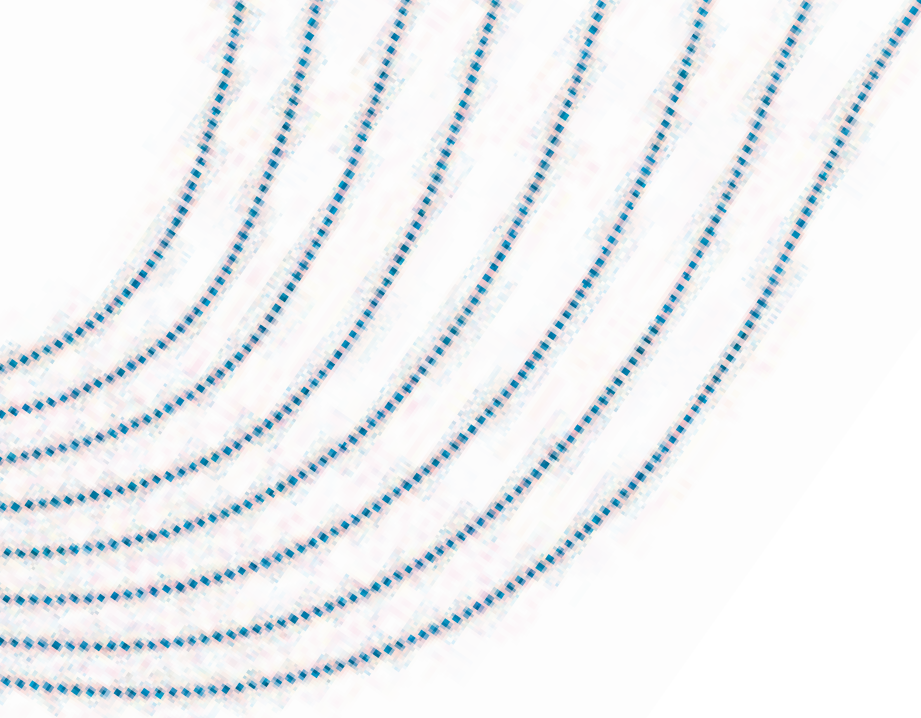


C|A|R|D|I **GRANTS**
PROGRAMME

Research Brief

**Age, Income and
Food in Ireland**



Ageing population: ROI

- At the 2006 census, there were 468,000 people aged 65+ (11% of the population).
- By 2041, there will be 1.4 million aged 65 and over (22% of the population).
- Life expectancy is 76.8 years for men and 81.6 years for women.
- 95% of men and women aged 70 and over rate their health as very good (19%), good (50%) or fair (26%).
- 9.1% of people aged 65 and over are still in employment (Q2 2009).

Ageing population: NI

- In 2008, there were 248,500 people aged 65+ (14% of the population).
- In 2041 the 65+ age group is projected to make up 24% of the population.
- Life expectancy is 76.3 years for men and 81.3 years for women.
- 66% of people aged 70 and over rate their health as good (25%) or fairly good (42%).
- 9% of men aged 65 and women aged 60+ are still in employment (Q2 2009).

Policy on pensions - ROI

- There is currently no comprehensive plan or strategy to address the issue of malnutrition.
- A National Nutrition Policy has been proposed but not published or implemented due to cutbacks.
- In 2008, HIQA introduced standards on meals and mealtimes for people in residential care.
- The HSE Health Promotion Agency has campaigned for health eating, although the focus of publications is on young children.

Policy on pensions - NI

- There is no specific government policy on food and nutrition or on food poverty in NI, although a Food and Nutrition Strategy was published in 1996.
- In 2007, the DHSS&PS published a set of guidelines for the provision of patient food in hospital.
- Campaigns by the Food Standards Agency and Health Promotion Agency aim to influence choice of food and improve dietary intake and nutrition.



Introduction

Poor diet among older people is an important public health issue, particularly as malnutrition contributes to increased morbidity and mortality. Research suggests that older adults are particularly vulnerable to a compromised nutritional intake due to a range of physical, economic and social factors which influence food access, choice and behaviour.

As a result, CARDI funded a study on demographic and socio-economic influences on food expenditure as part of its data mining programme in 2011. The resulting report, *Age, income and food in Ireland* (Bantry White et al., 2011) seeks to contribute to the emerging evidence base on food poverty and diet in older Irish people. It examines the demographic and socio-economic influences on food expenditure in the older populations in Northern Ireland (NI) and the Republic of Ireland (ROI).

