Food poverty in rural Northern Ireland

Fact-book for the pre-test community survey for the 'Decent Food for All (DFfA)' Programme

Prepared by

Orla Walsh, Steve Barron, Lorraine Fahy & Kevin P Balanda

On behalf of

The Food Research Group
at the Institute of Public Health in Ireland (IPH)

December 2006

ACKNOWLEDGEMENTS

The Food Poverty Research Group in the Institute of Public Health in Ireland would like to thank Donal McDade from Social and Market Research for coordinating and conducting the fieldwork for this survey.

We would also like to gratefully acknowledge the grant provided by the Food Safety Promotion Board that allowed this work to be undertaken.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

BACKGROUND

"Decent Food for All" (DFfA) is a three-year integrated, partnership-based programme committed to reducing food poverty and addressing inequalities in physical and financial access to safe healthy food in the Armagh and Dungannon area of Northern Ireland. DFfA is led by the Armagh and Dungannon Health Action Zone (ADHAZ) and involves the delivery of a range of programmes and workshops which provide practical community based focused help and advice on food issues and nutrition.

A comprehensive research and evaluation programme entitled *'All-island learning from the Decent Food for All programme'* runs throughout the lifetime of the programme, which ensures effective evaluation, and the sharing of best practices and experiences. The research and evaluation program is coordinated by the Institute of Public Health in Ireland (IPH) with cooperation from ADHAZ. Funding for the research is provided by the Food Safety Promotion Board. To take into account background changes not directly attributable to the DFfA Programme a matched comparison area was selected in the Newry/Mourne area of Co. Down.

An accurate measure of the changes that have occurred over the period of the DFfA programme is required. Valid estimates of change are based on measures before and after the programme. Pre-test and post-test community surveys provide a wide range of measures. This fact-book highlights the findings from the pre-test community survey.

The aims of the pre-test survey were to:

- Provide pre-test measures of the Key Performance Indicators underpinning the Key Expected Outcomes of the DFfA programme;
- Identify factors influencing these pre-test measures; and
- Contribute to the development of the programmes in DFfA.

METHODOLOGY

The Institute commissioned Social and Market Research (SMR) to conduct the pre-test community survey for DFfA.

The pre-test survey conducted in 2003/2004 involved an interviewer-administered structured questionnaire. Participants comprised a random sample of individuals selected from electoral wards making up the intervention area (Armagh and Dungannon Health and Social Services Trust) and comparison

area (Newry/Mourne Health and Social Services Trust).

Measures were taken to ensure that the sampling methodology employed, produced survey results which were representative of all individuals (aged 18 and over) within the intervention and comparison areas. The Royal Mail Postal Address File was used as the sampling frame for the survey.

A structured questionnaire was prepared by the IPH in consultation with SMR and ADHAZ and included questions related to the Key Expected Outcomes for the DFfA Programme. A pilot study was conducted which tested the content, structure, comprehensibility and acceptability of the questionnaire.

Advance letters were mailed to each household listed in the sample giving notice of the survey. Interviewers made three visits to each address before a household was deemed non-contactable. Fieldwork for the pre-test survey commenced on 24 October 2003 and was completed by 5 March 2004. The survey aimed to generate an achieved sample of 1200. In total 1816 addresses were issued to obtain 1205 interviews, yielding an effective response rate of 66.4%.

RESULTS

Results are presented according to Key Performance Indicators (KPIs) which underpin the DFfA Key Expected Outcomes (KEOs). These KPIs are related to questions from the community survey questionnaire.

Table 1 DFfA Key Expected Outcomes and their related Key Performance Indicators obtained from the pre-test community survey

Key Outcome 1.1
Improved accessibility to safe and healthy produce

- Financial access (benefit/budget maximisation)
- Physical access

Indicators

- Average distance in miles travelled to main food shop (Question A8)
- Percentage of population who do not substantially reduce the amount of money spent on food weekly to allow the payment of other household bills or expenses (Question A10)
- Percentage of population who do not identify factors related to physical and financial access to food not identified as a barrier to eating healthier (Question B10)

Key Outcome 1.2
Greater demand for (affordable) safe and healthy food.

Indicators

- Percentage of population who are very/quite concerned about food safety issues (Question F5)

Key Outcome 1.3
More influence on local food production and supply economies

Indicators
- Percentage of population who are aware of local food-related activities/initiatives (Question G2)

Key Outcome 2.1
Increased awareness/knowledge of food & nutrition, safety & hygiene and food poverty

Indicators
- Percentage of population that consider at least one healthy option when shopping for food (Question A11)
- Percentage of population who can name all of the five main food groups (Question E3)
- Percentage of population who have heard of the term 'food poverty' and can provide an example of what it means (Questions D1 & D2)
- Percentage of the population that comply with food safety practices (Question F3)
- Percentage of population that are quite or very concerned about food safety issues (Question F5)

Key Outcome 2.2
Improved health behaviours
- Healthier eating choices
- Increased healthy lifestyles
- Improved food hygiene and safety in the home

Indicators
- Percentage of population that eat foods from the fruit & vegetable food group more than once a day (Question B1)
- Percentage of population that eat foods from the Cereals, breads and potatoes food group more than once a day (Question B1)
- Percentage of population that eat foods from the Meat, fish & poultry food group more than once a day (Question B1)
- Percentage of population that eat foods from the dairy food group more than once a day (Question B1)
- Percentage of population that eat foods containing fat and foods containing sugar most days (3+) a week (Question B1)
- Percentage of population that comply with food safety practices when dealing with food (Question F3)
- Percentage of population that have been regularly physically active for 6 months or longer (Question C1)
- Percentage of population that have tried at least one positive dietary change in the last year (Question B7)

Key Outcome 2.3
- Greater social inclusion
- Increased community development & participation

- Less individual and community isolation
- Greater intergenerational working
- Empowerment
- Increased self-esteem
- Encouragement towards education, training & employment

Indicators
- No indicators available from pre-test survey

Key Outcome 3.1
Enhanced knowledge base and research
- Greater measure of knowledge regarding populations knowledge, attitudes and cultural ideas of food

Indicators
- No indicators available from pre-test survey

Key Outcome 4.1
Enhanced food-related strategy and policy development
- Locally, Regionally and Nationally

Indicators
- Percentage of population that mentioned at least one organisation who advertised about food safety and nutrition issues in the last 6 months (Question G1)
- Percentage of population who are aware of local food related activities/initiatives (Question G1)

Key Outcome 4.2
Strong support networks for food and well-being
- Networks for learning and sharing – locally, regionally and nationally

Indicators
- No indicators available from pre-test survey

A number of key themes have emerged from the study findings and are presented under the following headings:

1. Food poverty - physical and financial access to safe and healthy food
2. Demographic and socioeconomic differences in dietary knowledge, dietary behaviour and physical activity
3. Demographic and socioeconomic differences in awareness of food related advertising and local food initiatives
4. Concern about food safety and hygiene doesn't mean good food safety and hygiene practices
5. Pre-test differences between intervention and comparison areas for DFfA

Note: Key themes 1-4 summarise some of the overall significant relationships between socioeconomic and demographic factors and KPIs

where no significant differences exist between intervention and comparison groups. Key theme 5 summarises the relationship between socioeconomic and demographic factors and KPIs where significant differences exist between intervention and comparison survey groups.

KEY THEMES

1. Food poverty- physical and financial access to safe and healthy food

Food Poverty has been defined as "*the inability to afford or have reasonable access to food which provides a healthy diet'* (Feichtinger, 1996). Physical and financial access are two crucial factors which strongly influence dietary choice, particularly among low income income groups (Friel and Conlon, 2004; Friel et al. 2004; Coakley, 2001).

In order to determine physical and/or financial access to safe and healthy food in this survey, three indicators were used:

- Average distance in miles travelled to main food shop
- Percentage of population who don't substantially reduce the amount of money spent on food weekly to allow the payment of other household bills or expenses
- Percentage of population who don't identify factors related to physical and financial access to food not identified as a barrier to eating healthier

Findings demonstrate that inequalities existed in relation to physical and financial access to food before the DFfA programme began. This relationship is particularly obvious when findings are analysed according to employment status, border/non-border area of residence and age.

For example:

- More unemployed people reported substantially reducing the amount of money spent on food in the past to allow the payment of other household expenses. More unemployed people also identified factors related to physical and financial access to food as barriers to healthy eating compared with individuals who were employed, retired or economically inactive.
- More people living in non-border areas reported substantially reducing the amount of money spent on food in the past to allow the payment of other household expenses. Additionally more people living in non-border areas identified factors related to physical and financial access to food as barriers to healthy eating compared with individuals living in border areas.
- More younger people than older people reported substantially reducing the amount of money spent on food in the past to allow the payment of other household expenses. A higher proportion of younger people identified factors

related to physical and financial access to food as barriers to healthy eating and travelled further to get to the shop where they do their main food shopping.

2. Demographic and socioeconomic differences in dietary knowledge, dietary behaviour and physical activity

Demographic and socioeconomic characteristics have a significant influence on indicators related to dietary knowledge, dietary behaviour and physical activity. These differences are particularly evident when results are analysed according to gender, age, education and employment status.

Women appear to make more positive dietary choices and are more aware of healthy eating than men. However men are more physically active than women.

For example:

Men scored lower than women for the following indicators related to dietary knowledge and behaviour:

- Consideration of healthy options when shopping for food
- Knowledge of the five main food groups
- Consumption of fruit and vegetables more than once a day
- Trying at least one positive dietary changes to the diet in the last year

However, significantly less women than men report being regularly physically active.

Older people appear to make more positive dietary choices and are more aware of healthy eating than younger people. However younger people are more physically active than older people.

For example:

Older people scored lower than younger people for the following indicators related to dietary behaviour and physical activity:

- Consumption of cereals, breads and potatoes more than once a day
- Consumption of foods high in fat and high in sugar most days a week (3+)
- Regularly physically active for six months or longer.

Younger people score lower than older people for the following indicators related to dietary behaviour:

- Consideration of healthy options when shopping for food
- Consumption of milk and milk products more than once a day

Clear differences exist between individuals with different levels of education in relation to dietary knowledge and behaviour. A higher level of education is consistent with better dietary knowledge and behavioural patters.

For example:

People with no education (ED1) scored lower than individuals in the three other education categories (ED2 = GCSE/O Levels/NVQ Levels 1,2, ED3 = A Levels/NVQ Level 3, ED4 =Third Level/NVQ Level 4,5) for the following indicators:

- Knowledge of the five main food groups
- Consumption of fruit and vegetables more than once a day
- Consumption of cereals, breads and potatoes more than once a day
- Trying at least one positive dietary changes to the diet in the last year

Unemployed people are less likely than those who are employed retired and economically inactive to make more positive dietary choices.

For example:

Unemployed people scored lower than those who are employed, retired and economically inactive for the following indicators:

- Consumption of fruit and vegetables more than once a day
- Consumption of milk and milk products more than once a day
- Consideration of healthy options when shopping for food

3. Demographic and socioeconomic differences in awareness of food related advertising and local food initiatives

Demographic and socioeconomic characteristics have a significant influence on indicators related to awareness of food related advertising and local food initiatives. These differences are particularly evident when results are analysed by age, education and rural or urban area of residence.

To indicate awareness of food related advertising and local food initiatives two questions were asked relating to:

- Awareness of local food-related initiatives
- Awareness of advertising from organisations about food safety and nutrition in the last 6 months

For example:

- Older people are less aware of local food related initiatives and of advertising from organisations about food safety and nutrition than younger people.

- Unemployed people are less aware of local food related initiatives and of advertising from organisations about food safety and nutrition compared with people who are employed, retired or economically inactive.
- Respondents living in rural areas were less aware of local food related initiatives and of advertising from organisations about food safety and nutrition compared with people living in urban areas.

4. Concern about food safety and hygiene doesn't mean good food safety and hygiene practices

Overall findings show that concern about food safety issues doesn't necessarily translate into compliance with food safety practices. Overall 74% of respondents reported being quite or very concerned about food safety issues but only 16% of respondents reported always complying with food safety practices when dealing with food.

There were no overall significant differences between the demographic and socioeconomic factors in relation to compliance with food safety practices when dealing with food. In terms of concern about food safety issues however, overall significant differences were observed for five of the six socioeconomic/demographic factors including, gender, age, urban/rural residence, border/non-border residence and level of education.

5. Pre-test differences between intervention and comparison areas for DFfA

The results section above summarised the relationship between demographic and socio-economic factors and indicators where the relationship was the same in the comparison and intervention survey groups. However it is important to note that differences did exist between intervention and comparison groups before the DFfA programme began.

The comparison group scored significantly lower on the following indicators:
- Average distance travelled to main food shop
- Consumption of cereals, breads and potatoes more than once a day
- Trying at least one positive dietary changes to the diet in the last year

The intervention group scored significantly lower on the following indicators:
- Not substantially reducing the amount of money spent on food weekly to allow the payment of other household bills or expenses
- Compliance with food safety practices
- Awareness of local food-related initiatives

- Advertising from organisations about food safety and nutrition in the last 6 months

In some instances the relationship between demographic or socio-economic factors and KPIs was dependent on survey group. This effect was particularly evident for border/non-border residence, rural/urban residence and level of education.

These baseline differences between the survey groups will be taken into account when comparing pre and post test survey findings.

SOME IMPORTANT NOTES

The importance of local context when designing community food interventions

Significant variations in findings across intervention/comparison groups, rural/urban area of residence and border/non-border area of residence highlight the complex role of locality in influencing food behaviour. These variations show the importance of contextualising community food interventions in the local circumstances. The variations also highlight a possible advantage that community food intervention programmes have over mass media campaigns as interventions can be adapted to suit the local context of a community.

The context in which community food interventions operate can play an important role in influencing their implementation and effectiveness. An intervention that has been shown to be effective in one setting may turn out to be ineffective somewhere else. These issues need to be taken into account when:

1. designing community food interventions
2. considering the applicability and transferability of an intervention like Decent Food for All to other localities and;
3. extrapolating these results to other areas of rural Northern Ireland.

This is not a food poverty prevalence study for Northern Ireland

The pre-test community survey is not a study of the prevalence of food poverty in Northern Ireland.

The overall aim of the survey is to provide a measure of the Key Performance Indicators underpinning the Key Expected Outcomes of the DFfA programme. Some of these indicators are central to food poverty issues. Others are related to awareness of local and national food-related activities, food safety and hygiene, demand for healthy food, dietary behaviours and social inclusion.

Furthermore, the sample population was selected from the DFfA programme and

comparison areas and was not conducted on a national scale.

Findings should be interpreted in the context of other elements of the Decent Food for All evaluation programme

When evaluating the outcomes of the Decent Food for All programme, the findings from this pre-test community study must be interpreted in conjunction with other elements of the DFfA evaluation programme, in particular the post-test community survey.

The pre-test survey was conducted before the DFfA programme began; the post-test community survey is conducted after the DFfA programme is finished. When the post-test survey is completed, comparative analysis of the findings from these two surveys will facilitate an accurate measure of change over the period of the DFfA programme.

In addition the community surveys do not include KPIs for every DFfA KEO. To provide a more comprehensive and valid understanding of the achievement of all of the project KEOs and the role of DFfA in tackling food poverty in Armagh and Dungannon, the findings from the community surveys will need to be interpreted in the context of other components of the research and evaluation.

1. INTRODUCTION

1.1 DECENT FOOD FOR ALL (DFfA)

DFfA is a three-year integrated, partnership-based programme committed to addressing food poverty and inequalities in physical and financial access to safe healthy food based in the Armagh and Dungannon area of Northern Ireland. DFfA is led by the Armagh and Dungannon Health Action Zone (ADHAZ).

The ADHAZ partnership consists of key stakeholders across different sectors (councils, housing, education, health, community etc.) The DFfA project has been implemented and delivered within 12 target wards across the Armagh and Dungannon Council areas. The selection of these areas was determined, in part, by the two main factors that are known to influence food poverty, namely material disadvantage and geographical access to healthy food.

DFfA involves the delivery of a range of programmes and workshops in the Armagh and Dungannon area, which provide practical community based focused help and advice on food issues and nutrition, thereby supporting local communities, families and individuals to achieve balanced safe diets.

1.2 DFfA PROJECT STAGES

The table below outlines the project stages of the Decent Food for All programme.

1.2.1 Programme Initiation (Sept 02 - Mar 03)

This stage of the programme involved securing commitment and engagement from partners and developing an agreed programme proposal based on local needs and priorities. Programme Initiation also ensured that appropriate management and operational structures were developed that continue to be overseen by the DFfA Operational Group. Funding for the programme was secured from FSPB and FSA.

1.2.2 Programme Intervention (Apr 03 - Dec 06)

Programme Intervention's main aim was to tackle the barriers that are found to cause food poverty. The community food team worked with local communities to deliver programmes and workshops which provide practical community based

focused help and advice on food issues and nutrition, thereby supporting local communities, families and individuals to achieve balanced safe diets.

1.2.3 Research and Evaluation (Sep 02 – Feb 07)

A major element of the program is to test the effectiveness of the DFfA programme at reducing food poverty. To allow this a significant research and evaluation programme entitled *'All-island learning from the Decent Food for All programme'* runs throughout the lifetime of the programme, which ensures effective evaluation, and the sharing of best practices and experiences.

1.3 ALL-ISLAND LEARNING FROM THE DECENT FOOD FOR ALL PROGRAMME

A comprehensive research project (the 'All-Ireland Learning from the DFfA Programme') runs in parallel with the DFfA programme, as a co-operation between the Institute of Public Health in Ireland (IPH) and ADHAZ. Funding for the research is provided by the Food Safety Promotion Board. To take into account background changes not directly attributable to the DFfA Programme a suitable comparison area was selected in the Newry/Mourne area of Co. Down.

The aims of the research are:

1. To identify aspects of the programme which increase food knowledge and reduce food poverty in rural and urban communities; in socio-economic disadvantaged areas; and in border areas;
2. To identify aspects of the programme which can be applied across Northern Ireland and the island;
3. To identify aspects of the programme which can be used to support all-island communication and marketing campaigns; and
4. To asses the overall effect of the DFfA Programme in the programmme area.

The main components of the research and evaluation plan are:

- Pre-test and post-test community surveys
- Pre-test and post-test mapping of physical and financial access to healthy food
- Ethnographic study of food and food consumption
- Qualitative studies to further assess the role of social and psychological factors
- Community observational studies to further assess local regeneration and social inclusion
- Evaluation of local networks for health

1.3.1 THE COMMUNITY SURVEYS

An accurate measure of the changes that have occurred over the period of the DFfA programme is required. A wide range of valid estimates of change is obtained from collecting measures before and after the programme has been implemented. Pre-test and post-test community surveys are conducted as one of these measures of change.

The Institute commissioned Social and Market Research (SMR) to conduct the pre-test community survey as part of the evaluation of the Armagh and Dungannon Health Action Zone's 'Decent Food for All Programme' (DFfA).

The pre-test survey conducted in 2003/2004 involved an interviewer-administered structured questionnaire. Participants comprised a random sample of individuals selected from electoral wards making up the programme area (Armagh and Dungannon Health and Social Services Trust) and comparison area (Newry/Mourne Health and Social Services Trust).

The aims of the pre-test survey were to:

- Provide pre-test measures of the indicators underpinning the key expected outcomes of the DFfA programme;
- Identify factors influencing these pre-test measures; and
- Contribute to the development of the programmes in DFfA.

Fieldwork for the survey commenced on 24 October 2003 and was completed by 5 March 2004. Fieldwork in the programme area was completed before fieldwork in the comparison area commenced.

1.3.2 KEY OUTCOMES AND INDICATORS

A number of Key Expected Outcomes (KEO) for DFfA have been identified which reflect the benefits the programme is expected to bring. These outcomes are highlighted in Table 1.3.2 and include: Local regeneration, Community change, Research and Knowledge and Policy change. Key Performance Indicators (KPI), related to questions from the community survey questionnaire, have been identified which underpin these KEOs and enable us to see if they have been successfully achieved (table 1.3.2).

Table 1.3.2 DFfA Key Expected Outcomes and their related Key Performance Indicators obtained from the pre-test community survey

Key Outcome 1.1
Improved accessibility to safe and healthy produce
- Financial access (benefit/budget maximisation)
- Physical access

Indicators
- Average distance in miles travelled to main food shop (Question A8)
- Percentage of population who do not substantially reduce the amount of money spent on food weekly to allow the payment of other household bills or expenses (Question A10)
- Percentage of population who do not identify factors related to physical and financial access to food not identified as a barrier to eating healthier (Question B10)

Key Outcome 1.2
Greater demand for (affordable) safe and healthy food.

Indicators
- Percentage of population who are very/quite concerned about food safety issues (Question F5)

Key Outcome 1.3
More influence on local food production and supply economies

Indicators
- Percentage of population who are aware of local food-related activities/initiatives (Question G2)

Key Outcome 2.1
Increased awareness/knowledge of food & nutrition, safety & hygiene and food poverty

Indicators
- Percentage of population that consider at least one healthy option when shopping for food (Question A11)
- Percentage of population who can name all of the five main food groups (Question E3)
- Percentage of population who have heard of the term 'food poverty' and can provide an example of what it means (Questions D1 & D2)
- Percentage of the population that comply with food safety practices (Question F3)
- Percentage of population that are quite or very concerned about food safety issues (Question F5)

Key Outcome 2.2
Improved health behaviours
- Healthier eating choices
- Increased healthy lifestyles
- Improved food hygiene and safety in the home

Indicators

- Percentage of population that eat foods from the fruit & vegetable food group more than once a day (Question B1)
- Percentage of population that eat foods from the Cereals, breads and potatoes food group more than once a day (Question B1)
- Percentage of population that eat foods from the Meat, fish & poultry food group more than once a day (Question B1)
- Percentage of population that eat foods from the dairy food group more than once a day (Question B1)
- Percentage of population that eat foods containing fat and foods containing sugar most days (3+) a week (Question B1)
- Percentage of population that comply with food safety practices when dealing with food (Question F3)
- Percentage of population that have been regularly physically active for 6 months or longer (Question C1)
- Percentage of population that have tried at least one positive dietary change in the last year (Question B7)

Key Outcome 2.3

- Greater social inclusion
- Increased community development & participation
- Less individual and community isolation
- Greater intergenerational working
- Empowerment
- Increased self-esteem
- Encouragement towards education, training & employment

Indicators

- No indicators available from pre-test survey

Key Outcome 3.1

Enhanced knowledge base and research
Greater measure of knowledge regarding populations knowledge, attitudes and cultural ideas of food

Indicators

- No indicators available from pre-test survey

Key Outcome 4.1

Enhanced food-related strategy and policy development

- Locally, Regionally and Nationally

Indicators

- Percentage of population that mentioned at least one organisation who advertised about food safety and nutrition issues in the last 6 months (Question G1)
- Percentage of population who are aware of local food related activities/initiatives (Question G1)

Key Outcome 4.2
Strong support networks for food and well-being

- Networks for learning and sharing – locally, regionally and nationally

Indicators

- No indicators available from pre-test survey

2. METHODS

2.1 SURVEY METHODOLOGY

The survey was implemented on a face-to-face basis among a random sample of individuals selected from electoral wards making up the intervention and comparison areas. The objective was to conduct interviews with a total of 1200 residents, or 300 residents within each of the four areas: intervention rural; intervention urban; comparison rural; and comparison urban.

