

SLÁN 2007



**SURVEY OF LIFESTYLE,
ATTITUDES AND NUTRITION
IN IRELAND**

MAIN REPORT

DEPARTMENT OF HEALTH AND CHILDREN, 2008



This publication should be cited as follows:

Morgan K, McGee H, Watson D, Perry I, Barry M, Shelley E, Harrington J, Molcho M, Layte R, Tully N, van Lente E, Ward M, Lutomski J, Conroy R, Brugha R (2008). SLÁN 2007: Survey of Lifestyle, Attitudes & Nutrition in Ireland. Main Report. Dublin: Department of Health and Children.

Copyright © Minister for Health and Children, 2008

Department of Health and Children

Hawkins House

Hawkins Street

Dublin 2

Tel: +353 (0)1 635 4000

Fax: +353 (0)1 635 4001

E-mail: dohc@health.gov.ie

Web: www.dohc.gov.ie

Published by The Stationery Office, Dublin

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission in writing of the copyright holder.

For rights of translation or reproduction, applications should be made to the Head of Communications, Department of Health and Children, Hawkins House, Hawkins Street, Dublin 2, Ireland.



The SLÁN 2007 report is available to download as a PDF from www.slán07.ie

Karen Morgan, Hannah McGee, Dorothy Watson, Ivan Perry, Margaret Barry, Emer Shelley, Janas Harrington, Michal Molcho, Richard Layte, Nuala Tully, Eric van Lente, Mark Ward, Jennifer Lutomski, Ronan Conroy and Ruairí Brugha.

Royal College of Surgeons in Ireland
Economic and Social Research Institute
University College, Cork
National University of Ireland, Galway





CONTENTS

List of Tables	viii
List of Figures	x
Foreword	xv
Acknowledgements	xviii
Executive Summary	1
Introduction and methods	2
Health status	2
Health service use	2
Breast-feeding	3
Mental health and well-being	3
Physical activity	3
Healthy eating and the Food Pyramid	4
Other eating habits	4
Food affordability	4
Smoking	5
Alcohol and use of illicit drugs	5
Injuries necessitating medical consultation	6
Social support and community participation	6
Body weight and weight management	6
Blood pressure and cholesterol	7
Combined physical examination risk factors	7
Comparisons between SLÁN 2007 and HBSC 2006	8
Further reports	8
1 Introduction	17
2 Methods: SLÁN 2007 Main Survey	19
Background	20
Population and sampling	20
Study delivery	21
Data management	21
Response rate	21
Age, gender, marital status, nationality and ethnicity compared to Census 2006	22
Food Frequency Questionnaire, BMI and PE sub-samples	24
Comparison of methods between SLÁN 1998, SLÁN 2002 and SLÁN 2007	27

3 Overview of findings	29
4 General Health Results	33
Self-rated health	34
Long-term illness	35
Chronic illnesses	36
Attending a General Practitioner	38
Attending a Dentist	38
Attending a Complementary/Alternative Practitioner	39
Breast-feeding	40
Quality of life	41
5 Mental Health and Well-being	43
Positive mental health: Energy and Vitality Index	44
Psychological distress	45
Depression	46
Anxiety	47
Self-harm	47
Stigma	48
6 Physical Activity	49
Levels of physical activity	50
Reasons for inactivity	52
Physical activity comparison with 1998 and 2002 SLÁN surveys	53
7 Diet and Nutrition	55
Food Pyramid Servings Consumption Profile	56
Food Pyramid: Foods high in fats and sugar	59
Food Pyramid: Meat, fish, poultry and alternatives	59
Food Pyramid: Milk, cheese and yoghurt	61
Food Pyramid: Fruit and vegetables	64
Food Pyramid: Cereals, breads and potatoes	65
Food Pyramid: Comparisons from SLÁN 1998 to 2002 and 2007	66
Eating habits	67
Meal habits	69
Household food affordability	70
8 Smoking	73
Current and former cigarette smokers	74
Current cigarette smokers	74
Attempts to quit	76
Intentions to quit	77
Household smoking rules	77

