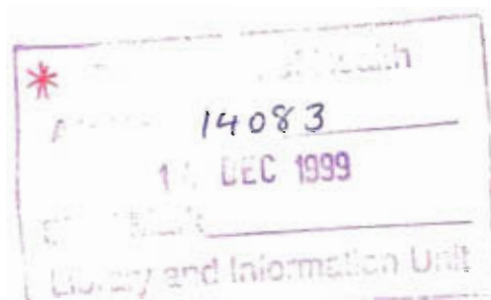


Annual Report 1999



Dietary habits of the Irish population:  
results from SLÁN



National Nutrition Surveillance Centre

Annual Report 1999

Dietary habits of the Irish population: results from SLÁN

Prepared by the National Nutrition Surveillance Centre,  
Department of Health Promotion,  
National University of Ireland, Galway.



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A Paperback original first published in 1999  
by the National Nutrition Surveillance Centre  
at the Centre for Health Promotion Studies  
National University of Ireland, Galway.

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Designed by Raydesign, Galway.  
Production co-ordination by Robert Smyth.  
Cover illustration by Kevin Newell.  
Printed by Standard Printers, Galway, Ireland.

ISBN: 1 900009 12 9

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## acknowledgements

### **National Nutrition Surveillance Centre**

Professor Cecily Kelleher	Director
Sharon Friel	Assistant Academic Director
Geraldine Nolan	Consultant dietitian
Janas Harrington	Nutrition researcher
Gloria Avalos	Data co-ordinator

The National Nutrition Surveillance Centre is funded by the Health Promotion Unit, Department of Health and Children, Dublin

The national health and lifestyle survey, SLÁN, was funded by the Health Promotion Unit, Department of Health and Children, Dublin

The Centre would like to thank Mr. Ben Kanagaratnam, Department Experimental Medicine, National University of Ireland, Galway for the computer programme development converting food frequency into quantities and nutrients.

The Centre would also like to thank Ms Ursula O'Dwyer for her helpful suggestions for the report.



# Summary

## executive summary

The National Nutrition Surveillance Centre was established in 1992, in the Department of Health Promotion, National University of Ireland, Galway. Its main functions are to provide nutrition-related information to relevant organisations in an accessible form and to monitor trends in health status in relation to food supply, availability and consumption.

Previous NNSC reports have drawn attention to the fact that there is a lack of Irish data on morbidity, lifestyle risk factors, and up to date information on national dietary patterns. We wished to establish whether there were any trends in patterns of the Irish diet and how these related to other lifestyle patterns and socioeconomic circumstances. It was in this context that the present study was embarked upon.

The choice of method of collecting data on diet was by self administration of a semi-quantitative food frequency questionnaire. The advantages of this method are its ability to reach large numbers of people quickly over a wide geographical area, (thus increasing the power of the sample); low cost; ease of administration; lack of interviewer bias. However, it has limitations in precise assessment of intake.

The following are key findings from the survey (note these are based on self reported data only).

## **BODY MASS INDEX**

40% of males and 25% of females were in the overweight category. In addition 11.6% of males and 9% females were in the obese category. Respondents in lower social classes were more inclined to be overweight or obese compared to social class 1-2. Highest prevalence of obesity was observed in males and females aged 35 - 54 years.

## **FOOD PYRAMID**

### **Cereals, bread and potatoes**

41% of respondents reported eating the recommended 6+ servings from the cereals, bread and potatoes shelf of the pyramid, while 59% reported consuming less.

Males compared with females and those in rural areas compared with urban dwellers were significantly most likely to consume 6+ per day. The lowest consumption of the recommended servings of cereals breads and potatoes was among urban dwellers (36.9%) with the highest among rural dwellers (45.5%).

### **Fruit and Vegetables**

Almost 65% reported eating the recommended 4 or more servings of fruit and vegetables every day, while 36% consumed less.

Female compared with males, middle aged people compared with younger and older age groups, those in social class 1-2 compared with lower social classes and people living with others compared with those living alone were most likely to consume the recommended number of servings. The lowest consumption of the recommended servings of fruit and vegetables was among males (56.9%) with the highest among those in social classes 1-2 (73.2%).

### **Milk, cheese and yoghurt**

Only 23% of the respondents, reported eating the recommended 3 servings from the milk cheese and yoghurt shelf of the pyramid, 38% consumed less than the recommended and 39% reported consuming more.

The percentage of respondents consuming the recommended servings of milk, cheese and yogurt ranged from 21.7% by those in age group 18-34 years to 25.2% by those in social classes 1-2. Those in social class 1-2 compared with those in lower social classes, and urban dwellers compared with rural dwellers were significantly most likely to consume the recommended number of servings.

### **Meat, fish and poultry**

Almost 40% reported eating the recommended 2 servings from the meat, fish and poultry shelf of the pyramid, while 27% consumed less and 25% consumed more.

The percentage of respondents consuming the recommended servings of meat, fish and poultry ranged from 36.3% among the older age group to 41.4% among those in social classes 5-6. Males compared with females and those in the 35 -54 year age group compared with the younger and older age groups were most likely to consume the recommended amount.

### **Top shelf**

Only 16% of respondents ate foods from this group sparingly i.e. 3 or less per day, while 84% consumed more.

The percentage of respondents consuming the recommended servings from the top shelf ranged from 12.4% in the age group 18-34 to 21.5% in the age group 55+. Significantly more men compared with females and those in the 18-34 year age group compared with older respondents consumed > 3 servings from this shelf.

# summary

## NUTRIENTS

### Energy

Energy intakes among males of all ages were observed to be below recommended intakes by 300-400 kcal.

This may be under reported however intakes in general are reasonably satisfactory. Energy intake was significantly higher amongst males compared with females, those aged between 18-34 years compared with older age groups and respondents living in households with other people compared with those living alone.

### Protein

Across all categories protein intake exceeded recommended values.

Males compared with females, those aged between 18-35 years compared with older age groups, rural dwellers compared with urban dwellers and people living with others compared with those living alone had significantly higher protein intakes.

### Fat

The percentage energy contributed from fat was 34.5%, which is within the recommended level.

Again significantly higher intakes of fat were observed with males, younger people and those living with others. This showed the same pattern as consumption of chips, full fat dairy products, red meat, processed meat, confectionery and savoury snacks. For both males and females the younger age group consumed most fat. This age group of both males and females consumed greater quantities of confectionery and savory snacks than those from older age groups.

### Fibre

The mean fibre intake was 23g per day. This fell below the lower point of the recommended range of 25 - 30 g/day. However it showed an increase on the National Nutrition Survey 1990 findings. Females compared with males, 18-34 year olds compared with older age groups, social classes 1-2 compared with those in lower social classes, rural dwellers compared with urban dwellers and those living with others compared with people living alone had significantly higher intakes. For males it was those in younger age group with the highest fibre intake, whereas for females it was those in 35 -54 year age group.

### Calcium

Males compared with females, those aged 18-34 years compared with older age groups, and those living with others compared with those living alone had significantly higher calcium intakes. This showed a similar pattern as consumption of milk, cheese and dairy products based upon food quantity consumption figures.

### Iron

While all males consumed the recommended intake of iron, females in the age range 18-54 years consumed less than the recommended intake for that age group.

Younger respondents compared with their older counterparts, and those living with others compared with those living alone reported significantly higher intakes of iron. Males in the 18 -34 year age group had a higher intake of iron compared to other ages, whereas females in the 35-54 year age group had the higher intake. The same patterns were reflected in the respondents who consumed most red meat, i.e. males in the 18 - 34 year age group, females in the 35 -54 year age group and those living with others.

## OTHER DIETARY HABITS

- The vast majority of respondents thought that their diet could be healthier.
- 12% reported eating fried foods every/most days.
- Those living in urban areas were more likely to use low fat milk.
- Traditional method of cooking vegetables prevailed by boiling from cold water
- Higher percentages of the younger age group grilled or fried their foods compared to other age groups
- Significantly more females were on a weight reducing diet (18.6%) than males (5.8%), and those in the 35 -54 year age group.
- Over half of the respondents said that they did read food labels, mainly for information on ingredients and nutrients

## COMPARISON WITH PREVIOUS SURVEYS

In the past 50 years only two national dietary surveys have been carried out in Ireland. These were the National Nutrition Survey in 1948, (which also included a clinical survey) and the National Nutrition Survey in 1990. These two surveys involved different methodologies but nevertheless gave us important pointers to the patterns of the diet.

In 1944, the question arose of finding out the level of nutrition of the population of Ireland, and what were the actual amounts of the various foods eaten in the country. This followed the years of rationing during the Second World War. It was agreed that a dietary survey and a clinical assessment of the state of nutrition should be made of the various sections of the population. For the dietary survey a sample comprised of 2600 families, this figure representing one family to about every 1,000 persons of the whole population. The sample was also representative of the urban -rural breakdown of the Irish population at that time. The method employed was that of measurement of the exact quantity of each individual food used by the family during the week of the survey.

The National Nutrition Survey was carried out in 1989 by the Irish Nutrition and Dietetic Institute to provide up to date information on the Irish diet. Many changes had occurred in Ireland in the intervening 50 years in terms of variety of food available, food preferences, and food technology. In the National Nutrition Survey the total sample was 1214 people with an age range from 8 years to over 60 years. The method employed was the 7-day diet history, and a photographic atlas of foods commonly eaten in Ireland was used to help quantify usual portion sizes. Because of the limited size of the sample it was not possible to draw any definite conclusions about the diet of population subgroups. The present survey comprised of the largest ever sample of Irish adults representative of each county in Ireland.



# summary

It can be seen from table 1 that whilst the two most recent studies are very similar to each other, they differ from the 1948 survey.

**Table 1: Comparison of the average daily nutrient intake/capita/day in 1948, 1990 and 1999**  
(note different collection methodologies)

	Energy MJ	% Protein Energy	% Fat Energy	% Carbohydrate Energy
1948	13.04	13	29	58
1990	9.79	15	36	49
1999	9.35	17	34	46

## CONCLUSIONS

While trends in reported consumption of cereals, breads, potatoes, fruit and vegetables are in line with recommendations, the top shelf of the pyramid is the area where most problems lie, in that high energy foods are being over consumed. Almost 84% of the population are failing to achieve the recommended target. To achieve a better balance of protein and carbohydrate intake there should be a further shift towards the bottom two shelves of the pyramid i.e. the cereals, breads and potatoes shelf and the fruit and vegetable shelf.

Younger people particularly males remain the highest consumers of fat. Young females remain the lowest consumers of calcium and have relatively low iron intakes. In order to ensure optimal intakes of iron and calcium, and to meet guidelines for fat consumption we recommend that all groups, particularly younger men and women should aim to consume meat, fish and poultry and milk, cheese and yogurt at the recommended serving levels.

There are still unacceptable socioeconomic variations in the population in that the less affluent report a less healthy diet overall. This needs to be addressed to bring the consumption in line with the Nutrition Advisory Group's (NAG) recommendations (NAG, 1995) and the recently published Building Healthier Hearts (1999).

Earlier results from SLAN indicate that exercise levels are well below the optimal, particularly for older women. An increase in the overall exercise patterns would help to achieve an energy balance, which would combat the problems of overweight and obesity.

# introduction

## introduction

One of the main purposes of the national health and lifestyle survey, SLÁN, was to produce baseline information for the on-going surveillance of health and lifestyle related behaviours in the Irish adult population. The sample was designed to be large enough to detect any variations of lifestyle behaviours in the adult population. In the summer of 1998, dietary habits were assessed as part of a larger questionnaire to evaluate health and lifestyle in the Irish population. Analyses are on-going to investigate the relationship between the range of lifestyle behaviours, how participation in some behaviours relates to others and how they all impact individually and collectively on general health and quality of life. This report focuses on the data relating to food and nutrient intake according to gender, age, social class, and living circumstances.

# methodology

## methodology

### INSTRUMENT

A self-administered questionnaire, which included a semi-quantitative food frequency, was used in the survey. An adapted version of the semi-quantitative food frequency questionnaire (SQFFQ) used in the British arm of the European Prospective Investigation of Cancer (EPIC) study (Riboli, 1997) was developed for use in SLÁN. The EPIC food frequency instrument has been validated extensively in several populations (Bingham et al., 1997) and used recently in a survey of diet and lifestyle of Irish women (NNSC, 1998) and validated using food diaries and a protein biomarker in volunteers of the National University of Ireland, Galway (Harrington, 1997 Thesis).

There are several reasons why semiquantitative food frequency questionnaires are the most popular version for this methodology.

- 1 Nutrients can be estimated from them but cannot be estimated from qualitative food frequency instruments without inputting portion sizes.
- 2 Semi quantitative food frequency questionnaires can be administered in 15-20 minutes while quantitative food frequency questionnaires usually require a lengthy interview using food models or pictures of food to assess portion size.
- 3 Self-administered questionnaires can be mailed to sample persons and this permits large cohort studies with sample persons spread over a wide geographic area.
- 4 Because the questionnaires are precoded they can be optically scanned or processed relatively easily and cheaply (Semplos, 1992).

There were eight sections in the questionnaire, which covered general health (including self-reported height and weight), exercise, tobacco, alcohol, illegal substances, accidents, household details and dietary habits.

### Level of Reporting

The percentage of respondents who under, normal and over reported energy intake was calculated. Standard equations based on gender, self-reported weight and age allow the estimation of basal metabolic rates (BMR) (Schofield et al 1985). Using the ratio of reported energy intake to estimated basal metabolic rate (EI/BMR), cut-off limits based on physiologically plausible levels of energy intake on a habitual basis, developed by Goldberg and other colleagues, were used to identify under, normal and over-reporters. Under-reporters were taken as those with EI/BMR < 1.35, normal reporters were in the EI/BMR range of 1.35-2.39 and over-reporters  $\geq 2.4$  (Goldberg et al 1991, Black et al 1996).



# methodology

Table 2 below shows the sociodemographic distribution of the different types of reporters. There were significant variations in the level of reporting across the different gender, age and body mass index categories. Males were more likely to under report whereas a higher percentage of females over reported their energy intake. Those respondents aged 18-35 years were more likely to under report but also be within the normal range of energy intake. A higher percentage of the older aged group over reported compared to other ages. Obese and overweight respondents were less likely to be regular or over reporters, with over half under reporting their energy intake.

**Table 2: Sociodemographic distribution of energy reporters**

	<b>Under Reporting n (%)</b>	<b>Regular Reporting n (%)</b>	<b>Over Reporting n (%)</b>
<b>Gender **</b>			
Males	1608 (59.4)	928 (34.3)	169 (6.2)
Females	1229 (39.4)	1488 (47.8)	399 (12.8)
<b>Age group (years) **</b>			
18-34 years	900 (42.1)	975 (45.6)	262 (12.3)
35-54 years	1078 (50.1)	892 (41.4)	182 (8.5)
55+ years	853 (55.9)	549 (36.0)	124 (8.1)
<b>Social Class</b>			
SC 1-2	713 (44.1)	750 (46.4)	152 (9.4)
SC 3-4	740 (46.0)	706 (43.9)	163 (10.1)
SC 5-6	403 (47.9)	343 (40.8)	95 (11.3)
<b>Body Mass Index **</b>			
Normal weight	1352 (41.2)	1533 (46.8)	394 (12.0)
Overweight	1012 (56.5)	663 (37.0)	116 (6.5)
Obese	369 (64.0)	175 (30.3)	33 (5.7)
<b>Total</b>	<b>2873 (49.1)</b>	<b>2416 (37.4)</b>	<b>568 (9.7)</b>

\*\*p<0.01 significant variation in levels of reporting within demographic group

## DIETARY HABIT SECTION

Questions were asked relating to special diets, food supplement use, food labelling, frequency of consumption of fried food, butter, low-fat / polyunsaturated spreads, vegetable oil and lard, methods used for cooking vegetables and whether people thought their diet could be healthier. The food frequency part of the questionnaire was designed to cover the whole diet and included 149 food items arranged into the main food groups consumed in the Irish diet. Subjects were asked to indicate their average use of each food item over the last year. Frequency of consumption of a medium serving or common household unit such as a slice or teaspoon was asked for each food and later converted to quantities using standard portion sizes. The frequency categories offered were 'never or less than once per month', '1-3 per month', 'once a week', '2-4 per week', '5-6 per week', 'once a day', '2-3 per day', '4-5 per day' and '6+ per day'.

The whole questionnaire took on average about one hour to complete. Research and Evaluation Services Ltd, Belfast carried out data entry. The daily intake of energy and nutrients was computed from the food frequency data using a specially written computer programme in FoxPro™ which linked the frequency selections with the cooked food equivalents in McCance and Widdowson Food Tables 5th Edition (1997).

## SUBJECTS

A series of estimates were made of a sample sufficient to detect significant differences across socioeconomic status of key lifestyle and dietary variables including smoking, dietary fat and fibre intake and exercise. Based on the pilot and Household Budget Survey, a response of at least 60% was anticipated.

**Table 3: Summary of SLAN Methodologies**

<b>Population</b>	Adults aged 18+
<b>Sampling frame</b>	Electoral Register
<b>Sample</b>	Multistaged sample drawn by electoral division
<b>Stratification</b>	Proportionate distribution across each of the 26 counties, locality and gender
<b>Survey Instrument</b>	Self-completed questionnaire
<b>Delivery/Reminders</b>	Postal, letter reminder, fieldworker follow-up, telephone helpline
<b>Return</b>	Freepost addressed envelope, fieldworker collection
<b>Data Quality</b>	Data were entered and validated according to present protocol

SLAN 1999

# methodology

## STATISTICAL METHODS

Chi square tests were used to test differences in proportions between categories. Outliers were removed from the nutrient and food quantity datasets based on standardised z scores for energy (kcal) of  $> 3.29$  (Tabachnick & Fidell, 1996). Means, standard deviations and medians of food and nutrient intake were computed. The distribution of some foods and nutrients were skewed. For those, which were not skewed, differences in intake of nutrients were tested using t-tests and one-way ANOVA's. Those food and nutrients, which showed skewed distributions, were tested using Mann-Whitney U or Kruskal Wallis statistics where appropriate. Data were analysed using SPSS™ version 9.0 (SPSS 1999).

## respondent characteristics

**Table 4: Sociodemographic characteristics of respondents (percentages)**

	<b>Total (6,539) n (%)</b>	<b>Males (n=2995) n (%)</b>	<b>Females (n=3424) n (%)</b>
<b>Age Group (years)</b>			
18-34	2375 (37.3)	851 (41.5)	1093 (45.8)
35-54	2358 (37.0)	840 (41.0)	972 (40.8)
55+	1634 (25.7)	360 (17.6)	320 (13.4)
<b>Social Class</b>			
SC 1-2	1796 (40.0)	744 (36.2)	1043 (43.5)
SC 3-4	1761 (39.2)	808 (39.3)	939 (39.2)
SC 5-6	938 (20.9)	502 (24.4)	416 (17.3)
<b>Location</b>			
Urban	2834 (48.0)	1337 (49.2)	1460 (47.2)
Rural	3076 (52.0)	1382 (50.8)	1630 (52.8)
<b>Marital Status</b>			
Married	3206 (50.6)	1456 (49.3)	1746 (51.8)
Cohabiting	233 (3.7)	105 (3.6)	127 (3.8)
Separated/divorced	249 (3.9)	99 (3.4)	150 (4.4)
Widowed	463 (7.3)	113 (3.8)	349 (10.3)
Single/never married	2189 (34.5)	1180 (40.0)	1001 (29.7)
<b>Number in household</b>			
Live alone	851 (13.5)	411 (14.1)	425 (12.8)
More than one person	5470 (86.5)	2504 (85.9)	2905 (87.2)



# results

## results

Results from the dietary section of SLAN will be presented in three ways:

- 1 Percentage consuming the recommended number of servings from each shelf of the food pyramid
- 2 Food quantities consumed
- 3 Nutrient intake

### ANTHROPOMETRIC MEASURES

#### Height, weight and body mass index

Respondents were asked to report their height (meters) and weight (kilograms). Figures 1 and 2 below show the mean weight and height of males and females across the various age groups. The mean heights are comparable to those obtained in "Health Survey For England 1992"

Mean height decreases with age, as can be seen in Figure 2, which was also found in the English survey. The observed decrease in height across the age range may reflect a true loss of height with age, however, it may also reflect a secular trend to increased height in younger generations, which may in turn be due to differences in nutrition and lifestyle in successive generations.