Table 2.1 Sample Profile

ARMAGH & DUNGANNON HSS TRUST	**NEWRY / MOURNE HSS TRUST**
INTERVENTION WARDS (RURAL) N=300	COMPARISON WARDS (RURAL) N=300
Caledon (Border)	Newtownhamilton (Non-Border)
Killylea (Border)	Creggan (Border)
Derrynoose (Border)	Silverbridge (Border)
Carrigatuke (Border)	Forkhill (Border)
Washing Bay (Non-Border)	Camlough (Non-Border)
INTERVENTION WARDS (URBAN) N=300	COMPARISON WARDS (URBAN) N=300
Keady (Non-Border)	Ballybot (Non-Border)
Ballysaggart (Non-Border)	Drumgullion (Non-Border)
Abbey Park (Non-Border)	St. Patricks (Non-Border)
Callan Bridge (Non-Border)	
Coalisland N (Non-Border)	St Marys (Non-Border)
Coalisland S (Non-Border)	Derrymore (Non-Border, Urban)
Coalisland W and Newmills (Non-Border)	Fathom (Non-Border, Urban)

Figure 2.1 Map of Armagh and Dungannon area

2.2 SAMPLING DESIGN

Given the important contribution of the survey results to the DFfA Programme evaluation, it was imperative that the sampling methodology employed was representative of all individuals (aged 18 and over) within the areas. To achieve this the following procedures were applied:

- within each of the four cells, households were selected from each ward on a simple random sample basis. The number of households selected within each ward was directly proportional to the number of households in that ward as a proportion of the total number of households across all of the selected wards in the area or cell.
- following the selection of households to represent each ward within each area, one individual (aged 18+) was randomly selected to participate in the survey.

2.3 SAMPLING FRAME

The Royal Mail Postal Address File (PAF) was used as the sampling frame for the survey. The PAF is an established means of drawing household samples, and contains a listing of all domestic properties in Northern Ireland. The PAF also has an electoral ward field appended to each record, which was essential for this project. The PAF is updated twice annually by Royal Mail.

To ensure that all individuals (aged 18+) within selected households had an equal chance of being selected, and to ensure that the sample reflects the demographic profile of the area, individuals were randomly selected from each household. On contacting each household, the person aged 18+ with the most recent birthday was selected for interview.

Given that the methodology was household based, individuals in smaller households had a greater chance of being selected compared with individuals in larger households. To control for this distorting effect the data was weighted by household size prior to analysis.

2.4 QUESTIONNAIRE DESIGN

A structured questionnaire was prepared by the IPH in consultation with SMR and ADHAZ. A copy of the questionnaire is attached as Appendix 3.

The questionnaire included questions related to the key expected outcomes for the DFfA Programme (see section 1.3.2) other influencing factors, and details of individuals and households. Its content included questions on:

- awareness of food-related activities
- food safety and hygiene
- food poverty issues
- demand for healthy food
- health behaviours (eating choices, physical activity, etc)
- local availability of affordable healthy foods
- social inclusion

2.5 PILOT

SMR conducted a pilot survey on 20 respondents. The pilot served the following purposes:

- testing the content, structure, comprehensibility and acceptability of the questionnaire;
- allowed interviewers to provide feedback on general reaction to the survey and any perceived omissions; and,
- provided an indication of the likely co-operation level with the survey.

Pilot interviews were conducted by SMR fieldworkers and the outcomes were communicated to the IPH and ADHAZ.

2.6 INTERVIEWER BRIEFING

An interviewer briefing was held on the 15th of October 2003, in the Lagan Valley Island Complex in Lisburn before interviewing began. This briefing was carried out by SMR's Project Director and attended by representatives of the IPH and ADHAZ.

2.7 FIELDWORK

Advance letters were mailed to each household listed in the sample giving notice of the survey. This letter was mailed by Armagh and Dungannon Health Action Zone and is attached as Appendix 2. Interviewers made three visits to each address before a household was deemed non-contactable.

Fieldwork for the main survey began on 24 October 2003 and was completed by 5 March 2004.

2.8 SURVEY OUTCOMES

Table 2.8 presents the electoral wards included in the survey with their proportionate household populations, required number of interviews (based on a sample of 1200), and achieved number of interviews.

Table 2.8 Household populations, required number of interviews and achieved interviews

ARMAGH & DUNGANNON HSS TRUST	% Pop.	Required Interviews	Achieved Interviews
INTERVENTION WARDS (RURAL)			

Caledon (Border)	4.9	59	69
Killylea (Border)	4.8	57	57
Derrynoose (Border)	5.8	69	60
Carrigatuke (Border)	4.6	55	47
Washing Bay (Non-Border)	5.0	60	60
SUBTOTAL		**300**	**293**
INTERVENTION WARDS (URBAN)			
Keady (Non-Border)	3.4	41	41
Ballysaggart (Non-Border)	3.5	42	42
Abbey Park (Non-Border)	3.0	36	33
Callan Bridge (Non-Border)	3.8	46	60
Coalisland N (Non-Border)	4.3	51	51
Coalisland S (Non-Border)	3.9	47	48
Coalisland W and Newmills (Non-Border)	3.2	37	37
SUBTOTAL		**300**	**312**
NEWRY / MOURNE HSS TRUST			
COMPARISON WARDS (RURAL)			
Newtownhamilton (Non-Border)	4.3	52	53
Creggan (Border)	4.9	59	59
Silverbridge (Border)	5.2	62	63
Forkhill (Border)	5.8	69	69
Camlough (Non-Border)	4.8	57	57
SUBTOTAL		**300**	**301**
COMPARISON WARDS (URBAN)			
Ballybot (Non-Border)	4.1	49	49
Drumgullion (Non-Border)	4.5	54	54
St. Patricks (Non-Border)	5.0	60	59
St Marys (Non-Border)	3.6	43	43
Derrymore (Non-Border)	4.0	48	48
Fathom (Non-Border)	3.8	46	46
SUBTOTAL		**300**	**299**

TOTAL	**100**	**1200**	**1205**

2.9 RESPONSE RATE

The survey aimed to generate an achieved sample of 1200. Taking account of the level of non contactable individuals a wastage rate of 35% was considered likely. To account for this 50% more individuals were drawn from each electoral ward than the required number of interviews. In total 1816 addresses were issued. Table 2.9.1 shows the response rate for the survey. Table 2.9.2 shows the reason for non achievement of interviews. In total 1816 addresses were issued to obtain 1205 interviews, giving an effective response rate of 66.4%.

Table 2.9.1 Response Rate

Total Interviews Obtained	**Addresses Allocated**	**Response Rate**
1205	1816	66.4%

Table 2.9.2 Breakdown of Unused Cases

	N	**%**
Interviews	1205	66.4
Refused	336	18.5
Sick/Elderly/Infirm	83	4.6
Unobtainable	192	10.6
Total Issued	1816	100.00

2.10 SAMPLE CHARACTERISTICS

Table 2.10 shows how the weighted survey sample compares between the intervention and comparison groups with the proportions in brackets:

Table 2.10 Selected characteristics of survey sample

	Intervention	**Comparison**	**Total**
Overall	590	626	1215

Gender			
Male	293 (50%)	305 (49%)	598
Female	297 (50%)	319 (51%)	616
	590	625	1214
Age			
18-29	284 (49%)	291 (47%)	575
30-44	122 (21%)	133 (21%)	255
45-59	93 (16%)	99 (16%)	191
60+	87 (15%)	97 (16%)	184
	586	619	1205
Rural/Urban			
Rural	252 (43%)	278 (44%)	530
Urban	338 (57%)	347 (56%)	685
	590	626	1215
Border Status			
Border	187 (32%)	168 (27%)	355
Non-border	403 (68%)	458 (73%)	861
	590	626	1215
Education			
None (ED1)	297 (50%)	274 (44%)	571
GCSE/O Levels /NVQ Levels 1, 2 (ED2)	177 (30%)	165 (26%)	342
A Levels / NVQ Level 3 (ED3)	63 (11%)	113 (18%)	176
Third Level / NVQ Level 4, 5 (ED4)	52 (9%)	74 (12%)	126
	590	626	1215
Employment status			

Economically Inactive	42 (7%)	84 (13%)	126
Employed	262 (44%)	260 (42%)	522
Unemployed	212 (36%)	195 (31%)	407
Retired	73 (12%)	85 (14%)	158
	589	625	1213

2.11 REPRESENTATIVENESS

In the survey sample, there was an over representation of females, peopled aged over 60, people living in non-border areas and people who are unemployed and retired. Additionally, there is an under representation of people in the 18-29 year age category. Survey responses were post-hoc weighted so that the profile of the weighted sample was representative of the Northern Ireland population. This ensures that findings are not biased because the sample contains too many or too few people of a given demographic/socioeconomic category. Table 2.11 compares the figures from the Northern Ireland population with the weighted sample. Further information on post-hoc weighting is outlined in section 2.12 on Statistical Methods.

Table 2.11 Comparing population with the weighted sample

		Population	Weighted sample
Gender			
Comparison	Male	49.3%	48.9%
	Female	50.7%	51.1%
Intervention	Male	49.8%	49.6%
	Female	50.2%	50.4%
Age			
Comparison	18-29	24.1%	46.9%
	30-44	30.8%	21.5%
	45-59	22.8%	16.0%
	60+	22.3%	15.7%
Intervention	18-29	25.7%	48.5%
	30-44	30.0%	20.8%
	45-59	22.8%	15.8%
	60+	21.5%	14.9%
Rural/Urban			
Comparison	Rural	44.7%	44.5%
	Urban	55.3%	55.5%
Intervention	Rural	42.5%	42.7%
	Urban	57.5%	57.3%
Border Status			
Comparison	Border	27.4%	26.8%
	Non border	72.6%	73.2%
Intervention	Border	34.0%	31.7%
	Non border	66.0%	68.3%
Education			
Comparison	None (ED1)	47.1%	43.8%
	GCSE/O Levels /NVQ Levels 1, 2 (ED2)	33.2%	29.4%
	A Levels / NVQ Level 3 (ED3)	8.4%	15.0%
	Third Level / NVQ Level 4, 5 (ED4)	11.3%	11.9%

2.12 STATISTICAL METHODS

The KPIs derived from the survey items consisted of two types of measures: KPIs with dichotomous data types that had two possible values (e.g. people were classified as physically active or not physically active) or KPIs with continuous data types that could represent a wide range of possible values (e.g. distance in miles that respondents travelled to the shop where they did the main food shopping for the household).

KPIs were analysed in terms of the following demographic factors: respondents' gender; respondents' age; whether the respondent lived in an urban or rural area; whether the respondent lived in a border or non-border area.

KPIs were also analysed in terms of the socio-economic factors education and employment status. Respondents' level of education was classified on four levels: i) none; ii) GCSE / O Levels / NVQ Levels 1, 2; iii) A Levels / NVQ Level 3; and iv) Third Level / NVQ Level 4, 5. Respondent's employment status individuals was classified as employed (self-employed, full-time employed or part time employed), unemployed, retired or economically inactive (individuals who are seeking work, are not seeking work and students).

The analysis focused on the differences between the intervention group and the comparison group and the role of demographic and socio-economic factors. If the relationship between the KPI and a factor was significantly different between the survey groups, the survey groups were analysed separately. If the relationship between the KPI and a factor was not significantly different between survey groups, the groups were analysed together.

Differences in KPIs between the comparison and intervention groups were assessed using contingency tables and the chi square statistic. For dichotomous indicators, logistic regression was used to see if the effect of demographic or socio-economic variables was modified by survey group. For continuous indicators, effect modification was assessed using ANOVA.

The percentages calculated from the survey responses are, as expected, not the true percentages – they are observed in the survey sample rather than the whole population. Because of this, p-values are calculated which help to decide if a difference in observed percentages represents a real difference in the true percentages, or if it may simply be due to chance variation.

All p-values give the likelihood that, when there is no real difference in the true percentages, a difference larger than the one observed in the sample would have occurred by chance. A 'small' p-value suggests the observed difference is statistically significant (unlikely to be due to chance variation) and so represents a real difference in the true percentages. A 'large' p-value suggests that the observed difference is not statistically significant (may be due to chance

variation) and that there is no difference in the true percentages. To control the likelihood of spuriously significant results, only results with p-values less than 0.01 are considered 'significant'. A p-value greater than or equal to 0.01 is considered to be 'not significant' and is represented in the results tables as 'ns'.

A post-hoc weighting strategy is used to ensure a more accurate representation of the actual population thus ensuring that the results are not biased. The sample is over represented by females, peopled aged over 60, people living in non-border areas and people who are unemployed and retired. There was also a deliberate over sampling in rural areas and under sampling in urban areas since an equal number of residents (300) were selected within each of the four areas, namely, intervention rural; intervention urban; comparison rural; and comparison urban. In addition there is under-representation in the 18-29 year olds as well as the male population. Survey responses were therefore post-hoc weighted so that the gender-age-rural/urban profile of the weighted sample matched the gender-age-rural/urban profile of the population for each of the intervention and comparison groups. This combined weight vector was computed and applied to the dataset.

Cautionary notes

After adjusting for the different gender-age-rural/urban profiles of the intervention and comparison groups of the sample to reduce bias, there are still some minor discrepancies between the weighted sample and population. For example there are more retired and unemployed respondents in the weighted sample compared with the actual population whereas there are slightly less respondents who are economically inactive. There are more 18-29 year olds in the weighted sample compared with the actual population. This is mainly due to the fact that since 18-29 year olds were under-represented in the original sample this resulted in a higher weight being applied to this age-group.

One of the more common problems with significance testing is the tendency for multiple comparisons to yield spurious significant differences even when the null hypothesis is true. However, to control the likelihood of spuriously significant results in this report, only results with p-values less than 0.01 were considered 'significant'.

'Employment Status' and 'education' were used to describe socio-economic status. It was not possible to use data relating to the occupation of the Chief Wage earner of the household due to the poor response to this question.

The educational classification system used in the analysis differs slightly to that of the Northern Ireland Statistics and Research Agency (NISRA).

The published educational classification system used by NISRA is as follows:

I. None

II. Level 1: GCSE (grades D-G), CSE (grades 2-5), 1-4 CSEs (grade 1), 1-4 GCSEs (grades A-C), 1-4 'O' level passes, NVQ level 1, GNVQ Foundation or equivalents.
III. Level 2: 5+ CSEs (grade 1), 5+ GCSEs (grades A-C), 5+ 'O' level passes, Senior Certificate, 1 'A' level, 1-3 AS levels, Advanced Senior Certificate, NVQ level 2, GNVQ Intermediate or equivalents.
IV. Level 3: 2+ 'A' levels, 4+ AS levels, NVQ level 3, GNVQ Advanced or equivalents.
V. Level 4: First degree, NVQ level 4, HNC, HND or equivalents.
VI. Level 5: Higher degree, NVQ level 5 or equivalents.

The above NISRA classifications were subsequently collapsed as follows in order to compare the population with the weighted sample:
ED1= No qualifications
ED2= Level 1 & 2
ED3= Level 3
ED4= Level 4 & 5

For the purpose of the analysis the following classification system was used to describe the level of educational attainment reported by respondents:
ED1= None
ED2= GCSE / O Levels / NVQ Levels 1, 2
ED3= A Levels / NVQ Level 3
ED4= Third Level / NVQ Level 4, 5

3. RESULTS

The results from the pre-test community survey are presented under five headings:

1. Physical and financial access to safe and healthy food
2. Food and nutrition: knowledge and awareness
3. Diet and lifestyle
4. Food safety and hygiene
5. Awareness of food related advertising and local food initiatives

Under each of these heading results will be presented according to Key Performance Indicators which underpin the DFfA Key Expected Outcomes and will eventually enable us to see if these outcomes have been successfully achieved. These indicators are related to questions from the community survey questionnaire.

For each indicator, the comparison and intervention groups were compared in terms of demographic factors (gender; age; rural/urban area of residence; border/non-border area of residence) and socio-economic factors (level of education; employment status).

The following classification system was used to describe the level of educational attainment reported by respondents:

ED1= None
ED2= GCSE / O Levels / NVQ Levels 1, 2
ED3= A Levels / NVQ Level 3
ED4= Third Level / NVQ Level 4, 5

In the case of employment status individuals were classified as Employed (self-employed, full-time employed or part time employed), Unemployed, Retired and Economically Inactive (individuals who are seeking work, are not seeking work and students).

3.1 PHYSICAL AND FINANCIAL ACCESS TO SAFE AND HEALTHY FOOD

3.1.1 Indicator: Average distance in miles travelled to main food shop (Question A8)

Respondents were asked the distance, in miles, travelled to the shop where they did the main food shopping for the household.

The indicator was taken to be the average distance travelled to the main food shop.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 1.1** to improve financial and physical accessibility to safe and healthy produce.

3.1.1.1 Overall average distance

There was a significant difference ($p<0.001$) between the comparison and intervention groups in terms of the average distance travelled in miles to the main food shop. Respondents in the comparison group travelled an average of five miles to their main food shop whereas those in the intervention group travel an average distance of four miles. Overall, respondents travelled an average of 4.6 miles to the main food shop.

3.1.1.2 Role of Demographic factors

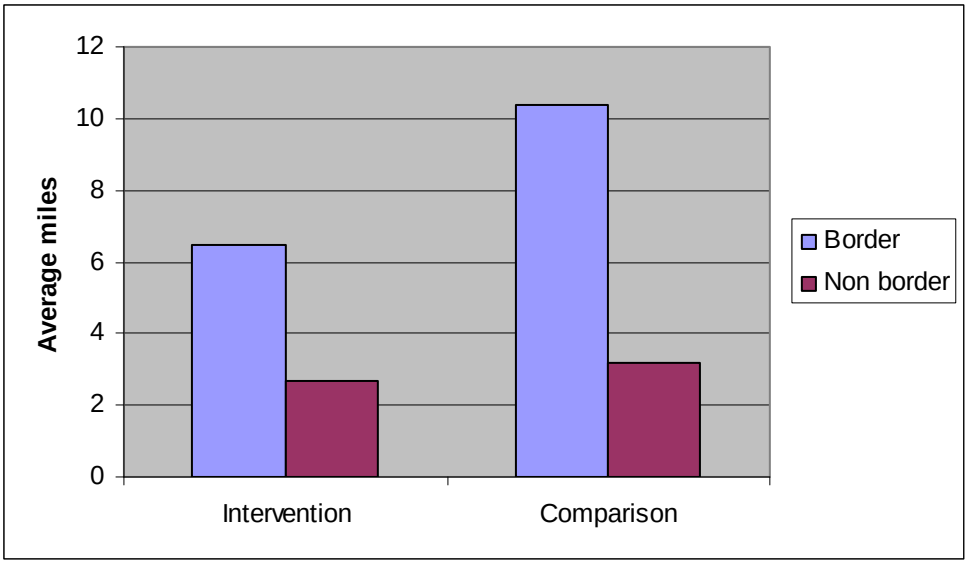
There was no significant difference in the relationship between age and average distance travelled to main food shop in the intervention and comparison group. Overall, the distance travelled to the local food shop is significantly lower amongst respondents aged 60 years and over ($p=0.006$).

The relationship between rural/urban area of residence and average distance travelled in the intervention group is significantly different than the relationship in the comparison group ($p<0.001$). Not surprisingly in both groups those living in urban areas had far less to travel to get to their main food shop compared with their rural counterparts. There was approximately a seven mile difference between rural and urban respondents in the comparison group compared with a smaller distance of four miles in the intervention group.

The relationship between border/non-border area of residence and average distance travelled in the intervention group is significantly different than the relationship in the comparison groups ($p<0.001$). In both groups individuals in non-border areas had less of a distance to travel to the main food shop

compared with those living in border areas however there was approximately a seven mile difference between border and non-border respondents in the comparison group compared with an approximate four mile difference in the intervention group.

Figure 3.1.1.2 Average distance (miles) travelled to main food shop by border status



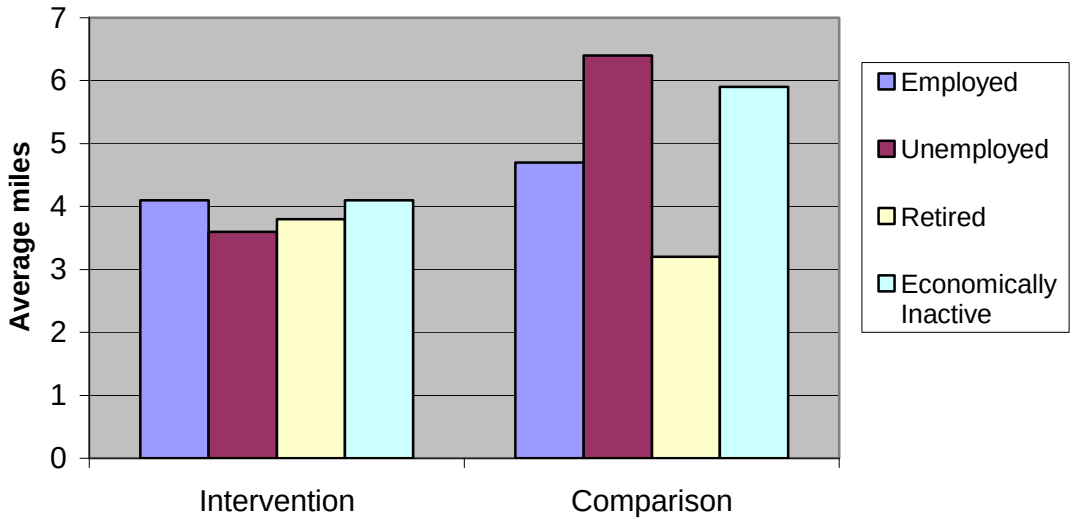
There was no significant gender differences in terms of average distance travelled to main food shop.

3.1.1.3 Role of Socio-economic factors

There was no significant difference in the relationship between education and average distance travelled to food shops in the intervention and comparison group. Overall, respondents in category ED3 travel the farthest distance (six miles) and respondents in the ED1 category travel the smallest distance (four miles; $p<0.001$).

The relationship between employment status and average distance travelled to the main food shop in the intervention group is significantly different than the relationship in the comparison group ($p<0.001$). In the comparison group unemployed respondents travelled furthest (six miles) and in the intervention group employed and economically inactive respondents travelled furthest (four miles).

