



The National Health & Lifestyle Surveys



Survey of Lifestyle, Attitudes and Nutrition, (SLÁN) &
The Irish Health Behaviour in School-Aged children survey (HBSC)

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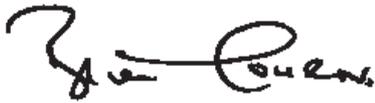
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foreword

It gives me great pleasure and satisfaction to be associated with the publication of this report. Those involved in planning and implementing educational, promotional and preventative strategies that seek to improve people's health status know the value of having good reliable data to help them in their task.

This body of work will aid greatly in policy and programme planning in the health services. For the first time we have a comprehensive set of data that relate to the health behaviours and beliefs of Irish adults and young people. It makes interesting reading with gender, age and socio-economic breakdowns. Over the years this survey will allow us to determine trends in our own patterns of health related behaviour as well as allowing us direct comparisons at European and international levels. I look forward to the publication of other reports which I know will follow from the vast banks of data that have been collected.

I think it is important that I pay tribute to all concerned and I would like to particularly thank the adults and young people who completed the questionnaires. The Health Promotion Department in the National University of Ireland, Galway is to be congratulated for providing us with a report which is accessible and informative. I would also like to thank the Steering committee, the Ethics committee and the Health Board liaison nominees for their participation and involvement in the process. I would finally commend the staff in my own Department's Health Promotion Unit who have overseen the commissioning of this piece of work and monitored its progress at all stages.



Brian Cowen TD
Minister for Health and Children

introduction

Two baseline surveys of health related behaviours among adults and school-going young people were carried out across the Republic of Ireland in 1998. The main aims of the surveys were to:

- Produce reliable baseline data for a representative cross-section of the Irish population which will inform the Department of Health and Children's future policy and programme planning.
- Establish a survey protocol which will enable lifestyle factors to be re-measured so that trends can be identified and changes monitored to assist national and regional setting of priorities in health promotion activities.

This report focuses on these two cross-sectional studies, SLÁN (Survey of Lifestyles, Attitudes and Nutrition), adults aged 18+ years and HBSC (Health Behaviour in School-aged Children), school-going children aged 9-17 years. SLÁN, in its true Irish meaning wishes someone health and well-being.

In keeping with the health and lifestyle surveillance system of many European countries a number of related factors were measured in both surveys. These included the seven key areas identified in the Health Strategy: general health, smoking, alcohol, food and nutrition, exercise, cholesterol and accidents.

This work was commissioned by the Health Promotion Unit, Department of Health and Children and carried out in the Department of Health Promotion, National University of Ireland, Galway.

summary

A summary of the main findings from SLÁN and HBSC is listed below:

General Health

Overall 48% of respondents reported excellent or very good general health, though smokers were significantly less likely to do so. Sources of health information were predominantly from the GP and media though those in social class 1-2 were more likely to cite the media as a source than others. The vast majority of children reported that they were either very or quite healthy however boys were more likely to think of themselves as healthy than girls.

Smoking

Smoking rates among adults far exceed the target anticipated for the year 2000. Rates among younger women are now comparable with men and there is a very strong influence of socio-economic status whether measured according to social class or General Medical Services (GMS) eligibility. This variation suggests that more focussed targets for subgroups of the population are required. Most smokers want to quit, perceive lack of willpower as the problem and tend to rate their health less well than non-smokers. Overall 49% of children reported that they had ever smoked a cigarette and by the age of 12-14 years both boys and girls of all social classes are approaching the national target limit of 20%. By the age of 15-17 years a third of both boys and girls are current smokers and 40% of girls in social class 5 to 6 are smokers.

Alcohol

There has been a shift in patterns of drinking in Ireland. Most adults now drink alcohol. Twenty-seven percent of males and 21% of females consume more than the recommended weekly limits of sensible alcohol consumption. Twenty-two percent indicated drinking having consumed two or more alcoholic drinks. Overall 29% of children reported having had a drink in the last month. Thirty-five percent of boys compared with 24% of girls reported that they had been drunk on at least one occasion.

Food & Nutrition

Thirty-two percent of respondents reported a Body Mass Index (BMI) classifiable as overweight and 10% were classifiable as obese. Over half of the respondents were consuming less than the recommended 6+ servings per day of cereals, breads and potatoes and 36% were consuming less than the 4+ servings per day of fruit and vegetables. Twelve percent of respondents ate fried foods 4 times or more a week and there was a strong relationship with social class in this pattern. Though nearly half of all girls in the 9-11 and 12-14 year categories reported eating fruit more than once a day only a third of 15-17 year olds in social class five and six did so. Around four-fifths of boys reported eating vegetables once a day or less. Overall 8% of children reported being on a weight reducing diet and an additional 23% reported they needed to lose weight. Seven percent of girls in social class 1 aged between 9 and 11 years are already on a weight reducing diet.

Exercise

Overall 42% of adult respondents engaged in some form of regular physical exercise. Rates declined markedly with age. Nearly one third of those over 55 years took no exercise at all in a typical week. While two-thirds of younger boys reported participating in vigorous exercise 4 or more times per week this had declined to just over half of all boys in all social class in the 15-17 year old age group. In the case of girls in the same age category, only a quarter reported taking vigorous exercise, that frequently.

Accidents

Sites of injury varied according to gender and age. Young males were most likely to report a sports-related injury (41%). Those in the 35-54 years age group were most likely to report a work related injury (37%) and the oldest age group, 55 years or over, reported home or garden based injuries (48%). There was a clear age gradient in relation to cycle helmet usage for all social classes with only 3% of 15-17 year olds reporting that they did so.

methodology

SLÁN

A representative cross-section of the Irish adult population was surveyed in 1998. A national sample was estimated which could show differences according to social class status in key variables, smoking, exercise and percentage caloric intake from fat with national precision levels of 3.4% (i.e. percentage difference between estimated measure and 95% confidence limits). Allowances were made for non-response and likelihood of ineligibility to participate. The sample was generated randomly from the Irish electoral register supplied by Precision Marketing Information (PMI) Ltd., a subsidiary of An Post.

Ninety percent of the total sample was surveyed by post and the remaining 10% invited to attend a clinical examination. Results from this subsample will be reported separately. A national postal sample of 12,722 was generated randomly and proportionately distributed based on health board population size and urban rural breakdowns so that each county of the Republic of Ireland was represented. Final selection was at district electoral division level. The self-completed questionnaires were posted from the National University of Ireland (NUI), Galway with FREEPOST return envelopes enclosed. Following a reminder letter, fieldworkers from Research and Evaluation Services (RES) Ltd. called to the doors of non-responders. A helpline to deal with general queries on questionnaire completion was set up in NUI, Galway and respondents were entered into a prize draw unless they stated otherwise. Data entry was carried out by RES Ltd.

The North Eastern Health Board requested an augmented sample in that area in order to have precision estimates comparable with the average national sample. An extra sample of 1,076 was generated and sent postal questionnaires.

HBSC

The HBSC is a World Health Organisation (European) collaborative study. It runs on an academic 4-year cycle and in 1997/8, 29 individual countries participated. Principal investigators from all countries co-operate in relation to survey content, methodology and timing and an international protocol is developed. Strict adherence to the protocol is required for inclusion in the International database and this has been achieved with the current study. The HBSC protocol requires sample sizes of 1,536 in each of three age groups, 11, 13 and 15 in order to approximate a 95% confidence interval of +/- 3%.

In the Republic of Ireland, sampling was conducted in order to be representative of the proportion of children in each of the 8 Health Boards. The objective was to achieve a Nationally representative sample of school aged children. A sample of pupils from a range of year groups was required. Data from the 1996 census was employed to provide a picture of the population distribution across the Health Boards. The sampling frame consisted of primary and post-primary schools, lists of which were provided by the Department of Education. A two-stage process identified study participants. Individual schools within regions were first randomly selected and class groups within schools were subsequently randomly selected for participation. In primary schools both 5th and 6th class groups were included, while in post-primary schools all Junior Cycle and the first year post Junior Cycle (Transition Year or the first year of Senior cycle) were sampled.

School principals were first approached by post and when positive responses were received, HBSC questionnaires in Irish or English were offered, along with blank envelopes to facilitate anonymity, information sheets for teachers and classroom based feedback forms. All returns were facilitated through the provision of FREEPOST envelopes. Consent forms for parents were provided for those who requested them. In order to maximise response rates, two postal reminders were sent to schools, followed by telephone calls from research staff from the Centre for Health Promotion Studies, NUI Galway, and in some regions from Health Board staff. Data entry was conducted according to the International HBSC protocol by Research and Evaluation Services, Ltd.

methodology

Table 1: Summary of Methodologies

	SLÁN	HBSC
Population	Adults aged 18+	School going children aged 9-17
Sampling frame	Electoral register	Department of Education School lists
Sample	Multistage sample, drawn by district electoral division	Cluster sample of pupils in a given classroom
Stratification	Proportionate distribution across each of the 26 counties, locality, gender	Proportionate to the distribution of pupils across the 8 Health Boards
Survey Instrument	Self-completion questionnaire	Self-completion questionnaire
Delivery/ Reminders	Postal, letter reminder, fieldworker follow-up, telephone helpline	Postal delivery via principals and teachers, letter and telephone reminders
Return	Freepost addressed envelope, fieldworker collection	Freepost addressed envelopes provided
Obtained sample	6, 539 adults	187 schools / 8, 497 pupils
Data Quality	Data were entered and validated according to preset protocol	Data were entered according to the HBSC international protocol

response

SLÁN

Excluding those not eligible (that is deceased or confirmed to have gone away at the follow-up stage), the total valid sample was 10,515. A national response of 6,539 (62.2%) was obtained. The regional response rates were as follows:

Table 2: Regional response to the SLÁN survey

Health Board	Valid Sample	Response (n)	Response (%)
Eastern	3651	1994	54.6
North Eastern (core)	743	505	68.0
North Eastern (extra)	820	543	66.2
Southern	1451	852	58.7
Western	918	605	65.9
South Eastern	1032	677	65.6
Mid Western	834	552	66.2
Midland	523	354	67.7
North Western	543	389	71.6
Unidentifiable		68	

HBSC

A total of 258 schools were initially contacted (166 primary and 92 post-primary) across the 8 Health Boards. Table 3 below presents the response rates from both types of schools across Health Boards.

Table 3: Regional response to the HBSC survey

Health Board	Primary Schools		Post-Primary Schools	
	Response (n)	Response (%)	Response (n)	Response (%)
Eastern	30	86	19	68
North Eastern	14	74	6	100
Southern	16	53	5	62
Western	16	59	8	62
South Eastern	11	69	5	83
Mid Western	13	72	9	82
Midland	10	77	11	79
North Western	6	67	8	80
Total	116	70	71	77

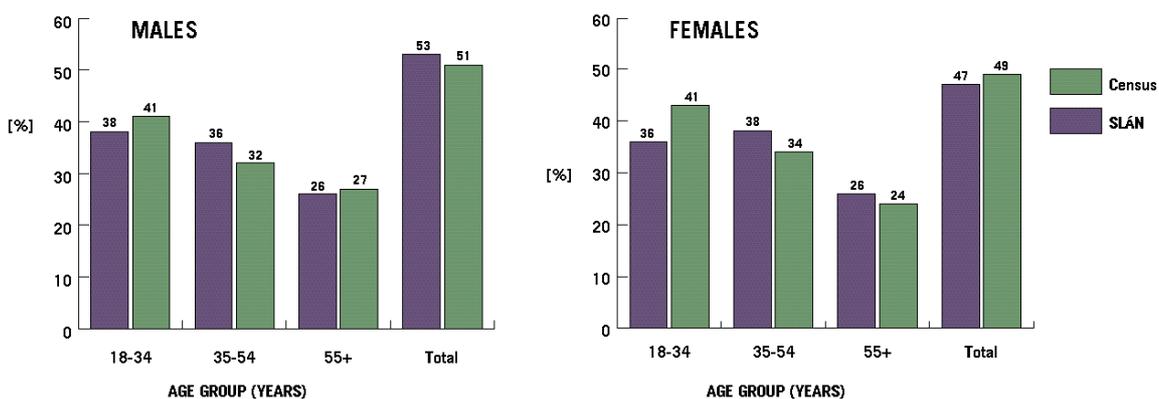
Within primary schools, a form was completed for each class indicating how many pupils were absent during data collection (6%) or whose parents or selves refused to participate (2%). Therefore, questionnaires were returned from 92% of pupils in selected primary schools. In post-primary schools, the rate of refusal was nil, but absenteeism was higher (14%). Therefore questionnaires were returned from 86% of selected post-primary school pupils. The final sample size is $n = 8,497$.