Figure 1: Age distribution of mean body weight (kilograms)

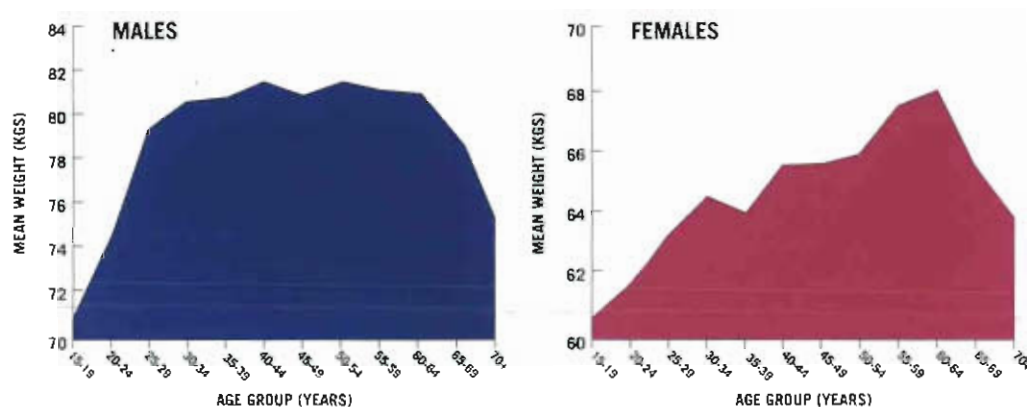
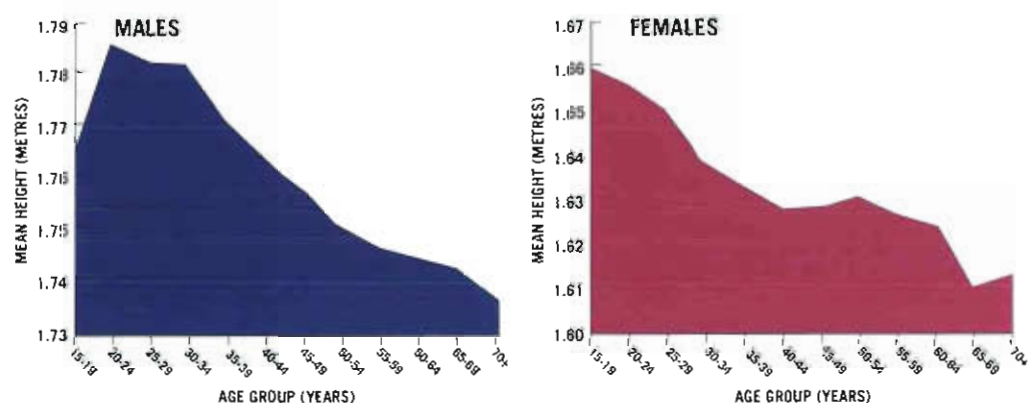
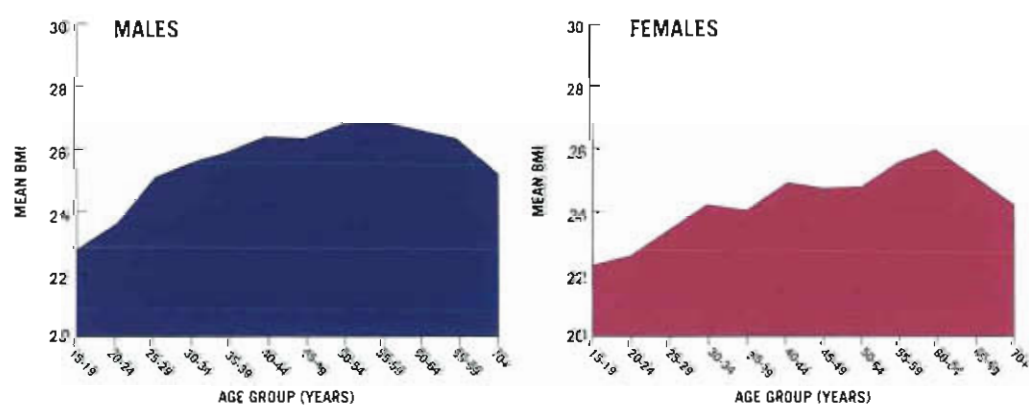


Figure 2: Age distribution of mean heights (metres)



Body mass indices were estimated using the self-reported heights and weights. Figure 3 below shows the mean BMI distribution across various age groups in both males and females.

Figure 3: Age distribution of mean body mass index



# results

Table 5 shows the sociodemographic distribution of normal, overweight and obese respondents. Normal BMI is defined as a weight to height ratio of less than 25. Overweight is between 25 and 30 and Obese is a ratio of greater than or equal to 30. A higher percentage of females reported heights and weights relating to a normal body mass index whereas males were more likely to be obese. There were also significant age differentials with those in the younger age group more likely to be normal weight compared to those in the 55+ year group who reported being obese. Higher social class group was related to normal body mass index. Those respondents in lower social classes were more inclined to be overweight or obese compared to social class 1-2.

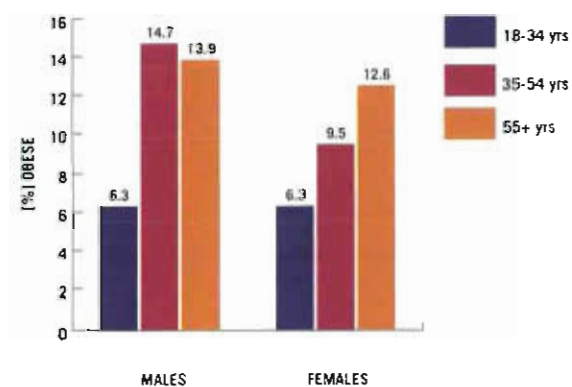
**Table 5: Sociodemographic distribution of body mass index levels**

	<b>Normal n (%)</b>	<b>Overweight n (%)</b>	<b>Obese n (%)</b>
<b>Gender **</b>			
Males	1313 (48.5)	1078 (39.9)	309 (11.6)
Female	2055 (66.3)	766 (24.7)	278 (9.0)
<b>Age Group (years) **</b>			
18-34	1498 (70.0)	506 (23.7)	13.2 (6.3)
35-54	1116 (51.8)	782 (36.3)	25.5 (12)
55+	736 (50.0)	541 (36.7)	19.5 (13.3)
<b>Social Class **</b>			
SC 1-2	1009 (62.3)	478 (29.5)	13.1 (8.1)
SC 3-4	966 (59.2)	496 (30.4)	171 (10.6)
SC 5-6	468 (54.9)	292 (34.2)	91 (10.8)
<b>Location</b>			
Urban	1523 (60.0)	769 (30.3)	244 (9.7)
Rural	1590 (57.0)	913 (32.7)	282 (10.3)
<b>Number in household</b>			
Live alone	421 (55.7)	243 (32.1)	91 (12.2)
More than one person	2988 (58.3)	1626 (31.7)	491 (10.0)
<b>OVERALL N (%)</b>	<b>3369 (57.9)</b>	<b>1849 (31.8)</b>	<b>597 (10.3)</b>

\*\* p < 0.01 Significant variation in BMI within demographic grouping

Among male respondents, those in the 35-54 year age group reported height and weights corresponding to a significantly higher prevalence of obesity compared to the other age groups. Those women in the 55 years and over age group were more likely to be obese compared to the other age groups (Figure 4).

Figure 4: Age and gender distribution of obesity





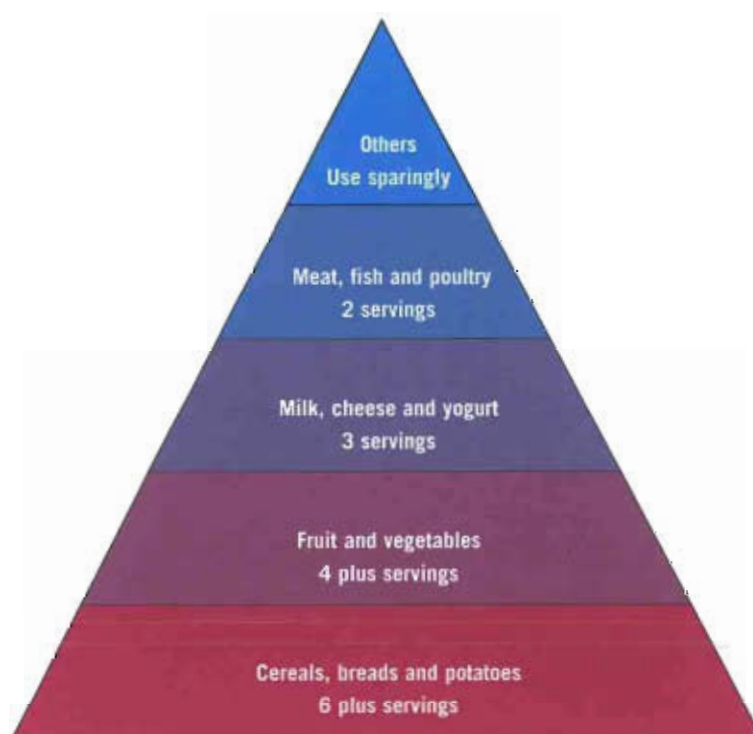
# results

## FOOD PYRAMID

In line with international dietary guidelines, the Irish food pyramid was developed (figure 5) which recommended daily consumption of a number of servings from four of the five shelves. It is recommended that foodstuffs from the top shelf be eaten sparingly.

Figure 5: The Irish Food Pyramid

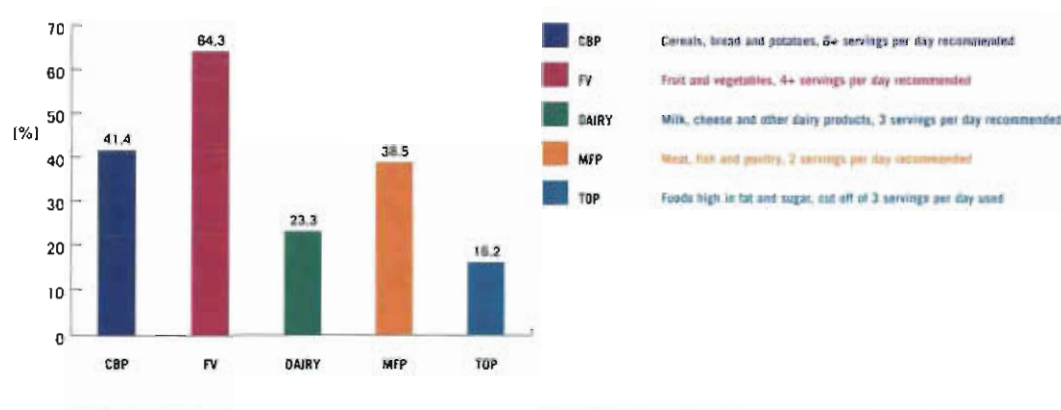
DAILY RECOMMENDED NUMBER OF SERVINGS



## Sociodemographic Variations in Food Pyramid Compliance

Appendices 1,2 and 3 show the sociodemographic breakdown of respondents consuming the recommended number of daily servings for each shelf of the food pyramid.

Figure 6: Percentage of all respondents consuming the recommended number of servings from each shelf of the food pyramid



### Cereals, breads and potatoes (six or more servings daily)

Males (44%) were more likely than females (39.3%) to report consuming the recommended number of servings of cereals, bread and potatoes ( $p < 0.01$ ). Differences also existed between urban and rural respondents with people living in rural areas significantly more likely to consume the recommended six plus servings daily. 58% of the population consumed less than the recommended six plus servings per day.

### Fruit and vegetables (four or more servings daily)

Just over seventy percent of women reported consuming four or more servings of fruit and vegetables daily which was significantly higher compared to only 57% of men ( $p < 0.01$ ). Respondents in the 35-54 year age group were also more likely to consume the recommended number of servings compared to the other age groups ( $p < 0.01$ ). There was a strong social class gradient in the numbers eating four or more servings, with significantly more of those respondents in social classes 1 and 2 reporting this behaviour ( $p < 0.01$ ). People living alone were less likely to meet the recommendations for this shelf of the pyramid ( $p < 0.05$ ). Overall, 36% of the population consumed less than the recommended number of servings.

# results

## Milk, cheese, and other dairy products (three servings daily)

There were no significant differences in the number of people consuming three servings per day across gender, age or number living in household. More people in higher social classes consumed the recommended number of servings of dairy products (25.2% Vs 24.1% and 21.0%,  $p < 0.05$ ) as did those living in urban areas (24.7% Vs 22.2%,  $p < 0.05$ ). Overall, 38% of the population are consuming less than 3 servings daily, this implies that almost 40% of the population are in danger of not getting enough calcium, which is important in the prevention of bone diseases such as osteoporosis.

## Meat, fish and poultry (two servings daily)

Males (40.2%) were more likely than females (37.2%) to consume two servings per day from the meat, fish and poultry shelf of the pyramid ( $p < 0.05$ ). Respondents in the 35-54 year age group were also more likely to consume the recommended number of servings compared to the other age groups ( $p < 0.05$ ). Overall, 37% of respondents consumed less than the recommended 2 servings per day.

## Top shelf, foods high in fat and sugar (eat sparingly, up to three servings daily)

Men were more likely to eat foods from the top shelf compared to women (84.9% Vs 82.9% consumed more than three servings daily,  $p < 0.05$ ). Differences were seen across the age groups with those in the 18-34 years group more likely to consume more than three servings per day (87.6% Vs 83.7% and 78.5%,  $p < 0.05$ ).

Daily nutrient requirements may be met if the recommended numbers of servings are consumed from each shelf of the pyramid. Non-compliance with the dairy and meat shelves on the pyramid has implications for iron and calcium intake. Table 6 below shows the percentage of respondents who report consuming the recommended daily number of servings from the cereals, breads and potatoes and fruit and vegetable shelves and whether they consumed above or below the recommendations in both the dairy and meat shelves.

**Table 6: Percentage consuming below and above the recommended number of daily servings from the dairy and meat shelves**

	Milk, Cheese & Other dairy			Meat, Fish & Poultry		
	<3 servings	3 servings	>3 servings	<2 servings	2 servings	>2 servings
Cereals, Breads & Potatoes (six plus)	31.6**	38.6	52.2	30.8**	42.0	56.7
Fruit & Vegetables (four plus)	54.7**	64.2	73.5	58.3**	66.7	70.0
Milk, cheese & other dairy products (3 servings)	-	-	-	24.8	22.9	21.1
Meat, fish & poultry (2 servings)	38.7	38.2	38.6	-	-	-
Top Shelf (up to 3 servings)	23.4**	15.6	9.7	24.1**	12.9	8.9

If people do not consume the recommended number of servings from a particular shelf it may be that they are compensating with foods from another. Figure 7 below shows the number of servings of meat, fish and poultry consumed by those respondents who consume above and below the recommended number of servings from the dairy shelf. It appears that those who consume less than recommended from the dairy shelf also consume less from the meat shelf and conversely, those who consume more than required from the dairy shelf are likely to consume two or more servings from the meat shelf. In addition, it also appears that those who consume less than the daily requirements from the milk, cheese and yogurt shelf and from the meat, fish and poultry groups also consume less servings of food from the top shelf.

Figure 7: Meat, fish and poultry daily consumption of those consuming above and below the recommended number of servings from the dairy shelf

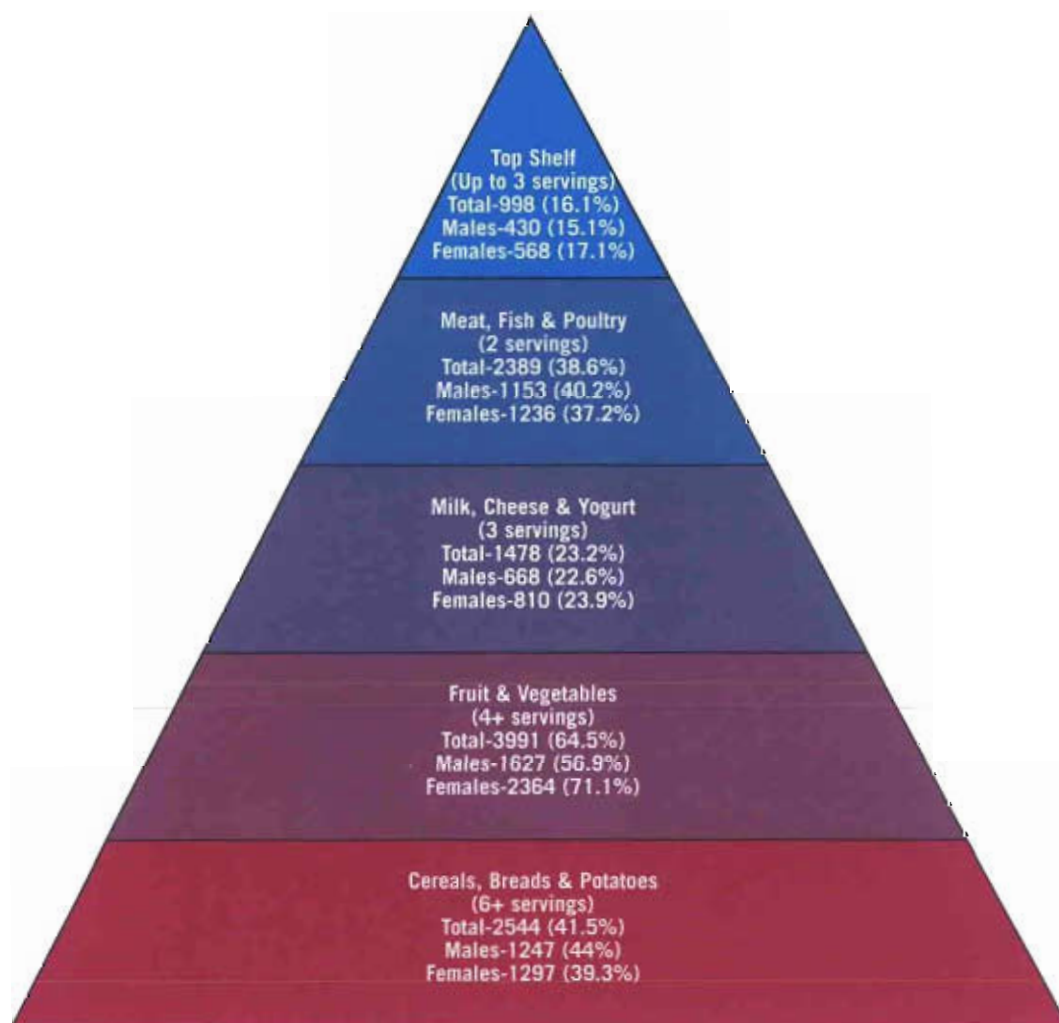




# results

## Food Pyramid, overall summary

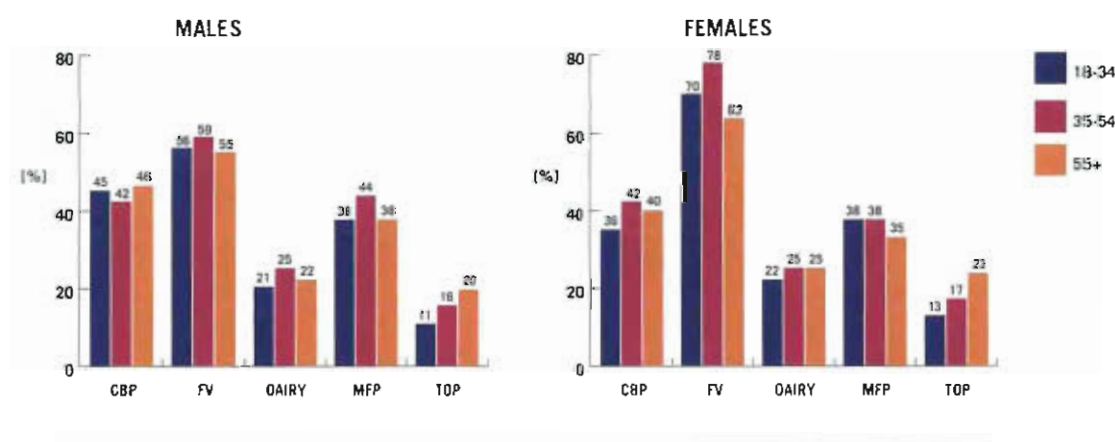
Figure 8: Percentage consuming the recommended number of servings for each shelf of the pyramid



## Food Pyramid, Gender and Age

Figure 9 below shows the distribution of those respondents consuming the recommended number of servings from each shelf in the food pyramid. Significantly more males in the 35-54 year age group compared to other age groups consumed the recommended two daily servings of meat, fish or poultry ( $p < 0.05$ ). Those men in the younger age group were significantly more likely than other ages to consume more than three servings per day from the top shelf ( $p < 0.01$ ). Variation by age was also observed within the female responses. Significantly more women aged 35-54 years compared to the other age groups consumed the recommended number of servings from the cereals, bread and potatoes and fruit and vegetable shelves ( $p < 0.01$ ). As with the males, those women aged 18-34 years were more likely to consume more than three servings per day from the top shelf ( $p < 0.01$ ).

Figure 9: Gender and age group breakdown of respondents consuming the recommended number of servings from each shelf of the pyramid

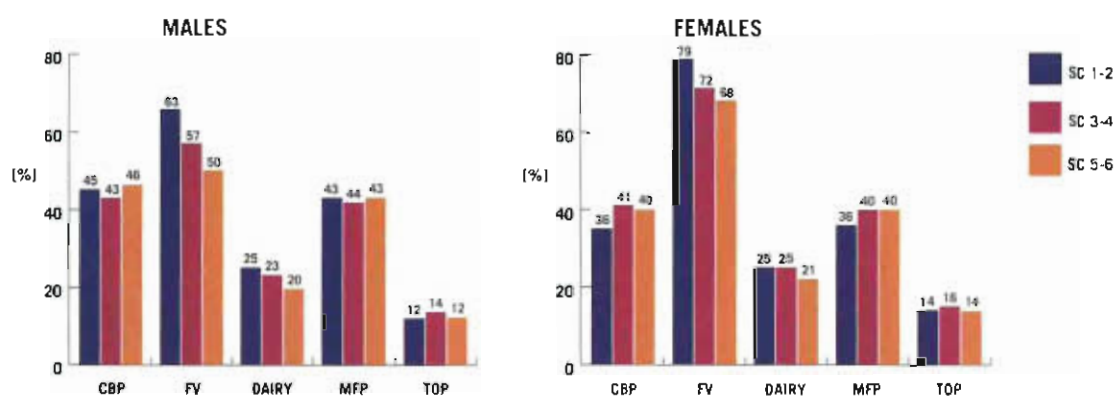


# results

## Food Pyramid, Gender and Social Class

As shown in Figure 10, in both males and females, significant social class gradients existed in the numbers of people reporting that they consumed four or more servings daily of fruit and vegetables. Respondents in social classes 1 and 2 were significantly more likely to report consuming this number of servings ( $p < 0.01$ ). Only amongst females were other social class differences observed, with 25% of those in classes 1 and 2 consuming two servings daily of dairy products. This was a significantly higher proportion compared to other class groups ( $p < 0.05$ ).

Figure 10: Gender and social class breakdown of respondents consuming the recommended number of servings from each shelf of the pyramid



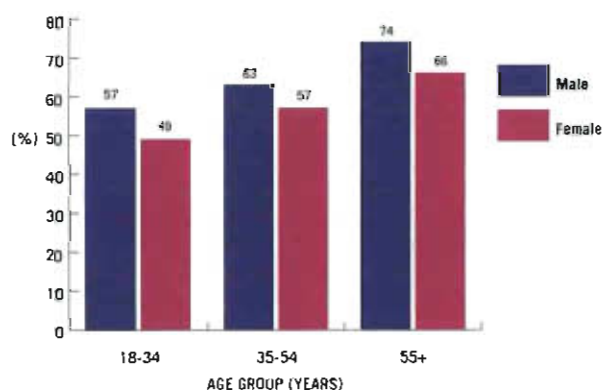
## OTHER DIETARY HABITS

The vast majority of respondents (73%) thought their diet could be healthier. Clear sociodemographic differences existed. Females (74.1%), those aged 18-34 years (86.1%), higher social classes (81.1%) and people living in urban areas (75.2%) and with others (74.8%) were more likely to feel that their diet could be healthier.