This research brief is based on the key findings from the study.

Key findings

- People aged 65 and over in ROI spend an average 31.7% of their income on food, compared to 27.3% of people younger than 65. In NI, people aged 65 and over spend 23.8% on food on average, compared to 35.7% for people aged under 65 (Bantry White, et al., 2011).
- In ROI, the highest income group spends a median of €202.85 per week on food, while people under the poverty line spend a median €84.90. In NI, people in the highest income group spent a median €133.22¹ compared to €81.53 for those under the poverty line (Bantry White, et al., 2011).
- There is a complex relationship between age and food expenditure, but behaviour is influenced by factors such as income, gender and level of social exclusion (Bantry White, et al., 2011).
- Expenditure on fruit and vegetables is quite low among older people in Ireland, less than half of the recommended daily intake of 400g (Bantry White, et al., 2011).
- Improving the diet and nutrition of the older population in Ireland requires a policy approach in three areas – reducing the risk of poverty, promoting health and nutrition and ensuring retail provision is readily accessible by all (Friel & Conlon, 2004).

1 Converted using the 2005 exchange rate of £1 equals €1.37.

Malnutrition and health

The term malnutrition covers a broad spectrum of conditions, including under nutrition, over nutrition (obesity) or specific nutrient deficiencies. It has been defined as “faulty or inadequate nutritional status; undernourishment characterised by insufficient dietary intake, poor appetite, muscle wasting and weight loss” (Chen, 2010). Older people are vulnerable to malnutrition and the risk factors include chronic diseases, polypharmacy, low functional status and poor nutritional intakes.

The causes are multifaceted and include physiological, psychological and social changes associated with reduced food intake. In the older population, it is associated with poor health outcomes such as prolonged hospitalisation, prolonged rehabilitation, infection, pressure ulcers, poor wound healing, reduced cognitive function, impaired muscle function and mortality (Ahmed & Haboubi, 2010). Malnutrition is a significant public health problem which often goes undiagnosed. However, it can be managed and controlled by timely nutritional intervention (Sampson, 2009).

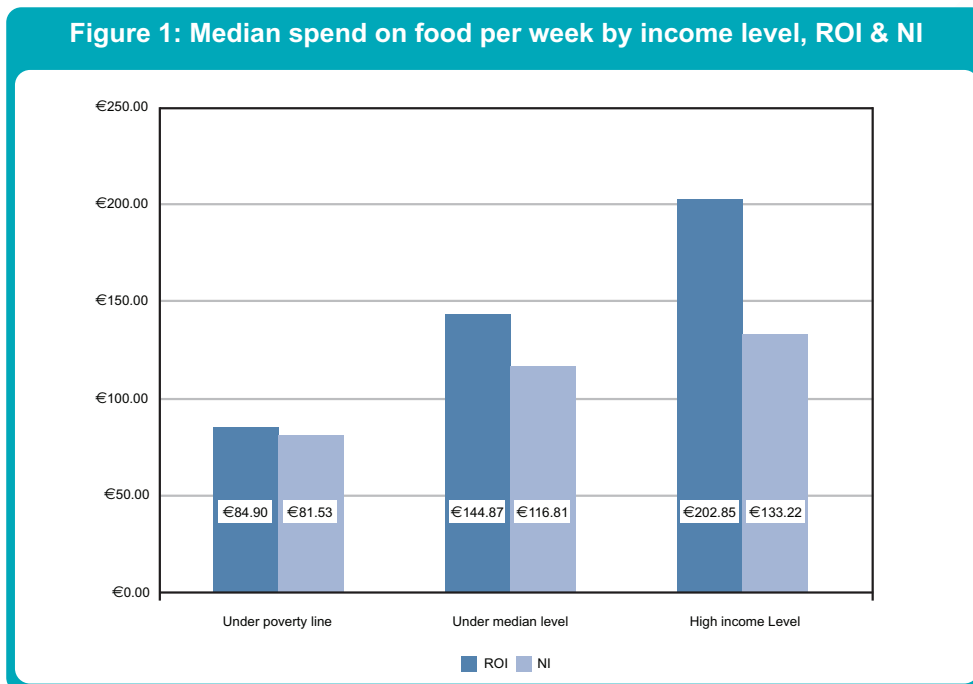
In NI, an estimated four out of 10 older people who are admitted to hospital are suffering from malnutrition on arrival. Patients over the age of 80 admitted to hospital have a five times higher prevalence of malnutrition than those under the age of 50. Six out of 10 people are at risk of becoming malnourished (Department of Health, Social Service & Public Safety, 2007). In ROI, one estimate suggests that 70,000 Irish people over 65 years of age may be either malnourished or at significant risk of malnutrition (UCD Institute of Food and Health, 2010).