DEMOGRAPHIC REPRESENTATIVENESS OF RESPONDENTS

SLÁN

The age and gender profile of respondents is representative of the target population based on data from the 1996 Census as presented in Figure 1 below. The gender distribution of the overall respondents was 47% (2,995) male and 53% (3,424) female.

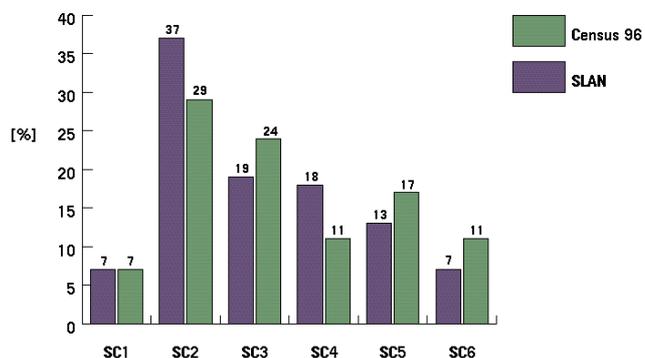
Figure 1: Gender and age distribution of SLÁN and Census 96



Social class was categorised based on stated occupation of respondent or principal household wage earner. General Medical Services (GMS) eligibility was also recorded. Thirty percent (1,827 / 6,164) were GMS cardholders compared to 34% in the general population. Of the 6,539 respondents, 62.5% could be classified accurately into the six social class groups. Further detailed analysis of the total sample based on a range of social class parameters is planned.

Figure 2 shows the comparison between social class of respondents and the 1996 Census social class data. There is a slight overrepresentation of social class 2 in the current data.

Figure 2: Social class distribution of SLÁN and Census 96



**SC1: Professional workers, SC2: Managerial and technical
SC3: Non-manual, SC4: Skilled manual,
SC5: Semi-skilled, SC6: Unskilled**

HBSC

The gender breakdown of the HBSC participants revealed that 49% were male and 51% female. Those who participated were compared to data from the 1996 census for region and social class. Table 4 below presents the final numbers from each Health Board area and the percentage of the total sample that this represents. The fourth column presents the percentages of 10-14 years olds recorded in the regions during the 1996 census. Clearly the data are representative of the population distribution across regions with only slight variations from the 1996 census.

Table 4: Comparison of the location of 1998 HBSC respondents to the 1996 Census

Health Board	n	%	Census 1996 %
Eastern	2255	28	32
North Eastern	716	9	10
Southern	1399	17	15
Western	892	11	10
South Eastern	988	12	12
Mid Western	712	8	9
Midland	716	9	6
North Western	519	6	7

In addition, the social class of the fathers of the participants was compared with those presented in the 1996 census. It should be noted that slight variations would be expected here in that the census does not report proportions for whom social class is unknown and the database differs. Not all men included in the census would be fathers of children in these age groups and therefore some variability would be expected.

Table 5: Comparison of the social class of 1998 HBSC respondents to the 1996 Census

Social Class	Father of Participants	Census (1996)
Professional	4%	7%
Managerial	27%	23%
Non-Manual	9%	17%
Skilled Manual	26%	27%
Semi-skilled	19%	15%
Unskilled	8%	11%
Unknown	6%	not reported

Finally, Table 6 below presents the percentages of HBSC respondents across gender, age and social class.

Table 6: Distribution of 1998 HBSC participants by age, gender and social class

	Social class 1-2	Social class 3-4	Social Class 5-6	Total n
BOYS				
Age 9-11	21 %	40 %	39 %	744
Age 12-14	24 %	38 %	38 %	2089
Age 15-17	30 %	41 %	29 %	1235
GIRLS				
Age 9-11	23 %	38 %	39 %	907
Age 12-14	22 %	37 %	37 %	2123
Age 15-17	31 %	35 %	34 %	1236

SHAPING A HEALTHIER FUTURE: MAIN RESULTS

The Irish health strategy was published in 1994. At that time no baseline information existed concerning basic health and lifestyle practices on a representative cross section of the Irish population. There were seven key lifestyle areas which were targeted as listed in Table 7 below. SLÁN and HBSC now report on the main findings in those areas.

Table 7: Health promotion targets in the Republic of Ireland

Area	Target
General	To develop health promotion programs in school, community, workplace and health service settings so as to promote health at local level
Smoking	To reduce the percentage of those who smoke by at least 1 percentage point per year so that more than 80 per cent of the population aged 15 years and over are non-smokers by the year 2000
Alcohol	To promote moderation in the consumption of alcohol and to reduce the risks to physical, mental and family health that can arise from alcohol misuse. To ensure that within the next years, 75 per cent of the population aged 15 years and over knows and understands the recommended sensible limits for alcohol consumption. While these limits are subject to on-going research, the present international consensus is 14 units per week for a woman and 21 units for a man To reduce substantially over the next 10 years the proportion of those who exceed the recommended sensible limits for alcohol consumption
Nutrition & Diet	To educate and motivate Irish people to eat a wide variety of foods in line with current recommendations as illustrated in the Food Pyramid. To encourage the achievement and maintenance of a healthy weight through healthy eating and regular exercise To encourage a reduction in total fat intake to no more than 36 per cent of energy (as fat) by the year 2005 and to attain an appropriate balance of fats To achieve a moderate reduction of 10 per cent in the percentage of people who are overweight and a reduction of 10 per cent in the percentage of people who are obese by the year 2005 (this target has been set understanding the difficulties associated with reducing overweight and maintaining a healthy weight)
Exercise	To achieve a 30 per cent increase in the proportion of the population aged 15 and over who engage in an accumulated 30 minutes of light physical exercise most days of the week by the year 2000 To achieve a 20 per cent increase in the proportion of the population aged 15 and over who engage in moderate exercise for at least 20 minutes, three times a week by the year 2000
Cholesterol	To achieve a situation where 75 per cent of the population in the 35-64 age group will have a blood pressure of less than 140/90mm Hg by the year 2005 To achieve a reduction in mean serum cholesterol in the 35-64 year age group from a present level of 5.6mmol/L to 5.2mmol/L by the year 2005
Accidents	To achieve a reduction of 10 per cent in mortality due to accidents within the next 10 years and a significant reduction in morbidity particularly among children

Source: *Shaping a Healthier Future (1994) and A Health Promotion Strategy (1995)*

INTERPRETATION OF RESULTS:

Data reported are rounded to the nearest percentage. Where means have been calculated standard deviations are reported in brackets. Any differences highlighted are significant at the 1% level unless stated otherwise. The valid response for each question has been used (i.e. those who did not answer the question(s) under consideration are excluded in all figures and tables). In some questions respondents were asked to choose all applicable options. These responses are not mutually exclusive and the presented results for those questions therefore may not add up to 100%.

general health





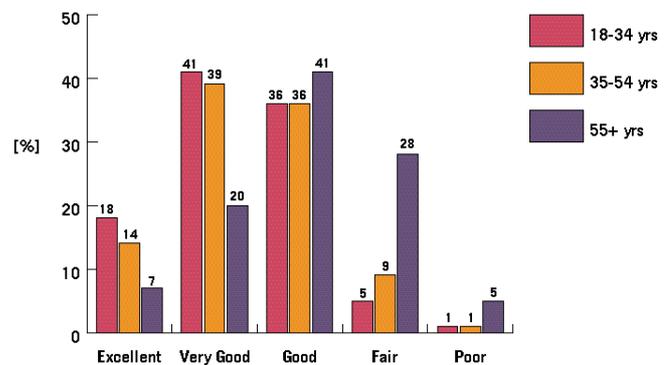
Overall 48% (n=3086) of the respondents thought their general health was excellent or very good.

There was no significant difference according to gender on perceived health. However within social class significantly more people in classes 1-2 rated their health as excellent. Older people were more likely to rate their health as fair to poor.

Table 8: Percentage response for perceived general health by gender and social class

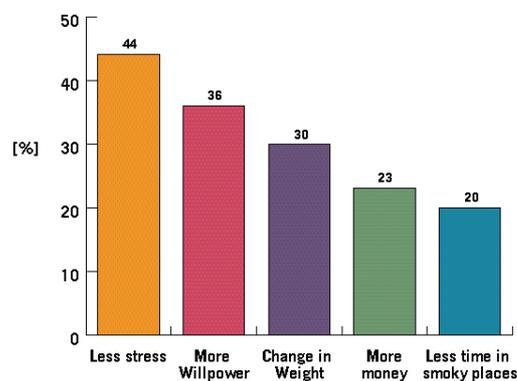
	Males	Females	SC1-2	SC3-4	SC5-6
Excellent	14	13	18	12	12
Very Good	33	36	41	41	35
Good	37	37	33	37	40
Fair	13	12	7	9	12
Poor	2	2	1	1	1
Total n	2923	3354	1758	1479	790

Figure 3: Perceived general health by age



There were a number of requirements indicated by respondents as being necessary for bettering their health. The top five are shown in Figure 4 below.

Figure 4: Top five requirements for bettering health



As seen in Table 9 below the top five requirements for males and females were more or less the same but with a high percentage of females indicating personal control as being important. Less stress was felt by both males and females to have the most effect on bettering their health (41% and 48% respectively).

Table 9: Top five ranked requirements for better health

Males		Females	
	(%)		(%)
Less stress	41	Less stress	48
More Willpower	32	More Willpower	41
Change in Weight	28	Change in Weight	32
More money	23	More money	23
Less time in smoky places	23	Less pollution	20

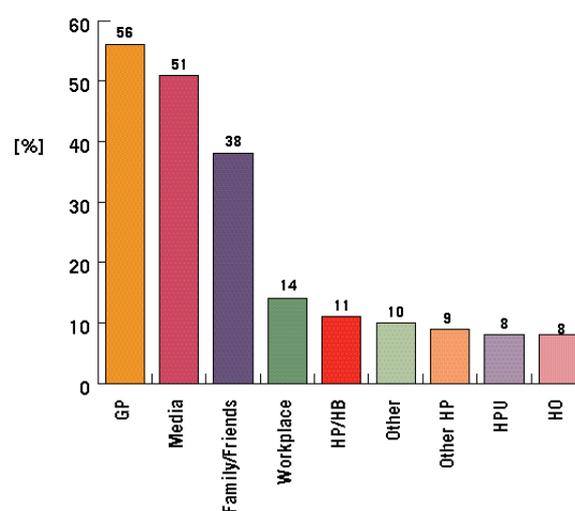
Similar requirements for better health were chosen by each social class grouping, Table 10. Although each grouping indicated less stress as their top priority, over half of social class 1-2 gave this as their main requirement for better health. Similar patterns also emerged in the different age groups. A significantly higher percentage of the younger ages felt less stress was the main requirement for better health.

Table 10: Top five ranked requirements for better health by age and social class

Social Class						Age Groups (years)					
SC1-2	%	SC3-4	%	SC5-6	%	18-34	%	35-54	%	55+	%
Less stress	52	Less stress	46	Less stress	42	Less stress	44	Less stress	54	Less stress	31
More Willpower	40	More Willpower	41	More Willpower	40	More Willpower	42	More Willpower	39	Change in Weight	26
Change in Weight	31	Change in Weight	33	Change in Weight	31	Change in Weight	29	Change in Weight	34	More Willpower	25
Less pollution	22	More money	24	More money	30	Less time in smoky places	27	More money	25	More money	25
Less time in smoky places	20	Less pollution	21	Better health information	22	Less pollution	21	Less pollution	20	Better health information	22

As seen in Figure 5 below the majority of respondents obtained their health information from either their GP or media. There were marked differences according to age. The younger aged people were significantly more likely to have cited the media as their main source of information whereas three quarters of those over 55 years relied on their GP. There were small but significant differences according to social class too. The rank order differed for those in classes 5-6 compared with the other groups.