9 Alcohol and Other Substances	79
Frequency of drinking	80
Drinking 6 or more standard drinks on one occasion	81
Alcohol and driving	82
Use of illicit drugs	85
10 Injuries	87
Helmet use	89
11 Family, Social Network and Neighbours	91
Social support	92
Loneliness	94
Involvement in the community	95
12 Sub-studies: Body Weight and Physical Examination	97
Body Mass Index (BMI)	98
Comparison with 1998 and 2002 SLÁN surveys	102
Weight management	103
Blood pressure	104
Total Serum Cholesterol	106
Combined physical examination risk factors	107
13 Combining findings from the HBSC 2006 and SLÁN 2007 for adolescents and young adults	111
Further reports	114
SLÁN 2007 Project Team	115
References	119
Appendix	121
SLÁN 2007 – Sampling and weighting	122
SLÁN Survey comparisons – Weighting of datasets	123
Additional Tables	125
Full list of Physical Examination assessments	130
Health Behaviour in School-aged Children (HBSC) Survey	131

LIST OF TABLES

Table 1:		
	SLÁN 2007 response rates	22
Table 2:		
	Characteristics of SLÁN 2007 sample compared to characteristics of population from Census 2006	23
Table 3:		
	Characteristics of full sample and of those completing the Food Frequency Questionnaire (FFQ), BMI/waist circumference measurement sub-study and physical examination (PE) sub-study	24
Table 4:		
	Summary of SLÁN survey methods	27
Table 5:		
	Number and percentage of respondents reporting chronic illness in the previous 12 months	37
Table 6:		
	Physical activity scores (IPAQ) of respondents, by gender, age and social class	50
Table 7:		
	Reasons for inactivity for those who were physically inactive, by gender, age and social class	52
Table 8:		
	Percentage of respondents complying with Food Pyramid Serving Consumption Guidelines, by gender and year (1998, 2002 and 2007)	66
Table 9:		
	Percentage of respondents consuming their meals at home or outside the home, by gender	69
Table 10:		
	Percentage of respondents smoking, by gender, age, social class and year (1998, 2002 and 2007)	76
Table 11:		
	Frequency of drinking alcohol in the past year, by gender, age and social class	80
Table 12:		
	Percentage of respondents who drank alcohol in the previous 12 months and consumed above the recommended number of units of alcohol per week, by gender, age, social class and year (1998, 2002 and 2007)	84
Table 13:		
	Percentage of respondents who did not drink alcohol in the previous 12 months, by gender and year (1998, 2002 and 2007)	84

Table 14:	Reported use of illicit drugs in the previous 12 months, by gender and year (1998, 2002 and 2007)	85
Table 15:	Percentage of respondents with normal or high blood pressure and whether or not they were taking anti-hypertensive (blood pressure) medication	105
Table 16:	Percentage of respondents with normal or high total cholesterol levels and whether or not they were taking cholesterol-lowering medication	106
Table 17:	Percentage of respondents with main cardiovascular risk factors (<i>includes those with normal levels but receiving treatment</i>), by gender, age and social class	107
Table 18:	Percentage of respondents with combined cardiovascular risk factors (<i>includes those with normal levels but receiving treatment</i>)	108
Table 19:	Percentage of respondents with main and combined cardiovascular risk factors, by gender, age and social class	109
Table 20:	Comparison of 15-17 year-olds (HBSC 2006) and 18-29 year-olds (SLÁN 2007) on a range of survey questions	113
APPENDIX		
Table A1:	Location where respondents consumed the previous day's meals, by gender	125
Table A2:	Self-reported BMI distribution, by gender and age	126
Table A3:	Self-reported BMI distribution, by gender, age and social class	127
Table A4:	Comparison of BMI scores using self-reported and measured data for respondents aged 18-44, by gender	128
Table A5:	Self-reported BMI distribution, by gender, age and year (1998, 2002 and 2007)	129
Table A6:	Methods summary for the Irish HBSC Survey	131