Food expenditure in ROI and NI

The Bantry White et al. (2011) project examined food expenditure in ROI and NI to compare money spent on food across different age groups and different socio-economic groups. Similar trends emerged across the island of Ireland. The median value of food expenditure increases for middle-aged groups and decreases in the retirement years. This can be partly explained by the variation in household size and disposable income available to the different age groups.

The project suggests that the role played by age on food expenditure is multi-faceted. It may have a direct effect on food choices or an indirect effect through a range of socio-economic and demographic factors, most notably income and household composition. Other factors that appear to be influential include marital status, geographical area, and to a lesser extent, gender, although the relationships of each of these to food expenditure may not be straightforward. Older people spend less on food both in terms of actual expenditure and as a proportion of their income compared with the rest of the adult population. The different expenditure patterns to other groups may reflect living circumstances such as household size.

Bantry White et al. (2011) demonstrate considerable differences in spending between different income groups, particularly in ROI. As Figure 1 shows, the highest income group spends a median €202.85 per week on food in ROI, compared to people under the poverty line who spend a median €84.90. In NI, people in the highest income group spent a median €133.22² compared to €81.53 for those under the poverty line.



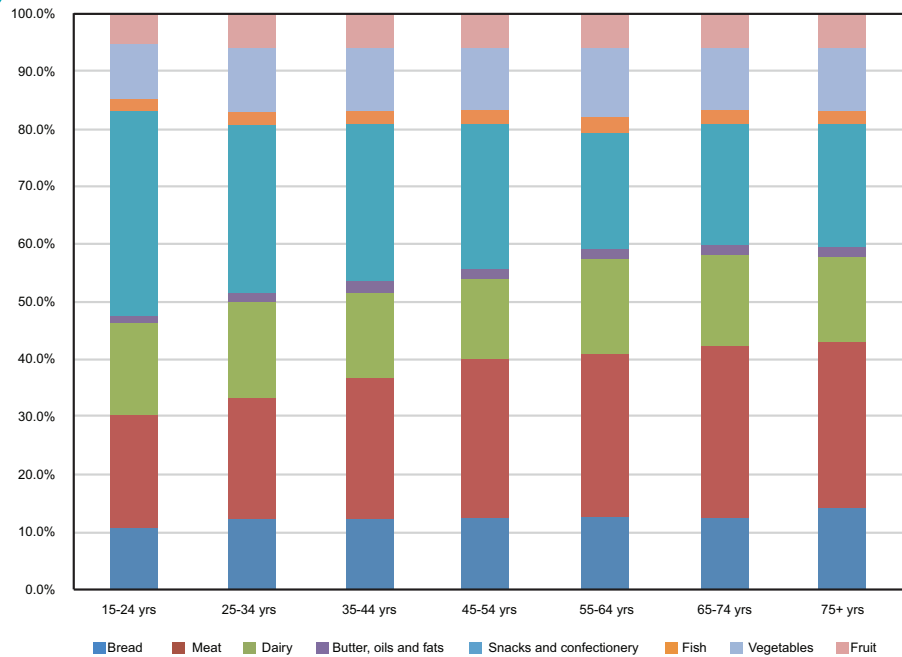
Source: Bantry White et al., 2011

People aged 65 and over in ROI spend an average 31.7% of their income on food, compared to 27.3% of people younger than 65. In NI, people aged 65 and over spend 23.8% on food on average, compared to 35.7% for people aged under 65.

Figure 2 below shows the proportion of spending on eight food groups by age in ROI. It does not include meals out. Spending on snacks and confectionery decreases significantly with age, while spending on meat increases. Older age groups spend less proportionately on dairy products, but spend more on bread and fish. The spending on vegetables is stable for all age groups, while the older age groups spend slightly more on fruit.