Figure 5: Sources of Information



HO: Health organisations, HPU: DoH Health Promotion Unit, HP/HB: Health Promotion unit in Health Board, Other HP: other health professionals

Table 11: Percentage response of sources of health information by age and social class

	Age Group (years)			Social Class		
	18-34	35-54	55+	SC1-2	SC3-4	SC5-6
GP	44	55	75	48	54	52
Other HP	8	9	10	12	7	5
HP/HB	11	13	7	12	11	12
HPU	9	10	6	11	8	7
HO	8	8	5	9	8	7
Workplace	20	16	4	18	17	16
Family/Friends	49	37	25	44	42	36
Media	59	56	33	62	56	51

Children were asked a number of general questions concerning their lives and perceived health. The first of these asked how healthy they think they are. Overall 22% report that they are very healthy and a further 67% think that they are quite healthy. However, collapsing these response options masks some gender differences. For example, 33% of boys and 22% of girls think they are very healthy while 60% of boys and 67% of girls think they are quite healthy. The figures presented below are for those who report that they think they are very healthy. Two basic patterns emerge, boys perceive themselves as more healthy than girls and rates for both boys and girls in each social class decrease with age. Of particular interest may be the 15-17 year old girls, of whom up to 20% fewer report that they are very healthy as compared to boys of the same age and social class.

Figure 6:
Percentages of boys who think they are very healthy

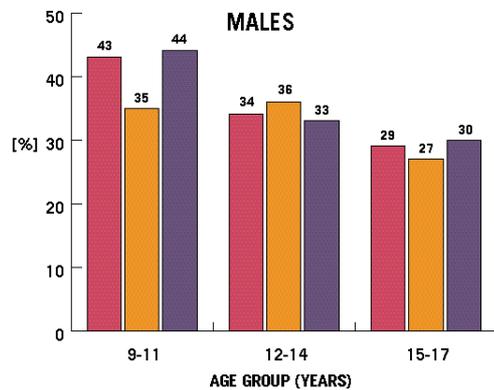
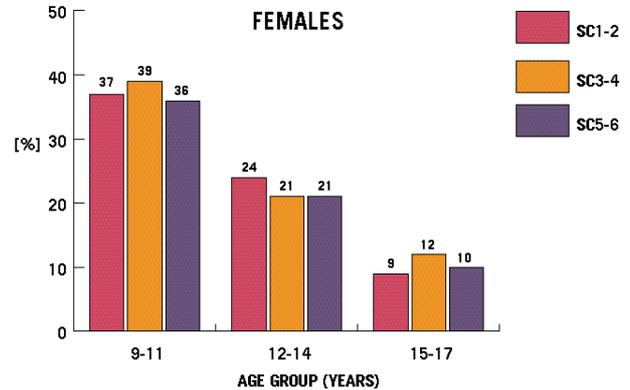


Figure 7:
Percentages of girls who think they are very healthy



The second aspect of general health to be reported here concerns how children feel about their lives at present. Overall, 40% report that they are very happy and a further 47% that they are quite happy with their lives. The remaining 13% report that they are not very or not at all happy. These data show a similar pattern as those above for perceived health, but the differences are not as large. There is also a potentially interesting interaction between social class and gender among the younger children (ages 9-11). Boys report being more happy with their lives than girls, and reported happiness decreases over age among both sexes and all social classes. In addition, the gender differences appear to increase as the children get older.

Figure 8:
Percentages of boys who feel very happy about their lives

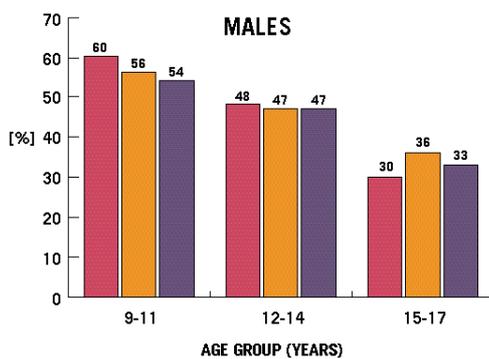
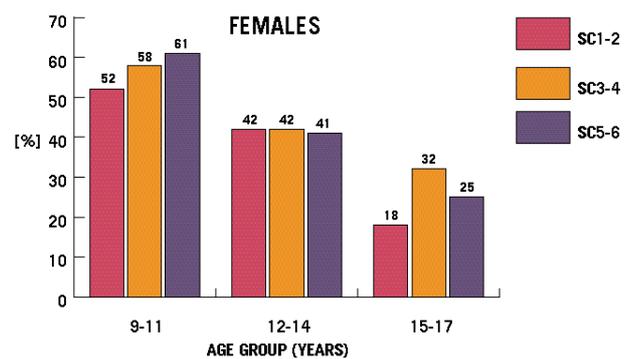


Figure 9:
Percentages of girls who feel very happy about their lives



smoking





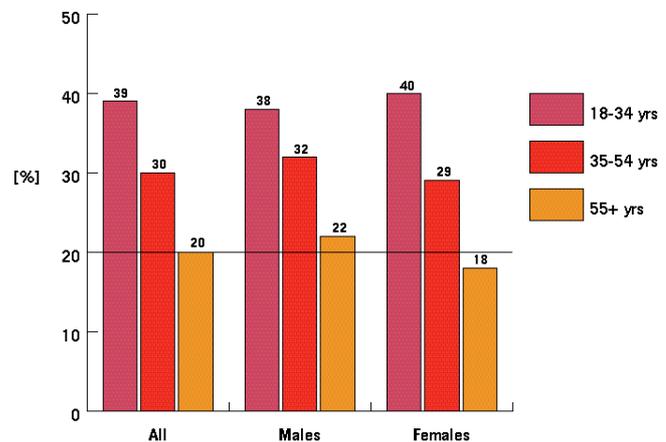
Health Strategy Target

To reduce the percentage of those who smoke by at least 1 percentage point per year so that more than 80 per cent of the population aged 15 years and over are non-smokers by the year 2000

Overall 31% (1,985) of respondents reported being regular (1,728) or occasional (257) cigarette smokers.
In addition, a further 133 people were regular or occasional cigar/pipe smokers.

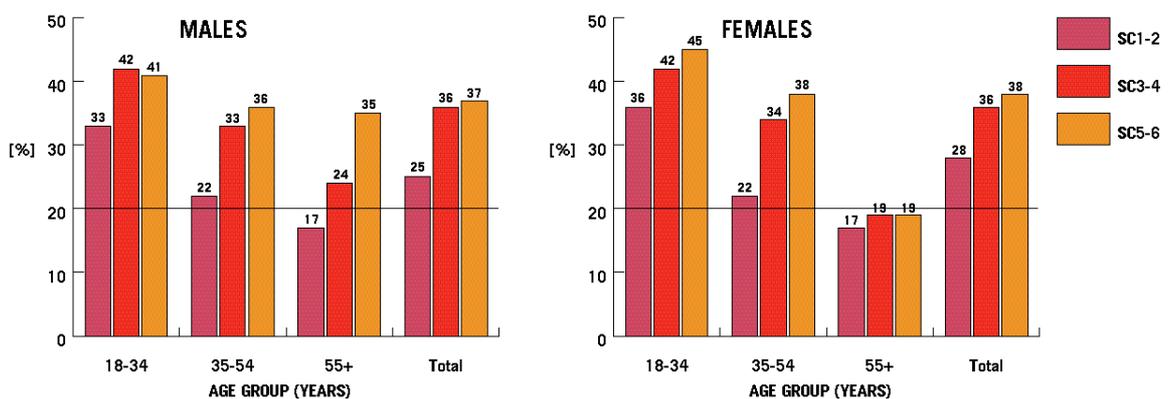
Figure 10 shows the percentage of cigarette smokers by gender and age. In general the prevalence of smoking is slightly higher among males (32%) than females (31%) but when further categorised by age the youngest female age group exhibited a significantly high rate of 40%. Overall these findings are similar to patterns in UK based health and lifestyle surveys but did exhibit higher percentages of smokers in the different age groups. Only older males and females are at the target level for the population as a whole.

Figure 10: Age & Gender Distribution of Smokers



Further analysis indicates a strong social class gradient in smoking prevalence in all age groups in the case of both men and women. It is only older males in social class 1-2 and all older women who appear to be around the target level.

Figure 11: Smoking prevalence by gender, age and social class



The smoking prevalence differed significantly between GMS and non GMS respondents. Thirty-six percent of those with a medical card reported smoking regularly/occasionally compared to 29% of those without.

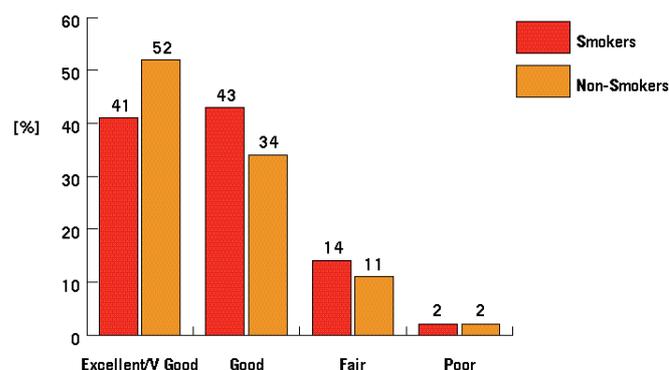
The mean number of cigarettes smoked daily ranged from 11.8 (7.1) for young females in higher social class groups up to 22.9 (12.3) for men in the 35-54 year age group and lower social class (Table 12). Sixty-three percent of smokers smoked more than 10 cigarettes per day.

Table 12: Mean number of cigarettes smoked by gender, age and social class (standard deviation in brackets)

	SC1-2	SC3-4	SC5-6
MALES			
18-34 yrs	14.1 (10)	16.3 (9.4)	16.2 (10.4)
35-54 yrs	17.6 (10.2)	20.5 (12.0)	22.9 (12.3)
55+ yrs	17.5 (16.3)	17.4 (11.1)	18.5 (13.9)
FEMALES			
18-34 yrs	11.8 (7.1)	13.7 (6.4)	14.2 (8.0)
35-54 yrs	16.7 (9.7)	16.1 (7.6)	17.8 (7.0)
55+ yrs	15.1 (11.4)	12.5 (8.1)	13.3 (5.8)

As seen in Figure 12 below smokers tended to rate their health slightly less well than non smokers generally.

Figure 12: Perceived general health



In terms of achieving better health there were differences in the needs of smokers compared to non-smokers as seen in Table 13.

Table 13: Top five needs for better health

Smokers	%	Non-Smokers	%
More Willpower	48	Less stress	44
Less Stress	46	Change in weight	31
More Money	29	More willpower	31
Change in Weight	28	Less time in smoky places	22
Regular checks from family GP	20	More money	21

Smokers indicated intentions to stop smoking. Of the 1,625 (82% of smokers) who responded to the question, 44% wanted to stop sometime and a further 36% would like to stop in the next 12 months. Similar percentages of smokers had already tried to give up. Thirty-six percent had tried in the past 2 years and a further 38% had tried previously. More willpower (72%) was by far the most common need for helping to give up smoking. Less stress and knowledge that own health was being damaged were the next two requirements for helping to give up.

Overall 49% of the children report that they have ever smoked a cigarette (51% boys and 48% girls), and 21% report that they are current smokers (21% boys and 21% girls). The following figures present this information by age and social class. Clearly, the rates of current smoking increase with age and by age 15-17, both boys and girls of all social classes are exceeding the national targets for those age 15+. Although boys are starting to smoke at an earlier age, by age 15-17, the smoking rates for girls exceed those for boys and among the older girls an effect of social class emerges, with 15-17 year old girls from social classes 5 and 6 reporting current smoking rates of 40%.