Figure 3.1.1.3 Average distance (miles) travelled to main food shop by employment status



Summary table 3.1.1 for indicator: Average distance travelled in miles to main food shop (A8)

	Survey group differences	Intervention	Comparison
OVERALL	p<0.001	3.9	5.2
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		3.6	5.1
Female		4.3	5.2
		ns	ns
Age	ns		
18-29		3.8	5.8
30-44		4.2	5.2
45-59		4.3	5.2
60+		3.5	3.3
		ns	p=0.0029
Rural/Urban	p<0.001		
Rural		6.2	9.1
Urban		2.2	2.0
		p<0.001	p<0.001
Border Status	p<0.001		
Border		6.5	10.4
Non-border		2.7	3.2
		p<0.001	p<0.001
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		3.3	4.8
GCSE/O Levels /NVQ Levels 1, 2 (ED2)		4.3	4.9
A Levels / NVQ Level 3 (ED3)		4.7	6.4
Third Level / NVQ Level 4, 5 (ED4)		5.1	4.9
		p<0.001	ns
Employment status	p<0.001		
Employed		4.1	4.7
Unemployed		3.6	6.4
Economically Inactive		4.1	5.9
Retired		3.8	3.2
		ns	p<0.001

3.1.2 Indicator: Percentage of population who do not substantially reduce the amount of money spent on food weekly to allow the payment of other household bills or expenses (Question A10)

Respondents were asked if they ever substantially reduced the weekly amount of money spent on food to pay for household bills or other expenses. The indicator was taken to be the percentage of respondents who did not substantially reduce the amount of money spent on food weekly to allow for the payment of other household bills or expenses.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 1.1** to improve financial and physical accessibility to safe and healthy produce.

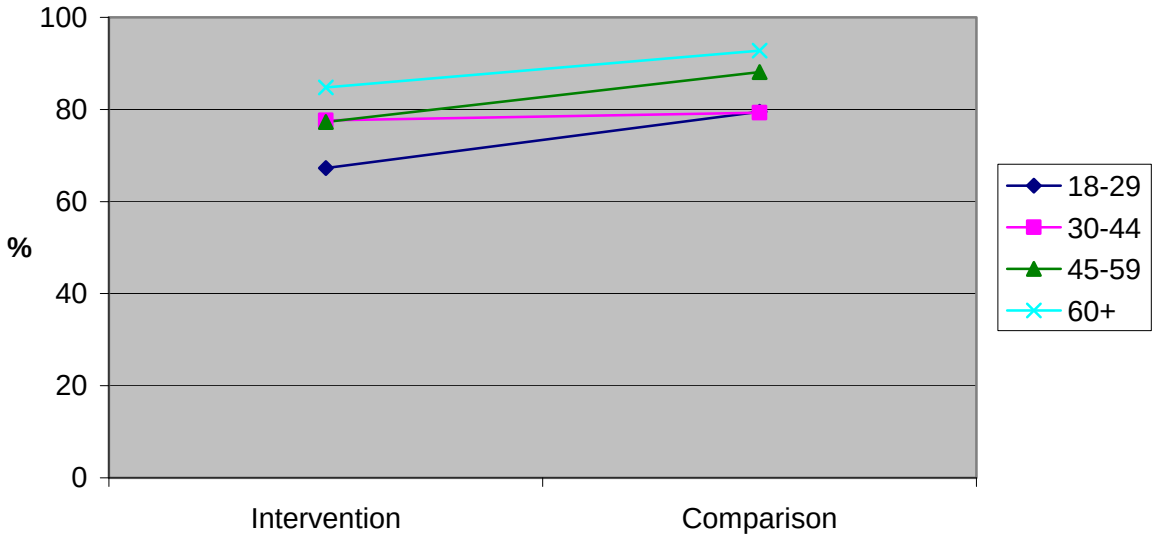
3.1.2.1 Overall response

Significantly more respondents from the comparison group (83%) than the intervention group (74%) reported that they had not substantially reduced their weekly food budget to allow the payment of other household bills and expense ($p<0.001$). Overall, 79% of respondents did not substantially reduce their weekly food budget to pay for bills and other household expenses.

3.1.2.2 Role of Demographic Factors

There was no significant difference in the relationship between age and not reducing the amount of money spent on food weekly to allow for bills/expenses. Overall, as age increases the proportion of respondents that do not reduce the amount of money on food to pay for bills also increases ($p<0.001$).

Figure 3.1.2.2 Proportion of persons who did not reduce the amount of money spent on food to pay for bills by age group



There was no significant difference in the relationship between rural/urban area of residence and not reducing money on food to pay for bills. Overall, 87% of respondents living in rural areas reported that they had never reduced the amount of money spent on food to pay for bills compared with 72% of respondents living in urban areas ($p<0.001$).

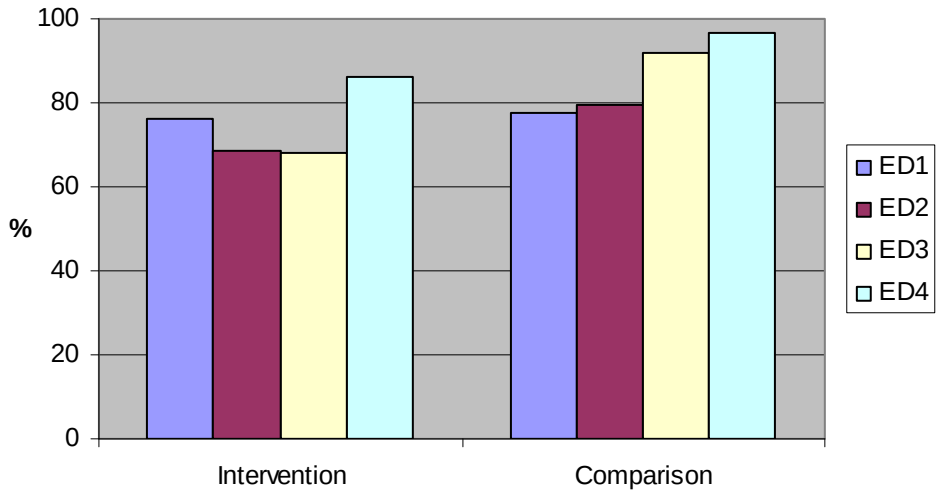
There was no significant difference in the relationship between border/non-border residence in the intervention and comparison groups. Overall, 84% of respondents living in border areas did not reduce money spent on food to pay for bills compared to 76% of respondents living in non-border areas ($p=0.002$).

There were no significant gender differences in terms of those who reported not reducing weekly food budget to pay for other household expenses.

3.1.2.3 Role of Socio-economic factors

The relationship between the education level and reducing money spent on food to pay for bills in the intervention group is significantly different than the relationship in the comparison group ($p=0.004$). In the comparison group the more educated the respondent is the less likely they will report reducing the amount of money spent on food to pay for bills. The relationship was not significant in the intervention group (figure 3.1.2.3).

Figure 3.1.2.3 Proportion of persons who did not reduce the amount of money spent on food to pay for bills by level of education



There was no significant difference in the relationship between employment status and reducing money on food to pay for bills in the intervention and comparison group. Overall, 89% of retired respondents reported not reducing their weekly food budget in the past to pay for bills compared to 70% of unemployed respondents ($p<0.001$).

Summary table 3.1.2 for indicator: Indicator: Percentage of population who do not substantially reduce the amount of money spent on food weekly to allow the payment of other household bills or expenses (Question A10)

	Survey group differences	Intervention	Comparison
OVERALL	p<0.001	73.8%	82.9%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		77.7%	82.6%
Female		70.1%	83.1%
		ns	ns
Age	ns		
18-29		67.3%	79.5%
30-44		77.6%	79.3%
45-59		77.3%	88.1%
60+		84.8%	92.8%
		p=0.006	p=0.007
Rural/Urban	ns		
Rural		82.2%	90.4%
Urban		67.3%	76.9%
		p<0.001	p<0.001
Border Status	ns		
Border		78.7%	90.3%
Non-border		71.5%	80.2%
		ns	p=0.003
SOCIOECONOMIC FACTORS			
Education	p=0.004		
None (ED1)		76.1%	77.6%
GCSE/O Levels /NVQ Levels 1, 2 (ED2)		68.4%	79.3%
A Levels / NVQ Level 3 (ED3)		68.1%	91.9%
Third Level / NVQ Level 4, 5 (ED4)		86.3%	96.5%
		ns	p<0.001
Employment status	ns		
Employed		78.0%	84.9%
Unemployed		64.6%	75.2%
Economically Inactive		77.9%	84.5%

Retired		84.2%	92.2%
		p=0.001	p=0.003

3.1.3 Indicator: Percentage of the population who do not identify factors related to physical and financial access to food as barriers to eating healthier (Question B10)

Respondents were shown a list of factors and asked if any of them discouraged or prevented them from eating more healthy foods. The prompted list of possible physical and financial barriers to eating healthier were:

- Healthy foods are too expensive (where I shop)
- Poor choice of healthy food (where I shop)
- Poor quality of healthy food (where I shop)
- Fruit and vegetables are too heavy to carry
- Transport problems accessing shops where affordable, safe, and healthy food is available

The percentage of people who identified at least one of these as a barrier to eating healthier was used as our indicator.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 1.1** to improve financial and physical accessibility to safe and healthy produce.

3.1.3.1 Overall identification of barriers

Overall, there is no significant difference between the intervention and comparison groups in terms of the identification of factors related to physical and financial access to food as barriers to healthy eating. Overall, 71% of respondents identified no barriers to eating healthier.

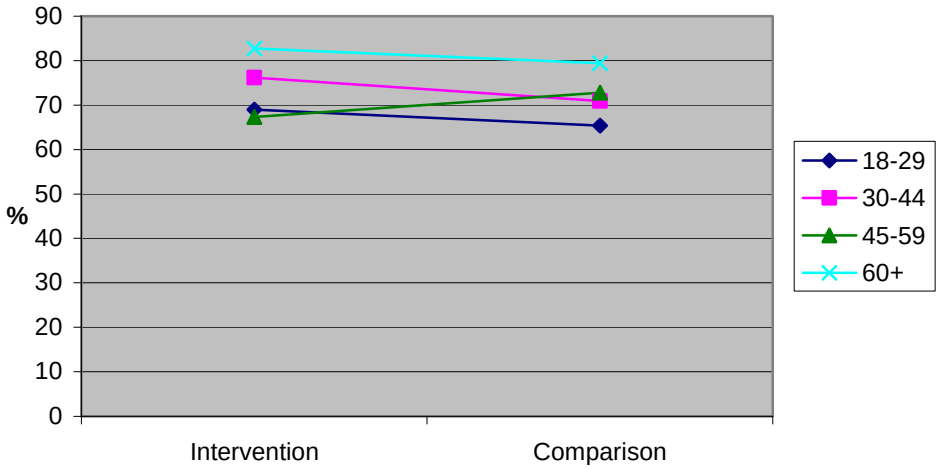
3.1.3.2 Role of demographic factors

There was no significant difference in the relationship between gender and physical/financial access barriers to eating healthier in the intervention and

comparison group. Overall, 79% of males did not identify physical/financial factors as barriers to healthy eating compared with 64% of females (p<0.001).

There was no significant difference in the relationship between age and physical/financial access barriers to eating healthier in the intervention and comparison group. Overall, 81% of those aged 60 years and over did not identify physical/financial factors as barriers to healthy eating compared with 67% of those aged 18-29 years (p=0.003).

Figure 3.1.3.2 Proportion of persons who identified no factors as a barrier to healthier eating by age group



There was no significant difference in the relationship between border/non-border area of residence and physical/financial access barriers to eating healthier in the intervention and comparison group. Overall, 86% of border respondents did not identify physical/financial factors as barriers to healthy eating compared with 65% of non-border respondents (p<0.001).

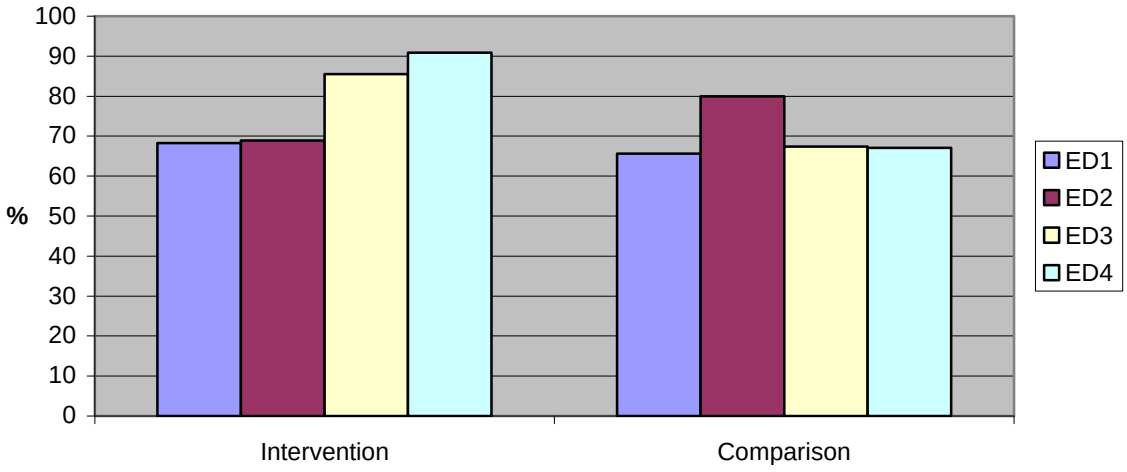
There was no significant difference in the identification of factors related to physical/financial access barriers to eating healthier and rural/urban area of residence.

3.1.3.3 Socio-economic factors

The relationship between level of education and identifying barriers related to physical/financial access to healthy eating in the intervention group was significantly different than the relationship in the comparison group (p<0.001). In the intervention group there is a clear gradient between level of education and the response to this question i.e. as the level of education increases the

proportion of respondents who did not identify physical/financial access factors as barriers to eating healthier also increased. This gradient was not observed in the comparison area (figure 3.1.3.3).

Figure 3.1.3.3 Percentage of respondents who identified no factors as a barrier to healthier eating by education level



There was no significant difference in the relationship between employment status and identifying physical/financial access factors as barriers to eating healthier in the intervention and comparison group. Overall, 82% of retired respondents did not identify any of these factors as barriers to eating healthier compared with 60% of unemployed respondents ($p<0.001$).

Summary table 3.1.3 for Indicator: Percentage of the population who do not identify factors related to physical and financial access to food as barriers to eating healthier (Question B10)

	Survey group differences	Intervention	Comparison
OVERALL	ns	72.3%	69.9%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		81.7%	75.7%
Female		63.1%	64.2%
		p<0.001	p=0.002
Age	ns		
18-29		69.0%	65.4%
30-44		76.2%	70.9%
45-59		67.3%	72.8%
60+		82.7%	79.4%
		ns	ns
Rural/Urban	ns		
Rural		77.1%	70.2%
Urban		68.8%	69.6%
		ns	ns
Border Status	ns		
Border		89.9%	80.8%
Non-border		64.1%	65.9%
		p<0.001	p<0.001
SOCIOECONOMIC FACTORS			
Education	p<0.001		
None (ED1)		68.3%	65.6%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		68.9%	80.0%
A Levels / NVQ Level 3 (ED3)		85.5%	67.4%
Third Level / NVQ Level 4, 5 (ED4)		90.9%	67.1%
		p<0.001	ns
Employment status	ns		
Employed		79.6%	69.8%
Unemployed		56.7%	62.6%
Economically Inactive		88.1%	75.9%
Retired		83.4%	80.5%
		p<0.001	ns

3.2 FOOD AND NUTRITION: KNOWLEDGE AND AWARENESS

3.2.1 Indicator: Percentage of the population that consider at least one healthy option when shopping for food (Question A11)

Respondents were shown a list of issues and asked if they considered any of them when shopping for food. If at least one of the following four healthy food options was mentioned this showed that healthy options are considered:

- Help with weight control
- Fat content of item
- Organic
- Healthy option

This indicator is relevant to the DFfA programme's **Key Expected Outcome 2.1** Increased awareness/knowledge of food & nutrition, safety & hygiene and food poverty.

3.2.1.1 Overall consideration of healthy food options

Overall, there is no significant difference between the intervention and comparison groups in terms of considering healthy options when shopping for good. Overall, 51% of respondents considered healthy options when shopping for food.

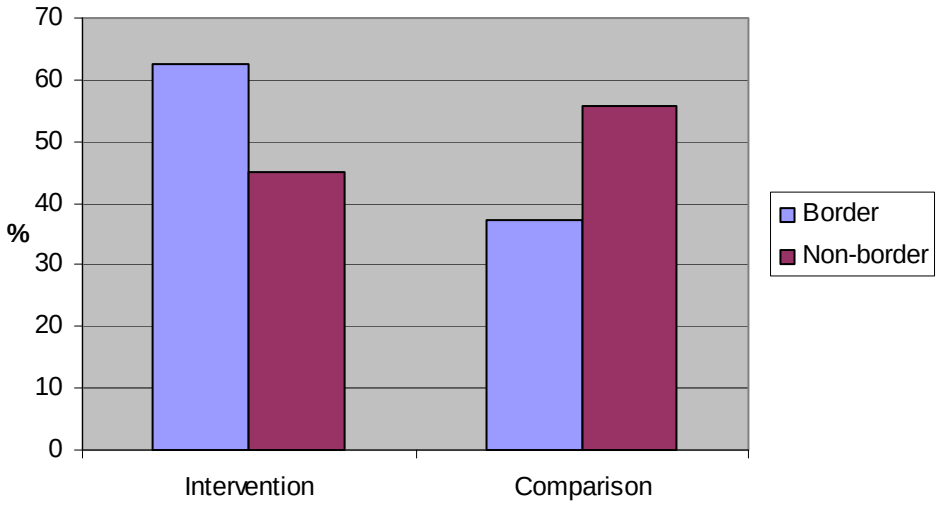
3.2.1.2 Role of demographic factors

There was no significant difference in the relationship between gender and the consideration of healthy options when food shopping in the intervention and comparison groups. Overall, females (58%) were more likely than males (43%) to consider healthy food options when shopping ($p<0.001$).

There was no significant difference in the relationship between age and the consideration of healthy options when food shopping in the intervention and comparison groups. Overall, the youngest age group (18-29 years) were less likely to consider healthy options when shopping for food (42%; $p<0.001$).
The relationship between border/non-border area of residence and consideration of healthy food options when shopping is significantly different in the intervention and comparison groups ($p<0.001$). In the intervention group a higher proportion of respondents living in border areas (63%) consider healthy food options when shopping compared to those living in non-border intervention areas (45%). The

reverse is true in the case of the comparison group where a higher proportion of non-border respondents (60%) consider healthy food options than border respondents (37%; p<0.001).

Figure 3.2.1.2 Proportion of persons who considered healthy food options when shopping by border/non-border

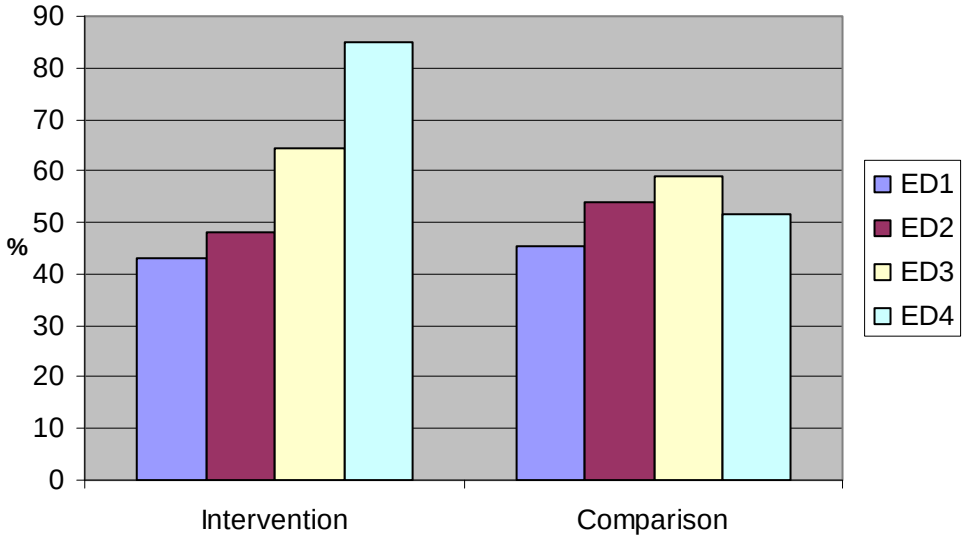


There was no significant difference in the consideration of healthy food options when shopping and rural/urban area of residence.

3.2.1.3 Role of socio-economic factors

The relationship between level of education and consideration of healthy food options when shopping is significantly different in the intervention and comparison groups (p<0.001). In the Intervention group, as education level increased so too did the consideration of healthy food options (p<0.001). This gradient was not observed in the comparison group.

Figure 3.2.1.3 Percentage of respondents who identified no factors as a barrier to healthier eating by education level



There was no significant difference in the relationship between employment status and the consideration of healthy options when food shopping in the intervention and comparison groups. Overall, 58% of retired respondents considered healthy food options compared with almost 40% of unemployed people ($p<0.001$).

Summary table 3.2.1 for Indicator: Percentage of the population that consider at least one healthy option when shopping for food (Question A11)

	Survey group differences	Intervention	Comparison
OVERALL	ns	49.4%	49.1%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		43.0%	43.7%
Female		58.1%	57.7%
		p<0.001	p<0.001
Age	ns		
18-29		41.2%	43.5%
30-44		55.7%	56.0%
45-59		65.5%	58.8%
60+		58.0%	56.0%
		p<0.001	ns
Rural/Urban	ns		
Rural		52.5%	47.4%
Urban		49.2%	53.7%
		ns	ns
Border Status	p<0.001		
Border		62.6%	37.3%
Non-border		45.0%	55.9%
		p<0.001	p<0.001
SOCIOECONOMIC FACTORS			
Education	p<0.001		
None (ED1)		43.1%	45.5%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		48.2%	54.1%
A Levels / NVQ Level 3 (ED3)		64.4%	59.0%
Third Level / NVQ Level 4, 5 (ED4)		84.9%	51.6%
		p<0.001	ns
Employment status	ns		
Employed		55.8%	56.9%
Unemployed		41.8%	37.9%
Economically Inactive		48.7%	56.0%
Retired		59.4%	56.8%
		p=0.009	p<0.001

3.2.2 Indicator: Percentage of population who can name all of the five main food groups (Question E3)

Respondents were asked, unprompted, to list the five main food groups (fruit and vegetables; bread, cereals and potatoes; meat, fish and alternatives; milk and milk products; foods containing fat and foods containing sugar). To indicate the level of knowledge and awareness, the percentage of respondents who named all five of the food groups was used.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 2.1:** Increased awareness/knowledge of food & nutrition, safety & hygiene and food poverty.