### Added Fats

Respondents were asked about their use of fats as spreads or in cooking. Appendix 4 lists the usage of the various fats across the sociodemographic strata. Fifty-nine percent of respondents reported using butter/hard margarine most days. Significantly more males, those aged 55 years and over, social classes 5-6 and people living in rural areas reported this behaviour (Appendices 5 and 6).

Figure 11: Daily use of butter/hard margarine by age group and gender

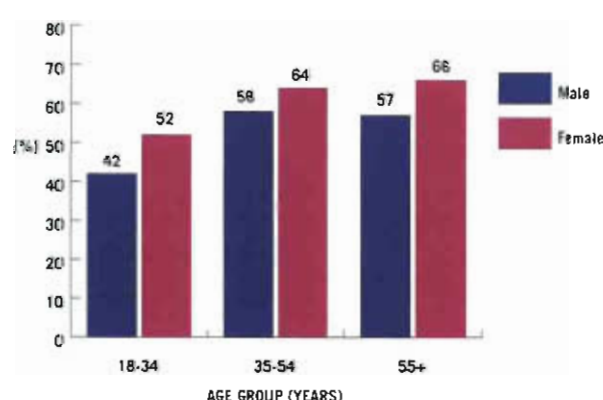




# results

A similar percentage (55.8%) reported daily use of low-fat/polyunsaturated spread. There were not so many sociodemographic variations in the daily use of this fat. Only females and those aged 35-54 years were significantly more likely to report its use daily compared to other demographic categories.

Figure 12: Daily use of low fat/polyunsaturated spread by age group and gender



Daily use of vegetable oil and lard/dripping was much lower compared to the spreads. Overall 17.8% of respondents used vegetable oil daily compared to 5.7% who used lard/dripping. Significantly higher percentages of those aged 55+ years used both these fats for cooking compared to the other age groups. People in social classes 1/2, living alone and in urban areas were more likely to use vegetable oil whereas higher percentages of males in social classes 5/6 living with others reported daily use of lard/dripping compared to the other strata.

Twelve percent of respondents reported eating fried foods every/most days of the week (Appendices 4,5 and 6). Significantly more males (17.4%) reported this behaviour compared to 7.2% females. Those in the 18-34 years age group, social classes 5-6 and those living with others were also more likely to consume fried foods regularly.

## Milk

The majority of respondents reported using either full-fat (62.3%) or low-fat (22.7%) milk most often. Appendices 7, 8 and 9 highlight the sociodemographic variations in the type of milk used. Higher percentages of males used full fat whereas more females used low-fat milk. Social classes 1-2 were more likely to use low fat compared with the two-thirds of social class 5-6 who used full-fat milk. Urban rural differences also existed with those living in urban areas more likely to use low-fat milk.

## Cooking Methods

The majority of people cooked their vegetables by boiling from cold water (54.6%). 18.5% immersed them in already boiling water and a further 8.2% steamed the vegetables. There were highly significant variations across the various sociodemographic strata with females more likely to immerse in boiling water and steam compared to men who were more likely to boil from cold water or fry. Higher percentages of the younger age group grilled or fried their foods compared to other age groups but were less likely to microwave. The higher social class groups were more likely to report immersing the vegetables in boiling water, microwave and steaming whereas more of the lower class groupings boiled the vegetables from cold water. Significantly more urban respondents grilled or microwaved vegetables compared to their rural counterparts, who were more likely to immerse in boiling water. Living alone or not did not appear to significantly influence vegetable preparation methods.

## Dieting

Overall, 24.9% of respondents reported being on some sort of diet with the most commonly reported being weight-reducing (12.7%), low-cholesterol (8.0%), vegetarian (3.4%) and diabetes management plan (2.2%). The type of diet varied significantly depending on sociodemographic status as seen in Appendices 13, 14 and 15. Significant demographic differences for the main diets mentioned are shown below.

<b>WEIGHT-REDUCING</b>	* Females (18.6%) * 35-54 years (15.0%)	Males (5.7%) 18-34 years (12.1%)	55+ years (9.8%)
<b>LOW-CHOLESTEROL</b>	* Aged 55+ years (16.6%) * Living alone (11.9%)	18-34 years (3.0%) Living with others (7.5%)	35-54 years (7.5%)
<b>VEGETARIAN</b>	* Females (4.4%) * Aged 18-35 years (4.5%) * Social classes 1-2 (4.5%)	Males (2.2%) 35-54 years (2.7%) SC 3-4 (2.8%)	55+ years (2.8%) SC 5-6 (2.1%)
<b>DIABETES MANAGEMENT PLAN</b>	* Aged 55+ years (5.5%) * Living alone (5.0%)	18-34 years (0.5%) Living with others (1.7%)	35-54 years (1.4%)

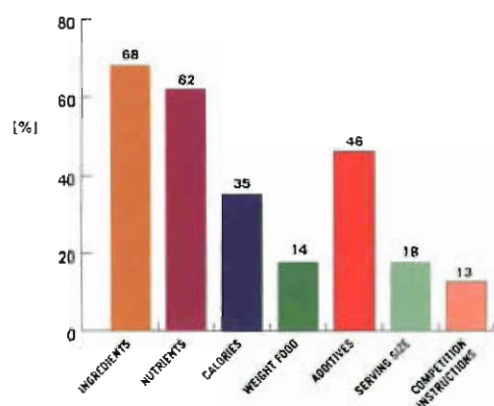
# results

## Food Labelling

Overall 56% of respondents said they did read food labels and for a number of reasons. Figure 13 below shows that the main information looked for by respondents is that of ingredients, nutrients and additives.

Appendices 16, 17 and 18 contain a breakdown of information looked for on food labels broken-down across the various sociodemographic strata.

Figure 13: Information looked for on food labels



## FOOD QUANTITIES

*Appendix 19 lists the overall mean, median and 10th and 90th percentile for each food group quantity.*

### Cereals, bread and potatoes

There was significant variation in the quantities of white bread consumed daily across the sociodemographic groupings although the median quantity was the same in each group (Appendix 20). Males, those in lower social classes and people living with others consumed greater quantities than their counterparts. The opposite was found for brown/wholemeal bread consumption. Respondents aged 55 years and over, social classes 1/2, rural dwellers and those living alone consumed significantly greater amounts of brown/wholemeal breads daily. In all age groups, males consumed greater quantities of white bread than females. Brown bread was consumed more by males and females in the 55 years and over age group (Appendix 20). 18% of the total population reported consuming no white bread, whereas 14% of the population consumed no brown/wholemeal bread.

The main type of cereal consumed on a daily basis was high fibre. Significant sociodemographic variations existed as shown in Appendix 20. The older age group, lower social classes and those living alone reported consuming significantly greater amounts of high fibre cereals compared to other groups. Both males and females in the 55 years and over age group consumed significantly more high fibre cereals daily compared to the other age groups (Appendix 21). The daily consumption of refined cereals was very similar across groupings. The percentage of the population consuming no high fibre cereals was lower (37%) than the percentage consuming no refined cereals (50%).

The median amount of boiled type potatoes consumed per day was 168 grams. Males, those aged 55 years and over, social class 5-6, rural dwellers and those living in households with others consumed significantly greater amounts than the other groups (Appendix 20). Males in all age groups tended to consume more potatoes especially in the older age groups (Appendix 21). Chips and roast potato consumption also showed sociodemographic variation. Males, the younger aged respondents, social class 5-6, urban dwellers and those living with others consumed significantly greater amounts than other groupings. Only 9% of the population reported consuming no boiled potatoes compared to 24% for chips and roast potatoes. More white than brown rice / pasta was consumed daily (77% of respondents reported consuming no brown rice/pasta). Females consumed greater amounts than males of this foodstuff. The younger age group of both males and females consumed greater quantities of white rice/pasta whereas the 55 years and over age group consumed more brown rice/pasta. Females in all age groups consumed significantly greater amounts of brown rice/pasta than males (Appendix 21). Social classes 1/2 consumed significantly greater quantities of white rice/pasta compared to the other social class groupings but there was no class variation in brown rice/pasta. Urban dwellers and those living with others had higher consumption levels of these foodstuffs compared to rural and people living alone.

### Fruit and Vegetables

There was a significant variation in the quantities of citrus fruit consumed daily across the sociodemographic groupings (Appendix 22). Females, those aged over 55 and those in the higher social classes consumed more than their counterparts. The same situation was found for other fruits with the addition of rural dwellers and those living in a household with others consuming more. The older age group and those living in rural areas consumed significantly more tinned fruit compared to other groups. Across all age groups females consumed more fruit than males (Appendix 23). Across the different fruit groups tinned fruits were the least popular with 54% of respondents reporting that they never consumed tinned fruits followed by 26% for citrus fruits and 14% for other fruits.

The mean amount of green vegetables consumed daily was 89 grams. Females, those aged between 35-54 and rural dwellers consumed significantly greater quantities than other groups (Appendix 22). The same pattern was seen for the consumption of other vegetables, in addition, those from higher social classes, and those living with others had also had a significantly higher consumption. Significant differences were seen across age, social class and number in household



# results

for the consumption of pulses (Appendix 22). Those between 35-54 years, social classes 5-6 and those living with people consumed greater quantities of pulses.

In all age groups females consumed higher quantities of all vegetable groups than their male counterparts (Appendix 23). Both males and females between 18 and 34 consumed significantly more pulses compared to other age groups. The proportion of the population who reported consuming no green vegetables or other vegetables were the same, 11% in both cases, with 34% consuming no pulses daily.

## **Cheese, Milk and Other Dairy Products**

There was a significant variation in the quantities of full fat dairy products consumed across age group (Appendix 24). Those in the younger age group consumed greater quantities than other groups. Males between ages 18 and 34 consumed more full fat dairy products (Appendix 25). Thirty one percent of the population consumed no full fat dairy products. Females and those in social classes 1 and 2 consumed low fat dairy products in significantly greater quantities. Thirty six percent of the population consumed no low fat dairy products.

The median amount of cheddar cheese consumed per day was 17 grams. Females and those between 18 and 34 consumed significantly greater amounts than the other groups (Appendix 24). Females between the ages of 18 and 34 consumed significantly more cheddar cheese than those in other age groups (Appendix 25). Thirty five percent of the population consumed no cheddar cheese. The daily consumption of soft cheese was very similar across groupings. Seventy nine percent consumed no soft cheese.

There was significant variation in the quantities of egg products consumed (Appendix 24). Males, those aged 55 years and over and those from lower social classes consumed greater quantities than other groups. Egg products were consumed in significantly greater quantities by both male and females respondents aged 55 years and over (Appendix 25). Twenty percent reported consuming no egg products. The consumption of dressings was very similar across groupings. Seventy four percent of the population does not consume dressings on a daily basis.

The main type of butter/spread consumed on a daily basis was butter. Significant demographic variations existed (Appendix 24). Males, people aged 55 and older, lower social classes, rural dwellers and people living alone reported consuming greater amounts of butter than other groups. Both males and females in the 55 years and over group consumed significantly more butter daily compared to the other age groups (Appendix 25). Forty six percent of the population consumed no butter on a daily basis.

The median amount of light butter consumed daily was 10 grams. Those between the ages of 35 and 54, social class 5-6 and rural dwellers consumed significantly more light butter than other groups (Appendix 24). Male respondents' 55 years and over and females between 35 and 54 years consumed more light butter than other age groups. Sixty two percent of the population consumed no light butter on a daily basis. There was significant variation in the quantities of both sunflower spread and olive oil spreads across age groups, with respondents in the age category 55 years and over consuming more than the other groups. Sunflower spread and olive oil spreads were consumed in greater proportion by males in the 55 years and over age group (Appendix 25). Sunflower spread was consumed by more of the population with 60% reporting not consuming it on a daily basis compared to 85% for olive oil spreads.

The main type of milk consumed on a daily basis was full fat. Significant sociodemographic variation existed as shown in Appendix 24. Males, those between the ages of 18 and 34 years of age and those in urban dwellings reported consuming significantly greater amounts of full fat milk compared to other groups.

Low fat milk consumption also showed sociodemographic variation. Males and those between the ages of 18 and 34 years of age reported consuming significantly greater amounts of low fat milk compared to other groups. The daily consumption of other milks was similar across other groupings. Males in the younger age groups consumed significantly more of all types of milk than the older age groups. Forty three percent of the population consumed no full fat milk daily in comparison to 74% for low fat milk and 95% for other types of milk.



## Meat, Fish and Poultry groups

There was significant variation in the quantities of red meat consumed daily across the sociodemographic groupings. Males, those between age 18 and 34 years, social classes 5-6, rural dwellers and those living with others consumed greater quantities than their counterparts (Appendix 26). Younger males (18-34 years) and middle aged females (35-54 years) consumed significantly more red meat than other age groups (Appendix 27).

Eight percent of respondents reported eating no red meat or pork per day.

Poultry consumption also showed sociodemographic variation. Females, those aged between 18 and 34, social classes 5-6, rural dwellers and those living alone consumed significantly greater amounts than other groupings. Both males and females between 18 and 34 years of age consumed significantly greater amounts (Appendix 27).

Consumption of processed meats followed the same trend as red meat consumption with males, those between ages 18 and 34, social classes 5-6 and those living with other people consuming significantly more than other groups (Appendix 26). The daily consumption of offal was very similar across groupings.

Fewer respondents reported consuming no red meat compared to poultry, processed meats and offal (7.8%, 15.7%, 27.0% and 84.5 % respectively).

The main type of fish consumed daily was white fish, the consumption of which was similar across all groupings (Appendix 26). There was significant variation in the quantities of oily fish consumed. Females consumed significantly more quantities than their counterparts. The daily consumption of fish products and shellfish was very similar across groupings. Shellfish was the least popular of the fish groupings with 88% not consuming it on a daily basis. This was followed by 72% for fish products, 61% for oily fish and only 23 % reported consuming no white fish daily.

## Confectionery and Cakes

The mean amount of cakes and biscuits consumed daily was 48 grams. Males and rural dwellers consumed significantly greater amounts than other groups (Appendix 28). Dairy dessert consumption also showed sociodemographic variation (Appendix 28). Males, those aged 55 years and over, social classes 5-6 and rural dwellers consumed significantly more than their counterparts. Both males and females aged 55 years and over, consumed significantly more dairy desserts compared to the other age groups (Appendix 29). The proportion of those who reported consuming no cakes and biscuits and dairy desserts on a daily basis was similar, 20% and 24% respectively.

There was significant variation in the quantities of confectionery consumed daily across the sociodemographic groupings. Males, those between 18 and 34 years of age, social class 3-4 and those living with others consumed significantly more confectionery compared to other groups (Appendix 28). Similar trends were found for the consumption of savoury snacks. Males, those aged between 18 and 34 years and those living with others consumed greater amounts compared to other groups. Both males and females between 18 and 34 years of age consumed significantly greater quantities of confectionery and savoury snacks compared to the other age groups (Appendix 29). Fewer respondents reported consuming no confectionery (18%) compared to savoury snacks (38%).

There was significant variation in the quantities of soups consumed daily across age group, location and number in household (Appendix 28). Those aged 55 years and over, rural dwellers and those living alone were the highest consumers of soups compared to other groups. Both males and females aged 55 years and over consumed greater quantities of soup compared to the other age groups (Appendix 29). The opposite was found for consumption of sauces. Males, those between 18 and 34 years of age, social classes 5-6 rural dwellers and those living with others consumed significantly greater amounts of sauces daily. The proportion of those who reported consuming no soups and sauces on a daily basis was similar, 23% and 25% respectively.

# results

The mean amount of meat extract consumed daily was 4.39 grams, the daily consumption of which was very similar across groupings (Appendix 28). Ninety two percent of respondents consumed no meat extracts daily.

There was significant variation in the quantities of spreads consumed daily across age group and location. Those aged 55 years and over and rural dwellers consumed significantly greater quantities of spreads compared to their counterparts. Spreads were consumed more by males and females in the 55 years and over age group (Appendix 29). Only 33% of the population consumed no spreads daily.

## Drinks

There was significant variation in the quantities of hot drinks consumed daily across the sociodemographic groupings. Females, those aged between 35 and 54 years of age and social classes 1-2 reported consuming a significantly greater amount of hot drinks (Appendix 30). Males aged 55 years and over and middle-aged females (35-54 years) consumed significantly more hot drinks compared to other age groups (Appendix 31). Only 9% of respondents consumed no hot drinks on a daily basis.

The main type of alcohol consumed on a daily basis was beer (Appendix 30). Malt drinks were consumed in significantly greater quantities by those aged 55 years and over and those living alone. Both males and females in the older age group consumed significantly greater quantities of malt compared to the other age groups (Appendix 31). Wines were consumed in greater quantities by middle aged (35-54 years), higher social classes, urban dwellers and those living alone (Appendix 30). Males aged 55 years and over and females aged 35-54 years consumed significantly more wine daily compared to the other age groups. The consumption of beer was greatest among males, those aged 55 years and over and urban dwellers. Males aged 55 years and over and females between 18 and 34 years consumed significantly more beer compared to the other age groups (Appendix 31).

Spirit consumption was significantly higher among males aged 55 years and over (Appendix 31). Forty nine percent of respondents consumed no beer on a daily basis compared to 59% for wines, 69% for spirits and 85% for malt drinks.

There was a significant variation in the quantities of fizzy drinks consumed daily across the sociodemographic groupings although the median quantity was the same in some groups. The younger age group, social classes 5-6, urban dwellers and those living with others consumed greater quantities than their counterparts (Appendix 30). Older males and younger females (Appendix 31) consumed fizzy drinks in greater quantities.

The daily consumption of low calorie fizzy drinks was very similar across groupings with the exception of location. Urban dwellers consumed significantly greater amounts of low calorie fizzy drinks compared to other groups. A greater proportion of people consumed no low calorie fizzy drinks (64%) compared to ordinary fizzy drinks (57%).

The mean amount of fruit juices consumed per day was 110.53 grams. Females and those living alone consumed significantly greater amounts daily compared to the other groups (Appendix 30). Thirty five percent of the population consumed no juices daily.

## NUTRIENTS

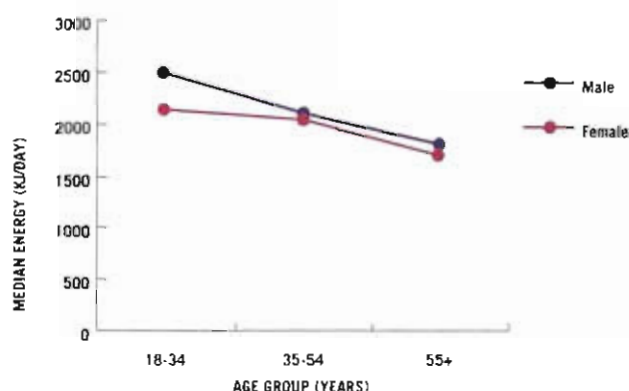
The main macro and micro nutrient intakes were estimated using the food frequency data. A number of the nutrients did not follow normal distributions within the population subgroups and hence their median values are discussed. Where parametric assumptions were met mean values are reported. Appendix 32 lists the overall mean, median, and 10th and 90th percentile values for each nutrient. For purposes of comparison the table of Irish Recommended Dietary Allowances (RDA) can be found in Appendix 33. New RDAs produced by the Food Safety Authority of Ireland are currently in press.

### Macro Nutrients

#### Energy

Energy intake was significantly higher amongst males, those aged 18-34 years and respondents living in households with other people (Appendix 34). Figure 14 below shows the daily median energy intake of males and females broken-down across three age groups. Daily energy intake varied significantly across the age groups for both male and female respondents ( $p < 0.01$ ).

Figure 14: Age and gender distribution of median daily Energy intake

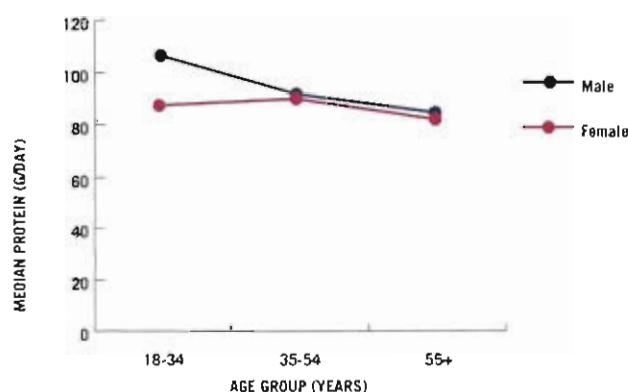


# results

## Protein

Mean protein intakes were about one and a half times the RDA for both males and females up to the ages of 54 years. Males, those aged 18-35 years, rural dwellers and people living with others had significantly higher daily protein intakes compared to their various counterparts (Appendix 34). Figure 15 shows the age and gender distribution of the daily median protein intake. Younger aged males had significantly higher protein intakes compared to the other ages ( $p<0.01$ ) whereas middle aged women reported higher levels ( $p<0.01$ ).

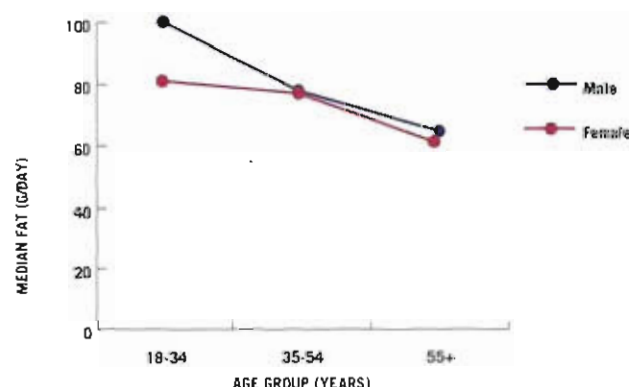
Figure 15: Age and gender distribution of the median daily Protein intake



## Fat

Fat contributed to 34.5% of total energy, which is very close to the recommended proportion of 35% as stated in the Framework for Action Nutrition Plan (HPU 1991). Similar sociodemographic variations were observed in daily fat intake with males, the younger age group and those living with others reported higher median intakes (Appendix 34). Figure 16 shows the age and gender distribution of daily median total fat intake. There were significant age gradients in fat intake for both males and females with the younger age group consuming the highest level.