Figure 13:
Percentages of boys reporting that they are current smokers

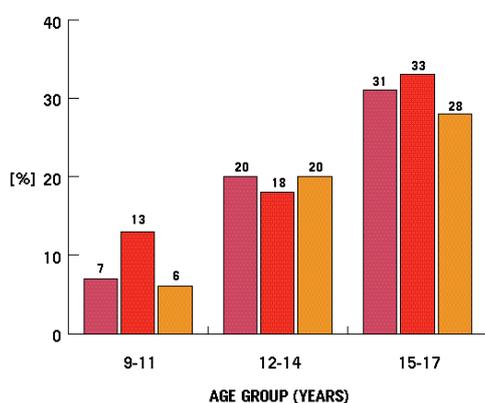
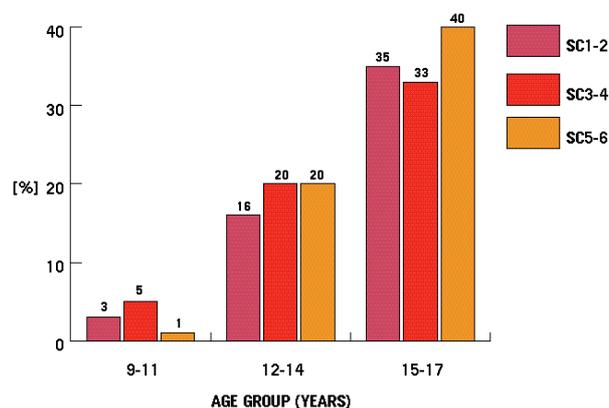


Figure 14:
Percentages of girls reporting that they are current smokers



The median number of cigarettes smoked per day ranges from less than one among all the younger age groups to 6 among the boys aged 15-17 from social classes 1 and 2. In general, the girls report smoking fewer cigarettes and their median peaked at 3 per day among the 15-17 years olds irrespective of social class.

alcohol





Health Strategy Target

To promote moderation in the consumption of alcohol and to reduce the risks to physical, mental and family health that can arise from alcohol misuse.

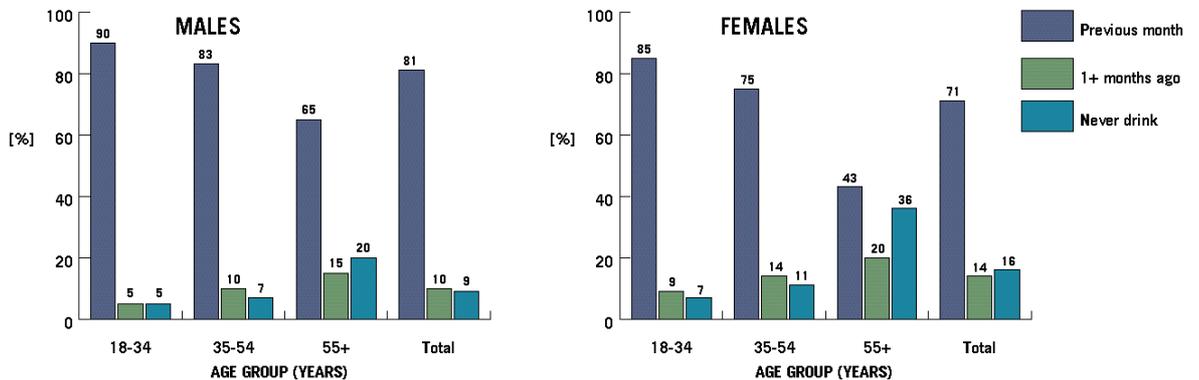
To ensure that within the next years, 75 per cent of the population aged 15 years and over knows and understands the recommended sensible limits for alcohol consumption. While these limits are subject to on-going research, the present international consensus is 14 units per week for a woman and 21 units for a man. (1 unit = 1 drink = half pint/glass beer, larger, stout or cider, a single measure of spirits, a single glass of wine, sherry or port).

To reduce substantially over the next 10 years the proportion of those who exceed the recommended sensible limits for alcohol consumption.

Overall three-quarters of the respondents (4,715) had consumed alcohol in the previous month.

As seen in Figure 15 slightly higher percentages of males than females across all ages consumed alcohol regularly but age showed the strongest gradients, with the younger age groups drinking significantly more regularly.

Figure 15: Regularity of alcohol consumption by gender and age



Regular = previous month, Occasional = 1+ month

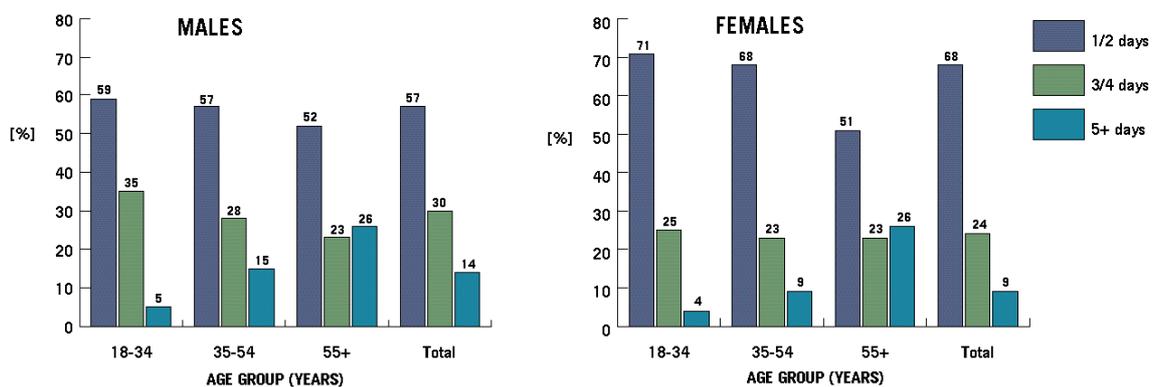
The survey highlighted the difference in alcohol consumption patterns across the age range. Abstention from alcohol was significantly higher in the over 55 year age groups in both sexes as seen in Table 14. There was a significant difference ($p < 0.05$) in abstention rates across social classes between the 18-34 years and 35-54 years age groups for males.

Table 14: Percentage of non-drinkers by gender, age and social class

	MALES			FEMALES		
	SC1-2	SC3-4	SC5-6	SC1-2	SC3-4	SC5-6
18-34 yrs	3	5	4	6	7	4
35-54 yrs	8	7	4	10	10	9
55+ yrs	22	18	13	32	32	28

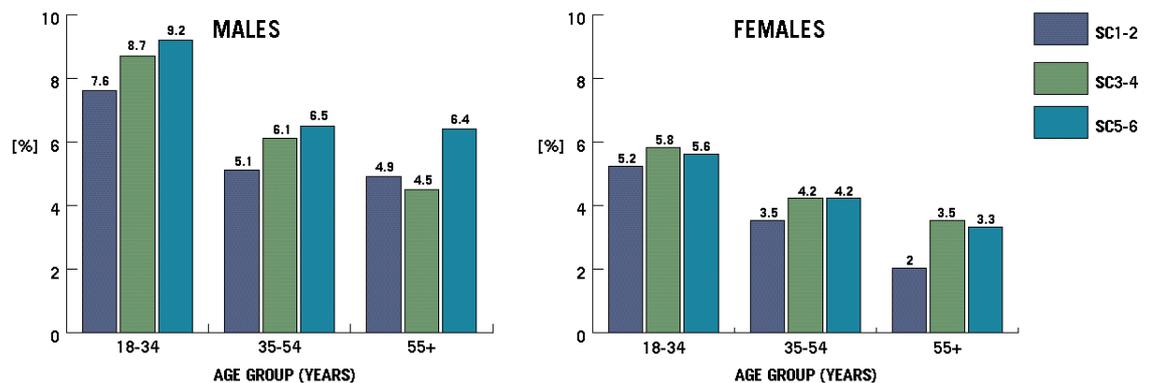
Of the 3,528 respondents to the question on frequency of drinking, most respondents (62%) usually drank alcohol on one or two occasions in a typical week. However 11% had an alcoholic drink 5+ days of the week. Overall, females drank significantly less frequently in the week than men but in both sexes the older age group was found to drink on more occasions in the week as seen in Figure 16.

Figure 16: Number of days drinking alcohol in a typical week by gender and age



Of those who did regularly drink alcohol, on a typical drinking occasion male respondents consumed on average 6.7 (5.4) alcoholic drinks (median:5). Females consumed on average 4.5 (3.5) drinks (median:4). Figure 17 below shows the age and social class distribution of mean alcohol consumption on a typical occasion for males and females. In both males and females there is a social class gradient with higher social groupings consuming less units in the day. Younger males in social class 5/6 reported consuming 9.2 alcoholic drinks in an average day.

Figure 17: Mean number of drinks per typical occasion by gender, age and social class



1 drink = half pint/glass beer, larger, stout or cider, a single measure of spirits, a single glass of wine, sherry or port

Overall, 27% of males and 21% of females consumed more than the recommended weekly limits for alcohol. It must be noted that just over 3,500 people responded to this question. Within the younger age group over one third males and one quarter female drinkers report consuming more than the weekly recommended limits.

Table 15: Percentage consuming more than recommended limits by gender, age and social class

	MALES			FEMALES		
	SC1-2	SC3-4	SC5-6	SC1-2	SC3-4	SC5-6
18-34 yrs	34	32	40	27	34	22
35-54 yrs	23	30	21	11	16	8
55+ yrs	23	24	25	8	15	21

Recommended sensible weekly limits = 21 units males, 14 units females

Continual, excessive alcohol use can contribute to a variety of physical and mental health problems. The majority of respondents (79%) reported not having experienced any problems as a result of someone else's drinking. However, 9% had experienced verbal abuse and 8% family/marital difficulties.

Substantially fewer children (32%) report that they have had an alcoholic drink than have had a cigarette (49%). The rates for lifetime abstinence decline rapidly across adolescence for both boys and girls. Of particular interest are the more than 50% who have had a drink prior to ages 9-11. Girls are more likely to be abstainers than boys and among girls an effect of social class is evident. Older girls from social classes 1 and 2 are less likely to have had an alcoholic drink than those from social classes 5 and 6.

Figure 18:
Percentages of boys who have never had an alcoholic drink

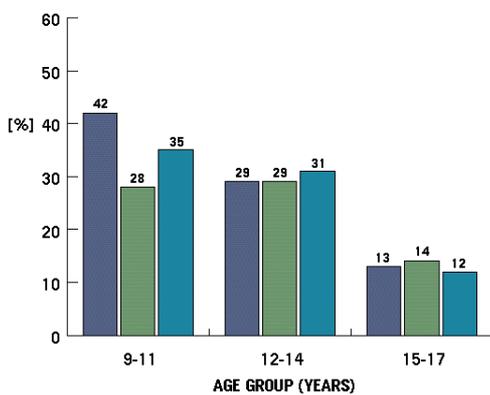
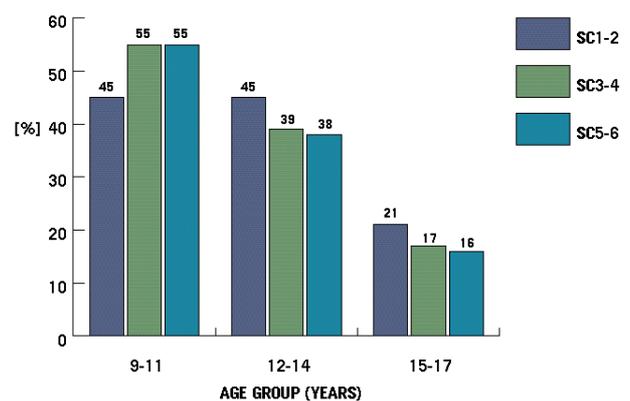


Figure 19:
Percentages of girls who have never had an alcoholic drink



Current drinkers are defined here as those who report having had an alcoholic drink in the last month. They represent a more actively drinking group than those who have ever had a drink. Overall, 29% of the children report having had a drink in the last month. The gender differences noted above are maintained, with boys more likely to report current drinking (34%) as compared to girls (24%) and a small but consistent effect of social class among girls from age 12 years and up which can be seen in figures 20 and 21 below.

