Thirteen (31%) of those who used cafés and restaurants ate there once a week, eight (19%) ate there more than once a week, however half of participants ate in these locations less than once a week. Again lunch and dinner were the main meals eaten in cafés and restaurants.

7.2.1 Shops and Supermarkets

As outlined above all participants identified shops and supermarkets as a place where they sourced food. Supermarkets were used most frequently with 65 participants stating that this is where they purchased their food. Some 28 participants also used convenience stores and one individual also used a market⁶⁴. Other shops frequented were a butchers' shop (n=3).

When asked why certain types of shops were used, the main reason given by participants (n=53 / 74%) was because of the cost of food from the shop. Similarly 64% (n=46) stated that the supermarkets were easy to get to and so this was the reason they used them.

Reasons for Buying Certain Types of Food

We asked participants to advise of the reasons why they choose certain types of food when buying in shops and supermarkets. Table 7.2 shows that the main reasons influencing the purchase of food are availability of food in the shops and the amount of money available to them to spend. Decisions were also influenced by knowledge of how to prepare certain types of food and the freshness of food.

Table 7.2
Main Reasons Why Certain Types of Food Chosen

	Total Number
Availability of food	52
Money available to spend	51
Foods I know how to prepare	47
Freshness of food	39

Note: total exceeds 72 as multiple reasons given

Accessibility of Shops

We also discussed with participants issues around transport and travel to the shops as well as any problems they faced when they were at the shops.

Multiple means of travel were used by participants to get to the shops. The vast majority walked to the shops (n=69), however they also used taxis (n=6), got a lift (n=3), drove (n=1) or used the bus (n=1)⁶⁵.

⁶⁴ Total exceeds 72 as multiple shops were used

⁶⁵ Total exceeds 72 as some participants used several methods of travel

Access to local shops was very good for those interviewed with travel distances being less than one mile for 89% of participants (n=64).

In terms of the choice of shops available, the results showed that all participants had one or more shops which sold a variety of foods within 15 minutes walking distance from where they were staying. Fifty-one (71%) could walk to four or more shops selling a variety of foods, 14 (19%) could walk to three shops, six (8%) could walk to at least two shops in the locality and only one person could only walk to one shop in this time period.

We also examined the ease with which participants could use shops in order to understand if any problems were encountered by them as a result of being homeless. Table 7.3 shows that about three-quarters of participants who used shops encountered no problems. Where problems were encountered these mainly related to participants having to buy 'value' products (18%), and for a small number, opening hours and the attitudes of staff or security guards towards them was an issue.

Table 7.3

Problems Encountered When Using Shops

	Number	%
No problems	55	76
Have to buy value products	13	18
Attitudes of staff / security guards	2	3
Opening hours	2	3
Total	72	100

7.2.2 Hostel Canteen/Day Centre

A small number of participants (n=3) also sourced food at a hostel or day centre. These people were asked what they liked and disliked about the food served there. Participants 'likes' included:

- the fact that they could get a hot meal;
- the price was inexpensive or food was free; and
- the food was freshly prepared.

None of the participants listed any dislikes about the food available in these centres.

Opening hours varied for these facilities with two open in the morning and the afternoon and one open only in the afternoon.

Only one participant noted that they had to pay for food from these facilities and stated the amount as £2. No recommendations were made in relation to how service delivery in the hostel/day centre canteens could be improved.

In addition to the three participants accessing food at a hostel or day centre, residents at a hostel in Strabane (n=3) were provided with free bread and milk on a daily basis.

7.3 Food Preparation

In this section of the questionnaire, participants were asked about the type of food preparation facilities they had access to, the type of amenities that were provided at these facilities and how clean these were. Some questions were also asked about participants' ability to prepare food for themselves.

7.3.1 Facilities Available

All of the participants advised that they had somewhere where they could prepare food for themselves. Forty-seven participants (65%) had access to a shared kitchen and 25 (35%) had access to a private kitchen. The kitchen space used was generally located where participants were living, but some (n=11) also had access to a kitchen at the homes of friends or family.

Table 7.4 outlines the facilities available within the kitchens used by participants. As the information shows, the kitchens were well equipped with appliances, utensils and cleaning products.

Table 7.4
Kitchen Facilities Available

	Number	%
Sink	72	100
Drinking Water	72	100
Fridge	72	100
Oven/Cooker/Hob	72	100
Freezer / Ice Box	71	99
Utensils	71	99
Kettle	70	97
Toaster	66	92
Microwave	62	86
Cleaning Products	59	82

In general participants were satisfied with the facilities provided, with over three-quarters of participants (n=55) advising that they were sufficient for their needs. Of those who felt that these facilities were insufficient (22%), the main concern was around the need for more utensils (n=9) while others thought that bigger fridges/freezers and cupboards were needed (n=3).

7.3.2 Cleanliness

Of those that shared kitchens (n=47) 72% stated that the kitchens were kept clean and when this was not the case, the main problem encountered was other residents not cleaning up after themselves and leaving dirty dishes in the kitchen.

7.3.3 Ability to Cook

All participants stated that they were able to cook for themselves, however in order to further determine their cooking ability, they were asked to provide responses based on three categories, namely:

- ability to cook convenience foods and ready meals (e.g. a frozen pizza);
- ability to cook a meal from ready made ingredients (e.g. ready made sauce and pasta); and
- ability to cook a main dish from basic ingredients (e.g. cottage pie or Irish stew).

We also asked participants to rate their ability in terms of being able to cook food without any help, with a little help, with a lot of help and not able to cook at all.

Table 7.5
Ability to Cook

Total Number	Convenience foods	Ready-made ingredients	Basic ingredients
With no help	71	67	58
With a little help	1	3	7
With a lot of help	0	0	2
Not at all	0	2	5
Total	72	72	72

As can be seen from the results, most of the participants advised that had a high level of cooking ability with all being able to cook convenience foods and ready meals with little or no help. Numbers able to cook a meal from ready made ingredients with no help was slightly lower (93%), while 81% advised they could cook a meal from basic ingredients with no help.

We also asked participants to say where they had learned to cook. As Table 7.6 shows, approx. half had learned to cook at home, while many others were self-taught or had learned to cook at school.

Table 7.6
Where Participants Learned to Cook

	Total Number
At home	35
Self-taught	28
At school	15
At work (e.g. chef, working in restaurant)	9
Family / friends	5
Cookery classes (in hostel or other location)	4
Watching others	2

Note: total exceeds 72 as multiple responses provided

7.4 Food Storage

In this section of the questionnaire participants were asked to provide information about the food storage facilities that were available to them where they were staying. Questions were asked about the type of storage available and if it was sufficient for their needs. They were also asked if the storage was locked and the issue of food theft was also discussed.

7.4.1 Facilities Available

Seventy-one (99%) of those interviewed noted that they had somewhere where they could store their food. This was either in a fridge/freezer, cupboard, bedroom or shelf. Those that had access to fridges/freezers (as outlined above in Table 7.4) used these for storage. In addition all had access to a cupboard or shelf for storing other items while some participants also used their bedrooms for storing food.

On the whole participants were happy with the storage facilities available and 72% (n=52) believed they were sufficient for their needs. However some participants noted issues with the size of the fridge/freezer/cupboard space available to them which impacted on the type and amount of food they could store.