3.2.2.1 Overall awareness

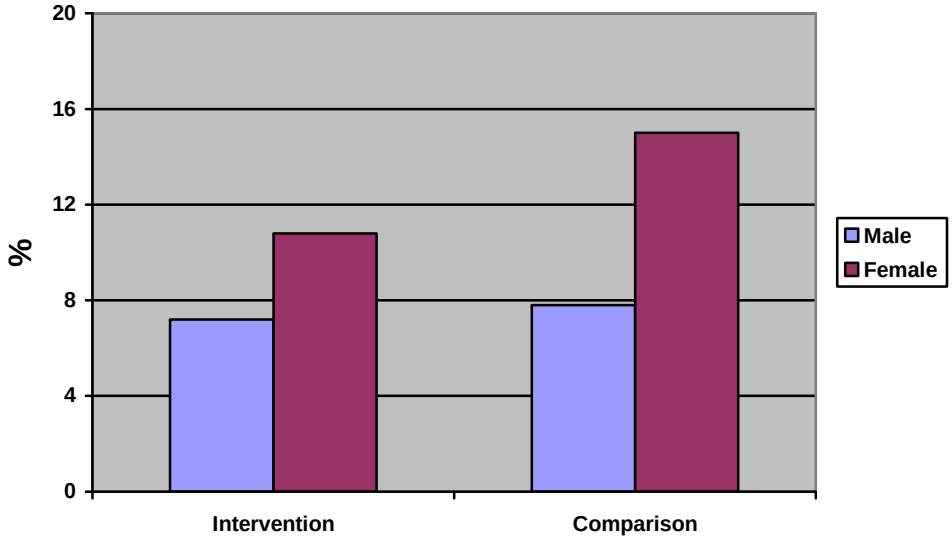
There was no significant difference between the comparison and intervention groups in terms of their knowledge of the five food groups. Overall, 10% of respondents named all five food groups.

3.2.2.2 Role of demographic factors

Gender appeared to be related to awareness of all five food groups in the comparison group where females (15%) were more likely than males (8%) to identify all five food groups, while the gender scores were closer in the intervention group. However, this apparent difference between survey groups was not statistically significant. Overall, females (13%) were significantly more likely ($p=0.002$) to name all five food groups than males (8%).

There were no significant differences in awareness of all five food groups in terms of age, border/non-border residence, or rural/urban residence.

Figure 3.2.2.2 Percentage of respondents who identified all five food groups by gender.

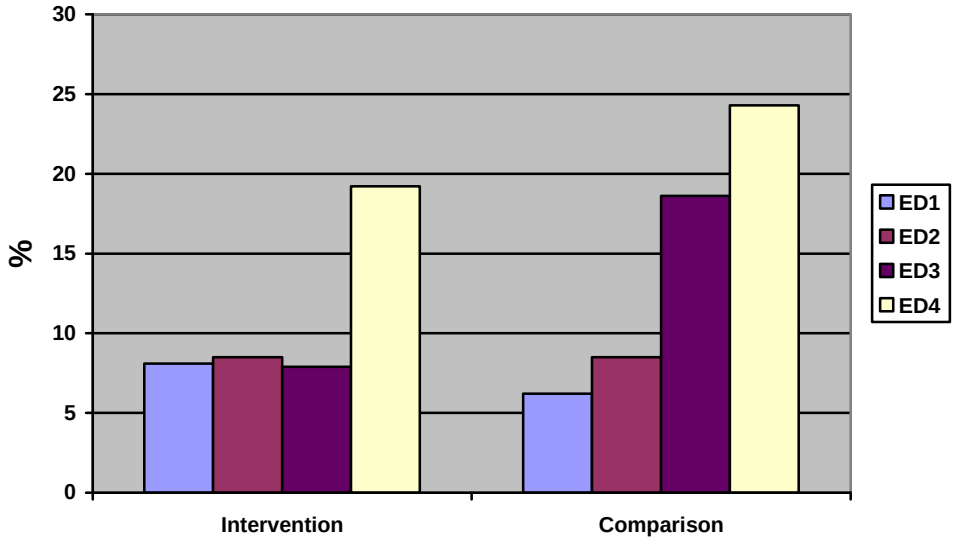


3.2.2.3 Role of socio-economic factors

Education did not appear to be related to awareness of all five food groups in the intervention group where level of knowledge was very similar for three of the four education levels (figure 3.2.2.3). In the comparison group, respondents with a higher level of education scored higher. This apparent difference between survey groups was not statistically significant. Overall, respondents with a higher level of education displayed greater knowledge of the five food groups ($p<0.001$)

There were no significant differences in awareness of all five food groups in terms of employment status.

Figure 3.2.2.3 Percentage of respondents who identified all five food groups by level of education.



Summary table 3.2.2 for Indicator: Percentage of population who can name all of the five main food groups (Question E3)

	Survey group differences	Intervention	Comparison
OVERALL	ns	9.0%	11.3%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		7.2%	7.7%
Female		10.8%	14.9%
		ns	p=0.005
Age	ns		
18-29		10.6%	12.2%
30-44		8.3%	13.3%
45-59		8.4%	11.9%
60+		5.6%	4.3%
		ns	ns
Rural/Urban	ns		
Rural		8.2%	8.2%
Urban		9.6%	13.9%
		ns	ns
Border Status			
Border	ns	10.5%	8.8%
Non-border		8.3%	12.3%
		ns	ns
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		6.3%	7.9%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		8.6%	8.4%
A Levels / NVQ Level 3 (ED3)		18.9%	7.9%
Third Level / NVQ Level 4, 5 (ED4)		24.9%	18.5%
		p<0.001	ns
Employment status	ns		
Employed		9.5%	15.5%
Unemployed		9.5%	6.8%
Economically inactive		11.1%	13.6%
Retired		4.8%	7.1%
		ns	ns

3.2.3 Indicator: Percentage of the population who have heard of the term "food poverty" and can provide an example of what it means (Questions D1 and D2)

Respondents were asked if they had ever heard of the term "food poverty". Those who said that they had heard of the term "food poverty" were then asked what they thought it meant. To indicate the level of knowledge about the term "food poverty", we used the percentage of respondents who had heard of the term "food poverty" and could provide at least one unprompted example from the following list:

- Not having enough money to be able to eat a healthy balanced diet;
- Inadequate shopping facilities;
- Poor access to shops;
- Poor quality & high cost of food locally;
- Lack of right equipment for cooking & storage;
- Conflicting information about food and health;
- Lack of information – not sure what makes up a healthy balanced diet;
- Poor transport to shopping facilities.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 2.1**: Increased awareness/knowledge of food & nutrition, safety & hygiene and food poverty.

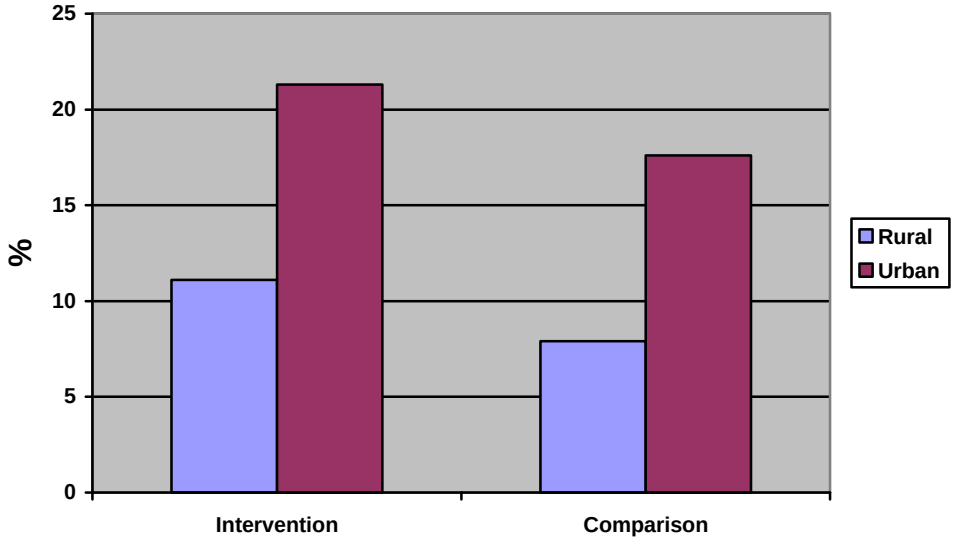
3.2.3.1 Overall knowledge

There was no significant difference between the comparison and intervention groups in terms of their knowledge of the term "food poverty". Overall, 15% of respondents had heard of the term "food poverty" and could provide at least one example.

3.2.3.2 Role of demographic factors

The relationship between urban/rural residence and knowledge of the term "food poverty" was not significantly different between the two groups. Overall, urban respondents (19%) had significantly more knowledge of the term "food poverty" than rural respondents (9%; $p<0.001$).

Figure 3 Percentage of respondents who demonstrated knowledge and understanding of the term "food poverty" by urban and rural areas of residence.



The relationship between border/non-border residence and knowledge of the term “food poverty” was not significantly different between the two groups. Overall, respondents living in non-border areas displayed significantly greater knowledge of the term “food poverty” (18%) than respondents living in border areas (8%; $p<0.001$)

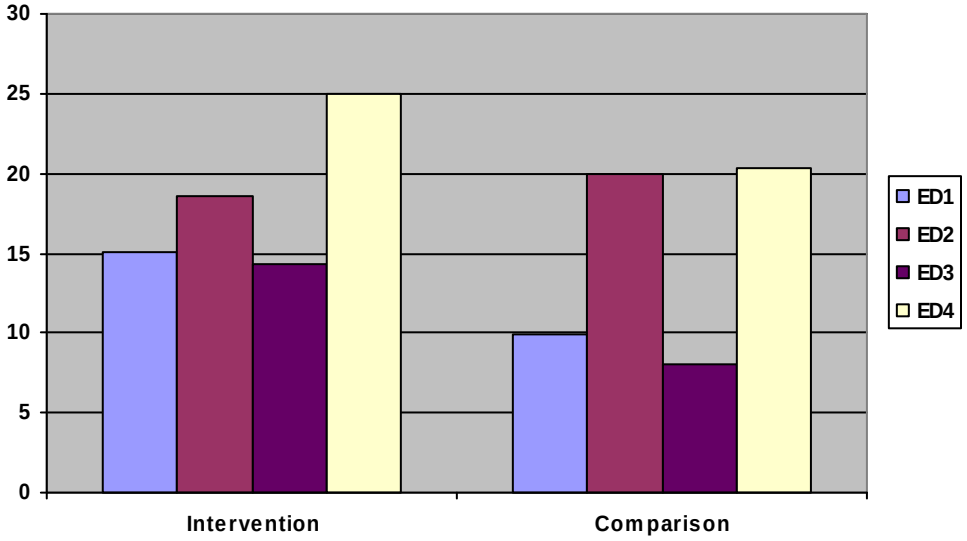
There were no significant differences in knowledge of the term “food poverty” in terms of gender or age.

3.2.3.2 Role of socio-economic factors

The relationship between level of education and knowledge of the term “food poverty” was not significantly different between the two groups. Overall, there were significant differences between educational levels ($p=0.001$). With the notable exception of respondents whose highest level of educational qualification was A Levels / NVQ Level 3 (ED3), respondents with a higher level of education displayed greater knowledge of the term “food poverty”.

There were no significant differences in knowledge of the term “food poverty” in terms of employment status.

Figure 3.2.3.2 Percentage of respondents who demonstrated knowledge and understanding of the term “food poverty” by border and non-border areas of residence.


30
25
20
15
10
5
0
Intervention
Comparison
ED1
ED2
ED3
ED4

Summary table 3.2.3 for Indicator: Percentage of the population who have heard of "food poverty" and can provide an example of what it means (Questions D1 and D2)

	Survey group differences	Intervention	Comparison
OVERALL	ns	16.9%	13.3%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		14.0%	15.0%
Female		19.9%	11.8%
		ns	ns
Age	ns		
18-29		19.8%	14.4%
30-44		14.5%	12.0%
45-59		17.3%	14.4%
60+		11.4%	10.6%
		ns	ns
Rural/Urban	ns		
Rural		11.0%	8.0%
Urban		21.3%	17.6%
		p=0.001	p<0.001
Border Status			
Border	ns	11.7%	3.3%
Non-border		19.4%	17.0%
		ns	p<0.001
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		15.0%	10.0%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		18.6%	19.8%
A Levels / NVQ Level 3 (ED3)		14.2%	7.6%
Third Level / NVQ Level 4, 5 (ED4)		25.9%	20.1%
		ns	p=0.002
Employment status	ns		
Employed		15.4%	17.2%
Unemployed		20.9%	8.4%
Economically inactive		14.0%	16.8%
Retired		13.0%	9.5%
		ns	ns

3.3 DIET AND LIFESTYLE

CONSUMPTION OF FOOD FROM 5 MAIN FOOD GROUPS (Question B1)

Respondents were given a list of 20 foods items from the five main food groups and asked how often they eat these foods in an average week. For analysis purposes the 20 food items were combined into each of their respective food groups as follows:

Table 3.3 Food groups

Food group	Food item from Question B1
Fruit and Vegetables	Fruit
	Vegetables
Bread, cereals and potatoes	Bread
	Potatoes
	Breakfast cereals
	Rice/pasta
Meat, fish and alternatives	Red meat
	White meat
	Meat products
	Fish
Milk and milk products	Milk and milk products
Foods containing fat and foods containing sugar	Biscuits
	Confectionary
	Cakes
	Savoury snacks
	Fizzy drinks and squashes
	Sugar free drinks
	Chips
	Fried foods (excluding chips)
	Ready made meals

To indicate the consumption of foods from each of the five food groups the following five indicators were used:

- Consumption of foods from the fruit & vegetables food group more than once a day
- Consumption of foods from the cereals, breads and potatoes food group more than once a day
- Consumption of foods from the meat, fish & alternatives food group more than once a day

- Those who eat foods from the milk and milk products group more than once a day
- Those who eat foods containing fat and foods containing sugar most days (3+) a week

These indicators are relevant to the DFfA programme's **Key Expected Outcome 2.2** to improve health behaviours including healthier eating choices.

3.3.1 Indicator: Percentage of population that eat foods from the fruit & vegetables food group more than once a day (Question B1)

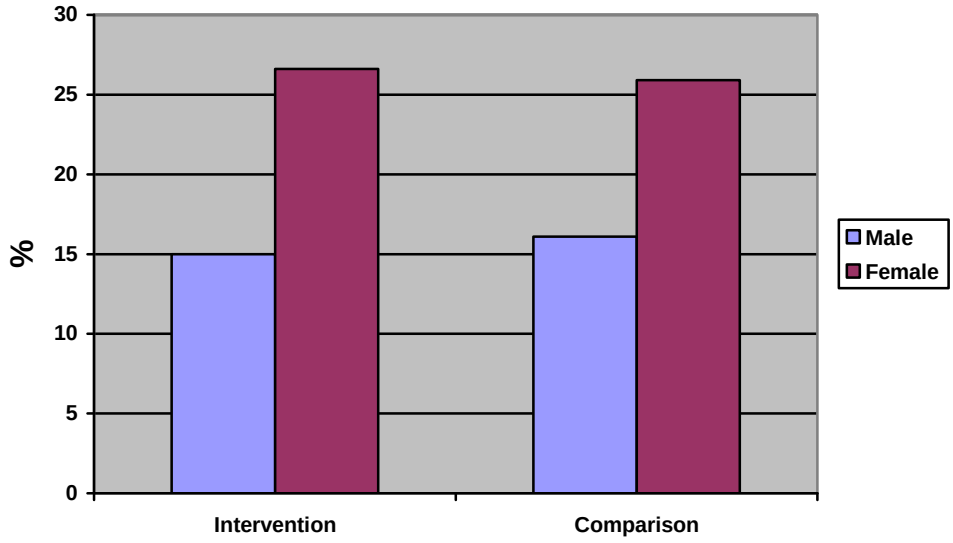
3.3.1.1 Overall consumption of fruit and vegetables

There was no significant difference between the comparison and intervention groups in terms of their consumption of fruit and vegetables more than once a day. Overall, 21% of respondents consumed fruit and vegetables more than once a day.

3.3.1.2 Role of demographic factors

There was no significant difference in the relationship between gender and fruit and vegetable consumption. Overall, females (26%) were significantly more likely ($p<0.001$) to eat foods from the fruit and vegetable group more than once a day than males (16%).

Figure 3.3.1.2 Percentage of respondents who consumed more than one food from the fruit and vegetable group daily by gender



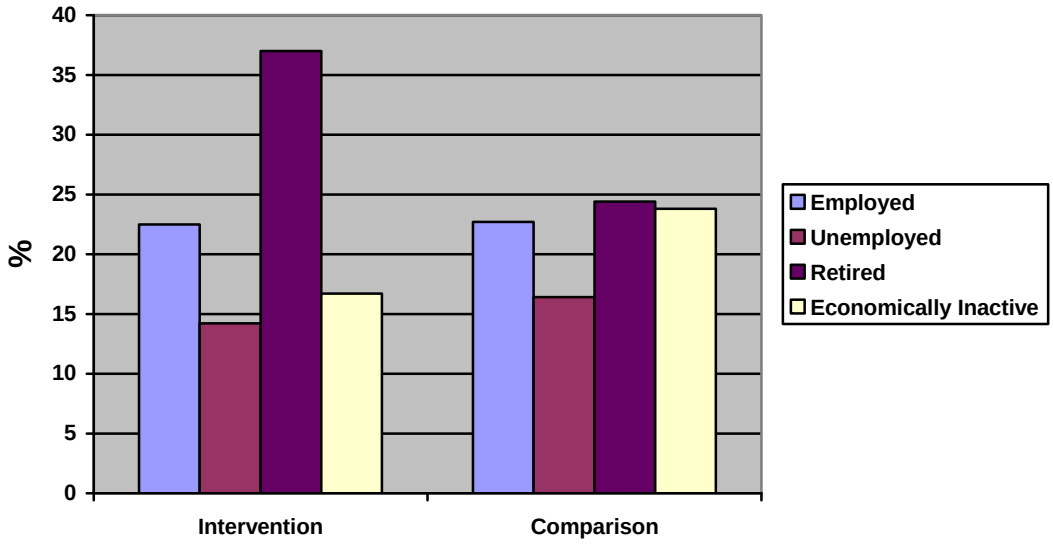
There were no significant differences in consumption of fruit and vegetables in terms of age, border/non-border residence, or rural/urban residence.

3.3.1.3 Role of socio-economic factors

There was no significant difference in the relationship between education and consumption of fruit and vegetables in the intervention and the comparison group. Overall, consumption of foods from the fruit and vegetable group more than once a day increased significantly as level of education increased (p=.003).

Employment status appeared to be related to fruit and vegetable consumption in the intervention group where more retired individuals ate more than once food from the fruit and vegetable group daily compared with all other categories. These differences were not as obvious in the comparison group. However, this apparent difference between survey groups was not statistically significant. Overall, there was a significant relationship between employment status and consumption of fruit and vegetables (p=0.001). Unemployed respondents were the lowest consumers of one or more foods from the fruit and vegetable group daily (15%) and retired respondents were the highest consumers of one or more foods from the fruit and vegetable group daily (30%).

Figure 3.3.1.3 Percentage of respondents who consumed more than one food from the fruit and vegetable group daily by level of employment status


40
35
30
25
20
15
10
5
0
%
Intervention
Comparison
Employed
Unemployed
Retired
Economically Inactive

Summary table 3.3.1 for Indicator: Percentage of population that eat foods from the fruit & vegetables food group more than once a day (Question B1)

	Survey group differences	Intervention	Comparison
OVERALL	ns	20.9%	21.1%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		15.0%	16.1%
Female		26.6%	25.9%
		p=0.001	p=0.003
Age	ns		
18-29		15.8%	19.2%
30-44		19.8%	22.6%
45-59		24.7%	21.2%
60+		33.3%	23.7%
		p=0.004	ns
Rural/Urban	ns		
Rural		17.5%	24.5%
Urban		23.4%	18.4%
		ns	ns
Border Status	ns		
Border		21.9%	22.2%
Non-border		20.6%	20.7%
		ns	ns
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		19.5%	16.8%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		18.6%	23.6%
A Levels / NVQ Level 3 (ED3)		23.4%	20.4%
Third Level / NVQ Level 4, 5 (ED4)		34.0%	32.4%
		ns	ns
Employment status	ns		
Employed		22.5%	22.7%
Unemployed		14.2%	16.4%
Economically inactive		16.7%	23.8%
Retired		37%	24.4%
		p<0.001	ns

3.3.2 Indicator: Percentage of population that eat foods from the cereals, breads and potatoes food group more than once a day (Question B1)

3.3.2.1 Overall consumption of cereals, breads and potatoes (C, B & P)

There was a significant difference ($p<0.001$) between the comparison and intervention groups in terms of their consumption of C, B & P more than once a day with 59% of those in the intervention group consuming these foods more than once a day compared with 45% in the comparison group.

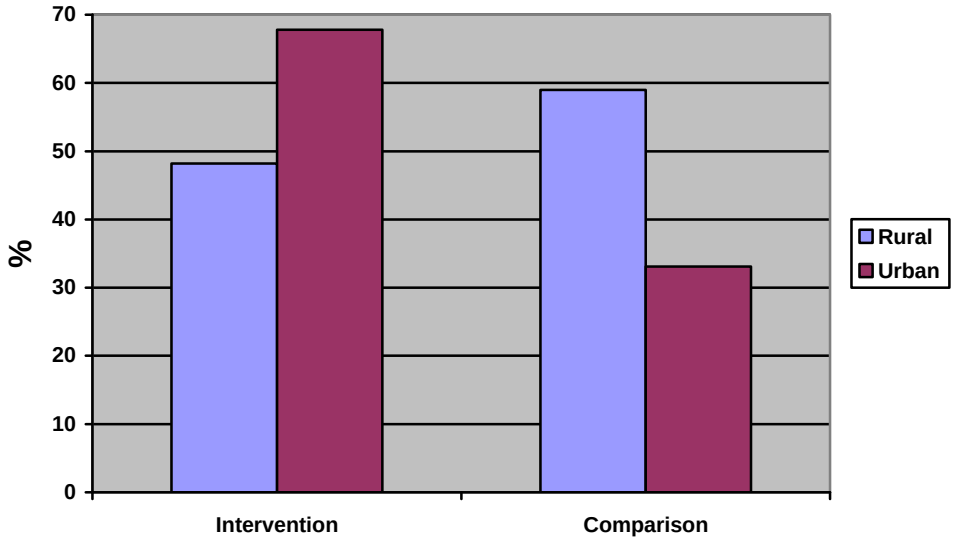
Overall, 52% of respondents consumed C, B & P more than once a day.

3.3.2.2 Role of demographic factors

The relationship between age and consumption of C, B & P was not significantly different between the intervention and comparison groups. Overall there was a significant relationship ($p=0.002$) between consumption of foods from the C, B & P group and age with the youngest respondents (18-34 years) eating the highest proportion of foods daily from this group (57%).

The relationship between rural/urban residence and consumption of C, B & P in the intervention group was significantly different than the relationship in the comparison group ($p<0.001$). In the comparison group more rural (59%) than urban (33%) respondents consumed more than one food from this food group daily however in the intervention group the opposite occurred with a higher number of urban respondents (68%) than rural respondents (48%) eating more than one item daily from this food group.