Figure 20:
Percentages of boys who have had an alcoholic drink in the last month

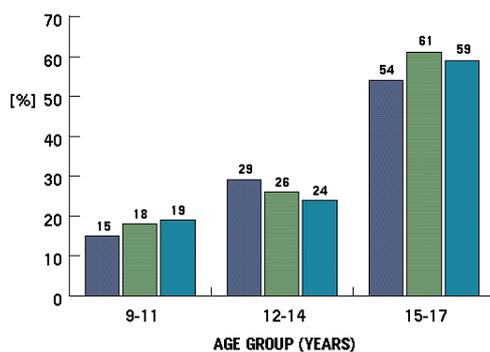
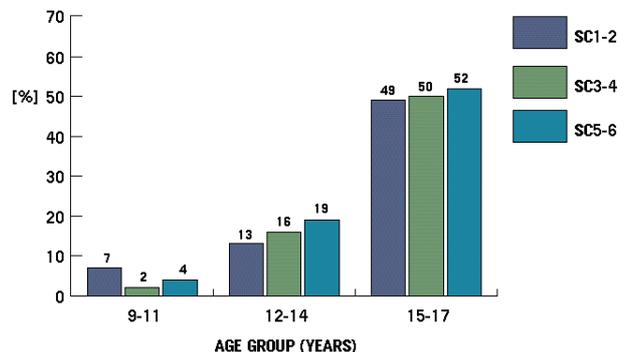


Figure 21:
Percentages of girls who have had an alcoholic drink in the last month



In addition to alcohol consumption, children were asked if they had ever had so much alcohol that they were 'really drunk'. This is considered to be more risky alcohol consumption. In total 29% of the children report having been drunk, with higher rates reported among the boys (35%) compared with the girls (24%). As presented in figures 22 and 23 below, and in common with both lifetime and current drinking, reported drunkenness increases over age, is higher among boys. Among the girls aged 12 and over it exhibits a social class effect.

Figure 22:
Percentages of boys who have been 'really drunk'

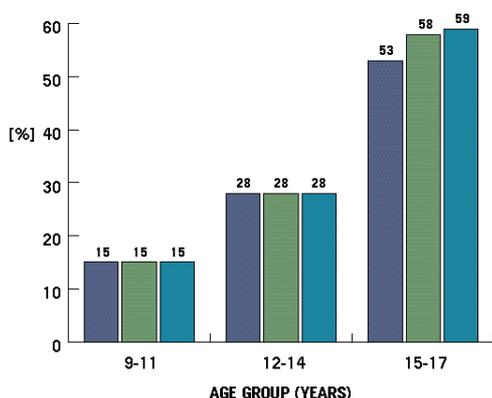
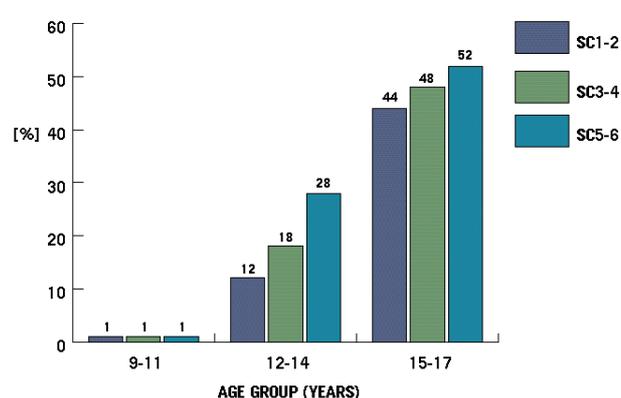


Figure 23:
Percentages of girls who have been 'really drunk'



This pattern is further confirmed by those who report having been really drunk more than 10 times. Eight per cent of boys and 3% of girls report having been drunk more than 10 times and this increases from 1% of 9-11 year olds, through 3% of 12-14 year olds to 13% of 15-17 year olds. There are no overall social class differences, however among girls there is a steady but small social class effect. Having been drunk more than 10 times rises from one percent of 12-14 year olds from social class 1-2 to 2% of those from social classes 3-6. Among the 15-17 year old girls, it ranges from 7% from social class 1-2, through 8% of social class 3-4 to 10% of social class 5-6. The same pattern does not emerge among boys whose rates of having been drunk more than 10 times range from 17-19% across the 15-17 year olds.

food & nutrition





Health Strategy Target

To educate and motivate Irish people to eat a wide variety of foods in line with current recommendations as illustrated in the Food Pyramid.

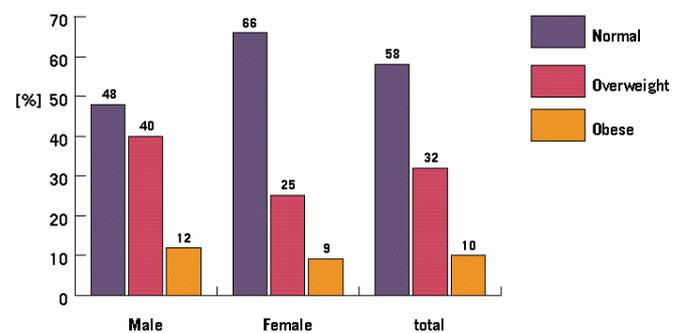
To encourage the achievement and maintenance of a healthy weight through healthy eating and regular exercise.

To encourage a reduction in total fat intake to no more than 36 per cent of energy (as fat) by the year 2005 and to attain an appropriate balance of fats.

To achieve a moderate reduction of 10 per cent in the percentage of people who are overweight and a reduction of 10 per cent in the percentage of people who are obese by the year 2005 (this target has been set understanding the difficulties associated with reducing overweight and maintaining a healthy weight).

The Health Strategy identified the need to reduce the percentage of people who were overweight and obese. Using reported height and weight, the body mass index was calculated and used as a measure of normal weight, overweight or obesity. Figure 24 shows the difference between males and females with significantly more females reporting normal height and weight ratios.

Figure 24: Gender distribution of BMI



Normal: <25, Overweight: 25-29.99, Obese ≥30

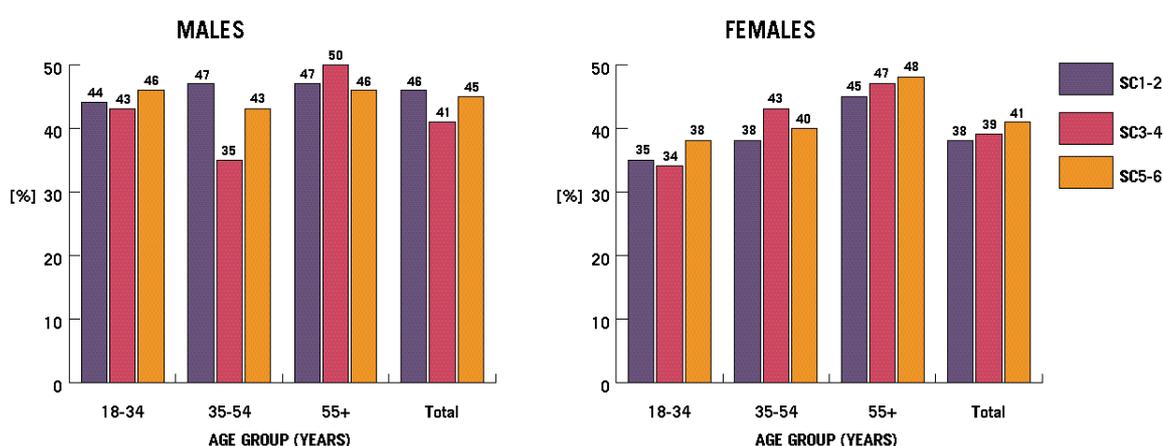
Thirteen percent of respondents reported being on a weight reducing diet. As might be expected this was significantly amongst females and in the younger age groups.

Table 16: Percentage of respondents on weight reducing diets by gender, age and social class

	SC1-2	SC3-4	SC5-6
MALES			
18-34 yrs	2	4	3
35-54 yrs	4	6	7
55+ yrs	7	5	8
FEMALES			
18-34 yrs	19	21	20
35-54 yrs	21	25	25
55+ yrs	16	17	11

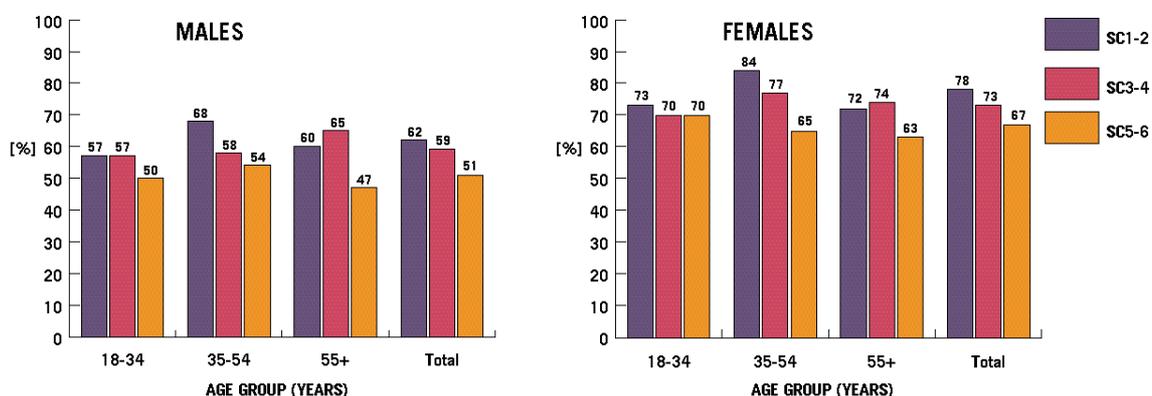
Irish healthy eating guidelines encourage people to eat a variety of foods based around the food pyramid. The bottom shelf of the pyramid relates to breads, cereals and potatoes and people are recommended to eat these foodstuffs daily. Specifically 6+ servings per day are recommended for the general adult population. **Forty one percent of respondents reported eating the recommended number of servings.** As seen in Figure 25 significantly more males than females ate the recommended number of servings in the younger age groups. The percentages were similar in the older age group.

Figure 25:
Percentage consuming recommended 6+ servings per day of Cereals, Breads and Potatoes by gender, age and social class



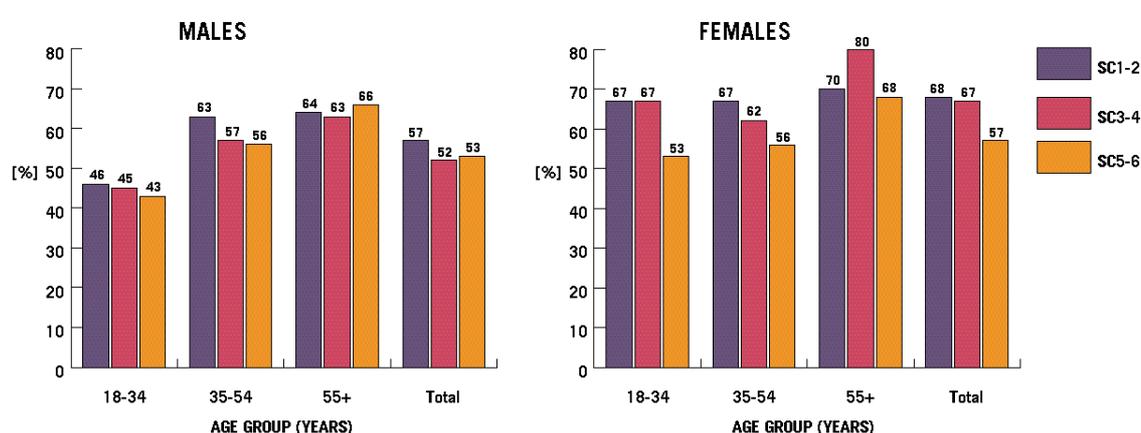
It is recommended that 4+ servings per day of fruit and vegetables be consumed. **Overall 64% of respondents reported consuming the recommended amounts, including fruit juice and vegetable soups.** In all age groups, fewer respondents in the lower social classes ate the recommended number of fruit and vegetables servings. Significant differences in those attaining the recommended number of servings were observed across gender, age and social class.