For those participants that shared kitchens (n=47), some had locked storage while others did not. Thirty-two (68%) had locked cupboards while only 14 (30%) had locked fridges and 19 (40%) had locked freezers.

Several participants (n=28/39%) advised that they had had food stolen from them in the past. A wide variety of food had been taken, for example, milk, butter, teabags, sugar, cheese, biscuits, chicken and pizzas. Participants advised this had happened as the storage they had been provided with had not been locked. However, some participants noted that locks had recently been installed and this had stopped the theft of food.

7.5 Expenditure on Food

This section discusses the amount individuals spend on food, who this food is for and the choices that participants can sometimes have to make between food and other essentials. It also examines the consumption of food by these individuals and the reasons why some homeless people do not always have enough to eat.

7.5.1 Weekly Spending on Food

The responses provided in terms of the amount of expenditure on food per week varied greatly from as little as £10 per week to over £50 per week. The results in Table 7.7 shows that 60% (n=30) of single people interviewed were spending less than £30 a week on food, while, as would be expected, parents with children are typically spending more, with 12 of the 20 participants with children spending £40 or more.

Table 7.7
Average Weekly Expenditure on Food

Amount	Single	Couple, no children	Couple, with children	Lone parent	Total
£10 - £19	17	2	0	0	19
£20 - £29	13	0	1	3	17
£30 - £39	10	0	0	4	14
£40 - £49	6	0	0	4	10
£50+	4	0	1	7	12
Total	50	2	2	18	72

In terms of gender there were no significant differences in expenditure on food per week however women were marginally more likely to spend over £40 on food than men.

Family expenditure (including money spent on food) is recorded annually by the Office of National Statistics⁶⁶. Their figures for 2004/5 show, for example, that across the UK, average spending on food and non-alcoholic drinks is £44.70 a week by all households, £21.60 by single (non-retired) households, £46.90 by couples and £40.40 a week for lone parents with two or more children. Weekly expenditure in Northern Ireland is slightly higher at £46.80 a week. While it is not possible to directly compare the results of the interviews with national statistics, the information does show that, in general, expenditure by those interviewed was below that of national averages.

⁶⁶ Office of National Statistics. (2005) *Family Spending, A Report on the 2004-05 Expenditure and Food Survey*

In terms of who they bought food for, almost all participants stated that the food they purchased was primarily for themselves or their partner and children, however 10 participants (all single) advised that they sometimes also bought food for friends or other residents in the hostel.

We also asked participants if they felt that they had enough money to spend on food each week. 64% (n=46) felt that they had enough money to spend on food each week whereas the remaining 36% (n=26) believed that they did not. Those who believed that they did not have enough money stated that this was due to a number of factors, such as having to spend money on accommodation, bills/debts, alcohol/drugs, clothes and travel expenses.

Table 7.8

Reasons Given for Not Having Enough Money to Spend on Food

Reason Given	Total Number
Had to spend money on	
Accommodation	16
Bills/debts	13
Cigarettes	12
Clothes	12
Alcohol/drugs	10
Travel Expenses	8
Other items (e.g. baby products)	12

Note: Total exceeds 26 as multiple reasons given

7.5.2 Issues Faced

For participants who advised that they did not have enough money to spend on food each week (n=26), they were asked a series of questions about the choices they had to face because they did not have enough money.

Choosing Between Meals and Other Essentials

Firstly, participants were asked how often they had to make the choice between buying food and other essentials. Of the 26, 15 (58%) had to make the choice on a daily or weekly basis. Four made the choice on a monthly basis, two at other times; however five also advised that they never made that choice as they believed that food should come first.

Table 7.9
Frequency of Having to Choose Between Food and Other Essentials

	Total Number
Daily	5
Weekly	10
Monthly	4
Other	2
Never	5
Total	26

We also asked these participants if in the last month they had missed meals because they did not enough money or food. Sixteen of the 26 (61%) advised that they had.

Issues Faced by Parents

Of the homeless people interviewed, 20 had children⁶⁷. To understand the difficulties they faced some questions were asked about feeding their children and their child's diet.

Of the 20 parents, nine (45%) had gone without food at some stage in order to feed their children, however in the last month none of their children had missed meals because there was not enough money for food.

Nine of the parents interviewed were also concerned about ensuring that their children had a balanced diet. Three of these parents advised that more money would help them to change their children's diet, while others commented that they found it difficult to get their children to eat vegetables or other healthy food.

We also asked parents about the following statement:

“I/we rely on only a few kinds of low-cost food to feed my/our children because I/we were running out of money to buy food”.

Half of parents commented that this statement was “sometimes” or “often” true for them in the last six months.

7.6 Eating Patterns

The FFQ aimed to establish the frequency that different types of food were consumed by participants. In the structured interview participants were also asked about the frequency of eating full meals and snacks, whether they felt they were getting enough to eat and how difficult it was for them to eat a balanced diet.

⁶⁷ Note: 1 child was living with his grandmother at the time of the interview

7.6.1 Frequency of Eating

The results in Table 7.10 show that that only 36% of respondents (n=26) were eating three or more full meals a day. In addition one participant did not eat meals, just snacks instead. Frequency of eating snacks among participants was also high with 63% eating two or more snacks a day.

Table 7.10
Frequency of Eating Full Meals and Snacks

Full Meals	%	Snacks	%
0	4	0	12
1	21	1	25
2	39	2	25
3 or more	36	3 or more	38

We also asked participants how often, in the last seven days they had eaten breakfast, lunch, an evening meal and dinner. The results from this question show that many of the participants were skipping meals, particularly breakfast and lunch, as only 38% ate breakfast every day, and 40% ate lunch every day. The number of participants who ate dinner every day was higher (69%) however significant numbers were not eating breakfast, lunch and dinner every day.

Table 7.11
Frequency of Eating Breakfast, Lunch, Dinner and Supper

No. Of Times Eaten a Week	Meal %	Breakfast %	Lunch %	Dinner %	Supper %
0		26	8	6	31
1-3		22	31	14	18
4-6		14	21	11	11
7		38	40	69	40
Total		100	100	100	100

7.6.2 Problems Getting Enough Food

We also asked participants about problems they faced in getting enough food and the reasons for this.

Forty-three participants (60%) stated that they never had problems getting enough food. However six (8%) stated they had difficulties in getting enough food all or most of the time, 12 (17%) some of the time and 11 (15%) advised that this was not very often a problem for them.

The reasons provided as to why people do not always have enough to eat are shown in Table 7.12. As the information shows, the main reason given was not having enough money for food.