Figure 3.3.2.2 Percentage of respondents who consumed foods from the C, B & P group more than once a day by rural/urban residence



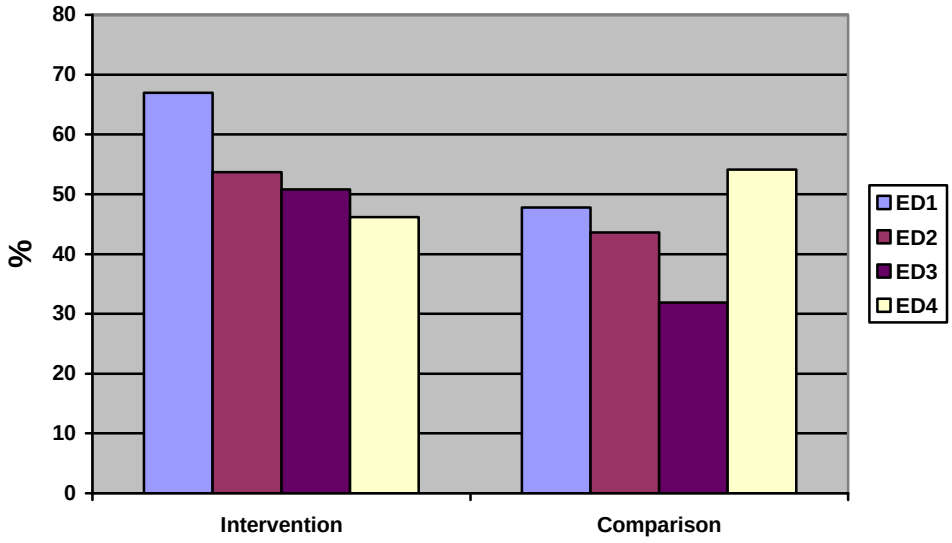
Similarly the relationship between border/non-border residence and consumption of C, B & P in the intervention group was significantly different than it was in the comparison group ($p<0.001$). In the comparison group more border (51%) than non-border (43%) respondents ate more than one food from this food group daily, however in the intervention group the opposite occurred with a higher number of non-border (71%) than border (34%) respondents eating more than one food daily from this food group.

There were no significant differences in consumption of foods from the C, B & P group in terms of gender.

3.3.2.3 Role of socio-economic factors

Education appeared to be related to consumption of C, B & P in the intervention group where consumption of more than food from this group decreased with increasing education (figure 3.3.2.3). This gradient was not observed in the comparison group. However, this apparent difference between survey groups was not statistically significant. Overall there was a significant relationship between consumption of more than one food from the C, B & P group and education, where individuals with no education reported the highest level of daily consumption of foods from this group (58% more than once a day).

Figure 3.3.2.3 Percentage of respondents who consumed foods from the C, B & P group more than once a day by education



There were no significant differences in consumption of C, B & P in terms of employment status.

Summary table 3.3.2 for Indicator: Percentage of population that eat foods from the cereals, breads and potatoes food group more than once a day

	Survey group differences	Intervention	Comparison
OVERALL	p<0.001	59.3%	44.7%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		63.7%	44.9%
Female		55.2%	44.5%
		ns	ns
Age	ns		
18-29		66.2%	48.3%
30-44		50%	40.6%
45-59		49.5%	39.4%
60+		59.8%	45.4%
		ns	ns
Rural/Urban	p<0.001		
Rural		48.2%	59%
Urban		67.8%	33.1%
		p<0.001	p<0.001
Border Status	p<0.001		
Border		33.7%	50.6%
Non-border		71.4%	42.6%
		p<0.001	ns
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		67%	47.8%
GCSE/O Level /NVQ Levels 1,2 (ED2)		53.7%	43.6%
A Levels / NVQ Level 3 (ED3)		50.8%	31.9%
Third Level / NVQ Level 4, 5 (ED4)		46.2%	54.1%
		p=0.002	ns
Employment status	ns		
Employed		57.3%	47.1%
Unemployed		59%	39.5%
Economically inactive		76.2%	50%
Retired		57.5%	43.5%
		ns	ns

3.3.3 Indicator: Percentage of population that eat foods from the meat, fish and alternatives food group more than once a day (Question B1)

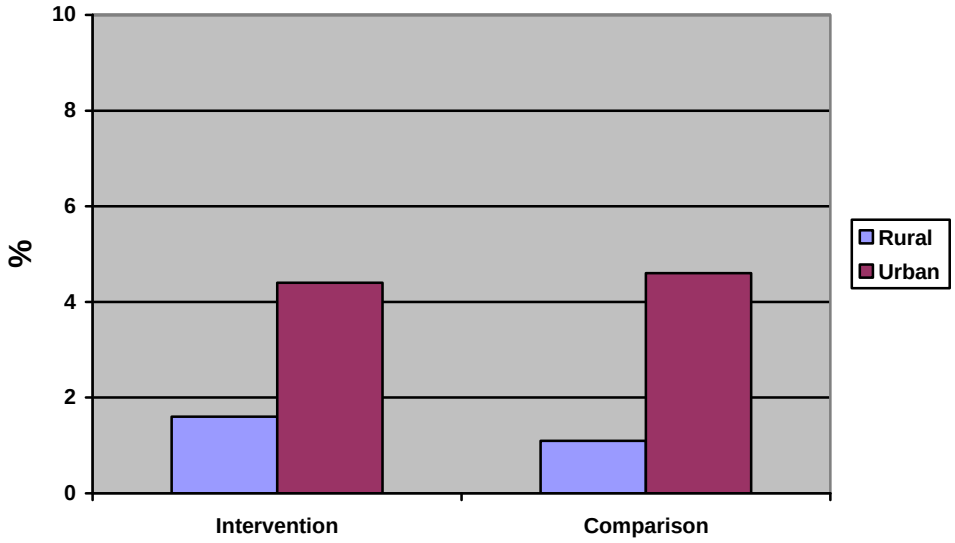
3.3.3.1 Overall consumption of meat, fish and alternatives (M, F & A)

There was no significant difference between the comparison and intervention groups in terms of their consumption of M, F & A more than once a day. Overall only 3% of respondents consumed food from the M, F & A group more than once a day.

3.3.3.2 Role of demographic factors

There was no significant difference in consumption of M, F & A more than once a day between the survey groups in terms of rural/urban residence. Overall, consumption of foods from the M, F & A group more than once a day was significantly higher for those living in urban areas (p=0.001).

Figure 3.3.3.2 Percentage of respondents who consumed foods from the M, F & A group more than once a day by rural/urban residence

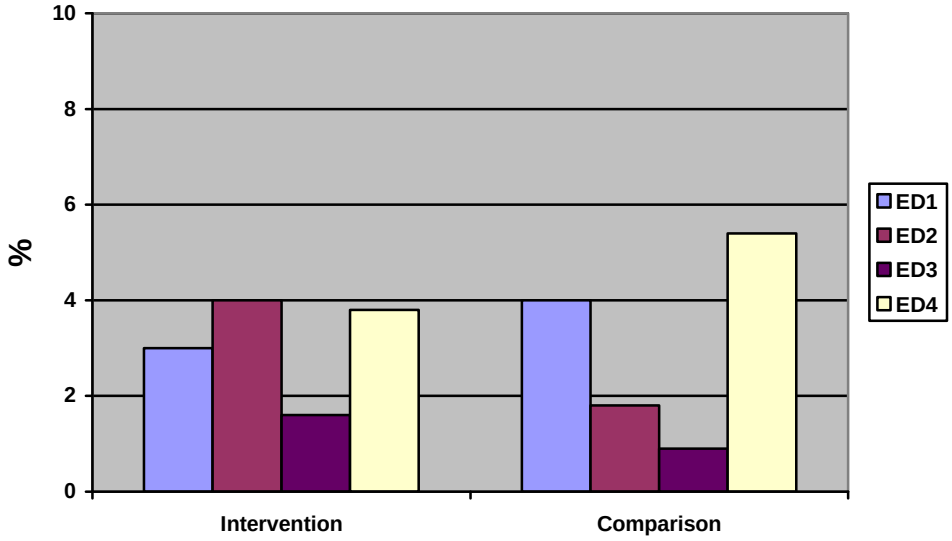


There were no significant differences in consumption of food from the M, F & A group in terms of gender, age and border/non-border residence.

3.3.3.3 Role of socioeconomic factors

There were no significant differences in consumption of food from the M, F & A group in terms of education and employment status.

Figure 3.3.3.3 Percentage of respondents who consumed foods from the M, F & A group more than once a day by employment status



Summary table 3.3.3 for Indicator: Percentage of population that eat foods from the meat, fish and alternatives food group more than once a day (Question B1)

	Survey group differences	Intervention	Comparison
OVERALL	ns	3.2%	3%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		4.1%	2.3%
Female		2.4%	3.8%
		ns	ns
Age	ns		
18-29		4.6%	3.8%
30-44		1.6%	3.8%
45-59		2.2%	2%
60+		1.1%	2.1%
		ns	ns
Rural/Urban	ns		
Rural		1.6%	1.1%
Urban		4.4%	4.6%
		ns	ns
Border Status	ns		
Border		2.1%	0.6%
Non-border		3.7%	3.9%
		ns	ns
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		3%	4%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		4%	1.8%
A Levels / NVQ Level 3 (ED3)		1.6%	0.9%
Third Level / NVQ Level 4, 5 (ED4)		3.8%	5.4%
		ns	ns
Employment status	ns		
Employed		3.8%	2.3%
Unemployed		1.9%	6.1%
Economically inactive		9.5%	1.2%
Retired		1.4%	1.2%
		ns	ns

3.3.4 Indicator: Percentage of population that eat foods from the milk and milk products group more than once a day (Question B1)

3.3.4.1 Overall consumption of milk and milk products

Significantly more respondents from the intervention group (54%) consumed milk and milk products more than once a day compared with the comparison group (46%; p=0.003).

Overall, 50% of respondents consumed milk and milk products more than once a day.

3.3.4.2 Role of demographic factors

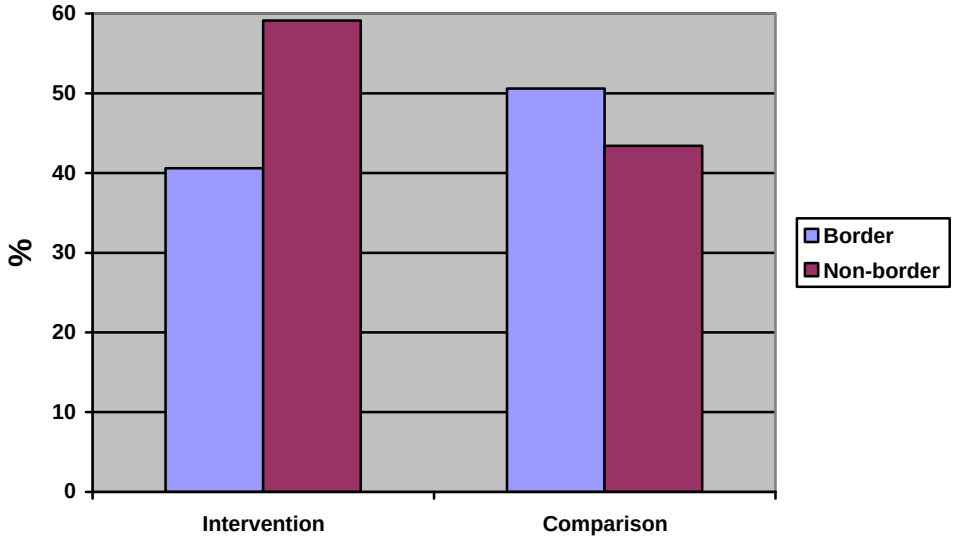
There appeared to be an age gradient in the comparison group in relation to consumption of milk and milk products where consumption more than once a day increased with age. This gradient was not observed in the intervention group. However, this apparent difference between survey groups was not statistically significant. Overall as age increased the percentage of respondents who consumed more than one item from the dairy group increased (p<0.001).

The relationship between rural/urban residence and consumption of dairy products in the intervention group was significantly different than that of the comparison group (p<0.001). In the comparison group more rural (57%) than urban (38%) respondents consumed more than one food from this food group daily, however in the intervention group the opposite occurred with a higher number of urban (59%) than rural (49%) respondents consuming more than one food daily from this food group.

Similarly the relationship between border/non-border residence and consumption of dairy products in the intervention group was significantly different than it was in the comparison group (p<0.001). In the comparison group more border (51%) than non-border (44%) respondents consumed more than one food from this food group daily, however in the intervention group the opposite occurred with a higher number of non-border (61%) than border respondents (41%) consuming more than one food daily from this food group.

There were no significant gender differences in consumption of milk and milk products.

Figure 3.3.4.2 Percentage of respondents who consumed milk and milk products more than once a day by border/non-border residence

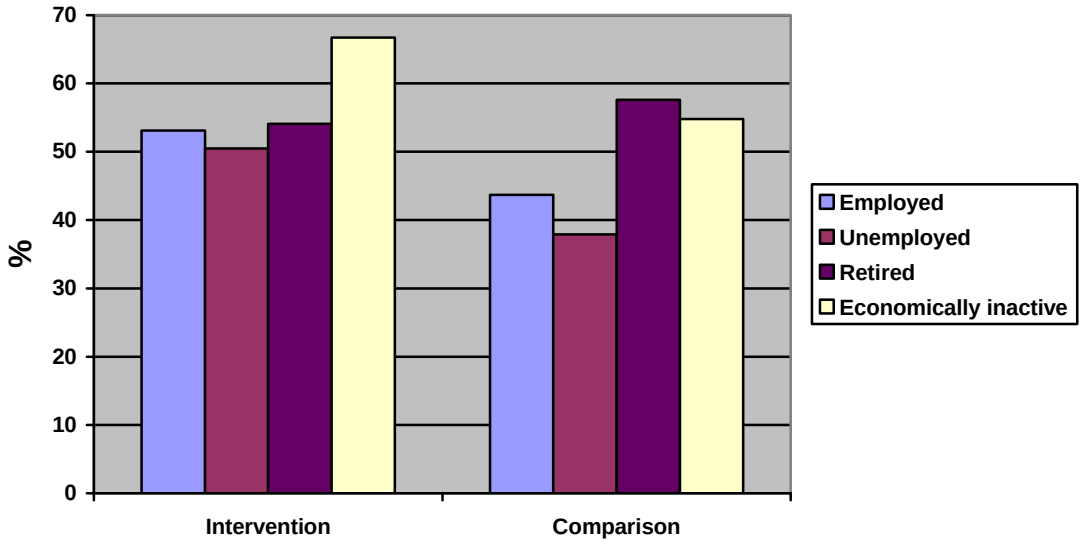


3.3.4.3 Role of socioeconomic factors

Employment status appeared to be related to awareness consumption of milk and milk products in the comparison group (figure 3.3.4.3) with unemployed individuals (39%) reporting the lowest levels of consumption and retired individuals reporting the highest (58%). This relationship was not observed in the intervention group. This apparent difference between survey groups was not statistically significant.

There were no significant education differences in consumption of milk and milk products.

Figure 3.3.4.3 Percentage of respondents who consumed milk and milk products more than once a day by employment status


70
60
50
40
30
20
10
0
%
Intervention
Comparison
Employed
Unemployed
Retired
Economically inactive

Summary table 3.3.4 Indicator: Percentage of population that eat foods from the milk and milk products group more than once a day

	Survey group differences	Intervention	Comparison
OVERALL	p=0.003	54.4%	46.0%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		59.8%	47.2%
Female		49.1%	44.6%
		ns	ns
Age	ns		
18-29		53.1%	37.7%
30-44		50.0%	50.4%
45-59		62.6%	51.0%
60+		55.8%	60.4%
		ns	p<0.001
Rural/Urban	p<0.001		
Rural		49.2%	56.5%
Urban		58.5%	37.5%
		ns	p<0.001
Border Status	p<0.001		
Border		41.3%	50.6%
Non-border		60.6%	44.2%
		p<0.001	ns
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		59.1%	48.3%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		47.7%	43.6%
A Levels / NVQ Level 3 (ED3)		54.2%	40.7%
Third Level / NVQ Level 4, 5 (ED4)		51.9%	51.4%
		ns	ns
Employment status	ns		
Employed		53.3%	44.5%
Unemployed		52.7%	38.5%
Economically inactive		70.0%	54.8%
Retired		54.8%	58.3%
		ns	p=0.007

3.3.5 Indicator: Percentage of population that eat foods high in fat and foods high in sugar three or more times a week (Question B1)

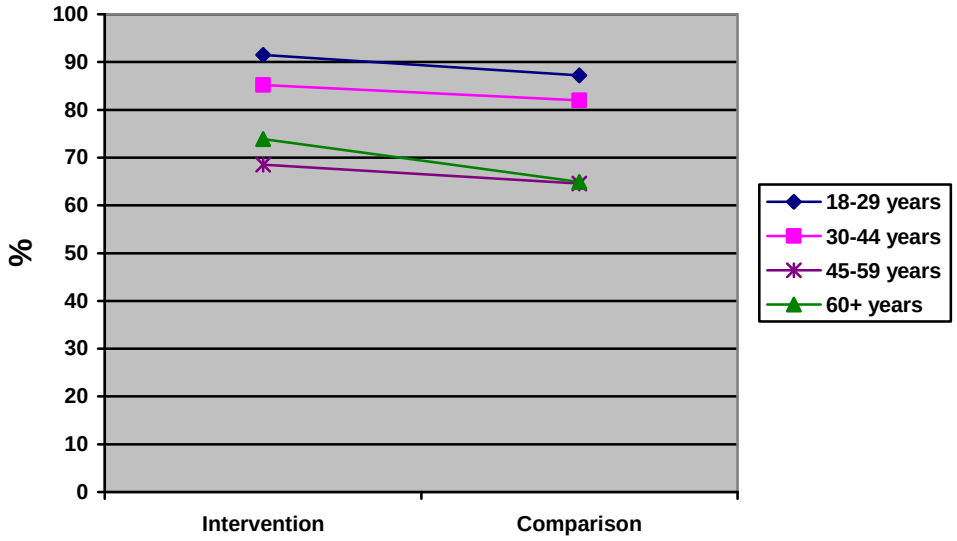
3.3.5.1 Overall consumption of foods high in fat and/or sugar

There was no significant difference between the comparison and intervention groups in terms of their consumption of foods high in fat and/or sugar. In total, 82% of individuals consumed less healthy foods three or more times a week.

3.3.5.2 Role of demographic factors

There was no significant difference in the relationship between age and consumption of foods high in fat and/or sugar in the intervention and comparison groups. Overall younger people consumed significantly more foods high in fat and/or sugar compared with older people ($p<0.001$).

Figure 3.3.5.2 Percentage of respondents who consumed foods high in fat and/or sugar more than once a day by age



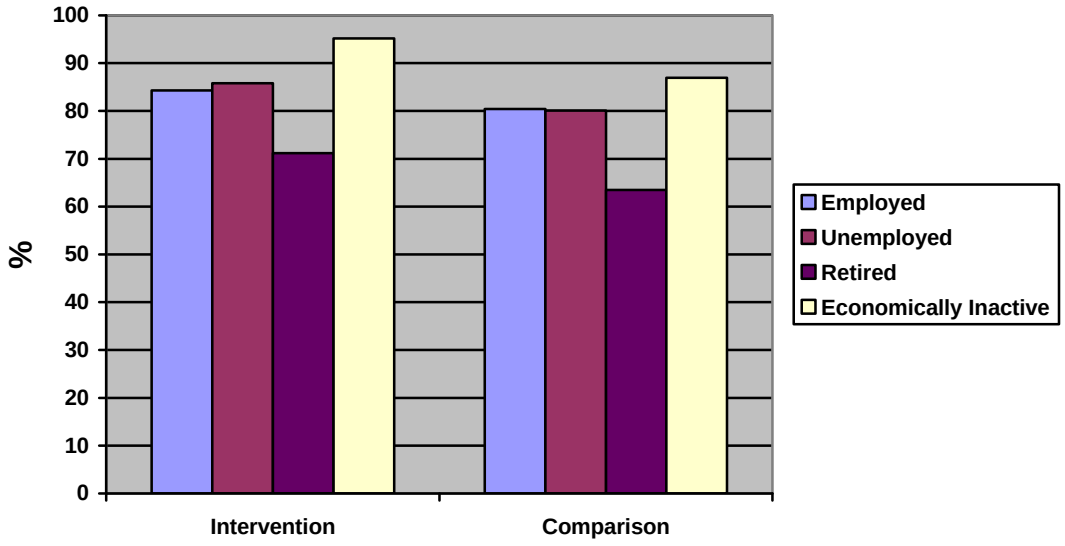
There were no significant differences in consumption of foods high in fat and/or sugar in terms of gender, employment status and border status.

3.3.5.3 Role of socioeconomic factors

There was no significant difference in the relationship between employment status and the consumption of foods high in fat and/or sugar.

There was no significant difference in the relationship between education and employment status and the consumption of foods high in fat and/or sugar in the intervention and comparison groups.

Figure 3.3.5.3 Percentage of respondents who consumed foods high in fat and/or sugar more than once a day by age



Summary table 3.3.5 for Indicator: Percentage of population that eat foods high in fat and foods high in sugar three or more times a week (Question B1)

	Survey group differences	Intervention	Comparison
OVERALL	ns	84.0%	79.0%
DEMOGRAPHIC FACTORS			
Gender	ns	85.3%	79.3%
Male		82.8%	78.7%
Female		ns	ns
Age	ns		
18-29		91.5%	87.2%
30-44		85.2%	82.0%
45-59		68.5%	64.6%
60+		74.7%	65.6%
		p<0.001	p<0.001
Rural/Urban	ns		
Rural		81.7%	81.4%
Urban		85.8%	77.2%
		ns	ns
Border Status	ns		
Border		76.5%	78.6%
Non-border		87.6%	79.2%
		p=0.001	ns
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		83.2%	74.4%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		87.6%	86.6%
A Levels / NVQ Level 3 (ED3)		81.0%	82.3%
Third Level / NVQ Level 4, 5 (ED4)		80.8%	74.3%
		ns	ns
Employment status	ns		
Employed		84.3%	80.4%
Unemployed		85.8%	80.1%
Economically inactive		95.2%	86.9%
Retired		71.2%	64.3%
		p=0.004	p=0.002

3.3.6 Indicator: Percentage of population that have tried at least one positive dietary change in the previous year (Question B7)

Respondents were asked if they had tried any of the following dietary changes in the last year (even if only for a short time);

- Less processed or convenience foods;
- Using low fat foods;
- Eating more fibre;
- Less sugar, confectionery & soft drinks;
- Eating more fruit & vegetables;
- Less fatty or fried foods.

To indicate the level of dietary changes the percentage of respondents who tried at least one of the dietary changes (even if only for a short time) was used.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 2.3:** Improved health behaviours including healthier eating choices.