LIST OF FIGURES

Figure 1:		
Percentage of respondents rating their health as 'excellent' or 'very good', by age, gender and social class		34
Figure 2:		
Percentage of respondents rating their health as 'excellent' or 'very good', by age, gender and year (1998, 2002 and 2007)		35
Figure 3:		
Percentage of respondents reporting that their daily activity was limited by a long-term illness, health problem or disability, by age, gender and social class		35
Figure 4:		
Percentage of respondents reporting that their daily activity was limited by physical/mental ill-health within the previous 30 days, by age, gender and social class		36
Figure 5:		
Percentage of respondents who reported attending a GP within the previous 12 months, by age, gender and social class		38
Figure 6:		
Percentage of respondents who reported attending a dentist within the previous 12 months, by age, gender and social class		39
Figure 7:		
Percentage of respondents who reported attending a complementary or alternative practitioner within the previous 12 months, by age, gender and social class		39
Figure 8:		
Percentage of women who reported having breast-fed any of their children, by age and social class		40
Figure 9:		
Percentage of women who reported having breast-fed any of their children, by age of mother in 2002 and 2007		40
Figure 10:		
Percentage of respondents reporting their quality of life as 'good' or 'very good', by age, gender and social class		41
Figure 11:		
Mean score on SF-36 energy and vitality scale, by age, gender and social class (higher scores indicate more energy and vitality)		44
Figure 12:		
Mean score on Mental Health Index scale, by age, gender and social class (higher scores indicate less psychological distress)		45

Figure 13:	Percentage of respondents who reported major depression within the previous year, by age, gender and social class	46
Figure 14:	Percentage of respondents diagnosed as having generalised anxiety disorder within the previous year, by age, gender and social class	47
Figure 15:	Percentage of respondents who agreed with the statement ' <i>If I was experiencing mental health problems, I wouldn't want people knowing about it</i> ', by age, gender and social class	48
Figure 16:	Percentage of respondents with high physical activity (IPAQ) scores, by age, gender and social class	51
Figure 17:	Percentage of respondents who reported no exercise in an average week, by age, gender and year (1998, 2002 and 2007)	53
Figure 18:	Irish Food Pyramid	57
Figure 19:	Percentage of respondents consuming the recommended number of daily servings from each shelf of the Food Pyramid	58
Figure 20:	Percentage of respondents consuming fried foods 4 or more times per week, by age, gender and social class	59
Figure 21:	Percentage consuming the recommended 2 daily servings of meat, fish, poultry and alternatives, by age, gender and social class	60
Figure 22:	Percentage consuming more than the recommended 2 daily servings of meat, fish, poultry and alternatives, by age, gender and social class	60
Figure 23:	Percentage consuming less than the recommended 2 daily servings of meat, fish, poultry and alternatives, by age, gender and social class	61
Figure 24:	Percentage of respondents consuming the recommended 3 daily servings of milk, cheese and yoghurt products, by age, gender and social class	62
Figure 25:	Percentage of respondents consuming more than the recommended 3 daily servings of milk, cheese and yoghurt products, by age, gender and social class	63