Table 7.12
Reasons Why Do Not Get Enough To Eat

	Total Number
Not enough money for food	14
Not enough time for shopping	4
Not enough time for cooking	5
Not able because of health problems	4
Too hard to get to the shop	2
No cooker/microwave available	2
On a special diet	1

Note: Total exceeds 29 as multiple reasons given

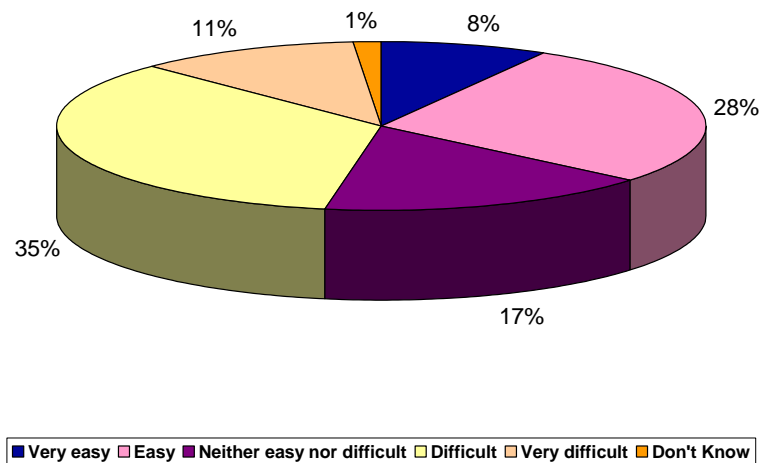
7.6.3 **Balanced Diet**

Our final questions in this section of the interview asked participants how easy or difficult it was for them to eat a balanced diet (i.e. a diet consisting of balanced portions of food such as meat, fish, potatoes, pasta, fruit and vegetables) and if they were concerned about the type of food they ate.

Figure 7.1 shows that 46% (n=33) of participants found it difficult or very difficult to eat a balanced diet, while 36% (n=26) found it easy or very easy. For those that found it difficult, they were asked what the reasons were for this. The main reasons given were that respondents preferred to eat what they liked or wanted (instead of what was healthy) (n=12), and because it was expensive to eat a balanced diet (n=11). Others advised that they didn't like eating fruit and vegetables or that they didn't have the time to eat.

In relation to the types of food eaten, 33% (n=24) of participants were concerned about the type of food they ate.

Figure 7.1
Difficulty Rating Regarding Ability to Eat a Balanced Diet



7.7 Summary

This chapter has presented the results from the second part of the interview with homeless people. Key findings from our analysis are that:

- the main source of food for all participants was shops and supermarkets, however fast food outlets, family and friends, and commercial restaurants/cafés were also frequently used;
- participants had good access to shops and they could walk to one or more shops which sold a variety of foods within 15 minutes from where they were staying;
- all participants had somewhere where they could prepare food for themselves. Kitchens were well equipped with appliances, utensils and cleaning products and in general participants were satisfied with the facilities provided and the cleanliness of the kitchens;
- all except one participant had somewhere they could store their food. On the whole participants were happy with the storage facilities available and advised that they were sufficient for their needs. For those that shared kitchens, most had access to some type of locked storage, however several participants advised that they had had food stolen from them in the past;
- all participants stated that they were able to cook for themselves, with most advising that they were able to cook convenience foods, a meal from ready made ingredients or from basic ingredients;

- expenditure on food varied greatly from as little as £10 per week to over £50. The majority of participants felt that they had enough money to spend on food each week, however for those that didn't, this was because they had to spend money on accommodation, bills/debts, alcohol/drugs, clothes and travel expenses. These participants also advised that they regularly had to make the choice between buying food and other essentials and had missed meals in the last month because they didn't have enough money for food;
- of the homeless people interviewed, 20 had children. Almost half had gone without food at some stage in order to feed their children, and some were also concerned about ensuring that their children had a balanced diet;
- many participants did not eat regular meals, with many only eating one or two full meals a day. However the majority of participants advised that they never had any problems getting enough to eat; and
- many participants advised that they found it difficult or very difficult to eat a balanced diet, however only a third of participants were concerned about the type of food they ate.

8. ROUGH SLEEPERS

8.1 Introduction

As outlined in Chapter 2, the approach to researching food poverty issues among rough sleepers was to interview staff who work with rough sleepers in the Belfast area, i.e. the Welcome Centre and Home Plus. The following sections discuss food provision for rough sleepers and highlight the issues encountered by those providing the services.

8.2 Welcome Centre

The Welcome Centre regularly caters for between 20 and 30 rough sleepers a day. The Centre is equipped with kitchen and dining facilities and staff at the centre provide breakfast, lunch and supper for visitors.

Breakfast consists mainly of tea / coffee and toast. Staff provide a varied lunch every day – examples of which are outlined below. Supper is provided in the evenings and usually consists of soup and sandwiches, egg and chips, stew, beans on toast, or pasties and spaghetti. Tea / coffee and biscuits are available throughout the day.

Table 8.1

Sample Lunch Menu

Day	Sample Menu
Monday	Mince, onions, creamed potatoes
Tuesday	Burgers or sausages with onions, gravy, creamed potatoes and vegetables
Wednesday	Roast dinner – chicken, beef or pork with vegetables and potatoes
Thursday	Gammon, cabbage and boiled potatoes
Friday	Fish, fish fingers or fishcakes with beans and champ
Saturday	Fry – sausages / chicken goujons, beans, chips,
Sunday	Roast dinner - chicken, beef or pork with vegetables and potatoes + dessert

The rationale for providing the above types of food was discussed with staff at the Centre. A number of points emerged from the discussion, namely that:

- most of the rough sleepers catered for at the Centre are alcoholics and/or drug addicts and the majority also smoke. Alcohol and drugs can affect appetite and as a result they may only be able to eat small amounts of food. Taste buds are also damaged by alcohol and therefore many rough sleepers like and need food with strong flavours or fatty food. As a result rough sleepers tend to use large quantities of condiments like salt, pepper and tomato ketchup;

- breakfast primarily consists of tea and toast. This is because many of the rough sleepers consume large quantities of alcohol during the night and as a result feel unwell and are unable to eat much food in the morning. Therefore providing a more substantial or healthy breakfast is not feasible;
- staff aim to provide simple but nourishing food – food provided at the Centre may be the only food that rough sleepers access each day. In addition staff also aim to have one ‘fat food’ meal a week which consists of high calorie food (e.g. a fry and chips); many of the rough sleepers are underweight and so it is felt that it is important to provide this type of food to try and maintain weight; and
- fresh fruit is provided at the Centre however rough sleepers do not usually avail of it. Vegetables are however incorporated into lunch and fresh soup which is made most days.

In preparing the food, food hygiene standards are adhered to by staff at the Centre. The importance of the freshness of the food was also emphasised as the poor health condition of rough sleepers can make them more vulnerable to food related illnesses. Hygiene is therefore maintained through ensuring food is always fresh and within date and by taking practical steps such as wearing gloves when preparing food and using individually wrapped portions of butter, sugar and jam.

8.3 Home Plus

The Home Plus service, which works in conjunction with the Welcome Centre, primarily caters for rough sleepers on the streets of Belfast at night. The service is operated by nine staff, who provide food, clothing, blankets, toiletries, and healthcare to the rough sleepers.

Food is distributed each night and primarily consists of sandwiches (such as ham, cheese and tuna), homemade soup, rolls, Pot Noodles and bottles of water. The service is operated from an office and a van and therefore food preparation facilities are limited. Several issues, similar to those outlined above, were raised, namely that:

- rough sleepers have difficulty eating due to drug and alcohol problems;
- it is important to provide plain food, such as soup and sandwiches, as many cannot eat flavoured or spicy foods; and
- rough sleepers, even though they have access to money through begging and/or benefits (some as much as £100 a day), do not prioritise food and will spend their money on alcohol and drugs instead.

9. CONCLUSIONS

9.1 Introduction

This chapter outlines our conclusions from the research undertaken with homeless people. The findings from the interviews conducted with key service providers for the homeless are also included.