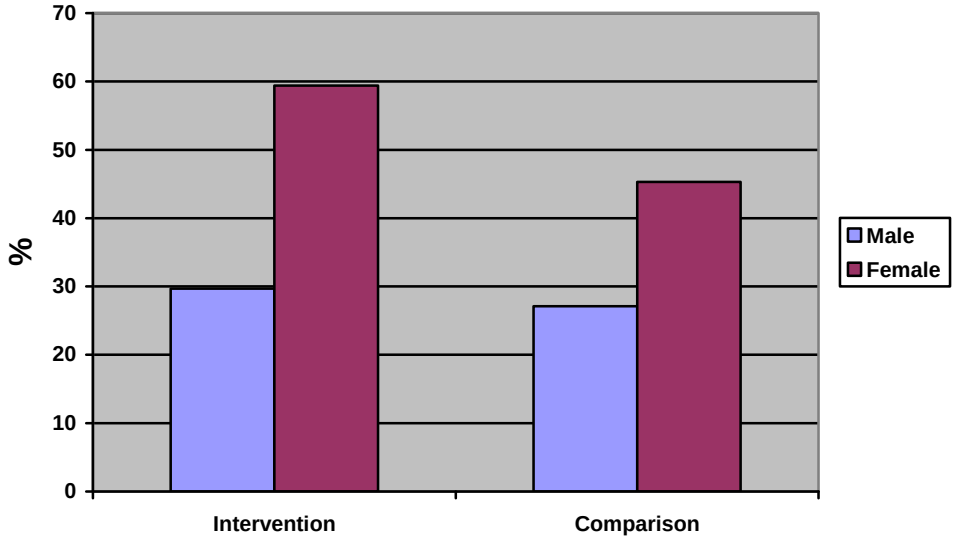
3.3.6.1 Overall level of dietary changes

The proportion of respondents who tried making at least one dietary change in the previous year was significantly higher ($p=0.003$) in the intervention group (45%) than in the comparison group (36%). Overall, eating more fruit and vegetables was the most common dietary change.

3.3.6.2 Role of demographic factors

The relationship between gender and trying dietary changes was not significantly different between the two groups. Overall 52% of females had tried making positive changes to their diet in the last year compared to 29% of males ($p<0.001$).

Figure 3.3.6.2 Percentage of respondents who tried making at least one dietary change in the previous year by gender.



The relationship between urban/rural area of residence and making dietary changes was not significantly different between the two groups. Overall, respondents living in urban areas were more likely to have made dietary changes (50%) than respondents living in rural areas (29%; $p<0.001$).

The relationship between border/non-border area of residence and making dietary changes was not significantly different between the two groups. Overall, respondents living in non-border areas were more likely to have made dietary changes (46%) than respondents living in border areas (27%; $p<0.001$).

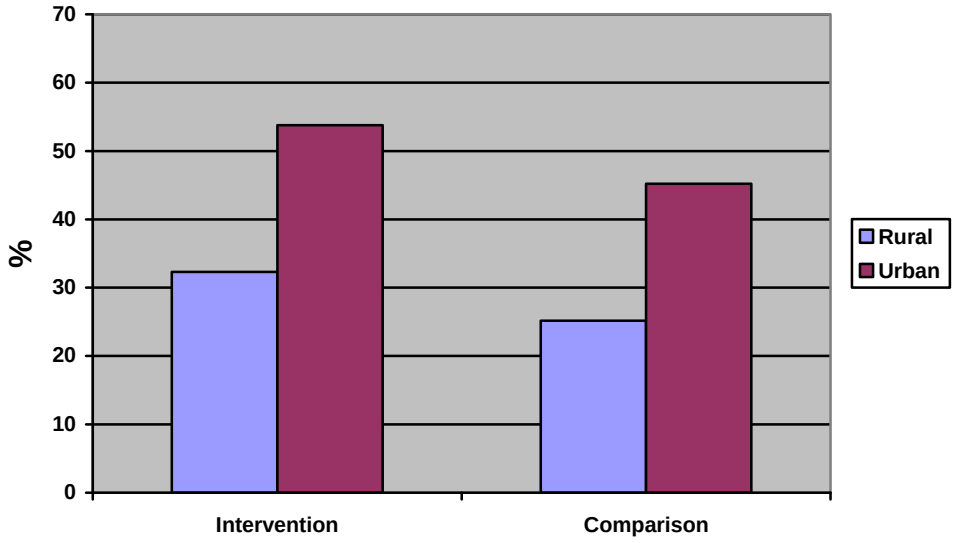
There were no significant differences in terms of those who tried making positive dietary changes in the last year and age.

3.3.6.3 Role of socio-economic factors

The relationship between level of education and making dietary changes was not significantly different between the intervention and the comparison groups. Overall, respondents with a higher level of education were more likely to have made dietary changes ($p<0.001$).

There were no significant differences in terms of those who tried making positive dietary changes in the last year and employment status.

Figure 3.3.6.3 Percentage of respondents who tried making at least one dietary change in the previous year by urban and rural areas of residence.



Summary table 3.3.6 for Indicator: Percentage of population that have tried at least one positive dietary change in the previous year (Question B7)

	Survey group differences	Intervention	Comparison
OVERALL	p=0.003	44.8%	36.4%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		29.8%	27.1%
Female		59.6%	45.3%
		p<0.001	p<0.001
Age	ns		
18-29		45.6%	35.9%
30-44		47.6%	41.4%
45-59		46.3%	40.4%
60+		36.5%	24.5%
		ns	ns
Rural/Urban	ns		
Rural		32.3%	25.3%
Urban		53.9%	45.2%
		p<0.001	p<0.001
Border Status	ns		
Border		31.6%	20.8%
Non-border		50.8%	42.0%
		p<0.001	p<0.001
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		37.2%	33.9

			%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		48.7%	33.5 %
A Levels / NVQ Level 3 (ED3)		57.1%	43.3 %
Third Level / NVQ Level 4, 5 (ED4)		58.7%	41.2 %
		p=0.001	ns
Employment status	ns		
Employed		43.5%	34.5 %
Unemployed		47.6%	41.0 %
Economically inactive		50.0%	44.0 %
Retired		37.8%	24.7 %
		ns	ns

3.3.7 Indicator: Percentage of population that have been regularly physically active for 6 months or longer (Question C1)

The interviewer defined regular physical activity/exercise as

"taking part in exercise or sport 2-3 times per week for a minimum of 20 minutes at a time, or more general activities like walking, cycling or dancing 4-5 times a week accumulating to at least 30 minutes per day.".

Respondents were asked, with this definition in mind, which of the following statements best described how physically active they had been over the previous six months:

- I am not regularly physically active and do not intend to be so in the next six months;
- I am not regularly physically active but am thinking about starting to do so in the next 6 months;
- I do some physical activity but not enough to meet the description of regular physical activity stated by the interviewer;
- I am regularly physically active but only began in the last 6 months;
- I am regularly physically active & have been doing so for longer than 6 months.

To indicate physical activity, the percentage of people who began to be physically active within the previous six months or had been physically active for longer than six months was used.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 2.3** improved health behaviours including increased healthy lifestyles.

3.3.7.1 Overall level of physical activity

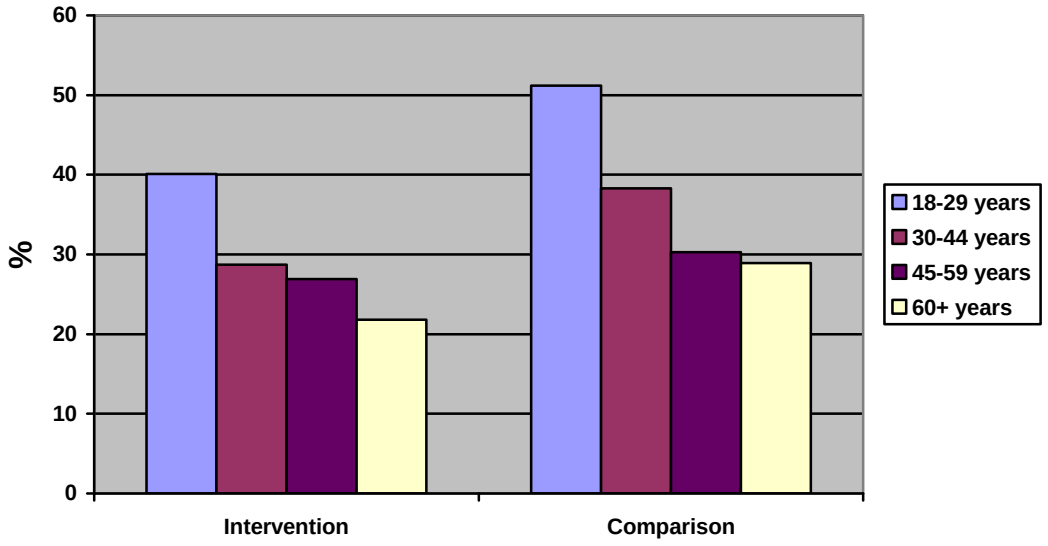
The proportion of respondents who were physically active as defined above was significantly greater in the comparison group (42%) than in the intervention group (33%; p=0.002).

3.3.7.2 Role of demographic factors

Gender appeared to be related to physical activity in the intervention group where males (38%) scored higher than females (28%), while the gender scores were closer in the comparison group. However, this apparent difference between survey groups was not statistically significant. Overall, males (42%) were significantly more likely (p=0.006) to be physically active than females (34%).

The relationship between age and physical activity was not significantly different between the intervention and the comparison group. Overall, as age increased, physical activity decreased (p<0.001).

Figure 3.3.7.2 Percentage of respondents who were physically active by age group



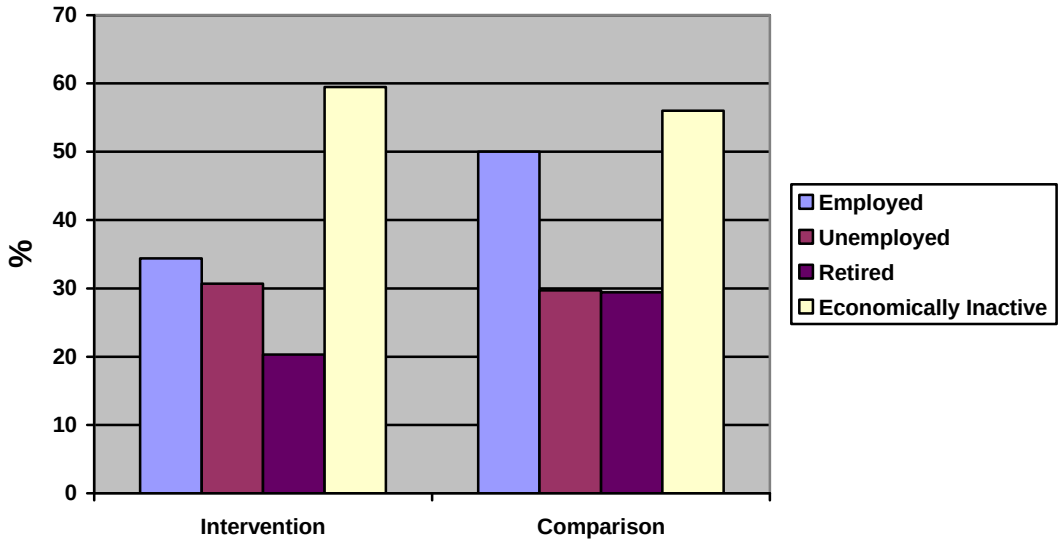
There were no significant differences in physical activity in terms of border/non-border residence or rural/urban residence.

3.3.7.3 Role of socio-economic factors

The relationship between level of education and physical activity was not significantly different between the intervention and the comparison group. Overall, respondents with a higher level of education were more likely to be physically active (p<0.001).

The relationship between employment status and physical activity was not significantly different between the two groups. Overall, economically inactive (57%) and employed (42%) respondents were more likely to be physically active p<0.001).

Figure 3.3.7.3 Percentage of respondents who were physically active by employment status


70
60
50
40
30
20
10
0
%
Intervention
Comparison
Employed
Unemployed
Retired
Economically Inactive

Summary table 3.3.7 for Indicator: Percentage of the population that have been regularly physically active for 6 months or longer (Question C1)

	Survey group differences	Intervention	Comparison
OVERALL	p=0.002	33.1%	41.8%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		38.3%	44.3%
Female		27.9%	39.3%
		p=0.007	ns
Age	ns		
18-29		40.1%	51.2%
30-44		28.9%	38.6%
45-59		26.7%	30.4%
60+		22.3%	29.1%
		p<0.001	p<0.001
Rural/Urban	ns		
Rural		32.9%	40.4%
Urban		33.2%	42.6%
		ns	ns
Border Status	ns		
Border		39.2%	38.5%
Non-border		30.2%	42.8%
		ns	ns
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		28.6%	31.4%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		35.7%	44.3%
A Levels / NVQ Level 3 (ED3)		38.3%	52.7%
Third Level / NVQ Level 4, 5 (ED4)		43.2%	57.0%
		ns	p<0.001
Employment status	ns		
Employed		34.4%	50.0%
Unemployed		30.7%	29.7%
Economically inactive		59.5%	56.0%
Retired		20.3%	29.8%
		p<0.001	p<0.001

3.4 FOOD SAFETY AND HYGIENE

3.4.1 Indicator: Percentage of the population that comply with food safety practices (Question F3)

Respondents were asked how often they comply with a list of 10 food safety practices including:

1. Follow manufacturers' instructions for preparation & cooking of food
2. Wash your hands with soap & water before handling food
3. Keep raw food below cooked food in the fridge
4. Keep kitchen utensils & chopping boards clean
5. Eat food that is past its "best before" date
6. Ensure that food in your fridge is in covered containers or is properly wrapped
7. Ensure that pets cannot come into contact with food
8. Store perishable foods in a fridge at home within two hours of buying them
9. Wash utensils (e.g. chopping boards), between preparing raw meat & cooked food
10. Check that your fridges and freezers are at the right temperature

The percentage of respondents who always adhere to all of these food safety and hygiene practices was used as an indicator.

This indicator is relevant to the DFfA programme's **Key Outcome 2.1**: improved awareness/knowledge of food and nutrition, safety and hygiene and food poverty.

3.4.1.1 Overall compliance

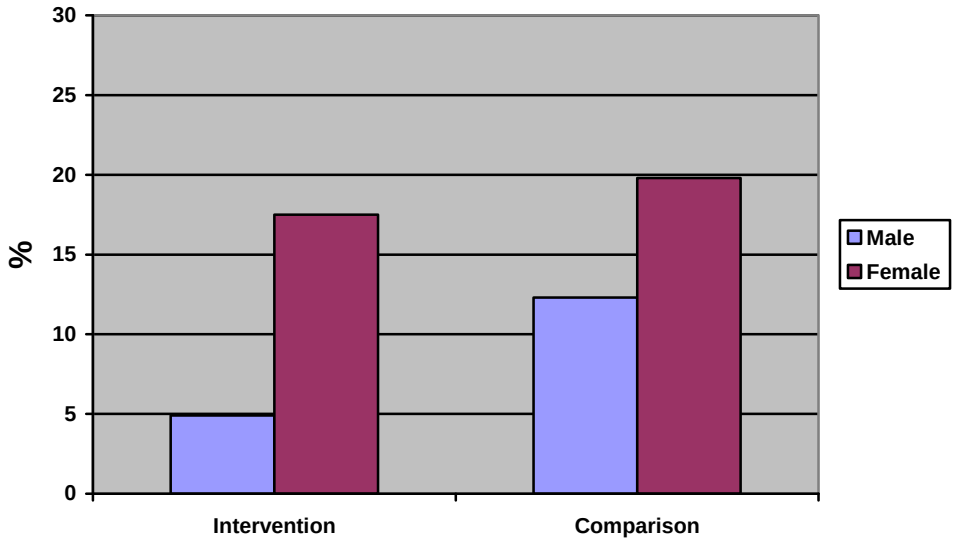
There was no significant difference between the comparison and intervention groups in terms of their compliance with food safety practices. Overall, 14% of people adhere to food safety and hygiene practices.

3.4.1.2 Role of demographic factors

There was no significant difference in the relationship between gender and compliance with food safety and hygiene practices in the intervention and

comparison groups. Overall significantly more women (19%) than men (9%) followed all food safety and hygiene practices when handling food (p<0.001).

Figure 3.4.1.2 Percentage of respondents who comply with food safety and hygiene practices by gender

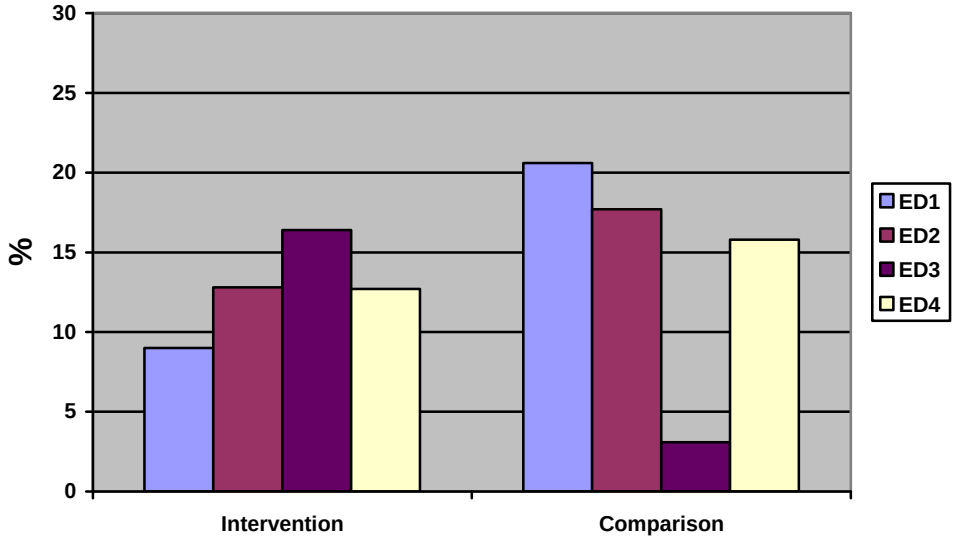


There was no significant difference in compliance with good food safety practices and age, rural/urban area of residence and border/non-border area of residence.

3.4.1.3 Role of socioeconomic factors

The relationship between education and compliance with food safety practices in the intervention group was significantly different than the relationship in the comparison group (p<0.001). In the comparison group individuals in category ED3 had the lowest level of compliance with food safety practices with only 3% of respondents achieving a score of one. In contrast in the intervention group individuals in ED3 had the highest level of compliance with food safety practices with 16% achieving a score of one.

Figure 3.4.1.3 Percentage of respondents who comply with food safety and hygiene practices by level of education



There was no significant difference in compliance with good food safety practices and employment status.

Summary table 3.4.1 for Indicator: Percentage of the population that comply with food safety practices (Question F3)

	Survey group differences	Intervention	Comparison
OVERALL	ns	11.2%	16.1%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		4.9%	12.3%
Female		17.5%	19.8%
		p<0.001	ns
Age	ns		
18-29		10.6%	12.3%
30-44		12.2%	17.1%
45-59		12.5%	20.2%
60+		9.2%	23.1%
		ns	ns
Rural/Urban	ns		
Rural		12.3%	14.4%
Urban		10.5%	17.5%
		ns	ns
Border Status	ns		
Border		11.8%	13.1%
Non-border		11%	17.2%
		ns	ns
SOCIOECONOMIC FACTORS			
Education	p<0.001		
None (ED1)		9%	20.6%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		12.8%	17.7%
A Levels / NVQ Level 3 (ED3)		16.4%	3.1%
Third Level / NVQ Level 4, 5 (ED4)		12.7%	15.8%
		ns	p<0.001
Employment status	ns		
Employed		11.7%	11.4%
Unemployed		10.9%	18.9%
Economically inactive		13.5%	18.4%
Retired		8.6%	22.1%
		ns	ns

3.4.2 Indicator: Percentage of the population who are quite or very concerned about food safety issues (Question F5)

Respondents were asked which of the following statements best described their attitude to food safety issues:

- I am very concerned about food safety issues;
- I am quite concerned about food safety issues;
- I am neither concerned / nor unconcerned about food safety issues;
- I am not very concerned about food safety issues;
- I am not at all concerned about food safety issues.

To indicate concern about food safety issues, the percentage of respondents who were quite concerned or very concerned about food safety issues was used.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 2.3:** improved health behaviours including improved food hygiene and safety.

3.4.2.1 Overall level of concern

There was no significant difference between the comparison and intervention groups in terms of their level of concern about food safety issues. Overall, 74% of respondents were quite concerned or very concerned about food safety issues.

3.4.2.2 Role of demographic factors

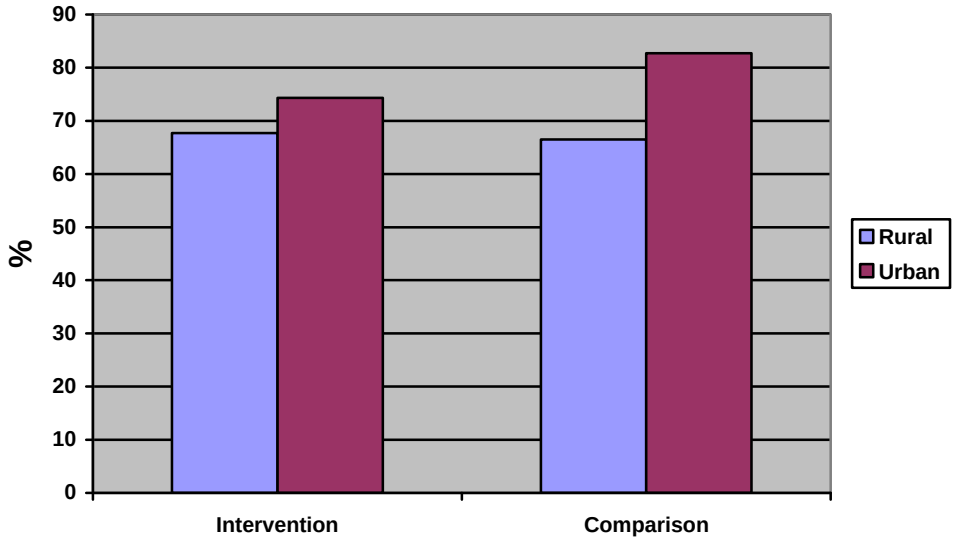
The relationship between gender and concern about food safety issues was not significantly different between the two groups. Overall, females (79%) were significantly more concerned about food safety issues than males (68%; $p<0.001$).

The relationship between age and concern about food safety issues was not significantly different between the two groups. Overall, the youngest age group (18-29 years) were the least concerned about food safety issues (69%) while the other age groups showed similar levels of concern (78%; $p=0.003$).