Figure 26:
Percentage consuming recommended 4+ servings per day of Fruit and Vegetables by gender, age and social class



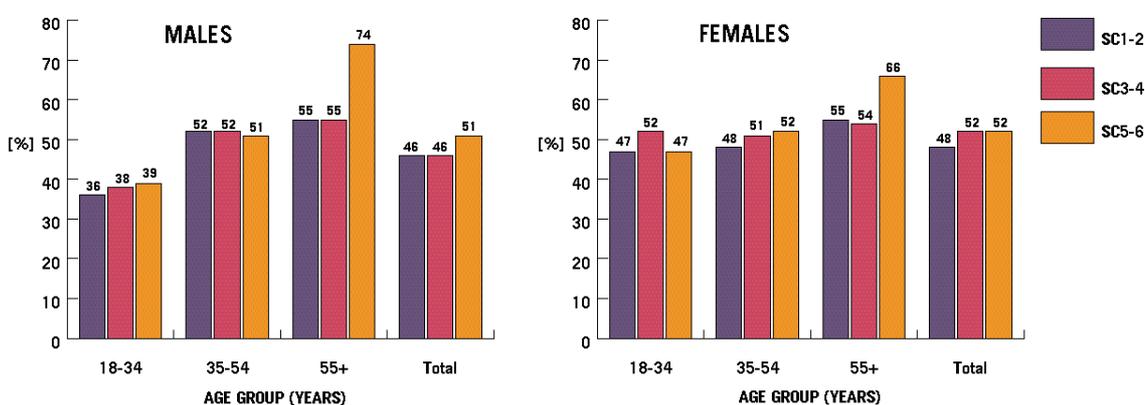
Up to two servings per day are recommended from the meat, fish and poultry group. **Overall 62% of respondents reported consuming within the recommended amount.** However, significant differences were observed across age, gender and social class. Figure 27 suggests the high percentages of lower social class females who are consuming more than the healthy eating guidelines for the meat group. Females in general are consuming the recommended intake compared to males.

Figure 27:
Percentage consuming recommended 2 or less servings per day of Meats, Fish or Poultry by gender, age and social class



It is recommended that not more than 3 servings per day of foods from the dairy shelf on the pyramid be consumed. **Overall 52% of respondents consumed within the recommended number of servings.** Significant differences in the number of respondents consuming not more than three servings per day were observed across the age groups and between the sexes. Although there is a slight social class gradient in each age group, the lower social class older males and females are most in line with the recommended number of servings of dairy foods.

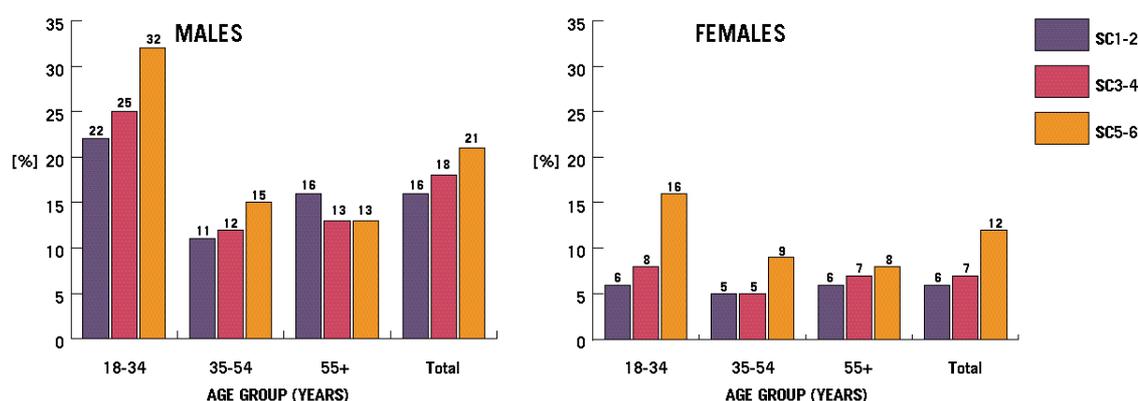
Figure 28: Percentage consuming recommended 3 or less servings of Dairy produce by gender, age and social class



Foods on the top shelf of the food pyramid are those which are high in fats and salt. It is recommended that these foods are used sparingly. **Almost all respondents had at least three servings per day of these foods.**

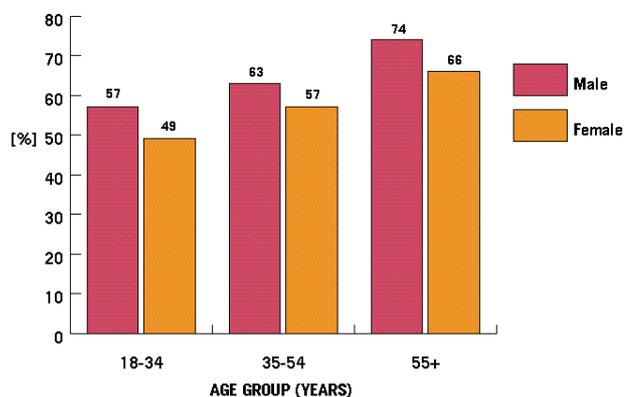
Twelve percent of respondents ate fried foods 4+ times per week. As seen in Figure 29 more males than females consumed fried food 4+ times per week. A strong social class gradient in both males and females was also observed.

Figure 29:
Percentage of respondents consuming fried foods more than 4 times per week by gender, age and social class



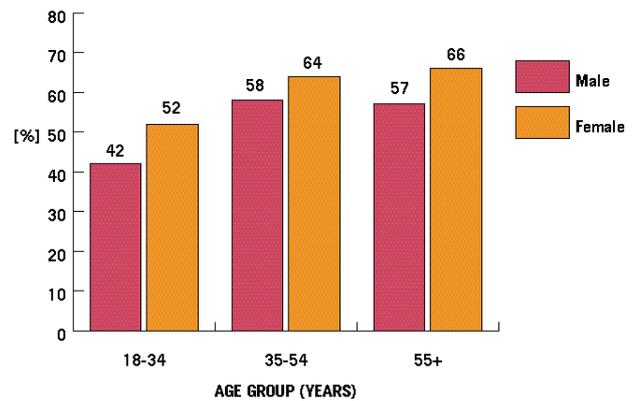
High percentages of respondents continued to use butter daily. Overall 59% used butter daily with the highest consumers in the older age group for both males and females.

Figure 30: Percentage consuming butter daily by gender and age



Fifty-six percent reported using low fat, polyunsaturated spreads. This was predominantly among the older males and females.

Figure 31: Percentage consuming low fat spread daily by gender and age



The children were asked about the frequency of their consumption of a variety of foodstuffs. In keeping with the National targets, data are presented below concerning fruit and vegetables (both cooked and raw) and foods high in sugar and fat. These illustrate less variability over socio-demographic groups than earlier sections. Nevertheless, both age and gender differences do emerge on the aggregate fruit data. Forty one percent of children aged 9-11 report eating fruit more frequently than daily and this decreases to 32% for those aged 15-17. The percentages rarely or never eating fruit are constant at 8% across all age groups. Gender differences are clear, with girls more likely to be eating fruit more frequently than boys. Overall 40% of girls report eating fruit more than once a day, while 7% report that they rarely or never eat fruit. The corresponding percentages for boys are 31% and 10% respectively.

Figure 32:
Percentages of boys who eat fruit more than once a day

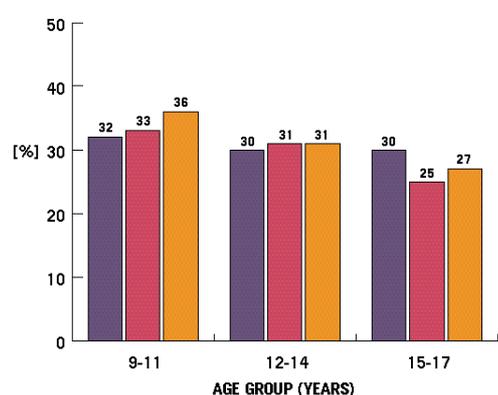
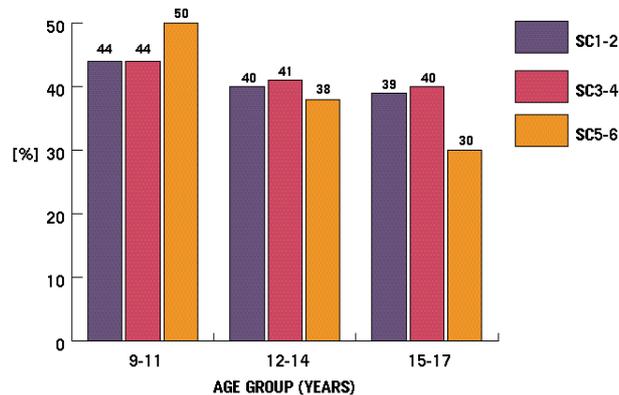


Figure 33:
Percentages of girls who eat fruit more than once a day



The data for vegetable consumption indicate that eating fruit is more common than eating vegetables. They also show fewer global differences across socio-demographic groups. Gender differences are minimal with 19% of boys and 20% of girls reporting that they eat vegetables more than once a day, while 14% of boys and 11% of girls report rarely or never eating vegetables. Similarly, there are few differences across social classes. There is, however, a reported decrease in vegetable consumption with age. Twenty one percent of children from 9-14 report eating vegetables more than once a day while this drops to 16% of those aged 15-17.

Figure 34:
Percentages of boys who eat vegetables more than once a day

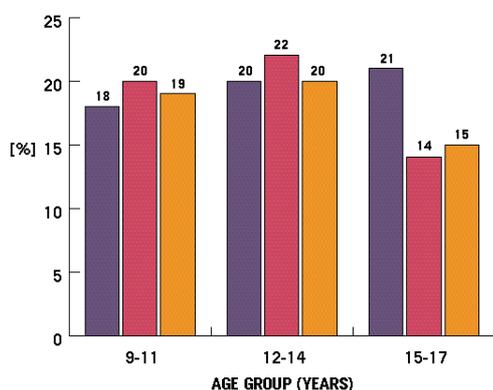
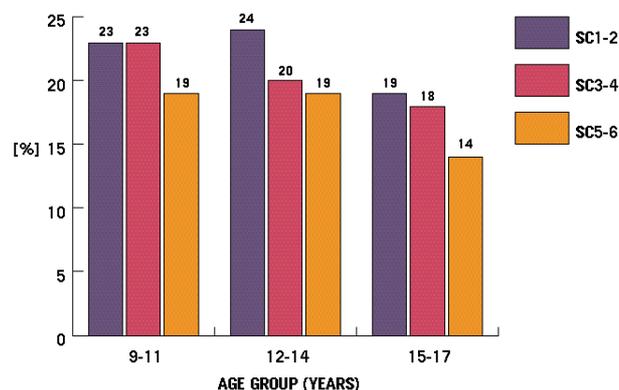


Figure 35:
Percentages of girls who eat vegetables more than once a day



Children were also asked about eating a range of other foods, including cakes and pastries, soft (fizzy) drinks, sweets, chocolate and crisps. All of these are considered to be high fat and/or sugar foods and it is recommended that they are eaten sparingly. The figures below indicate the percentages of children who report that they are eating 3 or more of these daily. Therefore this represents children who are eating these high fat and/or sugar foods frequently. Few patterns emerge in this data, with the exception of the suggestion of a social class effect and boys in general eating more high fat and/or high sugar foods.