In drawing our conclusions we have focused on the aims of the research, namely, to deliver a better understanding of the impact of poverty and social exclusion on the diet of people who are homeless in Northern Ireland by:

- establishing the extent to which homeless people are vulnerable to poor diet and inadequate nutrition;
- exploring the issues homeless people face in sourcing, funding, storing and preparing nourishing food for themselves and/or their families;
- exploring issues of service use and service access by homeless people in Northern Ireland to develop a clear understanding of the barriers to healthy eating;
- identifying the impact of food poverty upon health and wider experiences of social exclusion; and
- identifying gaps in current food provision for homeless persons across a range of support services.

The following sections summarise our findings in relation to each of these points. Chapter 10 will set out our recommendations for policy options going forward for the FSA.

9.2 Vulnerability to Poor Diet and Inadequate Nutrition

A FFQ was used in this research to assess the vulnerability of participants to poor diet and inadequate nutrition. The key finding was that although most of the homeless people interviewed may be getting enough to eat, the quality of their diet was poor. In particular the results of the FFQ revealed that:

- most of the foods that were consumed frequently were foods that are generally characteristic of a less healthy dietary pattern (e.g. red meat, processed meat, white bread, chips, chocolate, crisps, fizzy drinks and alcohol). In contrast, fruit, vegetables and 'healthier' options such as wholemeal bread, brown rice and high fibre fortified cereals were consumed relatively infrequently by the sample. Fish consumption was low with only 11% of the sample meeting the target of two portions of fish per week (of which one should be oily);
- bananas were the only fruit that was frequently consumed and then only by females, and the only vegetables that were consumed by more than half the sample more than once a week were carrots, peas, tomatoes and baked beans;

- intakes of energy and fat, particularly saturated fat, were higher than recommended and intakes of non-starch polysaccharide (NSP) were lower than recommended;
- participants tended to consume a relatively small number of foods on a regular basis and so variety appeared to be lacking in their diet; and
- given such a dietary pattern, this group may be vulnerable to low dietary intakes of a number of micronutrients; in particular iron, potassium, magnesium, riboflavin and vitamin A were highlighted as potential causes for concern.

As outlined in Chapter 6, these findings concur with other studies with the homeless that have taken place in Ireland, Europe and America.

9.3 Issues Faced in Sourcing, Funding, Storing and Preparing Food

These issues were assessed through the structured interview that formed the second part of the 72 interviews conducted with homeless people staying in temporary accommodation. Outlined below are the findings in relation to sourcing and storing and preparing food. Issues in relation to funding are discussed in Section 9.4 below as the findings in this area also impacted on barriers to healthy eating. As outlined in Section 2.4.1 all of the homeless people interviewed were staying in self-catered temporary accommodation.

Sourcing Food

Our research did not indicate any particular issues for participants in relation to sourcing food. Almost all of the participants had good access to food, primarily through shops and supermarkets in the local area, and few experienced any problems with accessing these shops. In addition many also used fast food outlets and cafés and restaurants to source food, while others often ate with their friends and families. However, the types of food sourced was clearly a concern as the results of the FFQ have outlined.

Preparing and Storing Food

Almost all of those interviewed had good access to facilities for preparing and storing food. All of the participants advised that they had somewhere they could prepare food for themselves, either through a shared or private kitchen. Seventy-one participants (99%) had somewhere they could store food for themselves. On the whole participants were happy with the food preparation and storage facilities available to them.

9.4 Barriers to Health Eating

In examining this area we drew on the results of the structured interviews with homeless people and also the discussions held with organisations that work to support them. The following sections outline what we consider to be the main barriers to healthy eating.

9.4.1 Financial Situation

The results of this research have clearly shown that the financial situation of those interviewed impacted on their diet. Almost all sourced their income from social security and benefit payments and 26% of the sample (n=19) stated that their income was less than £50 a week. A further 35% (n=25) received between £50 and £99 a week. The results showed that this reliance on benefits did impact expenditure on food, especially for single people, of which 60% (n=30) were spending less than £30 a week on food, either in supermarkets, cafés or fast food outlets. Other findings from the research showed that:

- 36% of participants (n=26) felt that they did not have enough money to spend on food each week, and many of these had to make regular choices between buying food and other essentials;
- 22% of participants (n=16) had missed meals in the last month because they did not have enough money to buy food;
- 40% (n=29) had problems getting enough food; and
- 46% (n=33) found it difficult or very difficult to eat a balanced diet.

It should also be noted that although expenditure on food was more than £30 a week for half the sample, the results of the FFQ would suggest that participants were not spending their money on healthy or nutritious food. This would also be supported by the fact that a sizeable proportion of participants were sourcing food from fast food outlets and cafés/restaurants one or more times a week (42% and 29% respectively). Some participants also commented that they found it difficult to eat a healthy diet because of the cost of fresh fruit and vegetables. One participant made the comparison between the cost of a packet of noodles and an apple; both cost the same and although they knew the apple was the healthier option, they chose the noodles because they would last longer and help to fill them up more.

9.4.2 Education

Although all of the participants indicated that they could cook and had access to food preparation and storage facilities, it was evident from the results of the FFQ and from conversations with those working with hostel residents, that even though many perceived themselves to have good cooking skills, this may not actually be the case. In addition many hostel and community workers were concerned about the ability of some hostel residents to adequately budget for, source and prepare healthy food for themselves. In order to address these issues, several hostels consulted have run cookery and lifestyle skills programmes to help their residents, for example the *Cook It!* programme (see Section 3.9.3). In addition the Simon Community and Salvation Army also allocate case workers in order to try and help their residents by developing support plans to address these issues.

Although several approaches have been tried by hostel and community workers to educate the homeless about food, a number of difficulties are faced, such as poor attendance and lack of interest in courses. Hostel managers also talked about the limitations they face in influencing the diet of residents. As accommodation is self-catered residents are therefore responsible for providing their own food; this accommodation is sometimes in flats or bed-sits and therefore staff only have limited access and cannot determine what residents are eating.

Several hostels consulted have also tried to improve the diet of their residents by providing them with fresh fruit and vegetables donated by shops. However, even though the food is free, residents sometimes do not choose to eat the food, either because they do not like it or because they do not know how to prepare it.

9.4.3 Alcohol and Drugs

Alcohol and drugs can also act as a barrier to healthy eating for the homeless. A large proportion of those interviewed (72%) drank alcohol and a further 18% took illegal drugs. Current advice on alcohol consumption is that men should not consume more than 3-4 units per day, women should not consume more than 2-3 units per day. The proportion of participants exceeding the recommended daily benchmarks of ≥ 4 per day for men and ≥ 3 per day for women are given below, as well as an indication of the number of heavy drinkers using cut-offs that were applied in the National Diet and Nutrition Survey.

- 13 men were consuming > 4 units per day;
- 4 men were consuming > 8 units per day (heavy drinkers);
- 4 women were consuming > 3 units per day; and
- 3 women were consuming > 6 units per day (heavy drinkers).