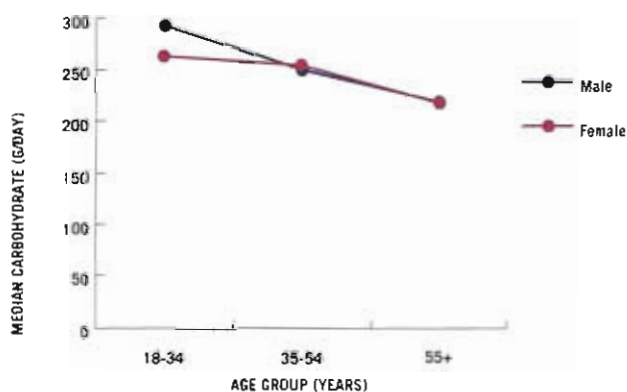
Figure 16: Age and gender distribution of daily Total Fat intake



### Carbohydrate

Mean carbohydrate intake contributed to 46.5% of total energy which is lower than the recommended quantity of 55% (Table 7). Males, those aged 18-34 years, social class 1/2 and respondents living with others had significantly higher median levels of daily carbohydrate intake (Appendix 34). Figure 17 shows the age and gender distribution of daily intake. The 18-34 year aged males and females had significantly higher carbohydrate intakes compared to the other age groups.

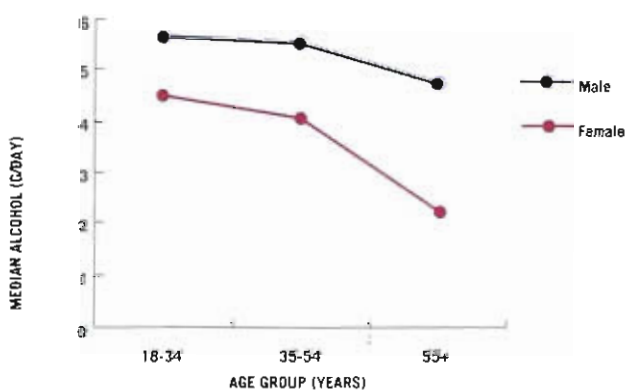
Figure 17: Age and gender distribution of median daily Carbohydrate intake



### Alcohol

There was substantial variation in levels of daily alcohol intake. Males, younger aged respondents, higher social classes and urban dwellers reported significantly higher levels of alcohol intake (Appendix 34). As figure 18 below shows, in all age groups, males consumed significantly higher levels of alcohol than females.

Figure 18: Age and gender distribution of median daily Alcohol intake





# results

## Contribution of macro nutrients to energy intake

The relative contribution to energy intake was calculated for protein, fat, carbohydrate and alcohol (Table 7). Adjustment for alcohol did not make a significant difference to the percentage contribution by the macronutrients. For males, the highest contribution to energy from protein was in the 55+ age group as was the case for carbohydrate. Younger males had a higher relative contribution from fat compared to other ages. The same age patterns were observed amongst females as males. Unlike males, a higher percentage of energy came from carbohydrates as opposed to protein or fat amongst females. The contribution of alcohol to energy was low in both sexes but was more pronounced in males.

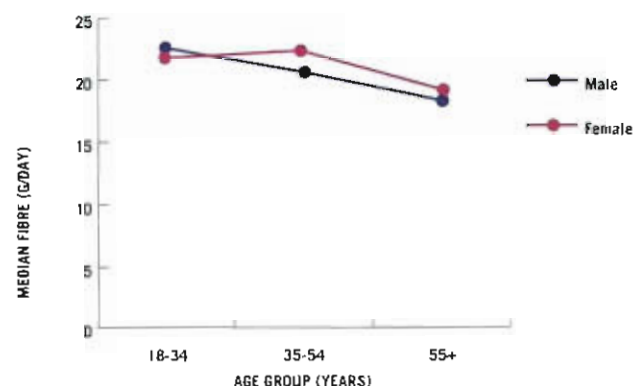
Table 7: Age and gender distribution of percentage contribution to energy intake

	Total %	Recommended %	Males			Females		
			18-34 yrs %	35-54 yrs %	55+ yrs %	18-34 yrs %	35-54 yrs %	55+ yrs %
Protein	17	10	17.1	17.4	18.5	16.4	17.2	18.6
Fat	34.5	35	36.1	33.2	32.2	34.4	33.6	32.0
Carbohydrate	46.5	55	44.8	45.2	46.1	46.5	46.3	47.8
Alcohol	2.7	-	1.6	1.8	1.9	1.5	1.4	0.9

## Fibre

Mean fibre intake was 23.5g/day which is lower than the recommendation of 25-35g/day (HPU, 1991). Daily fibre intake varied significantly across the various sociodemographic groupings. Females, 18-34 year olds, social classes 1/2, rural dwellers and those living with others had significantly higher intakes (Appendix 34). From Figure 19 it can be seen that for males those in the youngest age group had the highest daily fibre intake whereas females aged 35-54 years had significantly higher intakes compared to other age groups (Appendix 35).

Figure 19: Age and gender distribution of median daily Fibre intake



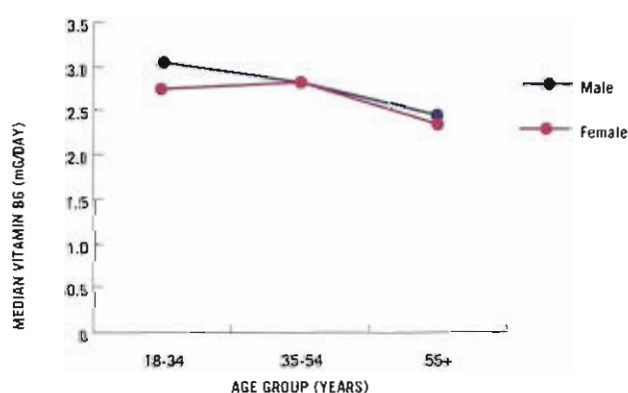
## Micro nutrients

The following results do not take into account additional nutrient contribution from vitamin and mineral supplementation's and are based purely on reported dietary intakes. Appendices 36, 37, 38 and 39 contain the mean and median micro nutrient intakes across the various sociodemographic population groups.

### Vitamin B6

Males and females across all ages consumed sufficient quantities of vitamin B6 to reach their RDA (2.2 mg and 2.0 mg respectively). Males, those aged 18-34 years and people living with others had significantly higher vitamin B6 levels in their diet (Appendix 36). Younger males and females aged 35-54 years had significantly higher levels of vitamin B6 compared to other aged groups (Figure 20).

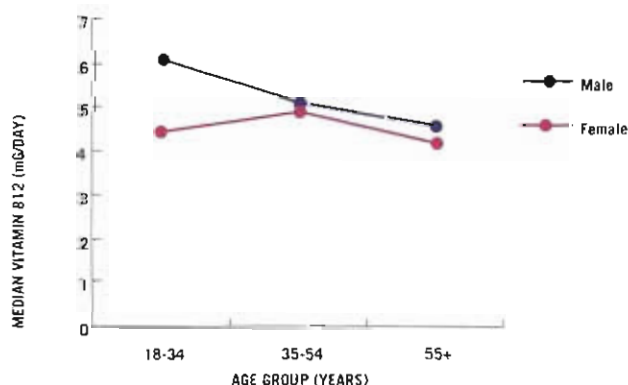
Figure 20: Age and gender distribution of mean daily Vitamin B6 intake



### Vitamin B12

Vitamin B12 intakes were well above the RDA across gender and age group. Males in younger age groups had significantly higher intakes of vitamin B12 compared to females and other age groups. Social classes 5/6, those living in rural areas and with other people also had higher levels compared to the other groupings (Appendix 36). As with vitamin B6 females in the middle age group had significantly higher levels compared to the other age groups (Figure 21).

Figure 21: age and gender distribution of median daily Vitamin B12 intake



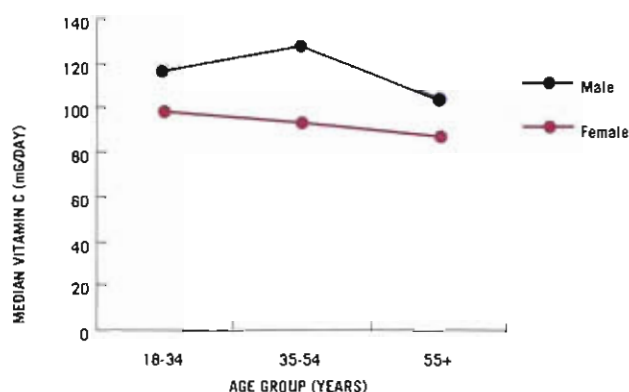
# results

## Vitamin C

Vitamin C intakes were well above the RDA for males and females across all ages.

Females, those aged 35-54 years, higher social classes and people living with others had significantly higher levels of vitamin C intake compared to the respective other groupings (Appendix 36). Intake decreased with age for males whereas those females in the 35-54 years age group had significantly higher levels than the other age groups (Figure 22).

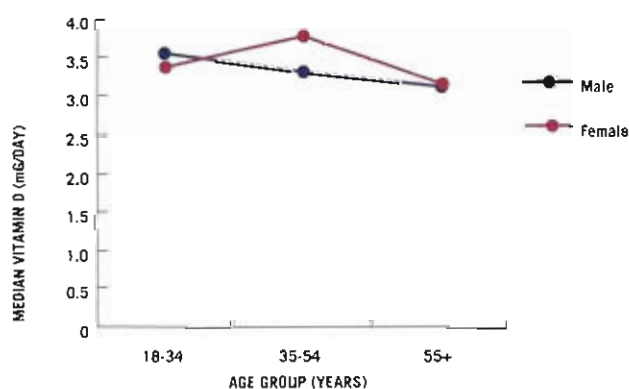
Figure 22: Age and gender distribution of mean daily Vitamin C intake



## Vitamin D

Dietary intakes were below the RDA for vitamin D, however this vitamin can be synthesised from direct sunlight. Only within age groupings and living arrangements did significant variation in mean vitamin D levels emerge (Appendix 36). Younger males and middle-aged females obtained significantly higher levels in their diet compared to the other age groups (Figure 23).

Figure 23: Age and gender distribution of mean daily Vitamin D intake

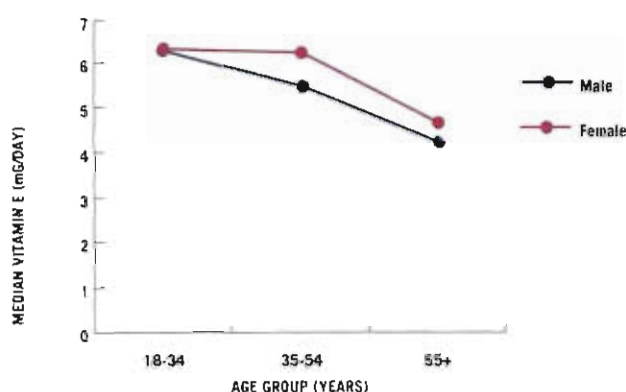


### Vitamin E

Vitamin E intakes were below the RDA with the older age groups having the lowest intakes.

Females, those aged 18-34 years, social classes 1/2 and people living with others reported higher levels of vitamin E compared to the other groups (Appendix 36). Similar age gradients were observed in both males and females as seen in Figure 24.

Figure 24: Age and gender distribution of median daily Vitamin E intake

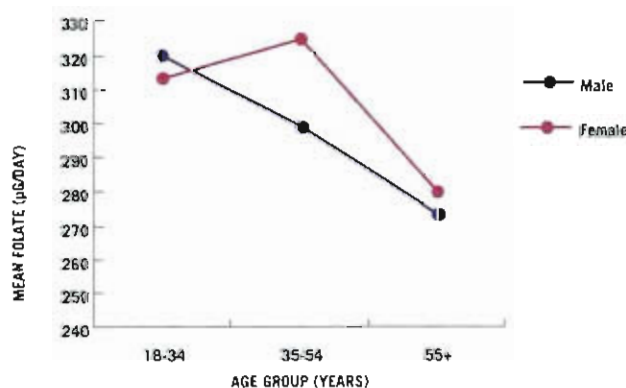


### Folate

Intakes for males aged 35 years plus and females above 55 years was below the RDA, while younger males and females between 18 and 54 years met the RDA.

The same sociodemographic variations emerged for folate intake as for many of the other micro nutrients, with females, those aged 18-34 years, social classes 1/2 and people living with others showing significantly higher levels compared to the other groupings (Appendix 36). Marked age gradients were evident within males and females (Figure 25), the males showing a continual decrease with age whereas females aged 35-54 years had the highest mean intake.

Figure 25: Age and gender distribution of mean daily Folate intake



# results

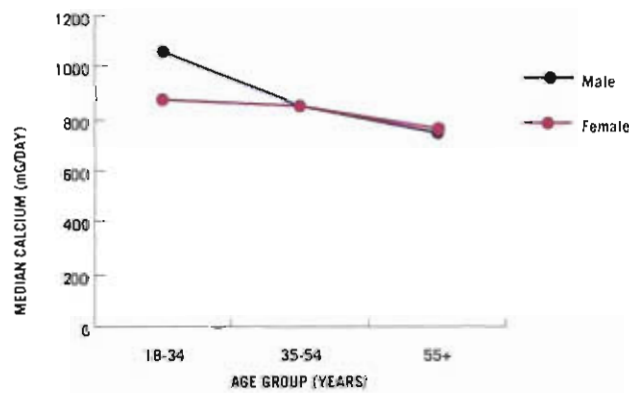
## Minerals

### Calcium

Calcium intakes were adequate for males and females across all ages.

Males, those aged 18-34 years and living with others had significantly higher daily levels of calcium intake compared to the other groups (Appendix 38). Figure 26 below shows how in both males and females the younger age groups had substantially higher median intakes (Appendix 39).

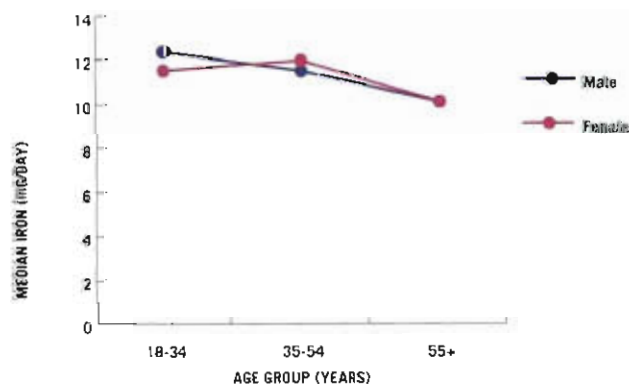
Figure 26: Age and gender distribution of median daily Calcium intake



### Iron

Consumption of iron among males and females over 55 years was adequate, however females between 18 and 54 years of age were below the recommended. The younger respondents and those living with others reported diets significantly higher in iron compared to the other age groups and those living alone (Appendix 38). Males in the 18-34 years age group had higher levels whereas females in the 35-54 years age group compared to other ages (Figure 27).

Figure 27: Age and gender distribution of median daily Iron intake



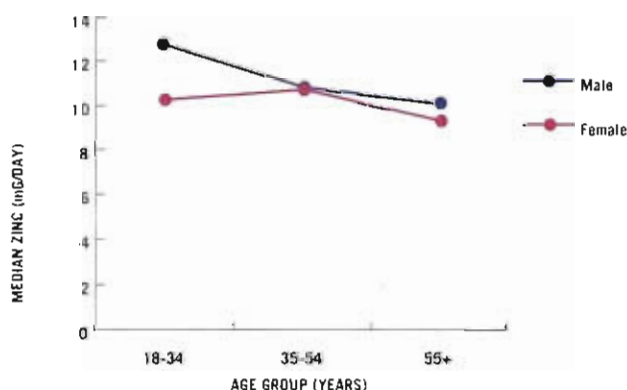


## Zinc

The intake of Zinc was below the RDA for both males and females across all ages.

There was significant variation in zinc intake within all of the sociodemographic groups. Males, those aged 18-34 years, social classes 5/6, rural dwellers and people living with others had significantly higher intakes of zinc compared to the other groups (Appendix 38). As with many of the micronutrients, younger males and middle aged females had significantly higher levels compared to the other age groups (Figure 28).

Figure 28: Age and gender distribution of median daily Zinc intake



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**Appendix 1: Sociodemographic profile of respondents consuming the recommended number of servings from each shelf in the food pyramid**

	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2995 %	Female n=3424 %	18-34 n=2375 %	35-54 n=2358 %	55+ n=1634 %	1-2 n=1796 %	3-4 n=1761 %	5-6 n=938 %	Urban n=2834 %	Rural n=3076 %	1 n=851 %	>1 n=5684 %
Cereals, Breads & Potatoes	44.0**	39.3	40.2	41.7	42.7	39.8	41.7	43.5	36.9	45.5**	39.6	41.7
Fruit and Vegetables	56.9	71.1**	63.6	68.8**	59.3	73.2**	65.6	57.3	63.4	64.8	61.0	64.7*
Milk, Cheese & Other Dairy Products	22.6	23.9	21.7	24.6	23.3	25.2*	24.1	21.0	24.7*	22.2	24.3	23.1
Meat, Fish & Poultry	40.2*	37.2	38.4	40.4*	36.3	39.1	40.1	41.4	38.1	38.5	37.5	38.6
Top Shelf	15.1	17.1*	12.4	16.3	21.5**	13.6	14.8	12.9	16.2	16.1	15.5	16.4

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories within food shelf

Appendix 2: % Males consuming recommended number of servings from each shelf in the food pyramid by sociodemographic variable

	Age Group (years)			Social Class			Location		Number in Household	
	18-34 n=1073 %	35-54 n=1129 %	55+ n=769 %	1-2 n=744 %	3-4 n=808 %	5-6 n=502 %	Urban n=1337 %	Rural n=1382 %	1 n=383 %	>1 n=2608 %
Cereals, Breads & Potatoes	45.4	41.7	45.5	45.1	43.2	45.8	39.8	48.4**	42.7	44.2
Fruit and Vegetables	55.8	59.1	55.3	65.6**	57.0	49.8	56.8	56.3	52.6	57.6
Milk, Cheese & Other Dairy Products	20.8	24.6	21.8	25.0	23.3	20.4	24.4	21.3	23.7	22.4
Meat, Fish & Poultry	38.3	43.6	38.2	42.6	41.2	42.7	39.6	40.2	42.1	39.9
Top Shelf	11.1	15.5	20.0	12.5	13.8	11.9	15.3	14.3	15.2	15.0

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories within food shelf

Appendix 3: % Females consuming recommended number of servings from each shelf in the food pyramid by sociodemographic variable

	Age Group (years)			Social Class			Location		Number in Household	
	18-34 n=1300 %	35-54 n=1225 %	55+ n=862 %	1-2 n=1043 %	3-4 n=939 %	5-6 n=416 %	Urban n=1460 %	Rural n=1630 %	1 n=452 %	>1 n=2972 %
Cereals, Breads & Potatoes	36.0	41.8**	40.3	36.1	40.7	40.5	34.5	43.3**	37.6	39.5
Fruit and Vegetables	70.1	77.6**	62.9	78.6**	72.5	67.5	69.4	72.5*	69.4	71.3
Milk, Cheese & Other Dairy Products	22.4	24.7	24.7	25.3	24.7	21.3	25.0	23.0	24.5	23.8
Meat, Fish & Poultry	38.4	37.5	34.6	36.5	40.0	40.2	36.8	37.2	33.6	37.8
Top Shelf	13.4	16.9	22.8**	14.4	15.6	13.5	17.0	17.2	16.1	17.2

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories within food shelf



Appendix 4: Sociodemographic profile of respondents who consume Added Fats every or most days

	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2995 %	Female n=3424 %	18-34 n=2375 %	35-54 n=2358 %	55+ n=1634 %	1-2 n=1796 %	3-4 n=1761 %	5-6 n=938 %	Urban n=2834 %	Rural n=3076 %	1 n=851 %	>1 n=5684 %
Butter/hard margarine	63.1**	55.9	52.7	59.8	69.7**	50.9	58.3	63.1**	54.7	62.6**	61.8	59.0
Low fat / polyunsaturated spread	51.8	59.1**	47.6	61.6**	61.5	55.9	54.9	53.4	56.6	55.2	56.2	55.7
Vegetable oil	17.4	18.2	15.9	18.7	20.3**	19.0**	15.4	14.8	18.2**	17.3	18.6*	17.7
Lard/dripping	7.0**	4.6	5.7	4.5	8.3**	2.7	5.3	8.2**	4.9	6.0	4.8	5.8*
Fried Foods	17.4**	7.2	16.2**	9.2	9.3	8.2	12.4	17.6**	11.8	12.3	8.8	12.4*

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories

Appendix 5: Percentage of male respondents consuming added fats every/most days

	Age Group (years)			Social Class			Location		Number in Household	
	18-34 n=1073 %	35-54 n=1129 %	55+ n=769 %	1-2 n=744 %	3-4 n=808 %	5-6 n=502 %	Urban n=1337 %	Rural n=1382 %	1 n=411 %	>1 n=2583 %
Butter/hard margarine	56.8	63.0	73.6**	55.7	63.3	64.9*	57.1	68.2**	27.1	25.3
Low fat / polyunsaturated spread	42.5	58.3**	56.8	53.0	49.2	48.9	51.5	51.4	53.3	51.6
Vegetable oil	16.6	17.6	18.9**	19.4	15.4	14.5	18.0**	16.6	17.9**	17.3
Lard/dripping	8.0	4.2	9.6**	3.9	8.0	8.9**	5.3	8.2	6.0	7.1*
Fried Foods	24.8**	13.1	12.8	14.4	19.2	21.8**	16.5	18.4	13.3**	18.0

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories

Appendix 6: Percentage of female respondents consuming added fats every/most days