1 Converted using the 2005 exchange rate of £1 equals €1.37.

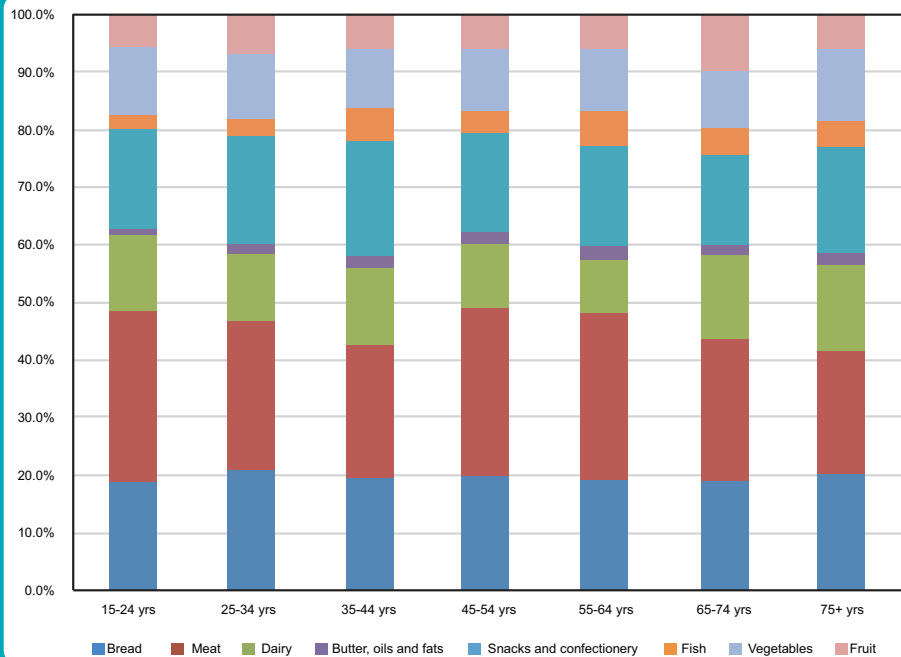
Figure 2: Food spending by age group in ROI



Source: Bantry White et al., 2011

Figure 3 shows the same breakdown for NI and the trends are somewhat different from those in ROI. Proportionate spending on bread, snacks and confectionery is stable. Spending on meat is highest for the 55-64 age group but then shows a decline for people aged 65 and over. People in the older age groups spend proportionately more on butter, oils and fats; fish and fruits than younger age groups.

Figure 3: Food spending by age group in NI



Source: Bantry White et al., 2011

A North-South comparison suggests that food expenditure trends by socio-economic and demographic characteristics demonstrate similarities. Older people across the island of Ireland spent more on staples such as bread, dairy, and fats and less on eating out, alcohol and tobacco. Spending across food categories and for alcohol and tobacco increased in line with increases in income levels in ROI while in NI, changes in expenditure on the key food categories by income level was more variable. Also in NI, expenditure on alcohol and tobacco was lower for the high income group than those in the middle income group. However, the study suggests that for both NI and ROI, those with higher incomes purchase a more diverse range of foods.

Food expenditure, health and nutrition

Bantry White et al. (2011) suggest that the majority of older people adhere to “traditional” diets which include such staples as bread, milk, fats, meat and vegetables. They reveal that Irish people’s expenditure on fruit and vegetables is quite low, less than half of the recommended daily intake of 400g. However, older people purchased proportionately more meat than younger adults and bought marginally higher quantities of fruit and vegetables, particularly green, leafy vegetables. These findings are congruent with the findings obtained from the Survey of Lifestyle, Attitudes and Nutrition (Department of Health and Children, 2007), which reported higher fruit and vegetable intake in older population groups.

However, recent data from the National Adults Nutrition Survey (NANS) (Irish Universities Nutrition Alliance, 2011) reported a significant prevalence of inadequate intakes of vitamin A, calcium, vitamin C, folic acid and vitamin B2, all of which can be attributed to low green leafy vegetable intakes in those aged 65 years and older. Depletion of such micronutrients could potentially contribute to the onset or progression of several age-related chronic conditions including age-related macular degeneration (AMD), osteoporosis, reduced immunity against infection, and reduced cognitive function. NANS also report that only 15% of those aged 65 years and over meet with the World Health Organization recommendations for a daily intake of 400g of fruit and vegetables.