As discussed in Chapter 8, alcohol can have a significant affect on the ability to consume food, for example, by limiting intake because of feeling unwell, causing damage to taste buds and causing health problems such as liver disease. Alcohol and drugs can also result in a loss of appetite (see Section 7.6). One participant commented:

“I can suffer from a lack of appetite some weekends, when I just drink and don’t have the stomach for food”

while another said:

“After clubbing and taking drugs, I don’t eat properly for a couple of days”

9.4.4 Other Issues

The interviews with homeless people and those that work to support them, also revealed that there are several other issues that could act as barriers to healthy eating. One hostel manager interviewed raised the issue of **image**, particularly among young girls, who like many others who are not homeless, are conscious about their appearance and weight, and therefore do not eat properly. Other homeless people interviewed mentioned **peer pressure**, and the need to go out and socialise in order to maintain their network of friends. This, as a result, often left them without enough money for food and other essentials.

In addition, homeless people do not always see food as a priority, they often have more serious concerns, such as finding accommodation and having enough money to survive.

9.5 Impact of Food Poverty on Health

Several studies in recent years have recognised the link between food poverty and health and the impact that poor diet can have on conditions such as coronary heart disease, cancer and diabetes⁶⁸. Although this study cannot predict future health problems for those interviewed, many participants (63%) advised that they had health problems. Common reported conditions included depression (n=29), arthritis (n=5) and other mental health problems (n=5). In addition, BMI calculations also revealed that compared with other studies of the homeless population and the general population, a greater proportion of participants in this study were classified as underweight. A greater proportion were also classified as obese compared to other homeless studies, however, levels of obesity were still lower than the general population.

Although the research results indicate that many of the participants have health problems which may result from being homeless, food poverty can for some, be one of several problems that are faced. This was particularly apparent from talking to those who work with rough sleepers who advised that alcohol, drugs, offending (crime) and psychological problems can also have a serious impact on health, and that food poverty while a concern, needs to be addressed alongside these other issues.

Emotional problems were also an issue for some of the homeless people interviewed. Many respondents reported being depressed (n=29) while others advised that at times they didn't feel like eating or couldn't be bothered cooking. Emotional problems also affected appetite, with 10 participants advising that they suffered from lack of appetite because of problems such as stress, depression and nerves. One hostel manager interviewed emphasised the importance of food, and expressed the view that eating regularly food can bring structure to a homeless person's day, it can also make them feel better, and by cooking together with other residents it can help them to engage and interact with other people.

⁶⁸ Royal College of Physicians of the United Kingdom. (2005) *Food Poverty and Health Briefing Statement*

Another hostel manager also noted the behavioural problems (such as Attention Deficit Hyperactivity Disorder (ADHD)) that poor diet can cause, especially among children staying at their hostel. These findings are similar to those of Centrepoint's (see Section 3.10) which also noted the health and emotional problems that food poverty can cause, such as feeling tired, headaches, depression, losing weight, lack of concentration, motivation, self-esteem.

9.6 Gaps in Food Provision

As discussed above, the financial situation of participants impacted considerably on their ability to eat a healthy and balanced diet. Some hostels have tried to address this by contacting shops and supermarkets in order to encourage donations of food for their residents. However those interviewed reported several difficulties in dealing with shops and supermarkets, particularly around regulations and 'red tape' regarding the safe disposal of food. As a result, few currently had agreements in place with shops and supermarkets, while others had ended their arrangements because of the regulations and time commitment involved to ensure that regulations were met.

Although it is difficult for hostels at present to put arrangements in place with shops, those consulted recognised the benefits of having these arrangements in place. Networks for the redistribution of food have been in place in GB, Ireland and further a field for a number of years, for example, FareShare (which operates in England and Scotland), the Dublin City Food Bank (Ireland) and the Emergency Food Relief System in Virginia (USA). As part of this research FareShare were consulted. They advised that while they do not currently operate in Northern Ireland at present, their strategy is to begin working here within the next three years. Service providers that we spoke with were supportive of FareShare operating in Northern Ireland.

10. RECOMMENDATIONS

10.1 Introduction

In line with the aims of this research, this chapter sets out recommendations for FSA in relation to tackling food poverty among the homeless population in Northern Ireland.

We have outlined six recommendations and where possible we have tried to develop these in line with FSA's current strategic plan (which has among its key aims to make it easier for all consumers to choose a healthy diet) and the Agency's ongoing research into food poverty.

10.2 Recommendation 1 – Remit and Role of FSA

It was clear from talking to consultees that there is limited knowledge and a certain amount of confusion about the work of FSA, in particular its remit in relation to other bodies (such as *Safefood* and the HPA), the Agency's role regarding food poverty and homelessness, and its fit with other homeless service providers in Northern Ireland.

We therefore recommend that FSA undertake work to raise its profile in Northern Ireland with homeless service providers and other stakeholders within the homeless sector. FSA should clarify its remit and role in general and in particular its role in relation to food poverty and social exclusion with these stakeholders. FSA has a clear role to play in helping to support, encourage and develop existing service provision and policy responses to tackle food poverty among the homeless population in Northern Ireland.

The completion of this research represents the ideal opportunity for FSA to organise a conference or information session, inviting key stakeholders across the homeless sector in Northern Ireland. FSA could use this event to disseminate findings, to present information about the types of support it provides and the work undertaken by FSA with other low-income groups e.g. students. The event could also be used to formulate an action plan in conjunction with other stakeholders to tackle food poverty among the homeless and developing on existing work in this area.

10.3 Recommendation 2 – Education

Our discussions with service providers revealed that several programmes and initiatives have been established in recent years to assist the homeless with budgeting, sourcing and preparing food including for example the *Cook It!* and *Energise* programmes. Consultees advised that these programmes were well received by homeless people. However some difficulties have occurred in securing attendance at courses by the homeless. Both these programmes have also been funded through National Lottery grants and are therefore short term in nature. We understand that these programmes are currently in the process of being evaluated.

It was clear from the results of the interviews with homeless people that many still require assistance with budgeting, sourcing and preparing healthy food. There was also a perception among many participants that healthy food (such as fruit and vegetables) was expensive and therefore they choose cheap (but not nutritious) food instead. Consultees also acknowledged that more work needed to be undertaken in this area, but that it was often dependent on having the resources available to carry out this work. It was also suggested by some consultees that more work needs to be undertaken in educating the homeless about the negative impacts of not eating healthily – i.e. the potential risks of coronary heart disease, cancer and diabetes.

An opportunity exists for FSA to work with existing service providers in order to develop a longer term and sustainable programme to addressing food poverty among the homeless population. Any programmes or initiatives created should cover areas such as health, nutrition, life skills, budgeting and cooking. They should also be developed in partnership with existing providers and should also draw on lessons learned and findings from the ongoing evaluations of these programmes. A tailored and innovative approach will be required in order to address issues such as attendance and lack of interest from participants. Temporary accommodation staff should also be trained to deliver these programmes to both encourage attendance and ensure its sustainability.

We are aware that FSA has been working with low-income households and students, and therefore in developing an approach to food poverty among the homeless, there is an opportunity for FSA to draw upon the work it is currently undertaken with these groups. For example, in order to address the perception that healthy food is expensive, FSA could tailor the cookbook it is developing for students on low incomes for homeless people.

10.4 Recommendation 3 – Catered Provision

Although this research did not directly interview homeless people accessing catered accommodation/provision, those supplying catered services to the homeless (i.e. Extern, the Welcome Centre and HomePlus) were consulted. These providers indicated that they would welcome advice from FSA on how to provide healthy and nutritious food for those they cater for, in particular for rough sleepers who have specific needs.