Urban/rural residence appeared to be related to concern about food safety issues in the comparison group where urban respondents (83%) scored higher than rural respondents (67%), while the urban/rural scores were closer in the intervention group. However, this apparent difference between survey groups was not statistically significant. Overall, urban respondents (79%) were

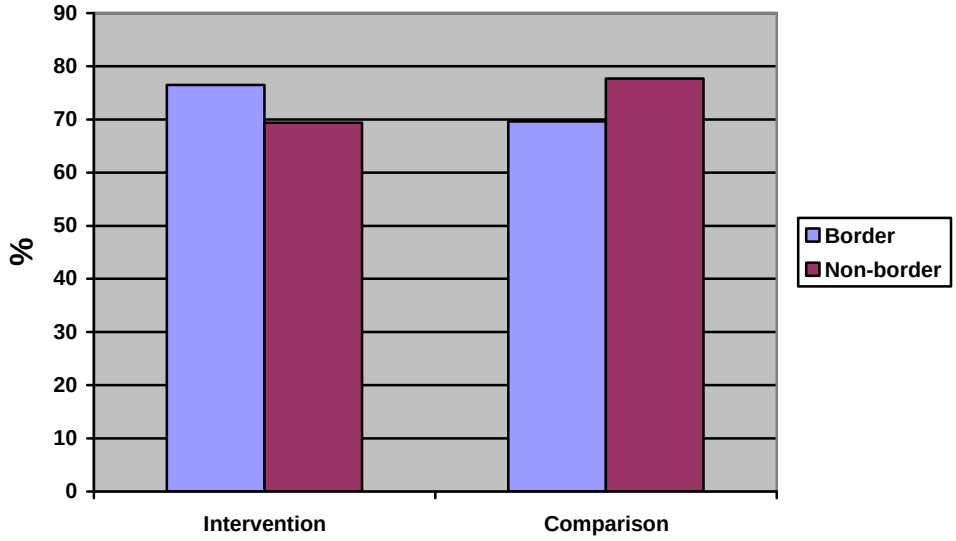
significantly more likely to be concerned about food safety issues than rural respondents (67%; p<0.001)

Figure 3.4.2.2a Percentage of respondents were concerned about food safety issues by urban and rural areas of residence.



The relationship between border and non-border residence and concern about food safety issues was different in the intervention group than the relationship in the comparison group (p=0.006). In the intervention group, border residents were more concerned, while in the comparison group, non-border residents were more concerned.

Figure 3.4.2.2b Percentage of respondents who were concerned about food safety issues by border or non-border area of residence.



3.4.2.3 Role of socio-economic factors

The relationship between education and concern about food safety issues was not significantly different between the two groups. Overall, respondents with a higher level of educational qualification were more concerned about food safety issues ($p<0.001$).

There were no significant differences in concern about food safety issues in terms of employment status.

Summary table 3.4.2 for Indicator: Percentage of the population who are quite or very concerned about food safety issues (Question F5)

	Survey group differences	Intervention	Comparison
OVERALL	ns	71.7%	75.5%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		64.9%	70.7%
Female		78.4%	80.3%
		p<0.001	p=0.006
Age	ns		
18-29		67.4%	70.3%
30-44		77.5%	78.2%
45-59		76.2%	81.2%
60+		73.9%	81.9%
		ns	ns
Rural/Urban	ns		
Rural		67.7%	66.6%
Urban		74.7%	82.6%
		ns	p<0.001
Border Status	p=0.006		
Border		76.6%	69.7%
Non-border		69.4%	77.6%
		ns	ns
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		64.3%	70.7%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		80.1%	72.3%
A Levels / NVQ Level 3 (ED3)		74.0%	92.5%
Third Level / NVQ Level 4, 5 (ED4)		82.1%	74.6%
		p<0.001	p<0.001
Employment status	ns		
Employed		75.6%	75.5%
Unemployed		67.9%	69.9%
Economically inactive		59.5%	83.1%
Retired		75.3%	81.4%
		ns	ns

3.5 AWARENESS OF FOOD RELATED ADVERTISING AND LOCAL FOOD NITIATIVES

3.5.1 Indicator: Percentage of the population that mentioned at least one organisation who advertised about food safety and nutrition in the last 6 months (Question G1)

Respondents were asked which organisations they have seen or heard advertising to consumers in the past 6 months about food safety and nutrition. The interviewer had a list of eleven such organisations on the questionnaire. Those who mentioned at least one organisation (unprompted) on the list of eleven was taken to be an indicator of awareness of food related advertising and initiatives.

The eleven organisations listed include:

1. Food Safety Promotion Board
2. Department of Health, Social Services and Public Safety
3. Ministry of Agriculture Fisheries and Food
4. Department of Environment, Food and Rural Affairs
5. The Food Standards Agency
6. Health Promotion Agency
7. Local Retailers
8. Local Newspapers
9. Community Newsletters
10. Local District Council
11. Armagh and Dungannon Health Action Zone

This indicator is relevant to the DFfA programme's **Key Expected Outcome 4.1** which is related to enhanced food-related strategy and policy development locally, regionally and nationally.

3.5.1.1 Overall awareness

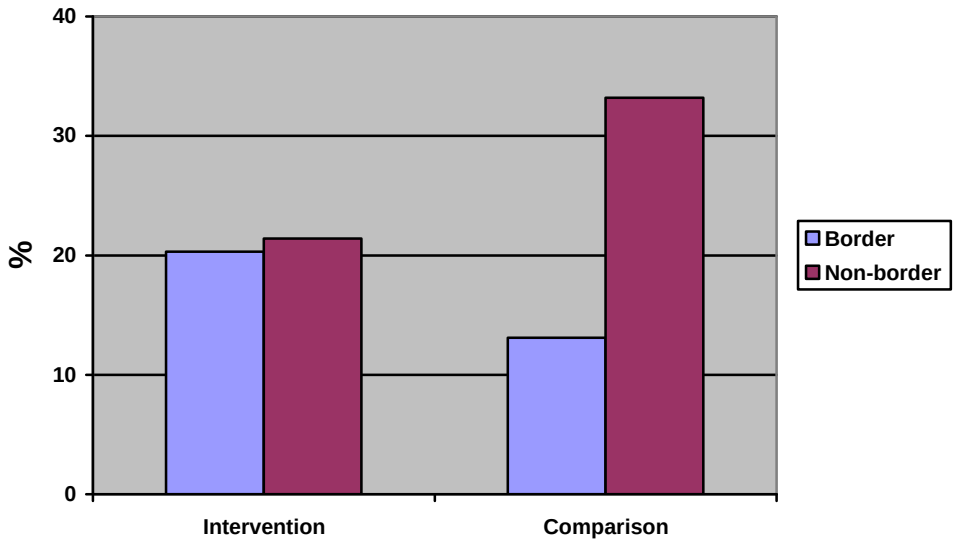
There was a significant difference (p=0.007) between the comparison and intervention groups in terms of their awareness of advertising related to food safety and nutrition in the past 6 months. 28% of respondents in the comparison group had mentioned at least one organisation from the list of eleven above compared with 21% from the intervention group. Overall, 25% of respondents mentioned at least one of the listed organisations. The most frequently mentioned organisation overall was the Food Safety Promotion Board which was mentioned unprompted by 13% of respondents.

3.5.1.2 Role of demographic factors

Age appeared to be related to awareness of advertising related to food safety and nutrition in the comparison group as level of respondents who mentioned at least one of the eleven organisations listed decreased with increasing age. This gradient was not as obvious in the intervention group. However, this apparent difference between survey groups was not statistically significant. Overall there was a significant relationship between age and awareness of food safety and nutrition advertising with the number of respondents who mentioned at least one organisation decreasing as age increased ($p<0.001$).

There was no significant difference in the relationship between rural/urban area of residence and the number of organisations associated with food safety/nutrition advertising mentioned. Overall, urban respondents (31%) were significantly more likely ($p<0.001$) than rural respondents (16%) to mention having seen or heard advertising related to food safety and nutrition from one organisation in the preceding 6 months).

Figure 3.5.1.2 Percentage of respondents who mentioned at least one organisation in relation to food safety/nutrition advertising by border/non-border area of residence



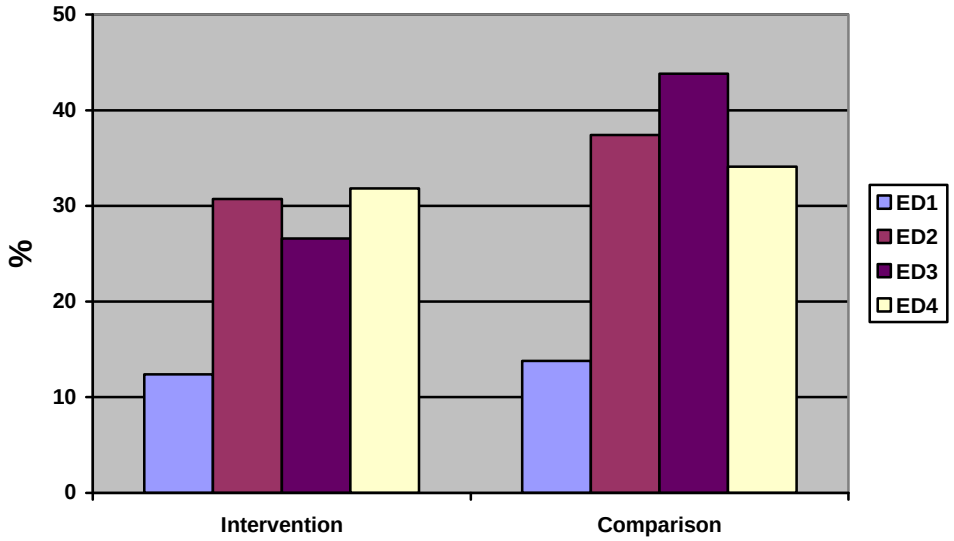
The relationship between border/non-border area of residence and the number of organisations mentioned in the intervention group was significantly different than the relationship in the comparison group ($p=0.001$). In the comparison area there was a 20% difference between those living in non-border and border areas in terms of the number of respondents that mentioned at least one organisation related to food advertising. In the intervention area there was no significant difference between those living in border and non-border areas.

There were no significant differences in awareness of food safety/nutrition advertising in terms of gender.

3.5.1.3 Role of socioeconomic factors

There was no significant difference in the relationship between education and the number of organisations mentioned in the intervention and comparison groups. Overall, there was a significant difference between level of education and awareness of food related advertising with 13% of individuals with no education mentioning at least one listed organisation compared with 33% of respondents with the highest level of education ($p<0.001$).

Figure 3.5.1.3 Percentage of respondents who mentioned at least one organisation in relation to food safety/nutrition advertising by education



There was no significant difference in the relationship between employment status and the number of organisations mentioned in the intervention and comparison groups. Overall, there was a significant difference ($p<0.001$) between employment status and awareness of food related advertising with 8% of individuals who are retired mentioning at least one listed organisation compared with 40% of individuals classified as economically inactive.

Summary table 3.5.1 for Indicator: Percentage of the population that mentioned at least one organisation who advertised about food safety and nutrition in the last 6 months (Question G1)

	Survey group differences	Intervention	Comparison
OVERALL	p=0.007	21.2%	27.8%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		19.8%	27.8%
Female		22.2%	27.9%
		ns	ns
Age	ns		
18-29		24.3%	36.8%
30-44		23.8%	28.6%
45-59		18.5%	18.4%
60+		10.2%	10.3%
		ns	p<0.001
Rural/Urban	ns		
Rural		15.5%	16.9%
Urban		25.4%	36.6%
		p=0.004	p<0.001
Border Status	P=0.001		
Border		20.3%	13.1%
Non-border		21.4%	33.2%
		ns	p<0.001
SOCIOECONOMIC FACTORS			
Education	ns		
None (ED1)		12.4%	13.9%
GCSE/O Levels/NVQ Levels 1,2 (ED2)		30.5%	37.6%
A Levels / NVQ Level 3 (ED3)		27%	43.8%
Third Level / NVQ Level 4, 5 (ED4)		32.1%	33.8%
		p<0.001	p<0.001
Employment status	ns		
Employed		25.3%	37.7%
Unemployed		16.5%	18.5%
Economically inactive		42.9%	38.1%

Retired		6.8%	9.4%
		p<0.001	p<0.001

3.5.2 Indicator: Percentage of the population who are aware of local food-related initiatives (Question G2)

Respondents were asked if they were aware of any food-related activities / initiatives that were available locally. Examples such as basic food hygiene courses, cooking skills courses, breakfast clubs, and food growing projects were provided by the interviewer

To indicate awareness of local food-related initiatives, the percentage of respondents who were aware of such initiatives was used.

This indicator is relevant to the DFfA programme's **Key Expected Outcome 4.2:** stronger food and well-being networks for sharing, learning and support locally, regionally and nationally.

3.5.2.1 Overall level of concern

Respondents in the comparison group were significantly more aware of food related initiatives (19%) than respondents in the intervention group (10%; p<0.001).

3.5.2.2 Role of demographic factors

There were no significant differences in awareness of food-related initiatives issues in terms of gender.

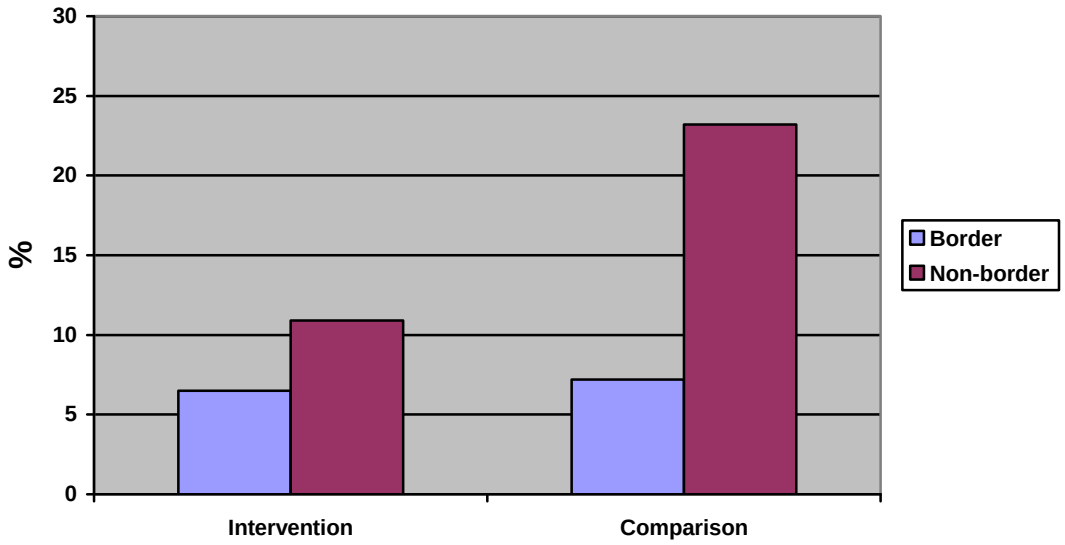
The relationship between age and awareness of food-related initiatives was not significantly different between the two groups. Overall, younger respondents were more aware of food-related initiatives than older respondents (p=0.001).

The relationship between rural or urban residence and awareness of food-related initiatives was not significantly different between the two groups. Overall, urban respondents (17%) were more aware of food-related initiatives than rural respondents (11%; p=0.001).

Border or non-border residence appeared to be related to awareness of food-related initiatives in the comparison group where non-border residents (23%)

scored higher than border residents (7%), while the corresponding scores were closer in the intervention group. However, this apparent difference between survey groups was not statistically significant. Overall, non-border residents (17%) were significantly more aware of food-related initiatives than border residents (7%; p<0.001)

Figure 3.5.2.2 Percentage of respondents who were awareness of food-related initiatives by border or non-border area of residence.

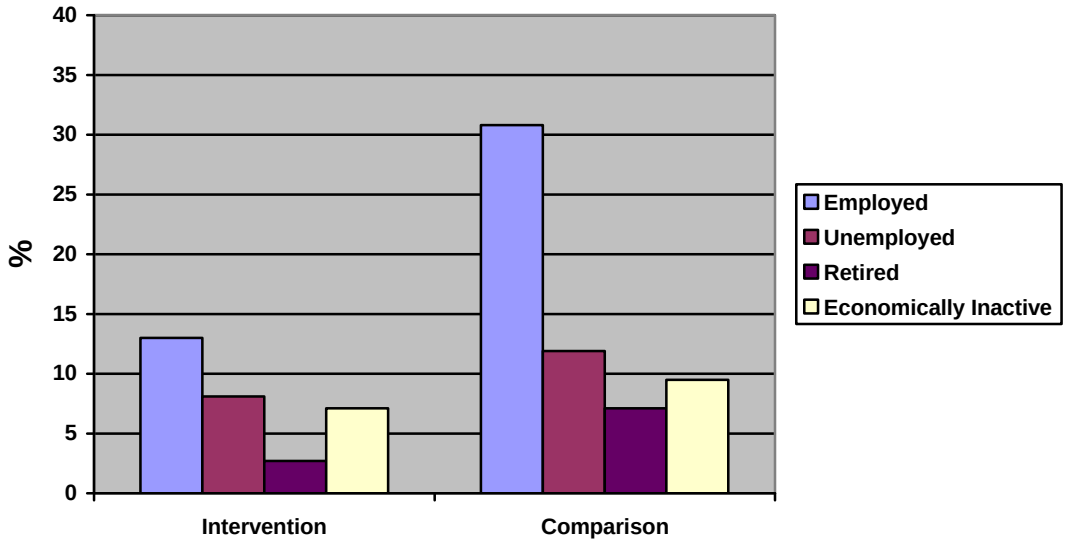


3.5.2.3 Role of socio-economic factors

The relationship between education and awareness of food-related initiatives was not significantly different between the two groups. Overall, respondents with a higher level of educational qualification displayed greater awareness of food-related initiatives (p<0.001).

The relationship between employment status and awareness of food-related initiatives was not significantly different between the two groups. Overall, employed people were most likely (22%) to be aware of food-related initiatives (p<0.001).

Figure 3.5.2.3 Percentage of respondents were aware of food-related initiatives by employment status.


40
35
30
25
20
15
10
5
0
%
Intervention
Comparison
Employed
Unemployed
Retired
Economically Inactive

Summary table 3.5.2 Indicator: Percentage of the population who are aware of local food-related initiatives (Question G2)

	Survey group differences	Intervention	Comparison
OVERALL	p<0.001	9.5%	18.9%
DEMOGRAPHIC FACTORS			
Gender	ns		
Male		5.5%	18.0%
Female		13.2%	19.5%
		p=0.001	ns
Age	ns		
18-29		9.2%	24.7%
30-44		12.4%	14.4%
45-59		12.1%	17.2%
60+		3.4%	9.2%
		ns	p=0.002
Rural/Urban	ns		
Rural		4.8%	15.9%
Urban		13.0%	21.3%
		p=0.001	ns
Border Status	ns		
Border		6.5%	7.2%
Non-border		10.9%	23.2%
		ns	p<0.001
SOCIOECONOMIC FACTORS			
Education	ns		

None (ED1)		6.1%	10.6 %
GCSE/O Levels /NVQ Levels 1, 2 (ED2)		10.8%	17.6 %
A Levels / NVQ Level 3 (ED3)		11.1%	30.1 %
Third Level / NVQ Level 4, 5 (ED4)		23.1%	35.1 %
		p<0.001	p<0. 001
Employment status	ns		
Employed		13.0%	30.8 %
Unemployed		8.1%	11.9 %
Economically inactive		7.1%	9.5 %
Retired		2.7%	7.1 %
		ns	p<0. 001

REFERENCES

Coakley A (2001) *Healthy Eating: Food and Diet in Low Income Households*. *Administration* 49(3), 87-103.

Feichtinger, E. (1996). Looking towards nutrients: towards a more holistic view of poverty and food. In Kohler B, Feichtinger E, Barlosius E and Dowler E (Eds*.), Poverty and Food in Welfare Societies*. Berlin.

Friel, S. & Conlon, C. (2004) *Food Poverty and Policy*. Combat Poverty Agency: Dublin.

Friel S, Walsh O & McCarthy D (2004) *The Cost of Health Eating in Ireland.* Combat Poverty Agency.

APPENDICES

APPENDIX 1: MEMBERSHIP OF THE FOOD POVERTY RESEARCH GROUP

Present members

Kevin P Balanda (chair)	Institute of Public Health in Ireland
Lorraine Fahy	Institute of Public Health in Ireland
Steve Barron	Institute of Public Health in Ireland
Orla Walsh	Institute of Public Health in Ireland
Emma Turkington	Armagh and Dungannon Health Action Zone
Linda Norris	Armagh and Dungannon Health Action Zone
Shirley Hawkes	Armagh and Dungannon Health Action Zone

Past members

Jorun Rugkasa	Institute of Public Health in Ireland
Niamh Shortt	Institute of Public Health in Ireland
Yukiko Kobayashi	Institute of Public Health in Ireland
Tracy O' Neill	Armagh and Dungannon Health Action Zone
Lyndsey McCann	Armagh and Dungannon Health Action Zone
Aodhann O' Donnell	Armagh and Dungannon Health Action Zone
Alison Crawford	Armagh and Dungannon Health Action Zone
Tracey Powell	Armagh and Dungannon Health Action Zone

APPENDIX 2: Cover letter to households

Date as Postmark:

Dear Householder

Re: Community Survey on Food and Health

Armagh and Dungannon Health Action Zone, in association with the Institute of Public Health in Ireland, is carrying out a community survey on food and health. The purpose of the survey is to find out what people know about healthy foods, food safety and nutrition. The results from the survey will be of enormous value in helping us better understand a range of issues around food, and help us to improve the health of people locally.

We have appointed Social & Market Research (SMR) to conduct the survey on our behalf and your household was selected at random to take part in the survey. I am therefore writing to ask for your help.

An interviewer from Social & Market Research (SMR) will call with you within the next couple of weeks in the hope that you will agree to take part in the survey. The interview will take around 15 minutes to complete. Any information which you give will be treated in the strictest confidence and will only be used for statistical purposes.

If you have any queries about the survey please feel free to contact me directly on 028 8772 9017.

I hope you will find the survey of interest and I thank you in anticipation of your co-operation.