	Age Group (years)			Social Class			Location		Number in Household	
	18-34 n=1300 %	35-54 n=1225 %	55+ n=862 %	1-2 n=1043 %	3-4 n=939 %	5-6 n=416 %	Urban n=1460 %	Rural n=1630 %	1 n=425 %	>1 n=2997 %
Butter/hard margarine	49.1	56.9	66.0**	47.7	54.1	60.4**	52.3	58.0**	59.9	55.4
Low fat / polyunsaturated spread	51.5	64.5	65.5**	57.7	59.3	59.0	61.2	58.2	59.2	59.0
Vegetable oil	15.2	19.7	21.6**	18.6*	15.3	15.1	18.5**	17.7	19.6*	18.0
Lard/dripping	3.6	4.7	7.1**	1.7	2.9	7.3**	4.6	4.2	3.6	4.7
Fried Foods	9.2**	5.5	6.1	3.9	6.6	12.5**	7.4	7.1	4.3	7.6**

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories

Appendix 7: Sociodemographic profile of respondents Milk consumption patterns

	Gender **		Age Group (years) *			Social Class **			Location **		Number in Household	
	Male n=2995 %	Female n=3424 %	18-34 n=2375 %	35-54 n=2358 %	55+ n=1634 %	1-2 n=1796 %	3-4 n=1761 %	5-6 n=938 %	Urban n=2834 %	Rural n=3076 %	1 n=851 %	>1 n=5684 %
<b>Type used most frequently</b>												
Full fat milk	67.4	58.0	61.9	63.4	61.4	56.4	64.1	67.0	57.7	66.6	59.8	62.7
Soya Milk	4.6	5.4	4.5	5.8	4.8	5.8	5.2	4.4	3.4	6.5	4.5	5.2
Low Fat	20.0	25.1	23.0	21.2	24.5	25.7	21.7	19.9	27.4	18.2	25.7	22.3
Buttermilk	0.3	0.6	0.5	0.5	0.4	0.6	0.5	0.1	0.4	0.4	0.6	0.4
Skimmed milk	2.4	5.5	4.1	4.5	3.2	5.3	4.2	3.1	4.6	3.6	3.3	4.1
Dried	0.1	0.2	0.1	0.1	0.4	0.1	0.1	0.2	0.2	0.1	0.4	0.1
High-Low	1.7	1.4	1.5	1.5	1.5	1.8	1.1	1.4	2.0	1.1	1.6	1.5
None	1.9	2.1	2.6	1.8	1.6	2.5	1.9	2.1	2.4	1.7	1.8	2.0
Amount consumed daily	**		**			**			**		*	
None	4.0	6.6	5.1	5.2	6.0	5.3	5.2	5.5	5.8	4.8	5.1	5.4
0.25 pint	23.8	30.2	25.6	27.8	29.0	29.2	25.9	28.0	28.7	25.5	30.8	26.7
0.50 pint	25.7	30.0	24.6	29.7	30.5	27.0	28.6	26.9	28.1	27.5	25.8	28.4
0.75 pint	11.7	11.0	11.0	11.8	11.2	13.6	11.5	8.5	11.6	11.6	11.5	11.2
1 pint	20.4	15.4	18.5	17.6	16.6	15.3	17.8	20.1	16.3	19.3	19.0	17.6
>1 pint	14.4	6.8	15.1	7.8	6.8	9.6	11.0	11.0	9.5	11.3	7.8	10.7
(this includes milk in tea, coffee, cereals)												

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories



## Appendix 8: Male respondents milk consumption patterns

	Age Group (years)			Social Class			Location		Number in Household	
	18-34 n=1073 %	35-54 n=1129 %	55+ n=769 %	1-2 n=744 %	3-4 n=808 %	5-6 n=502 %	Urban n=1337 %	Rural n=1382 %	1 n=411 %	>1 n=2583 %
Type used most frequently										
Full fat milk	68.0	67.8	66.1	64.2	69.0	70.7	** 62.4	72.7	64.8	67.8
Soya Milk	3.2	6.0	4.5	4.8	5.1	4.5	3.1	6.1	4.2	4.6
Low Fat	20.3	18.3	21.7	22.6	18.6	17.3	25.2	14.2	21.8	19.7
Buttermilk	0.4	0.5	0	0.5	0.3	0.2	0.3	0.3	0.5	0.3
Skimmed milk	2.2	2.7	2.0	2.6	2.7	1.8	3.1	1.7	2.2	2.4
Dried	0.2	0.1	0.1	0.1	0.1	0.2	0	0.2	0.2	0.1
High-Low	1.9	1.5	1.6	1.9	1.5	0.8	2.1	1.4	2.0	1.6
None	2.4	1.6	1.6	1.9	1.5	2.2	2.5	1.3	2.2	1.8
Amount consumed daily	**			*					**	
None	3.3	4.1	5.0	3.8	3.0	4.9	4.1	3.7	4.4	3.9
0.25 pint	16.9	25.7	31.0	24.6	20.4	24.4	25.5	21.9	30.1	22.8
0.50 pint	21.8	28.4	27.2	25.3	26.0	25.4	26.5	24.6	22.5	26.2
0.75 pint	11.9	11.8	11.0	14.5	12.2	9.1	11.4	12.7	11.6	11.7
1 pint	22.4	19.8	18.4	17.1	21.7	21.3	19.0	21.8	22.5	20.1
>1 pint	23.7	10.1	7.3	14.7	16.6	14.8	13.4	15.4	8.9	15.3

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories



# Appendix 9: Female respondents milk consumption patterns

	Age Group (years)			Social Class			Location		Number in Household	
	18-34 n=1300 %	35-54 n=1225 %	55+ n=862 %	1-2 n=1043 %	3-4 n=939 %	5-6 n=416 %	Urban n=1460 %	Rural n=1630 %	1 n=425 %	>1 n=2997 %
<b>Type used most frequently</b>										
Full fat milk	56.9	59.3	57.2	50.8*	60.2	62.7	53.5	61.6**	54.7	58.4
Soya Milk	5.6	5.6	5.1	6.4	5.1	4.5	3.6	6.8	4.9	5.5
Low Fat	25.3	23.7	27.0	28.0	24.3	22.4	29.3	21.4	29.2	24.5
Buttermilk	0.6	0.5	0.7	0.7	0.8	0	0.6	0.6	0.7	0.6
Skimmed milk	5.6	6.2	4.2	7.2	5.3	4.7	6.2	5.2	4.4	5.6
Dried	0.1	0.1	0.6	0.1	0	0.2	0.4	0.1	0.5	0.2
High-Low	1.2	1.6	1.4	1.7	0.8	2.2	1.9	0.8	1.2	1.4
None	2.7	2.0	1.6	3.0	2.3	1.7	2.3	2.1	1.5	2.2
<b>Amount consumed daily</b>										
None	6.6	6.3	6.9	6.2	6.9	5.8	7.2	5.8	5.7	6.6
0.25 pint	32.8	29.8	27.2	32.3	30.7	32.4	31.5	28.6	31.5	30.1
0.50 pint	26.9	30.9	33.5	28.3	30.8	28.3	29.5	29.7	29.1	30.2
0.75 pint	10.2	11.8	11.4	13.1	11.0	8.2	12.0	10.9	11.7	10.9
1 pint	15.3	15.6	14.9	14.2	14.4	18.8	13.9	17.1	15.3	15.4
>1 pint	8.1	5.6	6.3	6.0	6.2	6.5	5.9	7.9	6.7	6.8

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories

Appendix 10: Sociodemographic profile of respondents cooking methods

	Gender **		Age Group (years) **			Social Class **			Location **		Number in Household	
	Male n=2995 %	Female n=3424 %	18-34 n=2375 %	35-54 n=2358 %	55+ n=1634 %	1-2 n=1796 %	3-4 n=1761 %	5-6 n=938 %	Urban n=2834 %	Rural n=3076 %	1 n=851 %	>1 n=5684 %
Boiled from cold water	59.3	50.5	54.8	52.9	56.4	45.6	54.3	61.8	50.3	58.5	51.4	55.1
Grilled	3.9	3.0	4.2	3.3	2.4	3.2	4.7	2.9	7.0	0.6	3.4	3.4
Fried	1.6	0.7	2.2	0.7	0.3	1.4	1.3	1.1	1.4	0.8	1.1	1.1
Immersed in boiling water	15.0	21.6	17.8	19.2	19.0	22.3	19.0	16.8	15.4	21.0	17.6	18.6
Microwaved	2.3	3.2	1.9	3.6	2.9	4.4	2.4	1.5	4.2	1.5	5.4	2.4
Steamed	6.6	9.6	7.1	9.8	7.6	11.2	7.4	5.8	8.9	7.6	8.7	8.1
Sautéed then casseroled	0.5	0.4	0.6	0.5	0.2	0.9	0.3	0.3	0.5	0.3	0.2	0.5

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories

Appendix 11: Male respondents cooking methods

	Age Group (years) **			Social Class **			Location **		Number in Household **	
	18-34 n=1073 %	35-54 n=1129 %	55+ n=769 %	1-2 n=744 %	3-4 n=808 %	5-6 n=502 %	Urban n=1337 %	Rural n=1382 %	1 n=411 %	>1 n=2583 %
Boiled from cold water	59.1	57.4	61.8	50.7	60.3	62.9	54.4	64.8	57.0	59.7
Grilled	5.2	3.9	2.3	4.9	5.3	3.1	7.6	0.8	4.0	3.9
Fried	3.4	0.8	0.4	1.8	1.9	2.0	2.1	1.2	1.8	1.6
Immersed in boiling water	13.1	16.8	15.1	17.4	14.9	14.5	13.5	15.4	14.8	15.0
Microwaved	2.0	2.6	2.3	3.9	1.6	1.4	3.4	1.4	4.5	2.0
Steamed	5.5	8.2	6.2	9.7	5.9	4.9	6.7	6.6	5.3	6.9
Sautéed then casseroled	0.6	0.5	0.3	0.8	0	0.6	0.4	0.4	0.5	0.4

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories



Appendix 12: Female respondents cooking methods

	Age Group (years) **			Social Class **			Location **		Number in Household **	
	18-34 n=1300 %	35-54 n=1225 %	55+ n=862 %	1-2 n=1043 %	3-4 n=939 %	5-6 n=416 %	Urban n=1460 %	Rural n=1630 %	1 n=425 %	>1 n=2997 %
Boiled from cold water	51.4	48.7	51.5	41.7	49.3	60.4	46.6	53.3	46.0	51.1
Grilled	3.5	2.8	2.5	1.9	4.3	2.9	6.3	0.3	2.6	3.0
Fried	1.2	0.6	0.1	1.1	0.7	0	0.8	0.6	0.5	0.7
Immersed in boiling water	21.4	21.3	22.4	25.8	22.6	19.3	17.3	25.8	20.7	21.7
Microwaved	1.8	4.5	3.4	4.8	2.9	1.7	4.9	1.6	6.4	2.7
Steamed	8.5	11.2	9.0	12.4	8.6	6.8	11.0	8.6	11.9	9.3
Sautéed then casseroleed	0.6	0.5	0.1	1.0	0.5	0	0.6	0.3	0	0.5

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories

Appendix 13: Sociodemographic profile of respondents Dieting Patterns

	Gender		Age Group (years)			Social Class			Location		Number living in Household	
	Male n= 2995 %	Female n=3424 %	18-34 n=2375 %	35-54 n=2358 %	55+ n=1634 %	1-2 n=1796 %	3-4 n=1761 %	5-6 n=938 %	Urban n=2834 %	Rural n=3076 %	1 n=851 %	>1 n=5684 %
Eat healthier	71.0	74.1*	86.1**	76.7	45.9	81.1**	77.1	74.5	75.2**	70.8	58.3	74.8**
Vegetarian	2.2	4.4**	4.5**	2.7	2.8	4.5**	2.8	2.1	3.5	3.0	3.3	3.4
Diabetic	2.5	1.8	0.5	1.4	5.5**	1.2	1.7	1.9			5.0**	1.7
Weight Reducing	5.7	18.6**	12.1	15.0**	9.8	12.9	14.7	11.4	12.6	12.3	13.1	12.6
Vegan	0.1	0.3	0.4	0.2	0.1	0.4	0.2	0	0.4	0.2	0.3	0.3
Gluten Free	0.7	1.0	0.7	1.1	0.8	1.2*	0.5	0.6	0.6	1.0	1.2	0.8
Low Cholesterol	7.1	8.8	3.0	7.5	16.6**	6.7	6.9	6.8	8.0	8.0	11.9**	7.5
No Diet	82.8**	68.7	78.9**	74.1	71.0	75.5	75.6	78.1	74.2	76.3	72.7	75.5
Vitamins, minerals, food supplements	37.4	54.9**	54.8**	46.0	35.9	58.2**	48.2	40.9	52.5**	42.1	43.7	47.1
Folic Acid	1.4	23.1**	17.2**	15.3	3.4	18.3**	14.6	11.8	13.4	12.6	3.2	14.4

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories



Appendix 14: Male dieting patterns

	Age Group (years)			Social Class			Location		Household Number	
	15-34 n=1073 %	35-54 n=1129 %	55+ n=769 %	1-2 n=744 %	3-4 n=808 %	5-6 n=502 %	Urban n=1337 %	Rural n=1382 %	1 n=411 %	>1 n=2583 %
Vegetarian	1.5	2.3	3.0	2.9*	1.1	1.3	2.7*	1.6	2.8	2.1
Diabetic	0.5	1.6	6.5**	1.6	1.9	2.0	2.1	2.2	5.0**	2.1
Weight Reducing	4.4	5.5	7.9**	5.1	4.7	5.0	5.7	5.4	6.9	5.5
Vegan	0.1	0.1	0.3	0.1	0	0	0.2	0.1	0.3	0.1
Gluten Free	0.4	0.8	1.1	0.7	0.4	0.4	0.5	1.0	1.7*	0.6
Low Cholesterol	2.0	7.7	14.0**	6.6	6.0	5.9	7.5	6.7	9.6*	6.7
No Diet	88.8**	83.3	73.1	83.9	85.9	84.2	81.1	84.5*	76.0	83.8*
Eat healthier	84.9**	75.4	44.2	81.4**	73.7	73.2	76.1**	67.0	62.3	72.4**
Vitamins, minerals, food supplements	46.8**	35.5	26.5	47.4**	39.3	34.2	45.0**	30.4	35.5	37.8
Folic Acid	1.1	1.6	1.4	2.0	1.1	1.0	1.4	1.2	1.0	1.4

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories.

Appendix 15: Female dieting patterns

	Age Group (years)			Social Class			Location		Number in Household	
	15-34 n=1300 %	35-54 n=1225 %	55+ n=862 %	1-2 n=1043 %	3-4 n=939 %	5-6 n=416 %	Urban n=1460 %	Rural n=1630 %	1 n=425 %	>1 n=2997 %
Vegetarian	6.9**	3.0	2.5	5.7	4.1	3.1	4.3	4.2	3.9	4.5
Diabetic	0.4	1.3	4.7**	0.9	1.5	1.6	1.8	1.8	4.7**	1.4
Weight Reducing	18.4	23.5**	11.5	18.1	23.0*	18.8	18.9	18.0	18.0	18.7
Vegan	0.6	0.3	0	0.6	0.2	0	0.4	0.3	0.2	0.3
Gluten Free	0.9	1.4	0.5	1.6	0.6	0.8	0.7	1.1	0.8	1.0
Low Cholesterol	3.8	7.5	18.8**	6.6	7.6	8.1	8.5	9.0	13.8**	8.1
No Diet	70.8*	66.0	69.2	69.7	67.4	70.6	68.1	69.5	69.8	68.5
Eat healthier	87.2**	78.1	47.3	81.0	80.0	73.2	74.2	74.2	54.1**	76.8
Vitamins, minerals, food supplements	46.8**	35.5	26.5	65.9**	56.1	49.5	59.3**	52.2	51.7	55.3
Folic Acid	30.4**	27.9	5.3	30.1*	25.8	24.9	24.4	22.2	5.4	25.6**

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories

Appendix 16: Sociodemographic profile of respondents food label habits

	Gender		Age Group (years)			Social Class			Location		Number living in Household	
	Male n= 2995 %	Female n=3424 %	15-34 n=2375 %	35-54 n=2358 %	55+ n=1634 %	1-2 n=1796 %	3-4 n=1761 %	5-6 n=938 %	Urban n=2834 %	Rural n=3076 %	1 n=851 %	>1 n=5684 %
Read food labels	43.4	67.6**	55.5	59.1**	53.2	66.7**	57.1	49.3	59.5**	54.0	57.6	56.1
Ingredients	73.7**	65.8	68.1	69.9	67.3	74.1**	68.0	64.6	71.9**	66.3	70.4	68.1
Nutrients	56.4	65.0**	64.8**	62.1	57.4	66.4**	63.1	58.5	63.5*	59.9	58.9	62.2
Calorific Value	24.0	41.8**	44.2**	33.1	25.8	43.4**	36.1	30.5	35.7	34.9	27.5	36.4**
Weight of Food	15.4*	12.9	13.0	13.7	15.5	14.7	12.9	11.0	15.2	13.4	15.1	13.8
Additives	43.7	46.9	42.2	54.1**	37.7	52.5**	44.5	41.0	45.8	45.9	37.9	46.8**
Serving Size	19.8	17.6	18.5	18.2	18.8	19.3	18.3	19.7	19.9*	17.2	24.7**	17.4
Instructions for Competitions	12.3	13.0	11.9	14.0	11.9	13.2	13.4	14.0	12.4	13.3	9.6	13.2*

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories

Appendix 17: Males food labelling habits

	Age Group (years)			Social Class			Location		Household Number	
	15-34 n=1073 %	35-54 n=1129 %	55+ n=769 %	1-2 n=744 %	3-4 n=808 %	5-6 n=502 %	Urban n=1337 %	Rural n=1382 %	1 n=411 %	>1 n=2583 %
Read food labels	41.0	46.3*	42.6	52.5**	42.1	40.4			50.0**	42.4
Ingredients	78.4**	73.2	68.6	79.1	73.4	73.1	78.0*	70.0	75.6	73.4
Nutrients	57.3	55.8	56.1	56.4	55.0	49.8	59.2*	52.9	55.6	56.5
Calorific Value	25.9	23.9	21.8	30.2**	21.6	18.9	25.7	23.2	22.0	24.0
Weight of Food	13.4	15.1	19.0	17.8	11.8	14.9	16.3	15.3	20.0*	14.6
Additives	40.9	51.7**	34.6	47.7	42.3	41.8	44.7	42.2	33.7	45.6**
Serving Size	20.9	18.3	21.2	21.4	18.9	19.9	22.7*	17.2	33.7**	17.2
Instructions Competitions	11.1	13.1	12.8	12.4	13.3	13.4	13.3	11.2	11.2	12.5

\* p<0.05, \*\* p<0.01: significant difference between sociodemographic categories



Appendix 18: Females food labelling habits

	Age Group (years)			Social Class			Location		Number in Household	
	15-34 n=1300 %	35-54 n=1225 %	55+ n=862 %	1-2 n=1043 %	3-4 n=939 %	5-6 n=416 %	Urban n=1460 %	Rural n=1630 %	1 n=425 %	>1 n=2997 %
Read food labels	67.5	71.1**	62.8	76.9**	69.8	59.8			65.1	67.9
Ingredients	63.1	67.9	66.7	71.7**	65.2	58.4	68.0	64.9	67.4	65.5
Nutrients	68.6**	65.8	58.2	71.1	67.2	65.6	66.3	63.7	61.4	65.5
Caloric Value	53.4**	38.6	28.3	49.8**	43.3	40.0	42.1	41.1	31.4	43.1**
Weight of Food	12.8	12.9	13.3	12.9	13.5*	7.6	14.2	12.4	11.4	13.1
Additives	42.9	55.5**	39.7	54.8**	45.5	41.6	46.5	48.1	42.0	47.6**
Serving Size	17.3	18.2	17.3	18.0	18.1	19.2	18.1	17.3	17.4	17.6
Instructions Competitions	12.3	14.5	11.4	13.4	13.3	14.4	11.6	14.2	8.0	13.6**

\* p&lt;0.05, \*\* p&lt;0.01: significant difference between sociodemographic categories



Appendix 19: Descriptive profile of Food Quantity Consumption, excluding outliers, n= 6465

Food Group (grams)	N	Mean	Standard Deviation	Percentiles 10th	50th	90th
Meat	5962	105.73	81.7	34.28	91.40	182.90
Poultry	5499	36.27	38.2	8.39	18.57	55.71
Processed meats	4720	17.77	24.7	1.94	12.86	36.43
Offal	1000	10.36	10.0	6.45	6.45	14.29
White fish	4951	37.89	42.6	10.32	27.46	71.43
Oily fish	2504	19.16	34.0	7.61	7.61	50.57
Fish Products	1775	6.87	11.4	3.23	3.23	7.14
Shell fish	789	7.16	18.4	3.87	3.87	8.57
White Bread	5284	55.67	57.2	5.00	35.00	157.50
Brown bread	5576	69.30	85.2	5.00	38.00	175.00
Other breads	3640	7.65	19.2	0.45	3.00	16.16
High fibre cereals	4046	77.70	131.6	5.71	40.00	170.00
Refined cereals	3249	18.80	24.7	1.94	12.86	30.00
Boiled potatoes	5909	220.02	249.6	50.00	167.98	362.14
Fried potatoes	4945	60.61	73.6	12.90	39.22	109.28
Whole rice products	1467	34.24	42.3	9.68	21.43	77.14
White rice products	3743	68.87	88.4	11.61	44.47	175.71
Prepared pasta	3299	55.43	82.7	12.90	40.00	88.57
Full fat dairy products	4482	29.21	54.8	1.29	11.89	70.75
Low fat dairy products	4111	34.67	51.1	2.86	17.14	98.21
Cheddar cheese	4202	16.03	19.4	2.58	17.14	31.43
Soft cheese	1370	8.86	10.3	2.58	5.71	17.14
Egg products	5168	19.88	23.2	3.23	16.17	41.43
Dressings	1697	7.01	14.0	0.97	2.91	19.29
Butter	3451	18.49	18.8	1.43	10.00	45.00
Light butter	2471	15.62	17.8	0.65	10.00	45.00
Sunflower spreads	2586	16.45	17.6	1.30	10.00	45.00
Olive oil spreads	987	8.94	13.1	0.65	4.29	25.00