FSA is currently, through its work with students, working with caterers at Queen's University and the University of Ulster and providing advice on preparing nutritious and affordable meals for students. There is an opportunity for FSA to adapt the work already undertaken with university caterers and work with service providers that cater for the homeless. In addition, although the above mentioned organisations catering for the homeless follow food hygiene standards, there may be an opportunity for FSA to provide additional advice on food safety issues and guidelines.

10.5 Recommendation 4 – Further Research

The undertaking of this study was welcomed by interview participants and consultees. A number of interview participants commented that it had made them think more about the food they ate, while consultees acknowledged that this research was important in order to understand in more detail the issue of food poverty among the homeless population.

As outlined in Section 3.10 limited research has been undertaken in the area of food poverty and homelessness especially in Northern Ireland, and the majority of the studies undertaken have focused on examining the diet and nutritional status of homeless people. As outlined in Section 2.4 there are several limitations to this research, however, resources depending, we believe that there is the opportunity for FSA to undertake further research on areas not addressed in detail by this research i.e. rough sleepers and catered provision.

Many consultees expressed an interest in the findings of this research, and therefore as discussed above in Section 10.2, we would recommend that FSA consider organising a conference or an information session for key stakeholders. It will also be important for the results to be fed back to the PSI Working Group on Homelessness (see Section 3.6.2) in order to inform their future activities, strategies and recommendations to Government.

10.6 Recommendation 5 – Ability to Afford Healthy Food

Our research has highlighted that although participants had good access to shops and supermarkets many were choosing not to buy healthy and nutritious food (such as fruit and vegetables) because they found this type of food expensive.

We would therefore recommend that FSA consider a range of options in order to address the issue of affordability of healthy food for the homeless. These options could include:

- investigating the feasibility of assisting FareShare to establish in Northern Ireland. FareShare works with FSA in England (with food safety procedures and training on food safety guidelines) and therefore we recommend that FSA draw upon this relationship and actively encourage FareShare to locate in Northern Ireland; and
- utilising approaches that have been used in other projects that have aimed to address food poverty among the homeless – e.g allotments⁶⁹ (to help residents grow their own fruit and vegetables) and box schemes (where residents pool money to buy fruit and vegetables).

⁶⁹ Examples of allotment projects include: St Francis House, Oxford, The Porch Steppin' Stone Centre, Oxford and Homeless Action

10.7 Recommendation 6 – Advocacy

Through the consultations with service providers and other key stakeholders, it was emphasised that there is a need to further highlight the issue of food poverty among the homeless. We therefore believe that there is a role for FSA (in conjunction with other key stakeholders) to raise the profile of food poverty and homeless and to advocate to policy makers and government the need to address the issues involved. This should be done through existing structures such as the PSI Working Group on Homelessness and the Rough Sleepers Forum.

There is also a need to encourage policy makers to examine existing policies such as the Homelessness and Anti-Poverty strategies to ensure that future versions and any new policies contain reference to and actions for tackling food poverty among the homeless.

APPENDIX I
INTERVIEW GUIDE

APPENDIX II
METHODOLOGY

METHODOLOGY

This section outlines the approach that was employed by Deloitte for the research into food poverty and homelessness in Northern Ireland.

1. Project Initiation

Following a successful tendering process Deloitte was appointed in January 2006 to undertake this research into food poverty and homelessness in Northern Ireland. A project initiation meeting was held with FSA in order to initiate the project, clarify requirements and agree the approach to the research. Following this meeting a Project Initiation Document was produced by Deloitte which outlined the objectives and scope of the research, the research approach to be used, associated risks and management arrangements.

2. Review of Literature and Policy Context

Following the project initiation stage Deloitte examined a range of relevant documentation to ensure that our team had a good understanding of the current strategy, policy and legislative issues relating to food poverty and homelessness. Research that has been conducted in recent years into food poverty and homeless was also reviewed, in order to gain an understanding of this research and to help develop our own research approach. The output of our review is presented in Chapter 3.

3. Development of Primary Research Approach

This section outlines the approach to developing and piloting the data collection methods used to interview homeless people for this research. The sampling frame used to conduct the interviews is also discussed.

Selection of Data Collection Methods

The aims of this research required Deloitte to utilise a recognised nutritional data collection methodology in order to assess the extent to which homeless people are vulnerable to poor diets and inadequate nutrition. In selecting an appropriate research tool two main methods were considered:

- **24 Hour Recall** – this method involves participants being asked by the interviewer to recall foods they have consumed in the previous 24 hours. For each food item recalled, participants are then asked where the food was consumed, who prepared the food and how they acquired the item (e.g. purchased by them, obtained from other people, obtained through charitable source etc.); and
- **Food Frequency Questionnaire** – this method involves participants recalling food and drink intake over a selected period. The questionnaire consists of a list of food items with pre-coded classifications of frequency of consumption.

Through discussions with the FSA it was decided that the most suitable method of assessing dietary intake for this research would be through using a FFQ. The questionnaire used in this research was a modified version of the FFQ used in the US Nurses Health Study⁷⁰ with a food list that was adapted to include foods that were commonly consumed within the UK⁷¹ and Northern Ireland.

The administration of the FFQ formed the first part of the interview approach. In addition a semi-quantitative discussion guide was developed which asked participants questions about sourcing, preparing and storing food, expenditure on food, diet and health (see Appendix I). The third part of the approach involved measuring participant's blood pressure, height and weight.

Piloting

In order to test the approach, it was piloted with six volunteers from the Simon Community's Peer Education Group, 'Outspoken' and with a rough sleeper attending the Welcome Centre.

Our original approach to this research was to interview 10 rough sleepers in Belfast and 70 homeless people staying in temporary accommodation across Northern Ireland. However, following the pilots it was concluded that the interview guide was not suitable to use with rough sleepers. Therefore it was agreed with FSA that the approach for this group should be altered and instead interviews would be carried out with managers and staff working for the Welcome Centre and HomePlus in order to discuss the issues faced by rough sleepers and to obtain sample menus of the food provided to them.

Following the pilot exercise, some modifications were made to the FFQ and discussion guide to reflect issues highlighted through this process. A copy of the final interview guide used is attached at Appendix I.

Sampling Frame

In order to ensure that a balanced sample of homeless people were interviewed, a sampling frame was developed. We therefore aimed to interview:

- 50% of the sample in Belfast and 50% outside of Belfast;
- slightly more males than females (46% v 54%);
- single people and families (60% v 40%); and
- a broad range of ages from 16+.

⁷⁰ Willett WC, *et al.* (1985) *Reproducibility and validity of semiquantitative food frequency questionnaire*
Willett WC, *et al.* (1988) *The use of a self-administered questionnaire to assess diet four years in the past*

⁷¹ Day NE, *et al.* (2002) *Epidemiological assessment of diet: a comparison of a 7-day diary with a food frequency questionnaire using urinary markers of nitrogen, potassium and sodium*

Overall the sample (n=72) has met these criteria, however some difficulties were experienced in accessing temporary accommodation facilities which catered for families and older people. As a result 27% of the sample (n=20) is made up of families, while only three participants (4%) were over the age of 50. The sample is however broadly consistent with NIHE homeless statistics.

4. Recruitment of Participants

Deloitte in consultation with FSA, Simon Community and the NI Council for the Homeless developed a list of temporary accommodation providers that could be approached in order to recruit participants for the research.