Figure 26:	Percentage of respondents consuming less than the recommended 3 daily servings of milk, cheese and yoghurt products, by age, gender and social class	63
Figure 27:	Percentage of respondents consuming 5 or more daily servings of fruit and vegetables, by age, gender and social class	64
Figure 28:	Percentage of respondents consuming 6 or more daily servings of cereals, breads and potatoes, by age, gender and social class	65
Figure 29:	Percentage of respondents who always/usually add salt to food while cooking, by age, gender and social class	67
Figure 30:	Percentage of respondents who always/usually add salt to food while at the table, by age, gender and social class	68
Figure 31:	Percentage of respondents who reported that they eat snacks between meals, by age, gender and social class	69
Figure 32:	Household food affordability, by social class	71
Figure 33:	Percentage of respondents who reported smoking at least 100 cigarettes in their life, by age, gender and social class	74
Figure 34:	Percentage of smokers in 2007, by age, gender and social class	75
Figure 35:	Percentage of cigarette smokers who reported trying to quit smoking in the previous 12 months, by age, gender and social class	77
Figure 36:	Percentage of drinkers who reported having 6 or more 'standard' drinks on one or more occasions per week, by age, gender and social class	81
Figure 37:	Percentage of drinkers who reported having 6 or more 'standard' drinks on one or more occasions per week, by age, gender and year (2002 and 2007)	82
Figure 38:	Percentage of drivers (who were also drinkers) who reported driving a car after consuming 2 or more standard alcoholic drinks in the previous year, by age, gender and social class	82

Figure 39:	Percentage of drivers (who were also drinkers) who reported driving a car after consuming 2 or more standard alcoholic drinks in the previous year, by age, gender and year (2002 and 2007)	83
Figure 40:	Percentage of respondents who reported experiencing one or more injuries in the previous year, by age, gender and social class	88
Figure 41:	Percentage of respondents who reported that they always wore a helmet when riding a bicycle, by age, gender and social class	89
Figure 42:	Percentage of respondents who reported that they always wore a helmet when riding a bicycle, by age, gender and year (2002 and 2007)	90
Figure 43:	Percentage of respondents who reported having 3 or more close people they could count on if they had serious personal problems, by age, gender and social class	92
Figure 44:	Percentage of respondents who reported that people take some or a lot of friendly interest in what they are doing, by age, gender and social class	93
Figure 45:	Percentage of respondents who reported finding it 'easy' or 'very easy' to get practical help from neighbours, by age, gender and social class	94
Figure 46:	Percentage of respondents who answered 'Yes' to the question ' <i>Have you often felt lonely in the last 4 weeks?</i> ', by age, gender and social class	94
Figure 47:	Percentage of respondents who reported regularly attending one or more community activities, by age, gender and social class	95
Figure 48:	Percentage of respondents who reported regularly attending one or more community activities, by age, gender and year (2002 and 2007)	96
Figure 49:	Self-reported BMI scores for men, by age	99
Figure 50:	Self-reported BMI scores for women, by age	99
Figure 51:	BMI scores calculated using self-reported and measured data for 967 respondents aged 18-44, by gender	100

Figure 52:

BMI scores calculated using self-reported and measured data for 1,207 respondents aged 45+, by gender 101

Figure 53:

Self-reported BMI distributions for men, by year 102

Figure 54:

Self-reported BMI distributions for women, by year 102

Figure 55:

Percentage of respondents who reported actively trying to manage their weight, by age, gender and social class 103

FOREWORD

I am very pleased to be associated with the launch of this main report on SLÁN 2007, the third national Survey of Lifestyle, Attitudes and Nutrition in Ireland.

The collection of the data for SLÁN 2007 has been the most challenging to date. It involved face-to-face interviews with over 10,000 adults, along with a sub-study on body size of approximately 1,000 younger adults (aged 18-44) and a more detailed physical examination of over 1,200 adults (aged 45 years and over). Many challenges were encountered along the way, but I am pleased that the commitment shown to the project by the SLÁN Consortium has resulted in the publication of a comprehensive and most informative set of data.

The National Health and Lifestyles Surveys are commissioned by the Department of Health and Children, and they have in the past provided vital baseline data on a range of lifestyle-related health behaviours in the Irish population, such as smoking, alcohol consumption, diet and physical activity. In addition, SLÁN 2007 has, for the first time, collected data on mental health.