Influences on food expenditure among older people

Aside from age and food expenditure, several other factors influence what older people spend their money on in terms of food.

Income

Bantry White et al. (2011) identifies high income as having a strong positive influence on food expenditure in both NI and ROI. Those older people on lower incomes spent more on basic staples and economic foods such as bread, milk, tinned and frozen food. A minority of older people, who had higher incomes, bought a more diverse range of foods suggesting there is variation in purchasing capacity between older people on low and high incomes.

Gender

The relationship between food expenditure and gender is complex. Small differences were found between male-headed single households compared with female-headed single households in the full samples in both NI and ROI, with single men spending marginally less on dairy products, fruit and vegetables. This supports the theory that spousal relationships act as a protective factor for men in terms of improved quality of dietary intake and health behaviours (Provencher et al., 2005).

Social exclusion

Social exclusion is an important consideration in addressing food poverty in older populations in Ireland. Bantry White et al. (2011) argue that people who live alone appear to be particularly vulnerable to limited food access, which in turn may relate to marital status and income levels. Over 80% of the older population had a small household size, usually including less than two people in a household.

Case study:

Diet and nutrition for MCI patients

CARDI funded a qualitative study in 2010 which was aimed at encouraging dietary and physical activity changes in mild cognitive impairment (MCI) patients. The project was led by Jayne Woodside of Queen's University Belfast and involved focus groups with MCI patients and their caregivers in order to direct the design, development and pilot testing of educational materials which would achieve this aim.

The risk factors for MCI are strongly associated with cardiovascular disease risk factors, so increasing physical activity, achieving and maintaining a healthy weight and diet and quitting smoking are imperative. The educational materials developed with the MCI patients for this project consisted of information on the Mediterranean diet and other advice on following a healthy lifestyle. One of the findings was that while the MCI patients knew that keeping the mind active through puzzles and word games was worthwhile, there was no awareness of the link between diet and cognition. The educational materials developed seek to highlight the benefits of the Mediterranean diet for memory function.

The project demonstrates how important it is to highlight the benefits of nutrition, not just for the physical health of older people, but also for the benefits that a good diet and physical exercise can bring to mental health.

Policy implications

Improving the diet and nutrition of the older population in Ireland requires a policy approach in three areas – welfare and anti-poverty policies; health and nutrition policies; and food production and distribution policies (Friel & Conlon, 2004).

- 1. Welfare and anti-poverty policies:** Policies which sustain good income levels of older people, such as maintaining an adequate state pension, are essential in reducing the risk of food poverty and malnutrition among older age groups. Direct provision of food to people with very low incomes currently focuses on schoolchildren, but this could be expanded to include vulnerable older people such as single men and those living alone.
- 2. Health and nutrition policies:** There is a need for an integrated health and nutrition policy for older adults in Ireland, North and South. This could include measures such as awareness-raising of dietary guidelines and a health promotion programme for the specific nutrition needs of older people at national and local levels. This can address the low levels of expenditure on fruit and vegetables found in the study.
- 3. Food production and distribution:** The research suggests that there are geographic and regional differences in food expenditure patterns which may need to be considered when developing policies to support food access and choice. Retail provision needs to be readily accessible to all people, including older age groups.

Conclusion

Understanding the economic and social influences on food expenditure among older people is important in combating malnutrition and promoting healthy ageing. Food expenditure is an important indicator of diet, and income level is recognised as a key factor. Examining these issues informs the continued development of income support and health policies that target nutritional problems in older people.

Bantry White et al. (2011) highlight the complexity of the relationships between age, income and food. It is important that future policy takes into account the diversity among older age groups, as well as the diversity of policy areas which have an impact on food expenditure.

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CARDI has to date awarded funding to 25 research projects and networks through its grants programme. These projects cover a wide spectrum of research, reflecting the huge range of issues relevant to the ageing research agenda. They bring together researchers from many disciplines including medicine, gerontology, economics, psychology, physics, geography and sociology to work together in a cross-sectoral and interdisciplinary manner.

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Elder abuse in Ireland, North and South
Physical activity and mental health in older people
Multimorbidity and disability
Understanding fuel poverty
Age, income and food in Ireland

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