The research manager from Deloitte directly approached each temporary accommodation provider and asked the manager to help identify homeless people that would be willing to take part in the interviews. The managers took various approaches to recruitment, including displaying posters about the research, asking for volunteers and directly approaching hostel residents. The only criterion for inclusion in the research was that participants must have been homeless for more than 30 days.

5. Conducting Interviews

The interviews were undertaken by experienced Deloitte researchers who had undertaken training on the administration of the FFQ and blood, height and weight measurements.

As outlined above the interview was conducted in three stages:

- the Food Frequency Questionnaire (FFQ);
- a semi-quantitative discussion guide which asked questions about sourcing, preparing and storing food, expenditure on food, diet and health; and
- blood pressure, height and weight measurements.

The interview took between 45 minutes and one hour to complete.

Confidentiality

Interviews took place in the temporary accommodation provider's premises. In most cases a dedicated room or office was provided so that each interview could be conducted in private. In some instances this was not possible due to the facilities available and in these situations a quiet area of a room (e.g. common room) was used.

Prior to the commencement of the interview each participant was advised that:

- all information provided would be treated in absolute confidence;
- no information in the report would be linked, in any way, to any individual participant;
- the interview could be stopped at any point if they requested; and
- they were free to decline to answer particular questions.

Food Frequency Questionnaire

The FFQ was administered by the interviewer in order to avoid potential problems with literacy. For each food item, participants were asked to indicate their usual consumption from nine frequency categories, ranging from never or <1/month to \geq six times per day. The FFQ was semi-quantitative and so did not include specific questions on portion size but specified medium servings defined by natural (e.g. apple, slice of bread) or household units (e.g. glass, cup, spoon).

Energy and nutrient intakes were calculated using a food analysis database based on UK food composition tables (WISP, Tinuviel Software, Warrington, UK). As described by Bingham et al⁷², nutrient intakes were calculated by multiplying the frequency of food consumption by standard portion weights to obtain grams of each food consumed per day. These were then converted to nutrient intake using an appropriate food table code. 'Medium serving' or units were specified (pints, slices, teaspoons etc). The weights of 'medium serving' portions were derived from experience with other dietary surveys and from published values⁷³. Reported results for micronutrient intake are based only on dietary intake and do not take into account additional nutrient contributions from vitamin or mineral supplements. Values for vitamin A are expressed as retinol equivalents⁷⁴.

Vitamin A potency as μg retinol equivalents –

$$= \mu\text{g retinol} + \frac{\mu\text{g } \beta\text{-carotene equivalents}}{6}$$

Measurement of Weight, Height and Blood Pressure

Body weight was measured using SECA mechanical floor scales. Participants were dressed in as light clothing as possible with all items removed from pockets.

Height was measured using a SECA Leicester portable height measure to the nearest 0.1cm. Participants stood straight with their head in the Frankfurt plane, feet together, knees straight, and heels, buttocks and shoulder blades in contact with the vertical surface of the stadiometer as recommended by Gibson⁷⁵.

Participants were requested to remove shoes before height and weight measurements were recorded. If subjects were unwilling to do so, it was noted that these measurements were made with shoes on.

Blood pressure was measured three times from the right arm, using an automated Omron MX3 sphygmomanometer after the participant had been sitting quietly for at least five minutes. An average value from the three measurements was calculated for systolic and diastolic blood pressure.

⁷² Bingham SA, et al. (1997) *Validation of dietary assessment methods in the UK arm of EPIC using weighed records, and 24-hour urinary nitrogen and potassium and serum vitamin C and carotenoids as biomarkers*

⁷³ Crawley H (1988). *Food Portion Sizes*

Bingham SA, et al. (1997) *Validation of dietary assessment methods in the UK arm of EPIC using weighed records, and 24-hour urinary nitrogen and potassium and serum vitamin C and carotenoids as biomarkers*

⁷⁴ Food Standards Agency (2002). *McCance and Widdowson's The Composition of Foods*

⁷⁵ Gibson, RS. (2005) *Principles of nutritional assessment*, second edition

Payment

A payment of £20 was made directly to each interviewee after the interview to acknowledge their participation in the research.

6. Key Stakeholder Consultation

A number of interviews were also conducted with key service providers for the homeless, namely:

- **rough sleepers** –managers and staff working for the Welcome Centre and HomePlus were interviewed;
- **interviews with key service providers for the homeless** – representative from the following organisations and service providers were interviewed:
 - the Northern Ireland Housing Executive (NIHE), the Department for Health, Social Services and Public Safety (DHSSPS), Council for the Homeless, Simon Community and North & West Belfast HSS Trust Health Action Zone (HAZ) and FareShare; and
 - hostel managers, community dieticians and the homeless healthcare co-ordinator for North & West Belfast HSS Trust.

The full list of the organisations consulted is available at Appendix III.

APPENDIX III
LIST OF CONSULTEES

Name	Position / Organisation
Margaret Henry	Deputy Director, Council for the Homeless NI
David Carroll	Director, Simon Community NI
Margo McClure	Social and Life Skills Co-ordinator, Extern
Kath Elliott	National Operations Manager, Fareshare
Susan Semple	Homeless Healthcare Co-ordinator, North & West Belfast Health and Social Services Trust
Grainne McMacken	Community Dietician, North & West Belfast Health and Social Services Trust
Martin Morgan	Team Leader, North & West Belfast Health Action Zone
Michael Graham	Homeless Strategy Officer, Northern Ireland Housing Executive
Dr Naresh Chada	Senior Medical Officer, Department of Health Social Services and Public Safety
Pauline McFerrin + Ronald Cairns	Centre Managers, Salvation Army – Glen Alva Family Centre
Debbie Lawlor	Hostel Manager, Simon Community – Falls Road
Lillian McGuigan and Jo McGuigan	Hostel Managers, Welcome Centre
Michael Devlin	Outreach Worker, HomePlus