Figure 36:
Boys consuming high fat and high sugar foods frequently

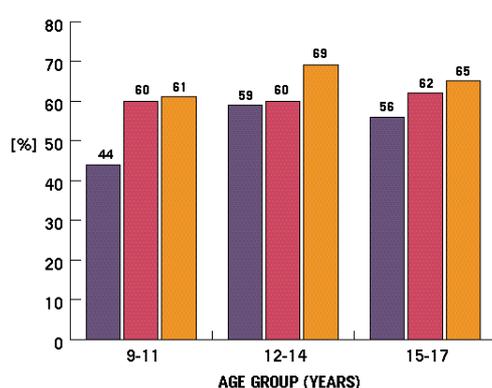
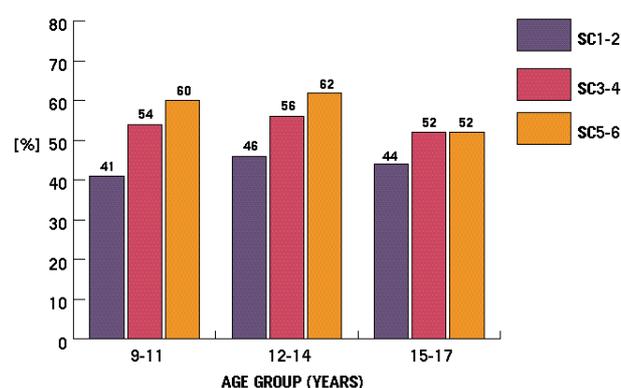


Figure 37:
Girls consuming high fat and high sugar foods frequently



In addition to questions about food consumption, children were asked whether they were on a diet to reduce weight or if they thought that they needed to lose weight (but were not currently on such a diet). Overall, 8% (4% of boys and 12% of girls) reported being on a weight reducing diet and an additional 23% (18% of boys and 28% of girls) reported that they needed to lose weight. These percentages increased across the age groups, from 5% of 9-11 year olds through 8% of 12-14 year olds to 10% of 15-17 year olds who were on weight reducing diets and a further 19% of 9-11 year olds, 23% of 12-14 year olds and 25% of 15-17 year olds reporting that they should lose weight. However, on examination these general increases across age are almost entirely attributable to the girls. The figures for boys decrease slightly from ages 9 to 17, while those for girls run from 6% of 9-11 year olds through 10% of 12-14 year olds to 16% of 15-17 year olds being on a weight reducing diet while the corresponding figures reporting that they needed to lose weight are 21%, 29% and 35%. There is no consistent pattern for these variables across the social classes.

Figure 38:
Percentages of boys who are on a weight reducing diet

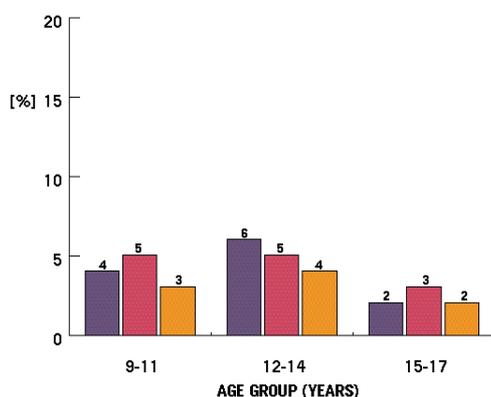
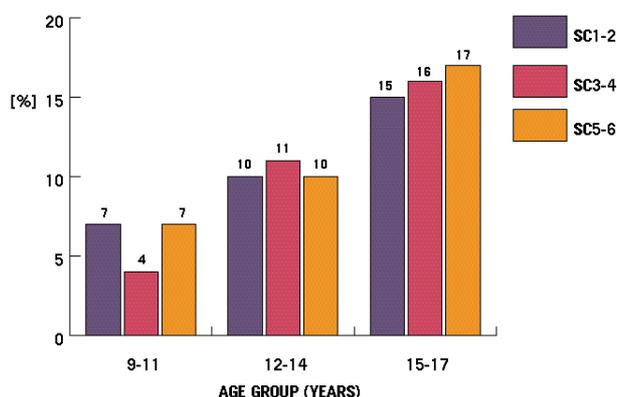


Figure 39:
Percentages of girls who are on a weight reducing diet



exercise





Health Strategy Target

To achieve a 30 per cent increase in the proportion of the population aged 15 and over who engage in an accumulated 30 minutes of light physical exercise most days of the week by the year 2000.

To achieve a 20 per cent increase in the proportion of the population aged 15 and over who engage in moderate exercise for at least 20 minutes, three times a week by the year 2000.

Overall, 42% of respondents engaged in some form of regular physical exercise.

Twenty-four percent reported doing mild exercise four times per week for at least 20 minutes, 31% did moderate exercise three times per week and 9% did strenuous exercise three times per week.

Table 17 below shows the distribution of mild exercise participation by gender, age and social class. Higher percentages of older females in the higher socio-economic groups did more mild exercise than the lower socio-economic groups. In contrast, more lower social class young males did mild exercise compared to higher social class males.

Table 17: Percentage engaging in mild physical exercise for at least 20 minutes most days of the week by gender, age and social class

	SC1-2	SC3-4	SC5-6
MALES			
18-34 yrs	27	19	33
35-54 yrs	23	21	21
55+ yrs	32	31	29
FEMALES			
18-34 yrs	28	27	27
35-54 yrs	22	24	21
55+ yrs	30	39	21

As seen in Figure 40 significantly smaller percentages of the older age group participated in moderate exercise 3+ times per week. There was also a difference between the numbers of males doing the required amount compared to females. A social class gradient existed in most age groups for both males and females.

Figure 40: Percentage engaging in moderate exercise for at least 20 minutes three times per week by gender, age and social class

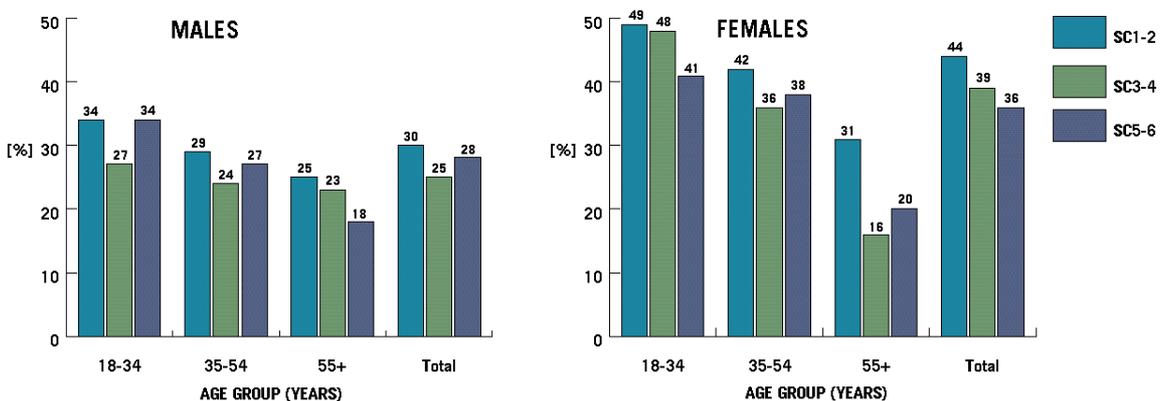
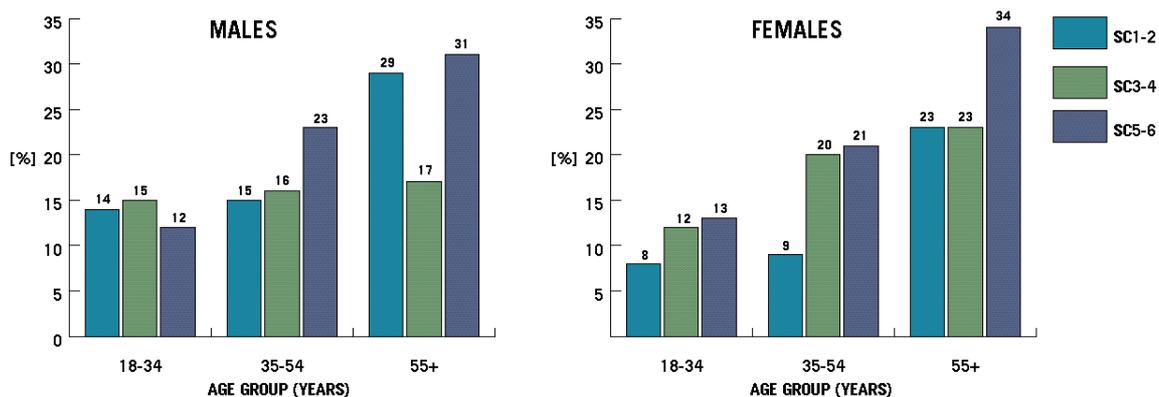


Table 18 below shows the distribution of strenuous exercise participation by gender, age and social class. More males than females engaged in this form of activity especially in the younger age group.

Table 18: Percentage engaging in strenuous physical exercise for at least 20 minutes three times per week by gender, age and social class			
	SC1-2	SC3-4	SC5-6
MALES			
18-34 yrs	27	22	20
35-54 yrs	8	11	6
55+ yrs	1	5	5
FEMALES			
18-34 yrs	12	8	8
35-54 yrs	7	5	3
55+ yrs	2	0	0

Twenty-one percent of respondents reported doing no exercise at all. This was predominantly so for older males and females in the lower social class groups.

Figure 41: Percentage doing no exercise at all in the week by gender, age and social class



Children were asked about their participation in exercise outside of class time. They were asked the frequency with which they exercised so much that they get out of breath or sweat. Presented below are data illustrating the percentages reporting that they exercise in such a way four or more times a week (in keeping with the National targets) and those reporting that they exercise less than weekly. The patterns that emerge are slightly different across these two ways of assessing exercise participation. Overall, 53% of children report exercising four or more times per week while 6% exercise less than weekly. However, this masks some substantial gender differences. Although only 5% of boys and 7% of girls are exercising less than weekly, 62% of boys and 45% of girls are exercising four times or more times per week. This suggests that the vast majority of children are involved in some exercise outside of school, but that boys are more frequent exercisers than girls. Although there are few global differences across social class, exercise participation does decrease with age. Exercising four or more times per week decreases from 63% of 9-11 year olds and 58% of 12-14 year olds to 40% of 15-17 year olds. This decrease is apparent among both genders but is particularly noticeable among girls (dropping from 59% of 9-11 year olds, through 49% of 12-14 year olds to 26% of 15-17 year olds) where it also interacts with social class (see figure 43).

Figure 42:
Percentages of boys participating in vigorous exercise four or more times per week

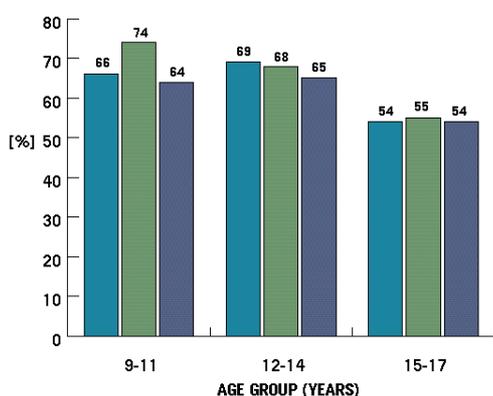


Figure 43:
Percentages of girls participating in vigorous exercise four or more times per week

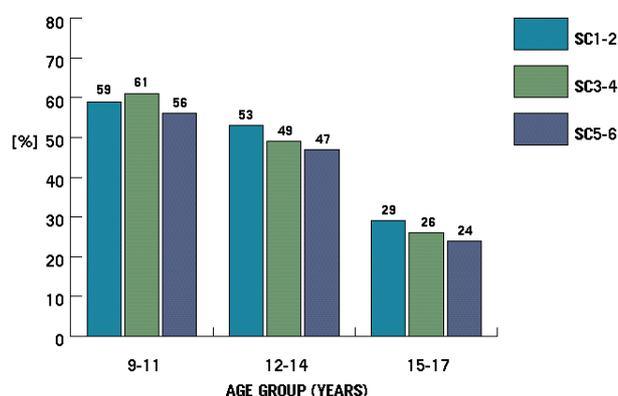


Figure 44:
Percentages of boys participating in vigorous exercise less than weekly