Appendix 19 contd: Descriptive profile of Food Quantity Consumption (gram/day), excluding outliers, n= 6465

Food Group (grams)	N	Mean	Standard Deviation	Percentiles 10th	50th	90th
Full fat milk	3691	386.30	228.6	142.00	284.00	852.00
Low fat milk	1682	348.42	210.4	142.00	284.00	568.00
Other milks	329	353.06	213.3	142.00	284.00	568.00
Citrus fruit	4815	62.30	82.9	7.10	47.14	124.29
Other fruits	5567	138.76	152.0	21.43	100.54	288.00
Tinned fruits	2972	17.33	26.6	3.57	9.36	32.74
Green vegetables	5734	88.69	80.8	80.76	69.65	164.35
Other vegetables	5771	107.81	82.7	82.73	88.84	199.89
Pulses	4296	37.29	41.5	41.51	19.29	67.86
Cakes & biscuits	5153	48.09	57.6	57.58	30.00	105.72
Dairy desserts	4924	33.07	52.6	52.66	17.10	75.00
Confectionery	5300	32.98	39.8	39.85	22.14	69.85
Savory snacks	4041	18.93	29.3	29.30	11.43	37.14
Soups	5000	70.55	94.1	94.14	31.43	188.58
Sauces	4830	22.46	24.8	24.79	13.58	51.07
Meat Extracts	547	4.39	7.8	0.97	0.97	11.79
Spreads	4321	11.41	14.7	0.97	6.43	17.71
Hot drinks	5895	5.63	3.8	1.82	4.63	9.95
Malt drinks	986	6.57	11.6	1.16	2.57	18.00
Wines	2638	38.87	68.2	8.06	17.86	98.21
Beers	3305	204.18	336.5	18.52	123.00	287.00
Spirits	2004	10.87	19.0	2.26	5.00	27.50
Fizzy drinks	2803	126.50	187.0	12.90	85.71	200.00
Low calorie fizzy drinks	2338	133.44	200.5	12.90	85.71	200.00
Juices	4228	110.53	128.3	10.32	71.80	181.43



Appendix 20: Sociodemographic profile of Cereals, Breads and Potatoes consumption (gram/day), mean (standard deviation), median, excluding outliers, n=6465

Food Group (grams): mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
White Bread	64.87 (63.9) 35.00**	47.64 (49.2) 35.00	57.14 (56.6) 35.00**	54.43 (55.9) 35.00	55.44 (60.6) 35.00	51.33 (53.4) 35.00	57.23 (56.2) 35.00	61.98** (61.1) 35.00	55.91 (56.0) 35.00	55.25 (57.9) 35.00	50.39 (55.8) 35.0	56.29 (57.2) 35.00**
Brown bread	70.10 (88.0) 36.3	68.34 (82.3) 40.26	52.28 (68.9) 31.29	68.06 (79.8) 40.26	93.38 (104.5) 66.29**	66.45 (75.6) 40.43**	63.31 (78.6) 35.00	68.32 (97.3) 35.00	57.84 (74.3) 33.97	79.39 (91.9) 46.29**	80.76 (96.6) 43.79**	67.11 (82.4) 37.45
Other breads	6.43 (15.2) 2.43	8.36 (21.3) 3.00**	7.30 (20.6) 3.00	7.18 (17.3) 3.00	8.81 (19.6) 3.00	6.46 (17.3) 3.00	7.29 (18.3) 2.43	7.44 (13.6) 3.00	6.81 (15.8) 3.00	8.30 (21.9) 3.00**	7.96 (20.8) 3.00	7.63 (19.1) 3.00
High fibre cereals	76.70 (125.7) 40.00	77.59 (133.6) 40.00	50.18 (108.0) 31.43	71.45 (109.0) 40.00	120.92 (166.6) 80.00**	62.15 (101.0) 40.00	65.14 (114.4) 40.00	74.32 (123.0) 40.00**	71.27 (123.7) 40.00	82.70 (131.8) 40.00**	108.68 (155.0) 63.56**	71.91 (124.9) 40.00
Refined cereals	18.68 (22.4) 12.86	18.60 (25.8) 12.86	19.01 (24.3) 12.86	17.78 (23.6) 12.86	19.40 (26.8) 12.86**	16.07 (18.8) 12.86	19.15 (25.0) 12.86	19.86 (26.7) 12.86	18.60 (26.1) 12.86	19.09 (24.1) 12.86	18.57 (28.5) 12.86	18.81 (24.2) 12.86
Boiled potatoes	240.78 (284.6) 175.00**	202.16 (214.2) 162.50	197.86 (233.5) 150.00	224.78 (254.6) 173.93	247.01 (265.9) 175.00**	185.65 (201.3) 150.00	215.45 (243.9) 162.50	243.12 (269.7) 175.00**	199.26 (244.3) 150.00	240.30 (253.9) 175.00**	204.30 (245.5) 162.50	222.03 (250.6) 167.98**
Fried potatoes	66.79 (74.7) 52.14**	55.08 (72.3) 36.47	69.93 (80.2) 52.14**	55.81 (66.3) 36.47	48.09 (70.0) 28.57	55.30 (58.20) 36.47	62.41 (62.8) 52.14	68.29 (102.7) 52.14**	65.36 (76.1) 52.14**	55.57 (72.2) 36.47	50.34 (57.3) 23.57	61.93 (75.5) 39.22**
Whole rice products	27.86 (32.2) 21.29	38.49 (47.4) 21.43**	35.71 (45.7) 21.43	33.45 (37.9) 21.43	48.4 (81.7) 26.45	34.74 (40.2) 21.43	31.56 (39.0) 21.29	36.28 (54.1) 21.43	33.46 (37.2) 21.43	35.79 (48.7) 21.43	38.98 (51.6) 21.29	33.56 (41.2) 21.43
White rice products	62.34 (78.6) 40.56	73.46 (94.6) 44.47**	77.03 (98.8) 44.47**	66.55 (76.2) 44.47	50.12 (106.2) 28.57	76.68 (75.6) 58.57**	66.04 (93.90) 40.55	62.99 (110.0) 32.86	72.03 (81.2) 44.47**	64.42 (89.1) 32.86	72.53 (125.8) 32.86**	68.57 (83.7) 44.47
Prepared pasta	52.90 (78.5) 40.00	56.72 (84.3) 40.00	56.93 (66.3) 40.00	53.70 (92.5) 40.00	50.12 (106.2) 28.57	53.28 (58.5) 40.00	51.24 (65.1) 40.00	54.01 (68.3) 36.12	55.66 (79.0) 40.00	53.07 (84.00) 40.00	50.49 (63.5) 40.00	54.71 (68.8) 40.00

\* p<0.05, \*\* p<0.01, significant differences across socio-demographic categories within food group

Appendix 21: Age and gender distribution of Cereal, Bread and Potato consumption (gram/day), excluding outliers for n=6465, mean, (standard deviation), median

Food Group (grams): Mean (standard dev) median	Males			Females		
	18-34 n=1052	35-54 n=1122	55+ n=766	18-34 n=1280	35-54 n=1205	55+ n=859
White Bread	68.85 (64.4) 35.00*	60.78 (61.6) 35.00	66.09 (67.0) 35.00	47.72 (47.4) 35.00	48.81 (49.6) 35.00	45.47 (52.2) 31.25
Brown bread	52.97 (73.5) 30.00	70.38 (85.0) 38.00	93.48 (104.5) 64.86**	51.97 (65.1) 32.45	66.00 (75.0) 42.50	97.05 (104.5) 70.00**
Other breads	6.57 (14.2) 2.72	5.46 (16.1) 1.10	7.91 (15.3) 3.00	7.78 (23.8) 3.00	8.42 (18.0) 3.00	9.42 (22.0) 4.29
High fibre cereals	48.68 (90.8) 27.14	70.72 (106.8) 40.00	122.8 (171.6) 80.0**	51.37 (119.9) 31.43	72.02 (110.9) 40.00	119.4 (162.6) 74.86**
Refined cereals	19.38 (21.5) 12.86	17.55 (23.6) 12.86	19.19 (22.5) 12.86	18.72 (26.2) 12.86	17.98 (23.6) 12.86	19.57 (30.0) 12.86
Boiled potatoes	217.3 (264.7) 150.0	249.1 (306.5) 175.0	263.2 (277.3) 175.0**	182.6 (204.3) 150.0	202.8 (193.5) 162.5	232.6 (254.6) 175.0**
Fried potatoes	82.45 (79.2) 70.71**	59.29 (74.6) 39.22	47.09 (54.1) 28.57	59.60 (79.6) 39.2*	52.54 (57.3) 36.47	49.09 (82.86) 28.57
Whole rice products	27.85 (34.88) 21.29	27.67 (27.8) 21.29	26.94 (33.7) 21.36	40.86 (51.0) 21.43	37.61 (43.4) 21.43	32.85 (45.15) 21.29
White rice products	71.17 (99.50) 44.47**	59.05 (57.5) 40.55	41.63 (40.2) 25.71	81.17 (98.2) 58.57**	72.09 (87.2) 44.47	52.97 (100.3) 26.45
Prepared pasta	57.81 (55.6) 40.00*	49.03 (106.0) 28.57	38.94 (45.6) 28.57	56.33 (73.3) 40.00	56.98 (81.5) 40.00	56.09 (127.0) 28.57

p&lt;0.05, \*\* p&lt;0.01, significant differences across age-groups



Appendix 22: Sociodemographic profile of Fruit and Vegetable consumption (gram/day), mean (standard deviation), median, excluding outliers, n=6465

Food Group (grams): mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
Citrus fruit	51.07 (66.1) 30.00	71.34 (93.6) 47.14**	53.86 (72.3) 27.32	66.37 (86.5) 47.14	70.26 (93.7) 47.14**	65.72 (81.8) 47.14**	58.18 (78.1) 35.16	53.59 (70.9) 27.32	61.02 (81.9) 42.86	63.19 (85.0) 47.14	67.75 (100.4) 47.14	61.54 (80.80) 42.86
Other fruits	121.25 (136.1) 86.86	153.38 (162.5) 116.16**	129.53 (152.2) 90.86	146.68 (149.4) 109.43	139.87 (153.7) 105.09**	149.65 (160.7) 110.15**	134.30 (146.4) 100.00	126.72 (143.6) 88.7	132.84 (143.9) 95.38	142.92 (163.0) 103.00*	135.92 (144.00) 100.00	139.12 (152.3) 100.54**
Tinned fruits	18.11 (23.4) 10.71	16.66 (29.0) 9.35	15.35 (18.2) 9.35	17.69 (33.20) 9.35	19.54 (25.1) 17.14**	16.16 (24.7) 9.35	16.65 (31.5) 9.35	15.22 (15.5) 9.35	16.26 (20.6) 9.35	18.38 (32.3) 10.71*	19.33 (23.7) 10.71	16.93 (26.8) 9.35
Green vegetables	80.04 (65.2) 65.82	96.16 (91.40) 74.00**	82.78 (71.4) 63.57	93.16 (93.0) 73.77**	90.32 (73.2) 73.38	90.52 (73.1) 73.73	88.98 (93.9) 67.96	83.36 (67.7) 66.44	82.89 (74.4) 65.82	93.45 (86.6) 72.68**	79.38 (65.4) 62.94	89.96 (82.6) 70.71
Other vegetables	92.29 (69.4) 77.18	121.31** (90.2) 101.59	108.51 (82.8) 89.69	115.94** (86.1) 96.43	94.80 (74.9) 76.34	123.42** (82.1) 106.32	109.76 (84.4) 89.08	97.53 (86.0) 78.87	104.66 (79.3) 84.23	110.11* (84.4) 92.20	88.18 (67.1) 72.28	111.00** (84.1) 92.05
Pulses	36.90 (37.40) 19.29	37.41 (44.6) 19.29	41.86 (46.4) 22.84	34.54 (31.1) 19.29**	32.69 (46.7) 19.29	33.46 (32.8) 19.29	38.25 (40.1) 19.29	42.17 (49.1) 23.8**	35.14 (30.9) 19.29	38.78 (49.2) 19.29*	32.74 (49.1) 19.29	37.78 (39.4) 19.29**

\* p<0.05, \*\* p<0.01, significant differences across socio-demographic categories within food group



Appendix 23: Age and gender distribution of Fruit and Vegetable consumption (gram/day), excluding outliers for n=6465, mean, (standard deviation), median

Food Group (grams): Mean (standard dev) median	Males			Females		
	18-34 n=1052	35-54 n=1122	55+ n=766	18-34 n=1280	35-54 n=1205	55+ n=859
Citrus fruit	44.86 (56.36) 22.16	51.65 (67.10) 30.00	59.95 (77.5) 47.14**	60.70 (81.70) 35.16	78.42 (97.9) 52.30	78.96 (104.8) 52.30**
Other fruits	111.1 (121.9) 72.2	122.8 (124.2) 90.9	132.7 (167.6) 90.86**	144.2 (171.27) 104.6	168.1 (165.8) 126.3**	146.1 (140.3) 112.3
Tinned fruits	16.93 (19.8) 9.35	16.9 (21.1) 9.4	21.70 (30.5) 17.14**	13.93 (16.4) 7.74	18.34 (40.37) 9.35**	17.89 (20.0) 11.31
Green vegetables	75.27 (62.7) 59.28	81.63 (64.7) 68.14	84.32** (68.9) 70.00	88.85 (77.2) 67.96	103.7 (111.8) 79.30**	95.71 (76.4) 75.01
Other vegetables	93.38 (74.3) 75.44	95.27** (63.8) 82.32	86.66 (70.1) 73.71	120.8 (87.2) 101.5	134.9* (98.6) 114.2	102.1 (78.4) 84.33
Pulses	43.43** (47.6) 23.8	33.09 (27.8) 19.29	31.89 (28.8) 19.29	40.57 (45.4) 19.29**	35.83 (33.7) 19.29	33.46 (58.9) 19.29

p&lt;0.05, \*\* p&lt;0.01, significant differences across age-groups

**Appendix 24: Sociodemographic profile of Cheese, Milk and Other Dairy Products consumption (gram/day), mean (standard deviation), median, excluding outliers, n=6465**

Food Group (grams): mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
Full fat dairy products	30.92 (63.1) 11.89	27.64 (46.5) 11.89	32.66 (52.2) 47.41**	27.25 (58.5) 10.71	25.38 (51.8) 9.03	31.60 (61.6) 16.63	28.69 (55.7) 11.89	28.67 (50.2) 11.49	29.62 (60.5) 13.06	28.94 (51.0) 11.84	29.72 (83.2) 9.54	29.15 (50.5) 11.89
Low fat dairy products	25.21 (45.0) 10.92	40.85 (54.1) 20.44**	33.69 (46.5) 17.86	35.18 (55.7) 16.68	36.04 (51.9) 17.86	36.99 (51.0) 17.86**	32.66 (42.3) 17.14	30.93 (57.7) 14.28	33.70 (50.3) 16.63	35.49 (51.9) 17.86	37.73 (58.8) 17.86	34.32 (50.0) 17.14
Cheddar cheese	15.43 (19.6) 17.14	16.62 (19.3) 17.41*	17.44 (22.2) 17.14**	15.57 (17.8) 17.14	14.27 (16.5) 5.71	16.79 (20.3) 17.14	15.77 (18.0) 17.14	15.22 (16.9) 17.14	15.96 (18.7) 17.14	16.05 (20.6) 17.14	15.86 (22.8) 5.71	16.06 (18.90) 17.14
Soft cheese	8.39 (10.2) 5.71	9.16 (10.4) 5.71	8.94 (10.8) 5.71	8.62 (9.5) 5.71	9.06 (10.9) 5.71	8.68 (9.6) 5.71	8.19 (8.9) 2.58	8.99 (12.00) 2.58	8.29 (9.7) 5.71	9.54 (11.2) 5.71	7.60 (7.2) 5.71	9.02 (10.7) 5.71
Egg products	21.1 (24.2) 21.43**	18.85 (22.4) 16.17	19.31 (21.5) 16.17	18.83 (19.9) 16.17	22.59 (29.9) 21.43**	18.24 (18.6) 16.17	18.85 (17.8) 16.17	21.00 (22.9) 21.43**	18.68 (19.3) 16.17	20.88 (26.7) 16.17	21.60 (26.8) 21.43	19.56 (22.1) 16.17
Dressings	6.22 (10.1) 2.91	7.52 (16.1) 4.08	6.64 (10.8) 2.91	7.22 (14.6) 4.08	7.43 (19.2) 4.08	7.18 (12.40) 4.08	6.13 (7.1) 2.91	6.07 (8.8) 2.91	7.06 (14.0) 2.91	6.40 (10.4) 2.91	8.03 (22.2) 2.91	6.88 (12.7) 4.08
Butter	20.24 (19.7) 10.00**	16.82 (17.7) 10.00	16.58 (17.7) 10.00	18.15 (18.6) 10.00	22.37 (20.2) 10.00**	17.02 (18.3) 10.00	18.25 (18.5) 10.00	19.76 (19.3) 10.00*	17.39 (18.4) 10.00	19.72 (19.4) 10.00**	19.17 (19.8) 10.00*	18.42 (18.7) 10.00
Light butter	16.25 (18.9) 9.29	14.88 (16.4) 4.08	13.90 (17.4) 7.86	16.72 (17.7) 10.00**	16.44 (17.3) 10.00	14.26 (16.7) 7.86	15.81 (18.3) 10.00	17.60 (19.0) 10.00**	14.64 (17.0) 8.58	16.35 (18.2) 10.00**	15.77 (18.3) 10.00	15.62 (17.7) 10.00
Sunflower spreads	16.72 (19.1) 10.00	16.13 (16.3) 10.00	14.58 (16.6) 9.29	16.90 (17.8) 10.00	18.45 (18.6) 10.00**	14.99 (15.6) 10.00	17.43 (18.5) 10.00	17.20 (18.0) 10.00	16.29 (18.1) 10.00	16.76 (17.1) 10.00	16.80 (18.4) 10.00	16.28 (17.4) 10.00



Appendix 24: contd

Food Group (grams): mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
Olive oil spreads	9.27 (14.4) 4.29	8.60 (11.8) 4.29	7.31 (11.7) 1.43	9.44 (12.9) 4.29	11.09 (14.9) 4.29**	9.48 (13.3) 4.29	7.96 (12.3) 4.29	9.76 (14.4) 4.29	8.84 (13.4) 4.29	8.97 (12.6) 4.29	10.45 (16.3) 4.29	8.82 (12.7) 4.29
Full fat milk	419.49** (239.2) 426.00	351.44 (211.0) 284.00	420.57** (245.1) 284.00	374.40 (219.4) 284.00	350.65 (206.6) 284.00	384.50 (277.1) 284.00	386.65 (229.8) 284.00	393.60 (237.2) 284.00	375.77 (225.7) 284.00	397.71** (230.5) 284.00	369.50 (212.7) 284.00	386.86 (230.8) 284.00
Low fat milk	385.73** (235.2) 284.00	323.77 (188.1) 284.0	383.15** (237.5) 284.00	325.99 (186.7) 284.00	328.02 (192.2) 284.00	333.31 (202.0) 284.00	360.49 (215.1) 284.00	356.73 (219.0) 284.00	342.10 (208.5) 284.00	362.30 (215.4) 284.00	337.03 (211.9) 284.00	350.48 (210.1) 284.00
Other milks	377.28 (217.4) 284.00	331.08 (209.1) 284.00	341.30 (224.9) 284.00	341.01 (197.4) 284.00	384.58 (225.4) 284.00	333.10 (216.4) 284.00	359.53 (207.9) 284.00	356.73 (215.6) 284.00	367.53 (227.3) 284.00	352.40 (205.4) 284.00	371.90 (230.4) 284.00	349.73 (211.3) 284.00

\* p&lt;0.05, \*\* p&lt;0.01, significant differences across socio-demographic categories within food group

**Appendix 25: Age and gender distribution of Cheese, Milk and Other dairy product consumption (gram/day), excluding outliers for n-RARS, mean, (standard deviation), median**

Food Group (grams): Mean (standard dev) median	Males			Females		
	18-34 n=1052	35-54 n=1122	55+ n=766	18-34 n=1280	35-54 n=1205	55+ n=859
Full fat dairy products	35.62 (49.2) 17.86**	29.02 (76.9) 10.71	23.72 (57.5) 8.57	30.21 (54.4) 16.63	25.71 (35.6) 10.71	26.59 (47.3) 9.54
Low fat dairy products	21.85 (30.9) 10.92	27.50 (57.5) 9.35	26.93 (39.2) 11.04	40.96 (52.6) 20.72	40.46 (53.8) 20.72	41.83 (57.9) 20.00
Cheddar cheese	16.66 (24.0) 17.14	14.55 (16.3) 17.14	14.85 (16.3) 17.14	18.02 (20.7) 17.1**	16.49 (18.9) 17.14	13.74 (16.7) 5.71
Soft cheese	7.86 (10.3) 2.58	9.23 (8.7) 5.71	10.23 (13.7) 5.71	9.68 (11.07) 5.7	8.93 (10.1) 5.71	8.33 (8.8) 5.71
Egg products	21.29 (25.3) 21.43	18.98 (17.4) 21.43	24.20 (30.8) 21.43**	17.72 (17.8) 12.26	18.72 (21.9) 16.17	21.08 (29.1) 21.43*
Dressings	6.67 (13.9) 2.91	5.81 (6.60) 2.91	6.23 (6.7) 2.91	6.62 (8.3) 2.91	8.17 (18.0) 4.29	8.10 (23.5) 4.08
Butter	19.20 (19.6) 10.00	18.85 (19.0) 10.00	24.22** (20.7) 25.00	14.31 (15.5) 10.0	17.48 (18.3) 10.00	20.61 (19.7) 10.00**
Light butter	14.23 (18.3) 7.86	17.21 (19.5) 10.00	18.23 (18.6) 10.00**	13.62 (16.6) 8.18	16.28 (16.2) 10.00*	14.96 (16.0) 10.00
Sunflower spreads	14.29 (17.8) 8.51	17.04 (19.2) 10.00	19.82 (20.3) 10.00**	14.79 (15.6) 10.00	16.80 (16.6) 10.00	17.25 (16.9) 10.00
Olive oil spreads	6.65 (11.6) 1.43	10.09 (15.0) 4.29	13.70 (17.5) 4.29**	7.83 (11.8) 2.86	9.00 (11.1) 4.29	9.54 (12.8) 4.29
Full fat milk	480.2** (252.4) 426.0	400.8 (228.0) 284.0	355.5 (212.4) 284.0	359.8 (221.7) 284.0	344.7 (205.2) 284.0	345.5 (200.4) 284.0
Low fat milk	474.1** (256.9) 426.0	339.6 (204.2) 284.0	324.1 (205.8) 284.0	323.4 (203.0) 284.0	316.6 (173.4) 284.0	330.8 (182.3) 284.0
Other milks	433.7** (259.1) 284.0	320.5 (172.1) 284.0	440.2 (227.9) 426.0	296.9 (193.0) 284.0	362.4 (220.1) 284.0	344.9 (217.6) 284.00

p<0.05, \*\* p<0.01, significant differences across age-groups



Appendix 26: Sociodemographic profile of Meat, Fish and Poultry consumption (gram/day), mean (standard deviation), median, excluding outliers, n=6465