Yours sincerely

A O'Donnell

Aodhan O'Donnell
Armagh & Dungannon Health Action Zone

APPENDIX 3: Pre-test survey Questionnaire

SERIAL NO: | | | | | **LETTER:** |

WARD NAME: (FROM ADDRESS SHEET)

SMR
SOCIAL & MARKET RESEARCH

on behalf of

INSTITUTE OF PUBLIC HEALTH IN IRELAND
&
ARMAGH AND DUNGANNON HEALTH ACTION ZONE

COMMUNITY SURVEY

RESPONDENT NAME: _____

RESPONDENT ADDRESS: _____

_____

_____

_____

RESPONDENT
TELEPHONE NUMBER: _____

INTERVIEWER'S NAME: _____

CONTACT DETAILS:

	Day		Month		Time	
1st Call						
2nd Call						
3rd Call						

CONTACT:

Full Interview	**1**	**No Longer Lives At This Address**	**6**
Refused	**2**	**Language Problem**	**7**
Ill / In Hospital	**3**	**Demolished / Vacant**	**8**
Away / On Holiday	**4**	**Other (specify)**	**9**
Occupied No Reply	**5**		

SECTION A : SHOPPING PATTERNS

A1. Who normally shops for food in this household? **(CIRCLE ONE ONLY)**

Self	1
Partner	2
Other adult in household	3
Child	4
Other (Specify)	5

A2A. Thinking about the different types of outlets where you can buy food, from which of the following do you buy food REGULARLY (at least two days per week), either for yourself or for someone else? **CIRCLE ALL MENTIONED - SHOWCARD 1**

A2B. And from which do you buy food OCCASIONALLY (about two or three times per month)? **CIRCLE ALL MENTIONED - SHOWCARD 1**

A2C. And from which do you NEVER buy food? **CIRCLE ALL MENTIONED - SHOWCARD 1**

	A2A	A2B	A2C
Takeaway	1	1	1
Fast food	1	1	1
Sandwich bar	1	1	1
Coffee shop	1	1	1
Cafes	1	1	1
Restaurant	1	1	1
Pub/wine bar	1	1	1
Mobile food outlet (e.g. hot dog stand)	1	1	1
Social club/ health club/ sports club	1	1	1
none	1	1	1

A3. Where do you do the MAIN food shopping for the household?
(PLEASE WRITE IN – ONE ONLY)

NAME OF SHOP	
LOCATION	

A4. Why is the shopping for your household mainly done at this shop?
UNPROMPTED – CIRCLE ALL MENTIONED

	Mentioned
Within walking distance	1

Good public transport to & from	1
Closest to home address	1
Provides value for money (i.e. cheap/inexpensive)	1
Good variety of food items	1
Good special offers	1
Friendly/helpful staff	1
Habit	1
Other, please specify	1
Don't know	77

A5. And how often does your household shop there? **SHOWCARD 2** **(CIRCLE ONE ONLY)**

Daily	1
More than once a week	2
Weekly	3
Fortnightly	4
Other (specify)	5

A6. And how does the person who normally does the shopping travel to this food store? **(CIRCLE ONE ONLY)**

Family car	1	-> go to A8
Friend/neighbour/relatives car	2	-> go to A8
Public transport (i.e. bus)	**3**	**-> go to A7A**
Taxi	**4**	**-> go to A7B**
Shared taxi (with friend/neighbour/relative)	**5**	**-> go to A7C**
Walk	6	-> go to A8
Other specify (e.g. Community transport)	7	-> go to A8

A7. If travel by public transport, taxi or shared taxi, what is the total cost of the journey. RECORD COST FOR SHOPPER AND THOSE WHO NORMALLY ACCOMPANY SHOPPER E.G. CHILDREN, CARER ETC.

		£ Cost for Shopper	**£ Cost for Others**	**£ TOTAL COST**
A7A	Public transport (i.e. bus)			
A7B	Taxi			
A7C	Shared taxi (with friend/neighbour/relative)			

A8 What is the distance that you travel to this shop? **(PLEASE WRITE IN NUMBER OF MILES)**

Miles			

A9. In the last 6 months on average how much of your household income is spent on food per week (excluding transport)? **(PLEASE WRITE IN AMOUNT)**

£			

A10. Have you ever substantially reduced the amount of money you spend on food weekly to allow the payment of other household bills or expenses in the last 6 months (e.g. rent/mortgage, heating, electricity, holiday etc)? **(CIRCLE ONE ONLY)**

Yes	No	Don't know
1	2	3

A11. Which of the following issues do you consider when shopping for food? **(CIRCLE FOR EACH)** **SHOWCARD 3**

ISSUE	**A11**			**A12**
	Yes	No		
Advertised – wanted to try	1	2		1
What it says on the label	1	2		2
Help with weight control	1	2		3
Produced locally	1	2		4
Special offers	1	2		5
Fat content of item	1	2		6
Convenient – easy to prepare	1	2		7
What partner will like	1	2		8
What children will like	1	2		9
Habit – usually buy item	1	2		10
Organic	1	2		11
Healthy option	1	2		12
Cost of food item	1	2		13
Other (Specify)	1	2		14

A12. And of the issues that you mentioned, which would be the MAIN issue that you would consider when you shop for food? **SHOWCARD 3** - **(CIRCLE ONE ONLY ABOVE)**

A13. Before you go shopping do you (SHOWCARD 4): (CIRCLE FOR EACH)

	Yes	No	Sometimes
Write a shopping list	1	2	3
Meal plan for the week ahead	1	2	3
Have an idea in your head what's needed	1	2	3

SECTION B: FOOD & NUTRITION:

B1. How often do you eat each of the following food items in an average week? **SHOWCARD 5 (CIRCLE FOR EACH)**

	More than	Once a	Most Days	1-2 Times	Weekl	Neve

	once a day	day	(3+ a week)	a week	y	r
Fruit	1	2	3	4	5	6
Vegetables	1	2	3	4	5	6
Bread	1	2	3	4	5	6
Potatoes	1	2	3	4	5	6
Breakfast Cereal	1	2	3	4	5	6
Biscuits	1	2	3	4	5	6
Confectionery	1	2	3	4	5	6
Cakes	1	2	3	4	5	6
Savoury Snacks	1	2	3	4	5	6
Fizzy Drinks & Squashes	1	2	3	4	5	6
Sugar-Free Drinks	1	2	3	4	5	6
Milk & milk products	1	2	3	4	5	6
Rice/pasta	1	2	3	4	5	6
Red meat	1	2	3	4	5	6
White meat	1	2	3	4	5	6
Meat products	1	2	3	4	5	6
Fish	1	2	3	4	5	6
Chips	1	2	3	4	5	6
Fried foods (excluding chips)	1	2	3	4	5	6
Ready made meals	1	2	3	4	5	6

B2. What type of bread do you normally eat? **SHOWCARD 6** **(CIRCLE ONE ONLY)**

White	1
Wholemeal/Multigrain	2
Brown/Granary	3
No regular preference	4
Other (specify)	5
Don't eat bread	6

B3. What type of milk do you normally use? **SHOWCARD 7** **(CIRCLE ONE ONLY)**

Whole	1
Semi-skimmed	2
Skimmed	3
Goats milk	4
Soya milk	5
None	6
Other (specify)	7

B4. Which one of the following best describes your attitude to eating & drinking? **SHOWCARD 8** **(CIRCLE ONE ONLY)**

I only eat & drink things that are good for me	1
I don't worry too much as long as I consume some healthy things such as fruit &	2

vegetables	
I can eat & drink anything as long as I take plenty of exercise	3
I eat & drink the things I enjoy & don't worry about it	4
I am not interested in food and will eat anything	5

B5. How healthy do you consider your eating habits to be? **(CIRCLE ONE ONLY)**

Very healthy	Fairly healthy	Unhealthy
1	2	3

B6. How many portions of fruit & vegetables do you eat in an average day? **SEE SHOWCARD 9 FOR DEFINITION OF PORTION (CIRCLE ONE ONLY)**

None	1 portion	2 portions	3 portions	4 portions	5 or more
0	1	2	3	4	5

B7. Have you TRIED any of the following dietary changes in the last year (even if only for a short time)? **(CIRCLE FOR EACH)**

	B7(Tried?)			B8 (Maintained?)		
	Yes	No		Yes	No	N/A
Eating more	1	2		1	2	8
Eating less	1	2		1	2	8
Less processed or convenience foods	1	2		1	2	8
More processed or convenience foods	1	2		1	2	8
Using low fat foods	1	2		1	2	8
Eating more fibre	1	2		1	2	8
Less sugar, confectionery & soft drinks	1	2		1	2	8
Eating more fruit & vegetables	1	2		1	2	8
Less fatty or fried foods	1	2		1	2	8
Other (specify)	1	2		1	2	8

B8. Of the dietary changes that you made in the past year, are you still MAINTAINING them? **(CIRCLE FOR EACH ABOVE)**

B9. If you have TRIED any of the above dietary changes, what was your MAIN reason for wanting to change? **UNPROMPTED (CIRCLE ONE ONLY)**

To lose weight	1
To improve overall health	2
To feel better or fitter	3
To help reduce risk of disease	4
Suggested by doctor or health professional	5
Other, please specify	6

B10. Which of the following factors discourage or prevent you from eating more healthy foods? **SHOWCARD 10 (CIRCLE FOR EACH)**

FACTORS	B10		B11
	Yes	No	
Lack of information available	1	2	1
Information available is not user friendly	1	2	2
Confused about what is & isn't healthy	1	2	3
Not sure how to read nutritional information labels	1	2	4
Do not know how to cook healthy foods	1	2	5
Healthy foods are too expensive (where I shop)	1	2	6
Poor choice of healthy food (where I shop)	1	2	7
Poor quality of healthy food (where I shop)	1	2	8
Fruit and vegetables are heavy to carry	1	2	9
Transport problems accessing shops where affordable, safe, healthy food is available (Specify):	1	2	10
Other (specify):	1	2	11

B11. Which of the above factors is the MAIN factor, which discourages or prevents you from eating more healthy foods? SHOWCARD 10 - (CIRCLE ONE ONLY)

SECTION C: LIFESTYLE

INTERVIEWER READ OUT:

"Regular physical exercise is considered as taking part in exercise or sport 2-3 times per week for a minimum of 20 minutes at a time, or more general activities like walking, cycling or dancing 4-5 times a week accumulating to at least 30 minutes per day."

C1. With this definition in mind, which of the following statements best describes how physically active you have been over the last 6 months? **SHOWCARD 11 (CIRCLE ONE ONLY)**

I am not regularly physically active and do not intend to be so in the next six months	1
I am not regularly physically active but am thinking about starting to do so in the next 6 months	2
I do some physical activity but not enough to meet the description of regular physical activity stated by the interviewer	3
I am regularly physically active but only began in the last 6 months	4
I am regularly physically active & have been doing so for longer than 6 months	5

SECTION D: FOOD POVERTY

D1. Have you ever heard of the term 'Food Poverty'? **(CIRCLE ONE ONLY)**

Yes	1	-> go to D2
No	2	-> go to D3
Don't know	3	-> go to D3

D2. What do you think the term 'Food Poverty' means? **UNPROMPTED – CIRCLE ALL MENTIONED**

Not having enough money to be able to eat a healthy balanced diet	1
Inadequate shopping facilities	1
Poor access to shops	1
Poor quality & high cost of food locally	1
Lack of right equipment for cooking & storage	1
Conflicting information about food and health	1
Lack of information – not sure what makes up a healthy balanced diet	1
Poor transport to shopping facilities	1
Other, please specify	1
Don't know	1

D3. Can you think of any things which might limit people's access to healthy food choices? **UNPROMPTED – CIRCLE ALL MENTIONED**

Lack of awareness / knowledge of healthy food choices	1
Money or cost	1
Where people live / distance to certain shops	1
Other 1 (specify)	1
Don't know	7

SECTION E: EATING / NUTRITION; KNOWLEDGE AND AWARENESS

E1. What is your understanding of the term 'healthy eating'? UNPROMPTED **(CIRCLE ALL MENTIONED BY RESPONDENT)**

	Mentioned?
Reduce fat or fried foods	1
Eat fruit & vegetables	1
Reduce sugar & confectionery	1
Eat plenty of fibre	1
Eat plenty of starch & carbohydrates	1
Reduce salt	1
Drink water & fruit juice	1
Avoid red meat/or eat white meat or fish	1
Don't know	1
Other, please specify	1

E2. How many portions of fruit and vegetables per day do health professionals recommend we eat? **UNPROMPTED – SHOWCARD 9 – INTERVIEWER SEE DEFINITION OF PORTION. (CIRCLE ONE ONLY)**

1 portion	2 portions	3 portions	4 portions	5 portions	6 portions	7-10 portions	Don't know
1	2	3	4	5	6	7	77

E3. Please list the 5 main food groups? **UNPROMPTED –CIRCLE ALL MENTIONED**

	Mentioned?
FRUIT & VEGETABLES All fruit and vegetables including fresh, frozen, canned, dried. Potatoes are not included.	1
BREAD, OTHER CEREALS & POTATOES All bread, e.g. white, wholemeal, wheaten, soda bread, Potatoes. Rice, pasta, noodles, couscous. Breakfast cereals, porridge oats. Other grains, such as barley, buckwheat, millet.	1
MEAT, FISH & ALTERNATIVES Meat. Poultry. Fish. Eggs. Pulses, e.g. peas, beans, lentils. Nuts. TVP, soy protein. Quorn. Meat includes beef, pork, lamb and products made from them. Poultry includes chicken and turkey. Fish included fresh, frozen and canned fish (e.g. sardines and tuna) and fish products.	1
MILK & MILK PRODUCTS Milk.Cheese. Yoghurt. Fromage frais. Buttermilk. This group does not include butter,eggs or cream.	1
FOODS CONTAINING FAT & FOODS CONTAINING SUGAR Cooking oil, butter, margarine, low fat spread, other spreading fats. Mayonnaise, salad cream and oily salad dressings. Creamy sauces, fatty gravies. Cream. Chocolate, sweets, sugar. Crisps, corn chips, corn snacks. Biscuits, cakes, pastries. Puddings, jelly, ice cream. Sugar, jam, honey. Sugary fizzy drinks and squashes.	1

E4. What is your understanding of the term the 'Balance of Good Health'?
(PLEASE WRITE IN)

Don't know	99

SECTION F: FOOD SAFETY & HYGIENE;

F1. Do you regularly cook for yourself & the rest of the household? **(CIRCLE <u>ONE</u> ONLY)**

Yes	1
No	2

F2. What do you think is the thing <u>MOST</u> likely to cause food poisoning in the home? **UNPROMPTED – RECORD ONE CAUSE ONLY**

F3. I am going to read out some things which people may do when they are dealing with food. Can you tell me how often you personally do each. **(SHOWCARD 12) (CIRCLE FOR EACH)**

	F3					
	Always	Usually	Some-times	Rarely	Never	Don't know
Follow manufacturers' instructions for preparation & cooking of food	1	2	3	4	5	6
Wash your hands with soap & water before handling food	1	2	3	4	5	6
Keep raw food below cooked food in the fridge	1	2	3	4	5	6
Keep kitchen utensils & chopping boards clean	1	2	3	4	5	6
Eat food that is past its "best before" date	1	2	3	4	5	6
Ensure that food in your fridge is in covered containers or is properly wrapped	1	2	3	4	5	6
Ensure that pets cannot come into contact with food	1	2	3	4	5	6
Store perishable foods in a fridge at home within two hours of buying them	1	2	3	4	5	6
Wash utensils (e.g. chopping boards), between preparing raw meat & cooked food	1	2	3	4	5	6
Check that your fridges and freezers are at the right temperature	1	2	3	4	5	6

F4 Now thinking about good hygiene, are you concerned about hygiene in any of the following places? **CIRCLE ALL MENTIONED – SHOWCARD 13**

Supermarkets	1
Local/corner grocery shops	1
Local Butchers	1
Market stalls selling fruit and veg	1
Market Stalls Selling Fish	1
In the home	1
Other place (specify)	1
None of these places	1

F5 Generally speaking which of these statements best describes your attitude to food safety issues? **(CIRCLE ONE ONLY) - SHOWCARD 14**

I am **very** concerned about food safety issues	1

I am **quite** concerned about food safety issues	2
I am **neither** concerned / nor unconcerned about food safety issues	3
I am **not very** concerned about food safety issues	4
I am **not at all** concerned about food safety issues	5

SECTION G: INFORMATION ACCESS

G1 When thinking about advertising in the form of TV, radio, newspapers, magazines, outdoor billboards or other forms, which organisations/companies/bodies have you seen or heard advertising to consumers in the past 6 months about food safety and nutrition?
UNPROMPTED – CIRCLE ALL MENTIONED

Food Safety Promotion Board	1
Department of Health, Social Services and Public Safety	1
Ministry of Agriculture Fisheries and Food	1
Department of Environment, Food and Rural Affairs	1
The Food Standards Agency	1
Health Promotion Agency	1
Local Retailers	1
Local Newspapers	1
Community Newsletters	1
Local District Council	1
Armagh and Dungannon Health Action Zone	1
Other: Specify	1
None/Don't Know	1

G2. Are you aware of any food-related activities / initiatives that are currently available locally? (e.g. basic food hygiene courses, cooking skills courses, breakfast clubs, food growing projects, etc.) **(CIRCLE ONE ONLY)**

Yes	1	-> go to G3
No	2	-> go to SECTION H

G3. Please list the name and venue for each activity or initiative? **(PLEASE WRITE IN ACTIVITY AND VENUE NAMES – UP TO A MAXIMUM OF 2)**

ACTIVITY NAME: VENUE:
ACTIVITY NAME: VENUE:

SECTION H: SOCIAL INCLUSION

H1. Which if any of the following have you done in the past two weeks? (CIRCLE FOR EACH)

	Yes	No
Visited relatives / been visited by relatives	1	2
Spoke to relatives on the phone	1	2
Visited friends / been visited by friends	1	2
Spoke to friends on the phone	1	2
Spoke to neighbours	1	2
Spoke to a health professional (e.g. home help, meals on wheels, social worker, health visitor)	1	2
None of these	1	2

H2. Which if any of these have you done in the past 2 weeks? **(CIRCLE FOR EACH)**

	Yes	No
Attended an adult education / night school class	1	2
Participated in a voluntary group / local community group	1	2
Participated in community or religious activities	1	2
Went to a leisure centre	1	2
Went on a social outing	1	2
None of these	1	2

H3. How strongly do you agree or disagree with the following statements? **SHOWCARD 15** **(CIRCLE FOR EACH)**

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I can influence decisions that affect my neighbourhood	1	2	3	4	5
I am satisfied with the amount of control I have over decisions that affect my life	1	2	3	4	5

H4. Do you agree or disagree that, by working together, people in your neighbourhood could influence decisions that affect the neighbourhood'? **CIRCLE ONE ONLY - SHOWCARD 16**

Strongly agree	1
Agree	2
No opinion	3
Disagree	4
Strongly disagree	5

H5. How confident are you in the following: **(CIRCLE FOR EACH) - SHOWCARD 17**

	Very confident	Confident	Neither	Not very confident	Not confident at all
Your ability to prepare safe food	1	2	3	4	5
Your ability to prepare healthy food	1	2	3	4	5

Your knowledge of what a healthy diet should be	1	2	3	4	5
Your ability to keep food safe in the home	1	2	3	4	5

SECTION I: BACKGROUND SECTION

I1. INTERVIEWER PLEASE RECORD DATE OF INTERVIEW

DAY		MONTH		YEAR	
				0	3

I2. INTERVIEWER PLEASE RECORD POSTCODE FROM ADDRESS SHEET

EXAMPLE	B	T	0	7		3	F	P
	B	T						

I3. INTERVIEWER PLEASE RECORD RESPONDENT SEX (CIRCLE ONE ONLY)

Male	**1**
Female	**2**

I4. What age are you?

I5. How tall are you (inches or cm)?
(PLEASE WRITE EITHER FEET/INCHES OR METRES/CMS)

Feet	Inches		Metres	Centimetres
Don't know	77			
Refusal	99			

I6. What do you weigh: (pounds or kg)?
(PLEASE WRITE IN STONES / POUNDS OR KILOGRAMS)

Stone	Pounds		Kilograms
Don't know	77		
Refusal	99		

I7. Are you? **CIRCLE ONE ONLY - SHOWCARD 18**

Single (never married)	1
Married	2
Cohabiting	3

Widowed	4
Separated	5
Divorced	6

I8. How many persons aged 18+ live in your household? **(PLEASE WRITE IN)**

I9. How many persons aged under 18 live in your household? **(PLEASE WRITE IN)**

I10. What is your current employment status? CIRCLE ONE ONLY - SHOWCARD 19

Self-employed	1	go to I13
Working full-time	2	
Working part-time	3	
Not working (seeking work)	4	go to I11
Not working (Not seeking work)	5	
On a Government Training Scheme	6	
On ACE (Action for Community Employment)	7	
Retired	8	go to I12
Student (Further Education)	9	go to I1I
Other (please specify)	10	

I11. Have you ever worked? CIRCLE ONE ONLY

Yes	**1**	**-> go to I12**
No	**2**	**-> go to I15**

I12. In what year did you last work? (PLEASE WRITE IN YEAR)

I13. What is / was the full title of your main job? (PLEASE WRITE IN)

_____ | | | |

I14. Describe what you do (did) in your main job. (PLEASE WRITE IN)

GO TO I17

I15. What is the occupation of the Chief Wage Earner in your household? (PLEASE WRITE IN)

_____ | | | |

I16. Describe what they do (did) in their main job. (PLEASE WRITE IN)

I17. How many cars or vans are owned, or available for use, by one or more members of your household? Include any company car or can if available for private use. **CIRCLE ONE ONLY**

None	1
One	2
Two	3
Three	4
Four or more (please write in)	

I18. Now I would like to ask you about your income. Please be assured that these responses will be treated with the strictest confidence. What is the total income before tax of your household? Please include all income from benefits. CIRCLE ONE ONLY - SHOWCARD 20

Per Annum	Per Week	
<£3000	£58 or less	1
£3,000 - £4,999	£58 - £96	2
£5,000 - £6,999	£96 - £134	3
£7,000 - £9,999	£134 - 192	4
£10,000 - £14,999	£192 - £288	5
£15,000 - £19,999	£288 - £384	6
£20,000 - £29,999	£384 - £576	7
£30,000 - £39,999	£576 - £769	8
£40,000 - £49,999	£769 - £961	9
£50,000 or more	£961	10
Refused		11
Don't know		12

I19A. What religion, religious denomination or body do you belong to? (CIRCLE ONE ONLY) SHOWCARD 21

Roman Catholic	1
Presbyterian Church in Ireland	2
Church of Ireland	3
Methodist Church in Ireland	4
Other please write in	5

I19B. What religion, religious denomination or body were you brought up in? (CIRCLE ONE ONLY) SHOWCARD 21

Roman Catholic	**1**
Presbyterian Church in Ireland	**2**
Church of Ireland	**3**

Methodist Church in Ireland	**4**
Other please write in	**5**
None	**6**

I20. Which of the following qualifications do you have? **CIRCLE ALL** of the qualifications that apply. **SHOWCARD 22**

GCSE (grades D-G), CSE (grades 2-5)	1
1-4 CSEs (grade 1), 1-4 GCSEs (grades A-C), 1-4 'O' Level Passes	1
5+ CSEs (grade 1), 5+ GCSE (grades A-C), 5+ 'O' Level passes, Senior Certificate	1
1 'A' Level, 1-3 AS Levels, Advanced Senior Certificate	1
2+ 'A' Levels 4+ AS Levels	1
First Degree	1
Higher Degree	1
NVQ Level, GNVQ Foundation	1
NVQ Level 2, GNVQ Intermediate	1
NVQ Level 3, GNVQ Advanced	1
NVQ Level 4, HNC, HND	1
NVQ Level 5	1
No Qualifications	1

I21.
Which local newspapers do you read regularly? **(CIRCLE FOR EACH)**

	Yes	No
Armagh Observer	1	2
Ulster Gazette	1	2
Democrat	1	2
Dungannon Observer	1	2
Tyrone Courier	1	2
Tyrone Times	1	2

I22. Finally, we may wish to follow up some of the participants in the survey at a later stage. Would you be willing to participate in further research? **(CIRCLE ONE ONLY)**

Yes	1	-> go to I23
No	2	-> END INTERVIEW

I23. INTERVIEWER RECORD CONTACT DETAILS: **(PLEASE WRITE IN)**

NAME	
ADDRESS	
TELEPHONE NUMBER	

END INTERVIEW AND THANK RESPONDENT