APPENDIX IV
FFQ RESULTS TABLES

See attached document

APPENDIX V
REFERENCES

- Bajekal M, Primates P, Prior G eds. *Health Survey for England 2001*. London: TSO, 2003.
- Bingham SA, Gill C, Welch A, Cassidy A, Runswick SA, Oakes S, Lubin R, Thurnham DI, Key TKA, Roe L, Khaw K-T, Day NE. *Validation of dietary assessment methods in the UK arm of EPIC using weighed records, and 24-hour urinary nitrogen and potassium and serum vitamin C and carotenoids as biomarkers*. *International Journal of Epidemiology* 1997;26:S137-S151.
- Centrepont. *Breadline, health and social exclusion briefing*. London: Centrepont, Winter 2002
- Combat Poverty Agency. *Summary of Food Poverty and Policy*. Dublin: CPA, 2004
- Crawley H. *Food Portion Sizes*. London: Her Majesty's Stationery Office, 1988.
- Darmon N, Coupel J, Deheeger M, Briend A. *Dietary inadequacies observed in homeless men visiting an emergency night shelter in Paris*. *Public Health Nutrition* 2001;4:155-161.
- Darnton-Hill I, Truswell AS. *Thiamin status of a sample of homeless clinic attenders in Sydney*. *Medical Journal of Australia* 1990;152:5-9.
- Day NE, McKeown N, Wong MY, Welch A, Bingham S. *Epidemiological assessment of diet: a comparison of a 7-day diary with a food frequency questionnaire using urinary markers of nitrogen, potassium and sodium*. *International Journal of Epidemiology* 2002;30:309-317.
- Department for Social Development. *Promoting the Social Inclusion of Homeless People Addressing the Causes and Effects of Homelessness in Northern Ireland*. Belfast: DSD, 2002
- Department of Health. *Dietary reference values for food energy and nutrients for the United Kingdom: Report of the Panel on Dietary Reference Values*. Report on Health and Social Subjects; 41. Committee on Medical Aspects of Food Policy. London: HMSO, 1991.
- Department of Health. *Folic Acid and the Prevention of Disease*. Report on Health and Social Subjects 50. London: TSO, 2000.
- Department of Health, Social Services and Public Safety. *Investing in Health*. Belfast: DHSSPS, 2002
- Drake MA. *The nutritional status and dietary adequacy of single homeless women and their children in shelters*. *Public Health Reports* 1992;107:312-319.
- Evans N, Dowler E. *Food, health and eating among single homeless and marginalized people in London*. *Journal of Human Nutrition and Dietetics* 1999;12:179-199.
- Food Standards Agency. *McCance and Widdowson's The Composition of Foods*, Sixth summary edition. Cambridge: Royal Society of Chemistry, 2002.
- Food Standards Agency. *Review of existing UK work on food and low-income initiatives. A report for the Food Standards Agency by Food Matters*. London: FSA, 2003a
- Food Standards Agency. *Consumer Committee Annual Report 2002-03*. London: FSA, 2003b

Food Standards Agency. *Strategic Plan 2005 – 2010, Putting Consumers First*. London: FSA, 2005

Galvin MA, Kiely M, Harrington KE, Robson PJ, Moore R, Flynn A. *The North/South Ireland Food Consumption Survey: the dietary fibre intake of Irish adults*. Public Health Nutrition 2001;4:1061-8.

Gibson RS. *Principles of nutritional assessment*, second edition. Oxford University Press, 2005.

Harrington KE, McGowan MJ, Kiely M, Robson PJ, Livingstone MBE, Morrissey PA, Gibney MJ. *Macronutrient intakes and food sources in Irish adults: findings of the North/South Ireland Food Consumption Survey*. Public Health Nutrition 2001;4:1037-42.

Henderson L, Gregory J, Swan G. *The National Diet and Nutrition Survey: Adults aged 19 to 64 years, Volume 1: Types and Quantities of Foods Consumed*. London: TSO, 2002.

Henderson L, Gregory S, Irving K, Swan G. *The National Diet and Nutrition Survey: Adults aged 19 to 64 years, Volume 2: Energy, Protein, Carbohydrate, Fat and Alcohol intake*. London: TSO, 2003a.

Henderson L, Irving K, Gregory J, Bates CJ, Prentice A, Perks J, Swan G, Farron M. *The National Diet and Nutrition Survey: Adults aged 19 - 64 years, Volume 3: Vitamin and Mineral intake and Urinary Analytes*. London: TSO, 2003b.

Hickey C, Downey D. *Hungry for change: Social exclusion, food poverty and homelessness in Dublin*. Focus Ireland, 2003.

Joseph Rowntree Foundation. *Findings – Poverty and Social Exclusion in Britain*. London: JRF, 2000

Langnäse K, Müller MJ. *Nutrition and health in an adult urban homeless population in Germany*. Public Health Nutrition 2001;4:805-11.

Laven GT, Brown KC. *Nutritional status of men attending a soup kitchen: a pilot study*. American Journal of Public Health 1985;75:875-8.

Lee RD, Niemen DC. *Nutritional Assessment – Third Edition*. McGraw-Hill: New York, 2003. Margetts BM, Pietinen P. *European Prospective Investigation into Cancer and Nutrition: Validity studies on dietary assessment methods*. International Journal of Epidemiology 1997;26(Suppl 1): S1-S4.

Luder E, Boey E, Buchalter B, Martinez-Weber C. *Assessment of the Nutritional Status of Urban Homeless Adults*. Public Health Reports 1989; Vol.104 No. 5: 451- 7

Margetts BM, Pietinen P. *European Prospective Investigation into Cancer and Nutrition: Validity studies on dietary assessment methods*. International Journal of Epidemiology 1997;26(Suppl 1): S1-S4.

Marks GC, Hughes MC, van der Pols JC. *Relative validity of food intake estimates using a food frequency questionnaire is associated with sex, age, and other personal characteristics*. Journal of Nutrition 2006;136:459-465

McCarthy SN, Harrington KE, Kiely M, Flynn A, Robson PJ, Livingstone MBE, Gibney MJ. *Analyses of the anthropometric data from the North/South Ireland Food Consumption Survey*. Public Health Nutrition 2001;4:1099-1106.

McKeown NM, Day NE, Welch AA, Runswick SA, Luben RN, Mulligan AA, McTaggart A, Bingham SA. *Use of biological markers to validate self-reported dietary intake in a random sample of the European Prospective Investigation into Cancer United Kingdom cohort*. American Journal of Clinical Nutrition 2001;74:188-196

Northern Ireland Housing Executive. *The Homelessness Strategy, Making a Real Difference to People's Lives*. Belfast: NIHE, 2002

Office of the First Minister and Deputy First Minister. *New TSN – The Way Forward Towards an Anti-Poverty Strategy*. Belfast: OFMDFM, 2004

Office of the First Minister and Deputy First Minister. *New TSN – The Way Forward – A Consultation Document Phase 2*. Belfast: OFMDFM, 2005

Office of National Statistics. *Family Spending, A Report on the 2004-05 Expenditure and Food Survey*. London: ONS, 2005

Riches, G. *Hunger, Food Security and Welfare Policies: Issues and debates in first world societies*. London: Nutrition Society, 1996

Royal College of Physicians of the United Kingdom. *Food Poverty and Health, Briefing Statement*. London: Faculty of Public Health, 2005

Ruston D, Hoare J, Henderson L, Gregory J, Bates CJ, Prentice A, Birch M, Swan G, Farron M. *The National Diet and Nutrition Survey: Adults aged 19 - 64 years, Volume 4: Nutritional status (anthropometry and blood analytes), blood pressure and physical activity*. London: TSO, 2003.

Scientific Advisory Committee on Nutrition. *Salt and Health*. London: TSO, 2003

Shu XO, Yang G, Jin F, Liu D, Kushi L, Wen W, Gao YT, Zheng W. *Validity and reproducibility of the food frequency questionnaire used in the Shanghai Women's Health Study*. European Journal Clinical Nutrition 2004;58:17-23.

Tarasuk V, Dachner N, Jinguang L. *Homeless Youth in Toronto are Nutritionally Vulnerable*. American Society for Nutritional Sciences 2005;135:1926-33

The Housing (Northern Ireland) Order 1988. London: The Stationary Office, 1988

Willett WC, Sampson L, Brown ML. *The use of a self-administered questionnaire to assess diet four years in the past*. American Journal of Epidemiology 1988;127:188-199.

Willett WC, Sampson L, Stampfer M. *Reproducibility and validity of semiquantitative food frequency questionnaire*. American Journal of Epidemiology 1985;122:51-65.

World Health Organisation (WHO). *Obesity: preventing and managing the global epidemic*. International Obesity Task Force. 3-5 June 1997, Geneva: WHO, 1998.