Food Group (grams): mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
Meat	114.6** (82.7) 100.84	97.74 (79.3) 83.11	108.86** (76.4) 94.71	106.07 (87.0) 92.02	99.72 (78.8) 85.39	97.12 (71.5) 83.88	107.48 (80.1) 94.57	114.74** (89.6) 99.76	97.85 (79.60) 84.46	111.26** (83.2) 95.42	83.38 (62.3) 72.12	108.92** (82.8) 93.98
Poultry	34.64 (35.3) 18.57	37.57 (39.4) 18.57**	39.00 (38.6) 18.57**	34.96 (38.2) 18.57	33.66 (34.6) 18.57	39.68 (37.3) 18.57	35.67 (36.6) 18.57	34.94 (49.3) 18.57**	38.12 (36.5) 18.57	34.24** (40.8) 18.57	37.02 (48.0) 18.57**	36.28 (36.9) 18.57
Processed meats	19.55 (25.1) 12.86**	15.94 (23.8) 8.58	21.54 (26.3) 12.86**	15.76 (23.0) 8.58	13.24 (20.3) 6.23	14.29 (18.9) 6.87	17.72 (23.1) 12.86	20.91 (24.8) 12.86**	18.29 (26.3) 12.86	17.21 (23.1) 11.62	14.41 (22.0) 8.58	18.22 (25.1) 12.86**
Offal	10.32 (10.1) 6.45	10.40 (10.0) 6.45	9.86 (9.1) 6.45	9.97 (9.8) 6.45	11.34 (11.3) 6.45	8.82 (5.8) 6.45	9.29 (6.9) 6.45	10.77 (10.9) 6.45	10.13 (9.4) 6.45	10.29 (9.9) 6.45	11.57 (12.2) 6.45*	10.07 (9.2) 6.45
White fish	38.16 (35.1) 30.60	37.54 (47.9) 25.80	37.67 (46.2) 27.46	37.25 (38.4) 27.46	38.66 (41.1) 30.6	35.59 (33.4) 25.80	37.29 (41.1) 29.31	37.93 (33.3) 30.6	37.65 (41.8) 29.77	36.39 (36.3) 25.80	39.01 (40.0) 25.80	37.46 (39.2) 29.31
Oily fish	17.02 (19.4) 7.61	20.73 (42.0) 16.86**	18.66 (24.7) 7.61	19.35 (38.7) 7.61	19.02 (37.2) 7.61	19.77 (41.2) 7.61	18.55 (25.3) 7.61	16.77 (21.3) 7.61	19.18 (37.8) 7.61	18.90 (31.9) 7.61	21.68 (48.1) 7.61	18.69 (31.1) 7.61
Fish Products	6.48 (8.8) 3.23	7.06 (13.1) 3.23	6.82 (13.67) 3.23	6.45 (8.3) 3.23	7.47 (10.1) 3.23	5.81 (6.10) 3.23	6.83 (16.1) 3.23	6.58 (7.2) 3.23	6.41 (7.8) 3.23	7.08 (13.7) 3.23	7.71 (11.9) 3.23	6.7 (11.4) 3.23
Shell fish	7.03 (15.4) 3.87	7.16 (20.480) 3.87	7.28 (17.4) 3.87	7.27 (21.5) 3.87	5.54 (4.4) 3.87	6.59 (20.5) 3.87	7.33 (20.1) 3.87	8.17 (10.1) 3.87	7.08 (20.5) 3.87	7.32 (17.0) 3.87	7.39 (9.50) 3.87	6.92 (18.7) 3.87

\* p&lt;0.05, \*\* p&lt;0.01, significant differences across socio-demographic categories within food group



Appendix 27: Age and gender distribution of Meat, Fish and Poultry consumption (gram/day), excluding outliers for n=6465, mean, (standard deviation), median

Food Group (grams): Mean (standard dev) median	Males			Females		
	18-34 n=1052	35-54 n=1122	55+ n=766	18-34 n=1280	35-54 n=1205	55+ n=859
Meat	127.3** (86.7) 112.9	108.2 (79.9) 96.1	105.7 (77.3) 91.13	93.21 (62.2) 80.81	104.3** (93.1) 87.29	94.44 (79.8) 80.10
Poultry	37.68 (34.4) 18.57**	34.06 (41.3) 18.57	30.72 (23.4) 18.57	40.07 (41.8) 18.57*	35.79 (35.2) 18.57	36.14 (41.6) 18.57
Processed meats	25.04 (29.3) 14.80**	16.50 (19.8) 12.86	14.57 (23.1) 8.58	18.33 (22.7) 12.86**	15.04 (25.7) 6.23	11.92 (17.0) 4.29
Offal	9.90 (8.3) 6.45	9.94 (9.0) 6.45	11.41 (13.0) 6.45	9.82 (10.08) 6.45	10.00 (10.4) 6.45	11.28 (9.2) 6.45
White fish	39.15 (35.5) 30.60	37.62 (35.5) 30.60	37.71 (33.9) 27.46	36.42 (53.5) 25.8	36.91 (40.9) 25.80	39.42 (46.6) 30.60
Oily fish	17.48 (23.6) 7.61	17.00 (17.5) 7.6	16.21 (15.8) 7.61	19.53 (25.4) 7.61	21.14 (48.9) 16.86	21.50 (48.7) 16.86
Fish Products	6.50 (9.2) 3.23	5.76 (6.03) 3.23	8.15 (12.4) 7.14**	7.08 (16.5) 3.23	7.06 (9.8) 3.23	6.67 (7.2) 3.23
Shell fish	8.53 (23.1) 3.87	5.95 (5.8) 3.87	6.20 (5.6) 3.87	6.31 (11.2) 3.87	8.37 (28.6) 3.87	5.04 (3.3) 3.87

p<0.05, \*\* p<0.01, significant differences across age-groups

Appendix 28: Sociodemographic profile of foods high in fat and sugar consumption (gram/day), mean (standard deviation), median, excluding outliers, n=6465

Food Group (grams): mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural N=3032	1 n=847	>1 n=5401
Cakes & biscuits	51.54 (61.9) 31.87**	44.99 (52.9) 28.39	46.32 (54.7) 29.51	48.62 (57.5) 30.00	49.76 (61.6) 30.48	49.00 (52.4) 32.38	46.41 (56.7) 29.29	50.22 (70.8) 29.27	45.85 (56.9) 28.39	49.59 (58.5) 31.08*	43.10 (46.0) 29.22	48.64 (58.8) 30.00
Dairy desserts	35.34 (56.2) 22.97**	30.98 (49.4) 17.10	29.60 (41.4) 17.10	30.71 (48.6) 17.10	42.83 (72.8) 22.97**	29.52 (46.9) 17.10	31.02 (51.8) 17.1	35.26 (52.3) 22.97*	28.49 (45.4) 17.10	36.33 (53.40) 22.97**	35.90 (48.4) 17.10	32.43 (53.1) 17.10
Confectionery	36.96 (41.7) 27.00**	29.30 (37.1) 17.43	39.21 (42.2) 27.43**	29.25 (35.8) 18.43	26.80 (37.2) 15.00	31.66 (35.4) 21.43	35.78 (46.8) 23.37*	34.61 (37.9) 25.14	33.20 (38.3) 22.4	32.53 (39.7) 21.43	29.86 (39.60) 16.9	33.61 (40.2) 22.97**
Savory snacks	20.28 (31.3) 11.43**	17.77 (27.5) 11.43	23.06 (30.7) 12.86**	15.60 (28.8) 7.52	10.87 (19.5) 4.73	17.30 (22.00) 11.43	18.65 (23.9) 11.43	22.25 (43.8) 12.86	19.01 (27.7) 11.43	18.94 (32.0) 11.43	18.37 (41.7) 7.52	18.86 (27.7) 11.43**
Soups	70.62 (83.5) 31.43	70.21 (102.1) 31.43	61.20 (80.5) 31.43	64.56 (71.5) 31.43	91.15 (126.7) 62.86**	65.93 (86.8) 31.43	66.61 (104.8) 31.43	69.03 (71.4) 31.43	64.61 (95.1) 31.43	74.51 (89.3) 45.62**	87.98 (126.5) 45.62**	67.40 (86.3) 31.43
Sauces	23.59 (27.5) 13.81**	21.49 (22.2) 13.58	23.58 (24.2) 14.19**	22.25 (26.7) 13.58	20.39 (21.8) 12.86	22.63 (24.2) 13.58	22.16 (22.9) 13.58	25.09 (32.4) 15.44*	21.20 (21.6) 13.58	23.30 (27.0) 13.58*	19.70 (21.0) 12.86	22.72 (24.4) 13.58**
Meat Extracts	4.42 (9.2) (0.97)	4.42 (6.8) 2.14	4.07 (5.8) 0.97	4.03 (6.5) 2.14	5.17 (10.7) 0.97	4.69 (8.8) 2.14	3.69 (5.1) 0.97	4.62 (5.9) 2.14	3.96 (6.6) 0.97	4.66 (8.40) 0.97	4.16 (5.8) 0.97	4.45 (8.2) 0.97
Spreads	11.95 (15.7) 6.43	10.84 (13.4) 6.43	8.60 (11.8) 6.43	11.58 (14.5) 6.43	14.38 (16.9) 11.79**	11.30 (14.8) 6.43	9.72 (11.40) 6.43	11.40 (14.6) 6.43	10.57 (14.2) 6.43	12.07 (14.9) 6.43**	13.08 (16.0) 11.79	11.08 (14.5) 6.43

\* p&lt;0.05, \*\* p&lt;0.01, significant differences across socio-demographic categories within food group

Appendix 29: Age and gender distribution of Confectionery and Cake consumption (gram/day), excluding outliers for n=6465, mean, (standard deviation), median

Food Group (grams): Mean (standard dev) median	Males 18-34 n=1052	35-54 n=1122	55+ n=766	Females 18-34 n=1280	35-54 n=1205	55+ n=859
Cakes & biscuits	51.19 (60.60) 32.26	51.92 (62.9) 32.49	51.71 (62.70) 30.00	42.40 (49.0) 28.09	45.61 (51.9) 28.71	48.10 (60.6) 31.08
Dairy desserts	33.11 (42.6) 22.97	31.47 (41.00) 17.10	46.37 (90.2) 27.14**	26.64 (40.1) 17.10	30.03 (54.8) 17.10	39.88 (54.11) 22.97**
Confectionery	45.78 (46.3) 35.29**	31.86 (34.9) 22.43	29.89 (39.9) 21.43	33.87 (37.7) 24.43**	26.85 (36.5) 14.43	24.01 (34.4) 12.23
Savory snacks	25.68 (28.5) 16.09**	16.00 (35.4) 7.52	10.38 (19.80) 4.29	20.96 (32.2) 12.86**	15.25 (21.5) 7.5	11.27 (19.3) 5.17
Soups	63.28 (74.6) 31.43	63.52 (67.7) 31.43	90.65 (103.7) 62.86**	59.56 (85.0) 31.43	65.5 (74.7) 31.43	91.57 (143.4) 45.62**
Sauces	25.66 (27.1) 17.05**	23.10 (29.6) 13.58	20.22 (22.8) 12.9	21.90 (21.3) 13.58	21.51 (23.9) 13.58	20.52 (20.9) 11.87
Meat Extracts	3.27 (5.4) 0.97	4.82 (9.2) 2.14	5.09 (12.1) 0.97	4.79 (6.0) 2.14	3.59 (4.2) 1.56	5.23 (9.6) 0.97
Spreads	8.96 (12.5) 6.43	12.05 (15.2) 6.43	15.46 (18.8) 11.79**	8.32 (11.1) 6.43	11.21 (13.8) 7.66	13.52 (15.1) 11.79**

p<0.05, \*\* p<0.01, significant differences across age-groups



Appendix 30: Sociodemographic profile of Drinks consumption (gram/day), mean (standard deviation), median, excluding outliers, n=6465

Food Group (grams): mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
Hot drinks	5.40 (3.7) 4.63	5.85** (3.9) 4.79	5.35 (4.0) 4.50	6.18** (3.8) 5.43	5.23 (3.3) 4.50	6.16** (3.9) 5.36	5.60 (3.6) 4.63	5.42 (3.9) 4.50	5.7 (4.0) 4.79	5.60 (3.7) 4.63	5.42 (3.6) 4.50	5.67 (3.8) 4.79
Malt drinks	6.21 (11.8) 2.57	6.85 (11.6) 2.57	4.56 (8.0) 1.16	6.95 (14.2) 2.57	10.86 (13.4) 4.12**	5.82 (10.7) 1.55	4.83 (9.2) 1.55	7.04 (13.2) 2.57	6.39 (11.1) 2.57	6.82 (11.9) 2.57	9.72 (13.7) 2.57**	6.14 (11.3) 2.57
Wines	39.26 (71.3) 17.86	38.48 (65.8) 17.86	31.08 (47.9) 17.86	43.77 (71.3) 17.86**	43.30 (87.1) 17.86	47.38 (73.0) 17.86**	30.91 (57.3) 17.86	25.76 (47.7) 11.29	41.85 (70.5) 17.86*	35.46 (66.5) 17.86	50.28 (90.8) 17.86**	37.62 (65.0) 17.86
Beers	258.32 (392.9) 123.00**	129.42 (214.8) 41.00	199.71 (301.9) 123.00	200.69 (356.2) 123.00	236.79 (410.5) 123.00**	213.7 (329.2) 123.00	197.8 (329.7) 123.00	221.26 (375.2) 123.00	244.24 (386.30) 123.00**	165.71 (276.6) 123.00	292.06 (466.7) 123.00	196.72 (321.0) 123.00
Spirits	10.84 (18.0) 5.00	10.92 (19.9) 5.00	9.71 (16.5) 5.00	10.02 (17.2) 5.00	14.78 (25.5) 5.00**	10.64 (18.3) 5.00	8.85 (12.02) 5.00	11.24 (18.6) 5.00	10.77 (17.8) 5.00	10.80 (19.3) 5.00	13.58 (24.70) 5.0	10.58 (18.2) 5.00
Fizzy drinks	131.19 (175.2) 85.71	120.29 (200.70) 28.57	149.33 (205.0) 85.71**	93.20 (150.1) 28.57	108.39 (172.0) 28.57	113.3 (179.3) 85.71	121.13 (164.1) 85.71	140.23 (207.9) 85.71**	136.83 (203.9) 85.71**	112.75 (162.6) 85.71	101.00 (139.9) 28.57	128.29 (188.3) 85.71**
Low calorie fizzy drinks	127.17 (205.1) 85.71	136.9 (198.0) 85.71	139.18 (196.06) 85.71	121.86 (206.5) 85.71	132.67 (190.1) 85.71	125.43 (199.90) 85.71	137.14 (191.5) 85.71	122.43 (195.7) 85.81	155.55** (232.7) 85.71	111.08 (157.2) 85.71	131.24 (207.5) 85.71	133.61 (200.0) 85.71
Juices	100.50 (117.9) 68.57	117.80 (135.1) 90.00**	111.71 (125.8) 71.80	106.25 (123.4) 71.8	115.49 (143.2) 90.00	113.18 (122.4) 72.86	104.61 (109.7) 71.80	97.12 (124.3) 68.57	111.65 (133.6) 71.80	110.62 (126.0) 71.80	111.90 (134.3) 71.80**	110.33 (128.1) 71.80

\* p&lt;0.05, \*\* p&lt;0.01, significant differences across socio-demographic categories within food group

Appendix 31: Age and gender distribution of Drink consumption (gram/day), excluding outliers for n=6465, mean, (standard deviation), median

Food Group (grams): Mean (standard dev) median	Males			Females		
	18-34 n=1052	35-54 n=1122	55+ n=766	18-34 n=1280	35-54 n=1205	55+ n=859
Hot drinks	4.85 (3.8) 4.5	6.04 (3.9) 5.36	5.15** (3.1) 4.50	5.75 (4.2) 4.79	6.32** (3.8) 6.00	5.30 (3.57) 4.50
Malt drinks	4.12 (8.3) 1.16	6.20 (14.6) 2.57	11.40 (12.6) 7.71**	4.85 (7.9) 1.16	7.45 (14.0) 2.57	10.52 (14.0) 3.43**
Wines	29.56 (43.4) 17.86	43.91 (78.4) 17.86	47.32 (93.2) 17.86**	32.0 (50.4) 17.86	43.67 (65.2) 17.86**	40.35 (82.4) 17.86
Beers	254.2 (351.2) 123.0	260.0 (417.3) 123.0	265.9 (441.1) 123.0**	144.4 (229.1) 123.0**	102.4 (182.1) 41.00	119.3 (216.2) 41.00
Spirits	8.65 (13.40) 5.00	9.17 (13.8) 2.26	16.47 (26.3) 5.00**	10.47 (18.4) 5.00	10.69 (19.47) 5.00	12.63 (24.3) 5.00
Fizzy drinks	162.9 (198.0) 85.7	91.38 (125.9) 28.57	103.2 (141.5) 57.14**	134.5 (211.6) 85.71**	95.74 (178.9) 28.57	113.6 (167.6) 28.57
Low calorie fizzy drinks	135.9 (205.3) 85.7	111.2 (198.9) 88.57	132.0 (198.0) 85.71	141.0 (190.9) 85.71	130.15 (212.10) 85.71	133.2 (184.1) 85.71
Juices	103.7 (122.7) 68.57	93.56 (103.4) 68.57	107.0 (134.5) 68.57	117.9 (127.8) 90.00	116.22 (136.4) 75.71	121.7 (149.1) 90.00

\*p<0.05, \*\* p<0.01, significant differences across age-groups



Appendix 32: Descriptive profile of Energy and Nutrient intake, excluding outliers, n= 6465

Nutrient	N	Mean	Standard Deviation	Percentiles 10th	50th	90th
Calories (kcal)	6361	2228.6	1040.0	1145.4	2064.3	3559.9
Protein (g)	6361	95.3	44.0	51.3	89.8	143.8
Fat (g)	6361	85.5	46.6	36.5	77.2	144.3
Carbohydrate (g)	6355	276.7	143.0	130.3	253.9	454.8
Alcohol (g)	4385	8.7	13.0	0.7	4.8	20.6
MUFA (g)	6357	27.0	15.8	10.8	24.0	47.0
PUFA (g)	6331	12.0	8.2	4.1	10.0	22.3
SFA (g)	6361	32.6	19.4	12.2	28.6	57.8
Cholesterol (mg)	6347	297.5	169.6	125.9	268.5	488.0
Sugar (g)	6355	121.4	71.9	49.2	109.0	206.9
Starch (g)	6230	157.2	90.7	69.5	140.0	264.4
Fibre (g)	6227	23.5	13.0	10.5	21.2	38.8
Vitamin A equivalence (mg)	6333	876.1	1159	220.0	545.6	1894
Thiamin (mg)	6361	1.8	1.0	0.9	1.7	3.0
Riboflavin (mg)	6361	1.9	1.0	0.9	1.8	0.1
Niacin (mg)	6349	8.3	6.3	2.8	7.2	14.5
Vitamin B6 (mg)	6361	2.7	1.4	1.4	2.9	4.3
Vitamin B12 (mg)	6346	6.4	5.9	2.2	4.9	11.6
Folate (mg)	6361	304.0	166.1	142.9	276.9	488.1
Vitamin C (mg)	6343	105.8	82.3	29.3	90.3	191.2
Vitamin D (mg)	6343	3.4	3.0	1.0	2.7	6.6
Vitamin E (mg)	6358	6.4	3.9	2.5	5.7	11.0
Phosphorous (mg)	6361	1494.9	646.6	805.0	1410.8	2286.5
Calcium (mg)	6361	923.4	470.8	417.7	858.3	1510.9
Iron (mg)	6361	13.0	8.4	6.1	11.4	22.0
Selenium (mg)	6351	53.5	30.3	23.9	48.0	90.5
Zinc (mg)	6361	11.5	5.9	5.8	10.7	17.9