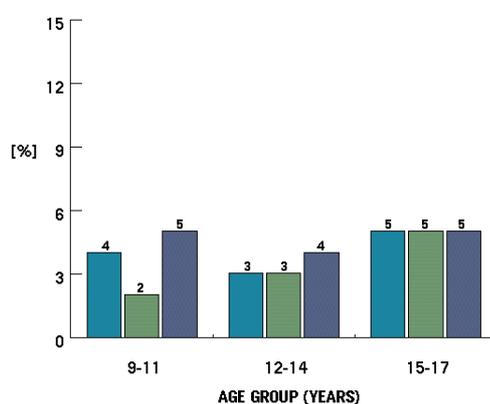
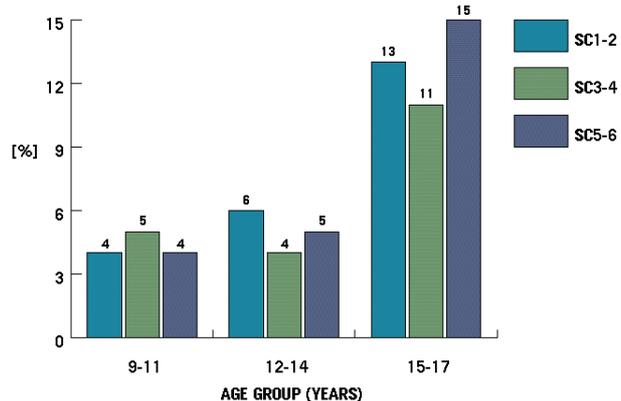


Figure 45:
Percentages of girls participating in vigorous exercise less than weekly



accidents





Health Strategy Target

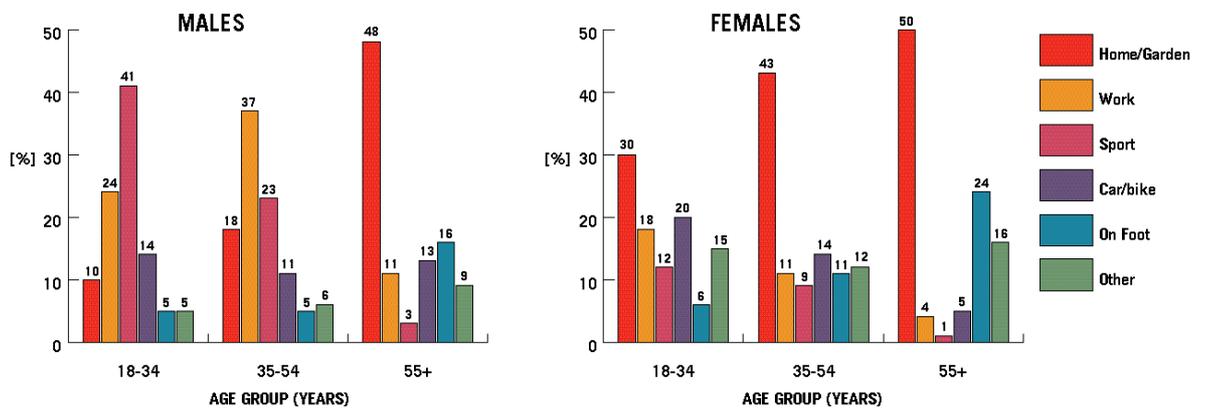
To achieve a reduction of 10 per cent in mortality due to accidents within the next 10 years and a significant reduction in morbidity particularly among children

No data on fatal injuries were collected but the pattern of non-fatal but limiting injuries in Ireland was recorded.

Eighteen percent of respondents indicated having had an injury in the past two years which interfered with their daily activities and of these 87% were accidental.

Males were more likely to have suffered such an injury with 22% compared to 14% females. There also appeared to be an inverse age relationship with 23% of the 18-34 year olds having a serious injury compared to 13% of the older 55+ age group. Eighteen percent of the injuries were at home/garden, 21% at work and 21% occurred during sport. However, as might be expected age and gender influenced the location at which injuries occurred. As seen in Figure 46 below, with increasing age injuries were more likely to happen at home or in the garden. Work is significant in young males whereas for all groups of women home was the most common site.

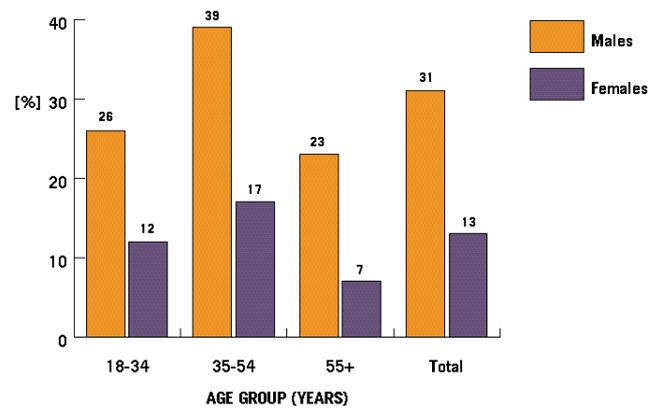
Figure 46: Site of injury by gender and age



The main treatment of injuries was carried out by the accident and emergency service in hospitals (47%). Thirty-six percent used the GP service and 15% treated the injury themselves.

A major concern around road safety is drinking and driving. Of those respondents who normally drank and who normally drove a car, 22% indicated that they had driven soon after consuming 2 or more alcoholic drinks. A significantly higher percentage of males to females reported doing this (31% to 13% respectively) and as seen in the Figure 47 below, predominantly the middle, 35-54 years age group.

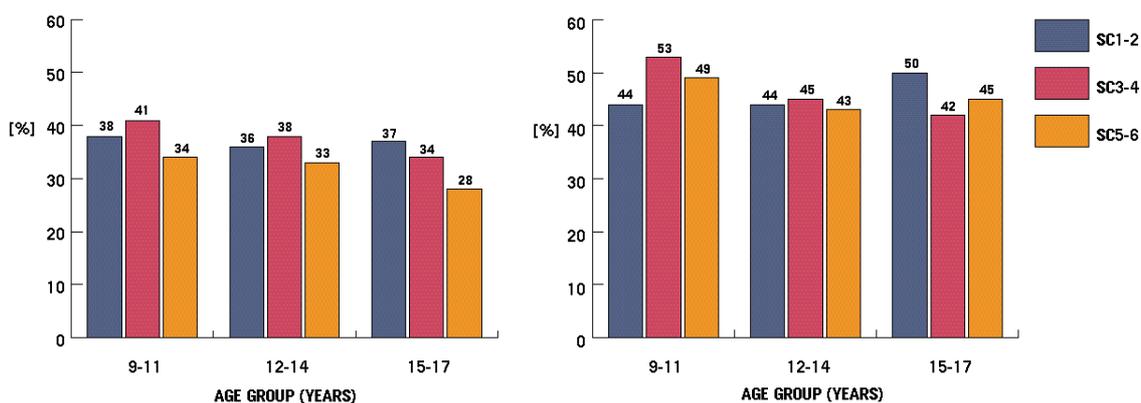
Figure 47



The majority of respondents (82%) reported always or nearly always using seatbelts when riding in the front seat of a car. Similar percentages were observed across age and social class groupings but there was a higher percentage of females (74%) always using the seatbelt compared to males (61%).

Children were asked a series of questions in relation to safety, accidents and injuries. These included frequency of seatbelt and cycle helmet use. The data presented below for seatbelt use exclude those who do not travel by car or report that there is no seatbelt where they sit in the car. It should be noted that the percentage of those reporting that there is no seatbelt where they sit is low (2% overall) and decreased with age from 4% of 9-11 year olds through 2% of 12-14 year olds to 1% of 15-17 year olds. This may reflect older teenagers sitting in the front passenger seat rather than the back seat of the car. Overall, 41% of children report that they always wear a seatbelt, but this masks some substantial gender differences as 35% of boys and 46% of girls report always wearing a seatbelt when travelling by car. In general, younger children and those from higher social classes are more likely to always wear a seatbelt but the differences are not as noteworthy. A clear effect of social class has emerged among older boys which is also present although to a lesser degree among girls (see figures 48 and 49 below).

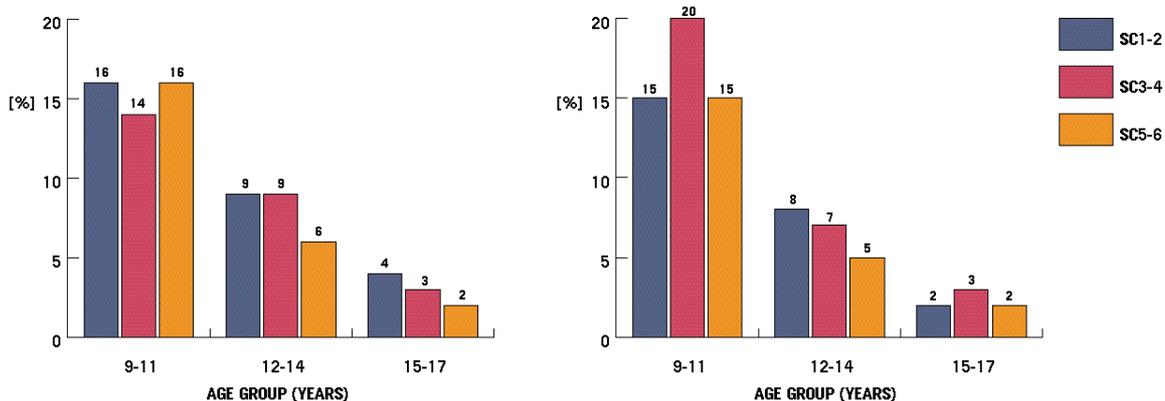
Figure 48: Percentages of boys who always wear a seatbelt **Figure 49: Percentages of girls who always wear a seatbelt**



The rates for cycle helmet use have been calculated by excluding those who report that they do not ride bicycles. Overall, 8% of children report that they always wear a helmet and no gender or social class differences emerge. There are, however, substantial age differences. The rates decrease from 16% at ages 9-11, through 7% at ages 12-14 to 3% at ages 15-17. Interestingly, this mirrors the increase in those reporting that they do not ride bicycles which were 8%, 11% and 21% for the three age groups respectively.

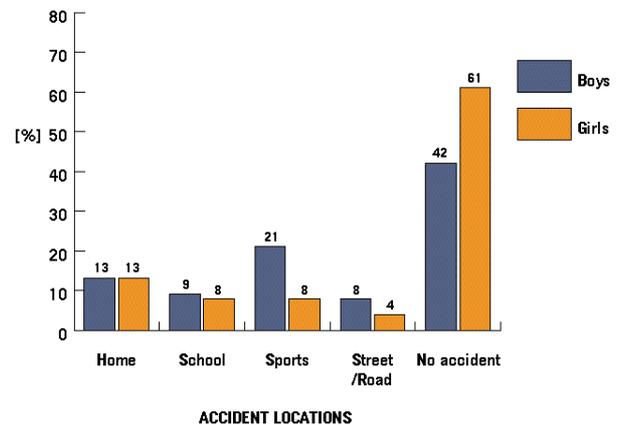
Figure 50: Percentages of boys who always wear cycle helmets

Figure 51: Percentages of girls who always wear cycle helmets



Children were asked about any injuries that they had in the previous 12 months. Overall, 48% report that they have had an injury. Although there are large differences across gender (58% of boys and 39% of girls) few patterns emerge across age or social class. Most injuries occur either at home (their own home or someone else's) or at a sports facility or field (not at school). Therein lies much of the gender difference, injuries at home are reported equally frequently by boys and girls (13%), but sports injuries are reported more frequently by boys (21%) as compared to girls (8%). This is likely to be related to the data reported in figures 42 and 43, illustrating more frequent exercise participation among boys. However, while injuries occurring at home are relatively static across gender, age and social class, injuries occurring at a sports facility or field increase across age for both boys and girls from 9-11 year olds (15% of boys and 5% of girls) through 12-14 year olds (21% of boys and 10% of girls) to 15-17 year olds (29% of boys and 9% of girls).

Figure 52: Percentage of accidents occurring in various locations



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