Appendix 33: Table of recommended dietary allowances

		Age Range years	Reference Weight kg	lb	Reference Height cm	in	Energy MJ	kcal	Protein g*	Thiamin mg	Riboflavin mg	Niacin mg	Ascorbic Acid mg	B12 µg	Folate µg	Pyridoxine Vit A µg	Vit D µg	Vit E mg	Calcium mg	Iron mg	Zinc mg	
Children	Infants	less than 1 year	9	20	71	28	0.48-0.44 x kg	115-105 x kg	28-25 x kg	0.3	0.4	5	35	1.5	50	0.6	450	10	4	540	7	5
	Children	1-3	13	29	90	35	5.6	1300	33	0.5	0.7	8	45	2.0	100	0.9	300	10	5	800	8	10
		4-6	20	44	112	44	7.0	1700	43	0.7	0.9	10	45	2.5	200	1.3	300	10	6	800	9	10
7-10		28	62	132	52	8.5	2000	51	0.8	1.1	12	45	3.0	200	1.6	480	10	7	800	10	10	
Adolescents	Male Adolescents	11-14 15-18	45 66	99 145	157 176	62 69	11 12	2600 2900	66 72	1.1 1.2	1.4 1.7	16 19	50 60	3.0 3.0	300 300	1.8 2.0	725 750	10 10	8 10	1200 1200	13 14	15 15
	Female Adolescents	11-14 15-18	46 55	101 120	157 163	62 64	9 9	2100 2100	53 53	0.9 0.9	1.4 1.7	16 19	50 60	3.0 3.0	300 300	1.8 2.0	725 750	10 10	8 8	1200 1200	14 14	15 15
	Sedentary Moderately Active Very Active	19-34	70 70 70	154 154 154	178 178 178	70 70 70	10.5 12 14	2500 2900 3300	63 72 84	1.0 1.2 1.3	1.6 1.6 1.6	18 18 18	60 60 60	3.0 3.0 3.0	300 300 300	2.2 2.2 2.2	750 750 750	7.5 7.5 7.5	10 10 10	800 800 800	10 10 10	15 15 15
Men	Sedentary Moderately Active Very Active	35-64	70 70 70	154 154 154	178 178 178	70 70 70	10 11.5 14	2400 2700 3300	60 69 84	1.0 1.1 1.3	1.6 1.6 1.6	18 18 18	60 60 60	3.0 3.0 3.0	300 300 300	2.2 2.2 2.2	750 750 750	7.5 7.5 7.5	10 10 10	800 800 800	10 10 10	15 15 15
	Moderately Active Sedentary	65-74 75+	70 70	154 154	178 178	70 70	10 9	2400 2100	60 54	1.0 0.9	1.6 1.5	18 18	60 60	3.0 3.0	300 300	2.2 2.2	750 750	7.5 7.5	10 10	800 800	10 10	15 15
	Most Occupations Very Active	19-54	55 55	120 120	163 163	64 64	9 10.5	2100 2500	54 62	0.9 1.0	1.3 1.3	15 15	60 60	3.0 3.0	300 300	2.0 2.0	750 750	7.5 7.5	8 8	800 800	14 14	15 15
Women	Moderately Active	55-74 75+	55 55	120 120	163 163	64 64	8 7	1900 1700	47 42	0.8 0.7	1.3 1.3	15 15	60 60	3.0 3.0	300 300	2.0 2.0	750 750	7.5 7.5	8 8	800 800	9 9	15 15
	Pregnancy (second half)***						10	2400	60	1.0	1.6	18	80	4.0	500	2.6	750	10	10	1200	15	20
	Lactation (first six months)***						11.5	2700	69	1.1	1.8	21	80	4.0	400	2.5	1200	10	11	1200	15	25

\* Based on 75% biological utilization

\*\* These figures are based on USA 1980 figures and refer, in the infant to the 6-12 month age group

\*\*\* Refers to women in most occupations



Appendix 34: Sociodemographic profile of Daily Macro Nutrient intake, excluding outliers n=6465, mean, (standard deviation), median

Nutrients: mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
Energy (Kcals)	2297 (1063) 2144 **	2172 (1008) 2013	2461 (1082) 2267 **	2225 (962.3) 2084	1898 (979.4) 1757	2331 (960) 2168	2310 (999.3) 2135	2332 (1075) 2138	2215 (1014) 2054	2238 (1053) 2081	1889 (959) 1747	2295 (1035) 2123**
Protein (g)	98.42 (44.1) 93.15**	92.72 (43.2) 86.36	101.0 (43.8) 94.39**	96.21 (43.6) 90.16	85.68 (42.1) 81.36	97.07 (40.1) 91.04	97.89 (41.9) 92.04	99.48 (46.2) 92.38	93.18 (42.5) 88.24	96.61 (44.9) 91.34**	82.03 (39.5) 77.06	97.82** (43.8) 91.72
Fat (g)	88.77 (47.8) 80.41**	82.48 (45.0) 74.94	96.96 (49.5) 88.08**	85.24 (43.8) 77.44	68.79 (40.1) 63.02	88.45 (44.8) 79.52	89.82 (45.1) 80.88	91.41 (48.8) 82.87	84.52 (46.1) 76.22	85.91 (46.5) 78.07	69.53 (40.6) 63.78	88.40 (46.7) 79.65**
Carbohydrate (g)	280.2 (143) 260.6*	274.3 (142) 249.9	302.6 (146) 276.3**	274.6 (133) 254.4	242.8 (144) 219.6	290.5 (127) 273.2**	285.3 (140) 258.0	285.1 (148) 257.7	274.6 (139) 252.0	279.2 (146) 256.6	238.8 (138) 213.3	284.4** (142) 261.3
Alcohol (g)	10.84 (14.9) 5.61**	6.73 (10.4) 4.06	111.2 (12.2) 4.78**	111.2 (12.7) 4.76	111.2 (14.9) 4.06	10.14 (13.4) 5.91**	7.90 (11.3) 4.49	111.2 (14.2) 4.06	10.06 (14.1) 5.46**	7.44 (11.7) 4.06	10.79 (16.0) 5.37	8.55 (12.6) 4.76
MUFA (g)	28.32 (16.2) 25.14**	25.96 (15.3) 23.02	31.14 (17.1) 27.87**	26.89 (14.7) 24.08	21.34 (13.1) 19.15	28.00 (15.3) 24.88	28.58 (15.3) 25.18	29.21 (16.8) 25.90	26.82 (15.6) 23.76	27.11 (15.8) 24.10	21.65 (13.5) 19.73	28.06 (15.9) 24.84**
PUFA (g)	11.95 (8.1) 10.13	11.97 (8.1) 9.99	13.26 (8.0) 11.42**	12.34 (8.1) 10.34	9.54 (7.7) 7.55	12.63 (7.8) 10.68	12.87 (8.2) 10.83	12.52 (8.6) 10.55	11.97 (8.0) 10.06	11.92 (8.2) 10.03	9.46 (7.2) 7.78	12.43 (8.2) 10.40**
SFA (g)	35.12 (20.4) 30.82**	30.47 (18.1) 26.58	37.22 (20.7) 33.42**	32.12 (18.2) 28.46	26.65 (17.2) 23.06	33.04 (19.0) 28.84	34.33 (19.1) 30.04	35.50** (20.6) 31.44	32.02 (19.5) 27.92	33.17* (19.4) 29.50	27.02 (17.8) 23.3	33.70 (19.5) 29.77**
Cholesterol (mg)	316.2 (174) 286.3**	281.7 (162) 255.2	306.8** (166) 278.6	298.3 (163) 268.2	283.0 (179) 256.4	296.3 (158) 267.2	302.5 (153) 274.2	316.1 (174) 283.7*	284.9 (157) 258.9	308.2 (180) 280.3**	269.2 (170) 242.6	303.1** (168) 272.2

## Appendix 34 contd.

Nutrients: mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male	Female	18-34	35-54	55+	1-2	3-4	5-6	Urban	Rural	1	>1
	n=2964	n=3381	n=2334	n=2331	n=1628	n=1785	n=1735	n=924	n=2814	n=3032	n=847	n=5401
Sugar (g)	121.9 (70.6) 109.5	121.2 (72.8) 108.6	136.8 (74.4) 123.5**	118.0 (66.6) 106.9	103.8 (68.8) 90.58	130.0* (69) 117.4	126.2 (71) 111.7	121.6 (70) 109.3	123.1 (72.4) 110.4	120.1 (71.1) 108.3	106.5 (68.3) 91.9	124.6** (72.2) 111.4
Starch (g)	161.0 (91.3) 144.2**	154.2 (89.7) 136.3	167.0 (90.9) 149.5**	158.2 (85.8) 141.6	141.8 (94.8) 124.0	160.7 (78) 145.7	159.0 (89) 140.4	164.8 (98) 145.8	152.6 (86.0) 136.6	161.7 (93.7) 142.5**	136.3 (89.4) 120.9	160.9** (89.9) 143.4
Fibre (g)	22.94 (12.1) 21.05	23.99 (13.7) 21.40*	24.53** (13.2) 22.12	23.88 (12.4) 21.67	21.44 (13.4) 19.03	24.38 (11.5) 22.51**	23.86 (12.8) 21.47	23.83 (13.3) 21.18	22.80 (12.3) 20.64	24.08 (13.4) 21.68**	20.57 (12.9) 18.28	23.96** (12.9) 21.72

\* p&lt;0.05, \*\* p&lt;0.01, significant differences within socio-demographic category

**Appendix 35: Gender and Agegroup breakdown of Daily Macro Nutrient Intake, excluding outliers n=6465, mean (standard deviation), median**

Nutrients: Mean (standard dev) Median	Males			Females		
	18-34 yrs n=1052	35-54 yrs n=1122	55+ yrs n=766	18-34 yrs n=1280	35-54 yrs n=1205	55+ yrs n=859
Energy (Kcals)	2652 (1134) 2472**	2214 (961.4) 2095	1933 (936.8) 1797	2307 (1009) ** 2124	2239 (962.3) 2077	1871 (1013) 1723
Protein (g)	110.2 (46) 105.4**	95.38 (43.4) 91.26	86.78 (38.0) 83.01	93.63 (40.6) 87.29	97.10 (43.7) ** 89.46	84.89 (45.3) 80.02
Fat (g)	106.9 (52) 99.23**	84.54 (43.0) 77.17	70.01 (38.0) 64.3	88.89 (45.5) 81.21**	86.00 (44.5) 77.66	67.87 (41.8) 61.30
Carbohydrate (g)	316.8 (148) 295.0**	270.3 (131) 252.3	244.6 (141) 220.8	291.2 (143) ** 263.4	279.1 (134) 256.5	241.8 (146) 219.5
Alcohol (g)	10.34 (13.6) 5.65	11.16 (15.4) 5.54	11.29 (16.3) 4.78	7.18 (10.7) 4.49	6.38 (8.4) 4.06	6.04 (12.3) 2.27
MUFA (g)	34.72 (17.9) 31.84**	26.80 (14.3) 24.24	21.74 (12.3) 19.58	28.26 (15.8) 24.92**	27.01 (15.1) 23.91	21.03 (13.7) 18.82
PUFA (g)	13.88 (8.1) 12.20**	11.85 (7.8) 10.05	9.49 (7.8) 7.29	12.77 (7.8) 10.75**	12.82 (8.4) 10.70	9.60 (7.7) 7.77
SFA (g)	42.53 (22.1) 39.14**	33.03 (18.5) 29.21	27.95 (17.1) 25.04	32.92 (18.4) 29.92**	31.32 (17.8) 27.42	25.55 (17.2) 21.70
Cholesterol (mg)	345.0 (179) ** 318.1	303.7 (164) 272.2	294.6 (174) 268.4	275.9 (148) 251.2	293.7 (162) 264.8**	272.8 (182) 246.0
Sugar (g)	143.5 (74.0) 129.8**	114.3 (61.9) 104.7	102.9 (67.6) 91.05	131.4 (74.3) ** 117.6	121.5 (70.5) 109.3	104.9 (69.8) 90.55
Starch (g)	175.8 (91.8) ** 160.4	158.9 (88.3) 142.8	144.1 (92.2) 125.4	160.0 (89.4) ** 141.7	157.6 (83.7) 140.1	140.0 (97.0) 122.7
Fibre (g)	24.59 (12.3) 22.54**	22.65 (11.4) 20.60	21.11 (12.6) 18.58	24.49 (13.8) 21.80	25.01 (13.2) ** 22.46	21.77 (14.0) 19.44

\* p&lt;0.05, \*\* p&lt;0.01: significant differences between age groups within each gender category



Appendix 36: Sociodemographic profile of Daily Vitamin intake, excluding outliers n=6465, mean (standard deviation), median

Vitamin mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
Vitamin A (mg)	938.7 (1219) 595.2**	823.0 (1107) 501.4	819.4 (1002) 544.3	912.0 (1180) 563.2**	898 (1323) 507.3	813.2 (841.8) 547.4	872.6 (955.6) 571.6	972.9 (1319) 588.4	836.3 (1102) 507.9	903.2 (1165) 571.4*	833.7 (1274) 493.8	882.7 (1112) 556.1
Thiamin (mg)	1.86 (0.97) 1.71	1.84 (1.0) 1.65	1.91** (1.0) 1.74	1.86 (1.0) 1.67	1.74 (1.1) 1.59	1.87 (0.9) 1.71	1.88 (0.9) 1.70	1.91 (1.0) 1.74	1.76 (0.9) 1.61	1.92 (1.0) 1.74**	1.60 (0.9) 1.47	1.90 (1.0) 1.71**
Riboflavin (mg)	1.98** (1.0) 1.83	1.87 (1.0) 1.69	2.07 (1.0) 1.92**	1.91 (1.0) 1.75	1.72 (1.0) 1.56	1.96 (0.9) 1.81	1.96 (0.9) 1.81	1.99 (1.0) 1.81	1.89 (1.0) 1.72	1.94 (1.0) 1.79	1.72 (1.0) 1.55	1.96** (1.0) 1.80
Vitamin B6 (mg)	2.81 (1.4) 2.59**	2.67 (1.4) 2.43	2.89** (1.4) 2.68	2.79 (1.4) 2.54	2.43 (1.4) 2.20	2.80 (1.2) 2.61	2.82 (1.3) 2.59	2.84 (1.4) 2.55	2.70 (1.4) 2.47	2.76 (1.4) 2.52	2.32 (1.3) 2.14	2.74 (1.4) 2.51**
Vitamin B12 (mg)	6.78 (5.8) 5.35**	6.00 (5.9) 4.57	6.32 (5.3) 5.15**	6.54 (6.0) 5.02	6.10 (6.2) 4.38	5.99 (4.8) 4.79	6.40 (4.9) 5.17	6.96 (6.4) 5.18**	6.16 (5.8) 4.78	6.46* (5.7) 5.02	5.73 (6.1) 4.19	6.46** (5.6) 5.05
Folate (mg)	299.6 (153) 277.3	308.6* (176) 277.1	315.9** (162) 288.9	312.0 (165) 284.8	276.7 (168) 246.7	318.7 (145) 293.7**	311.8 (164) 284.5	307.3 (159) 279.4	300.1 (160) 272.4	307.7 (170) 280.0	264.4 (156) 239.9	312.0** (166) 284.9
Vitamin C (mg)	93.14 (67.3) 80.20	117.3 (91.9) 99.80**	108.3 (82.0) 92.69	110.9** (83.9) 95.77	96.1 (79.3) 80.05	120.2** (86.2) 104.6	106.4 (77.5) 91.5	96.94 (74.0) 80.48	106.0 (79.5) 90.8	106.1 (86.2) 89.8	91.02 (75.9) 74.66	108.8** (83.1) 93.36
Vitamin D (mg)	3.36 (2.4) 2.74	3.46 (3.5) 2.74	3.46 (2.6) 2.81	3.54** (3.4) 2.84	3.13 (3.0) 2.54	3.55 (3.5) 2.86	3.56 (2.7) 2.88	3.51 (2.6) 2.87	3.39 (3.2) 2.70	3.44 (3.0) 2.78	3.08 (3.6) 2.32	3.48** (2.9) 2.82
Vitamin E (mg)	6.06 (3.5) 5.53	6.68 (4.0) 5.91**	7.09 (3.9) 6.37**	6.57 (3.8) 5.90	5.11 (3.4) 4.52	6.92** (3.7) 6.19	6.76 (3.7) 6.04	6.44 (3.9) 5.70	6.27 (3.7) 5.59	6.48 (4.0) 5.84	5.19 (3.5) 4.59	6.62 (3.8) 5.91**

\* p<0.05, \*\* p<0.01, significant differences within socio-demographic category

Appendix 37: Gender and Agegroup breakdown of Daily Vitamin intake, excluding outliers n=6465, mean (standard deviation), median

Vitamin: mean (standard dev) median	Males			Females		
	18-34 yrs n=1052	35-54 yrs n=1122	55+ yrs n=766	18-34 yrs n=1280	35-54 yrs n=1205	55+ yrs n=859
Vitamin A equivalence (mg)	933 (1064) 636.6**	939.3 (1178) 583.1	945.6 (1468) 555.7	727.3 (938.3) 482.0**	888.5 (1186) 547.8	855.5 (1179) 473.4
Thiamin (mg)	1.99** (0.9) 1.85	1.82 (1.0) 1.66	1.75 (1.0) 1.59	1.84 (1.0) 1.65	1.90** (1.0) 1.70	1.74 (1.1) 1.58
Riboflavin (mg)	2.26 (1.0) 2.19**	1.92 (1.0) 1.76	1.72 (1.0) 1.58	1.92** (1.0) 1.74	1.91 (1.0) 1.75	1.72 (1.1) 1.55
Vitamin B6 (mg)	3.07** (1.4) 2.85	2.79 (1.4) 2.56	2.47 (1.3) 2.28	2.74 (1.4) 2.52	2.80** (1.4) 2.54	2.39 (1.5) 2.15
Vitamin B12 (mg)	7.32** (5.3) 6.08	6.60 (5.8) 5.12	6.29 (6.6) 4.60	5.51 (5.2) 4.44	6.50 (6.3) 4.94**	5.94 (5.9) 4.19
Folate (mg)	319.8** (152) 297.9	299.3 (150) 277.5	273.2 (155) 250.3	312.9 (170) 284.3	324.0** (177) 288.1	280.4 (180) 244.2
Vitamin C (mg)	98.08** (67.7) 83.30	92.83 (63.6) 82.58	86.99 (71.9) 73.28	116.7 (92.0) 100.8	127.8** (96.0) 108.4	104.4 (84.6) 88.18
Vitamin D (mg)	3.54** (2.6) 2.94	3.33 (2.4) 2.70	3.12 (2.3) 2.57	3.40 (2.6) 2.70	3.75** (4.1) 3.02	3.13 (3.6) 2.52
Vitamin E (mg)	7.05 (3.7) 6.39**	5.96 (3.3) 5.48	4.85 (3.2) 4.32	7.13 (4.0) 6.36**	7.15 (4.1) 6.26	5.35 (3.6) 4.70

\* p&lt;0.05, \*\* p&lt;0.01: significant differences between age groups within each gender category



Appendix 38: Sociodemographic profile of daily mineral intake, excluding outliers n=6465, mean (standard deviation), median

Mineral mean (standard dev) median	Gender		Age Group (years)			Social Class			Location		Number in Household mineral	
	Male n=2964	Female n=3381	18-34 n=2334	35-54 n=2331	55+ n=1628	1-2 n=1785	3-4 n=1735	5-6 n=924	Urban n=2814	Rural n=3032	1 n=847	>1 n=5401
Phosphorous (mg)	1537 (644) 1469**	1462 (642) 1372	1614 (661) 1531**	1494 (614) 1424	1327 (625) 1248	1560 (605) 1470	1531 (603) 1433	1538 (676) 1448	1485 (642) 1399	1503 (645) 1425	1329 (637) 1251	1529** (639) 1440
Calcium (mg)	954.5 (469) 900.3**	899.4 (471) 833.8	1012 (491) 948.6**	912.0 (446) 849.6	815.4 (453) 758.4	972.7 (470) 904.8	942.3 (432) 884.4	940.5 (499) 866.6	917.8 (488) 857.6	931.9 (458) 866.2	845.0 (523) 773.8	941.5** (460) 877.1
Iron (mg)	12.85 (7.6) 11.58	13.22 (9.1) 11.27	13.57 (8.3) 11.94**	13.19 (7.9) 11.70	12.06 (9.4) 10.11	13.59 (7.1) 12.09	13.23 (8.1) 11.63	13.28 (7.7) 11.57	12.89 (8.8) 11.22	13.18 (7.9) 11.64	11.20 (8.6) 9.70	13.40** (8.4) 11.75
Selenium (mg)	55.34 (30.6) 49.67**	52.06 (29.7) 46.66	55.48 (29.0) 49.87**	54.68 (29.7) 49.52	49.24 (31.8) 43.06	55.25 (28.7) 49.87	55.11 (28.3) 49.54	55.83 (31.4) 49.52	52.87 (29.5) 48.33	53.81 (30.6) 47.54	47.00 (31.1) 40.69	54.79** (29.5) 49.44
Zinc (mg)	12.02 (6.0) 11.30**	11.13 (5.7) 10.20	12.14 (5.9) 11.36**	11.69 (5.9) 10.81	10.43 (5.5) 9.81	11.54 (5.2) 10.68	11.81 (5.8) 11.04	12.18 (6.4) 11.17*	11.15 (5.8) 10.30	11.81 (5.9) 11.06**	9.71 (4.8) 9.03	11.86 (5.9) 11.00**

\* p<0.05, \*\* p<0.01, significant differences within socio-demographic category

Appendix 39: Gender and Agegroup breakdown of Daily Mineral intake, excluding outliers n=6465, mean (standard deviation), median

Mineral: Mean (standard dev) median	Males			Females		
	18-34 n=1052	35-54 n=1122	55+ n=766	18-34 n=1280	35-54 n=1205	55+ n=859
Phosphorous (mg)	1745 (670.2) 1678**	1484 (609.9) 1429	1329 (562.8) 1273	1509** (632.7) 1401	1503 (617.7) 1421	1329 (674.1) 1242
Calcium (mg)	1110 (499.2) 1047**	908.7 (440) 852.1	807.1 (399) 749.3	932.7** (468) 865.1	915.6 (451) 847.5	824.6 (495) 763.1
Iron (mg)	13.84 (6.7) 12.54**	12.49 (7.1) 11.47	12.04 (9.2) 10.17	13.35 (9.4) 11.48	13.86** (8.5) 11.88	12.10 (9.5) 10.08
Selenium (mg)	60.46** (30.6) 54.96	54.17 (30.4) 48.72	50.32 (29.5) 44.14	51.46 (27.0) 46.20	55.21 (29.0) 49.89**	48.37 (33.6) 42.58
Zinc (mg)	13.49 (6.5) 12.89**	11.57 (5.8) 10.82	10.65 (5.0) 10.12	11.05 (5.0) 10.20	11.82** (6.0) 10.81	10.25 (5.8) 9.36

\* p&lt;0.05; \*\* p&lt;0.01: significant differences between age groups within each gender category





ISBN: 1 900009 12 9  
IR£10.00 €12.72