The findings reported in this publication are just a fraction of the depth and wealth of data collected from the 10,000 participants. The data will be an invaluable resource for a range of users, including academics, researchers, policy-makers and the medical profession. The information contained in this study should stimulate and inform debate on the many lifestyle issues that confront our society. For example, the results from the physical examination of those adults aged 45+ highlight the prevalence of obesity, high blood pressure and raised cholesterol within this sector of the population. These are three of the well-known risk factors for cardiovascular diseases. While there have been improvements in cardiovascular health in recent years, the results of this study leave no room for complacency.

I would like to extend my appreciation to all those respondents who gave freely of their time to participate in the study. I particularly appreciate the efforts of the 1,207 who also participated in the physical examination. I would like to pay tribute to all those involved in the SLÁN 2007 Consortium who have helped produce this invaluable study.

Pat the Cope Gallagher, TD

Minister for Health Promotion and Food Safety



BROLLACH

Táim thar a bheith sásta an tuairisc achomair seo bunaithe ar SLÁN 2007 a sheoladh; an tríú Suirbhé Náisiúnta ar Nósanna Maireachtála, Dearcaí agus Cothú in Éirinn.

Bhain an dúshlán is mó fós leis na sonraí do SLÁN 2007 a bhailiú. San áireamh sa suirbhé bhí agallaimh duine le duine le breis is 10,000 duine fásta, mar aon le fostaidéar ar mheáchan 1,000 duine fásta níos óige (idir 18-44 bliain d'aois) agus scrúdú fisiciúil níos mionsonraithe ar os cionn 1,200 duine fásta (45 bliain d'aois agus níos sine). Is iomaí dúshlán a bhí le sárú i rith na hoibre, ach cúis áthais dom a chur in iúl, trí thiomantas Chuibhreannas SLÁN don tionscadal, gur foilsíodh an tsraith is cuimsithí agus is faisnéisí sonraí go dtí seo.

Is é an Roinn Sláinte agus Leanáí a choimisiúnaíonn na Suirbhéanna Náisiúnta Sláinte agus Nósanna Maireachtála, agus san am a caitheadh foinsí ba ea na suirbhéanna seo de shonraí ríthábhachtacha bonnlíne faoi iompraíochtaí sláinte bunaithe ar nósanna maireachtála i measc phobal na hÉireann; cosúil le caitheamh tobac, alcól, aiste bia agus gníomhaíocht fhisiciúil. Den chéad uair riamh, mar chuid de SLÁN 2007, bailíodh sonraí maidir le meabhairshláinte.

Níl sna torthaí tuairiscithe san fhoilseachán seo ach codán de na sonraí iomlána a bailíodh ón 10,000 rannpháirtí. Beidh na sonraí seo thar a bheith úsáideach d'úsáideoirí éagsúla, lena n-áirítear lucht acadúil, taighdeoirí, lucht déanta beartas agus gairmithe leighis. Ba cheart go spreagfadh an t-eolas sa staidéar seo díospóireacht ar a lán de na nósanna maireachtála atá i measc na sochaí faoi láthair. Mar shampla, tarraingíonn torthaí an scrúdaithe fhisiciúil i measc daoine fásta 45+ aird ar chomh forleathan is atá murtallacht, brú fola ard agus colaistéaról ardaithe i measc an ghrúpa seo den daonra. Fachtóirí riosca aitheanta do ghalair chardashoithíocha iad na trí fhachtóir seo. Cé go bhfuil feabhas éigin tagtha ar shláinte chardashoithíoch le blianta beaga anuas, is léir ó thorthaí an staidéir seo nach féidir linn beag is fiú a dhéanamh den tábhacht a bhaineann le sláinte chardashoithíoch.

Ba mhaith liom mo bhuíochas a chur in iúl do na freagróirí ar fad a thug a gcuid ama go fial agus a ghlac páirt sa staidéar. Táim buíoch go háirithe den 1,207 rannpháirtí a ghlac páirt sa scrúdú fisiciúil freisin. Ba mhaith liom buíochas a ghabháil le gach duine a bhí páirteach i gCuibhreannas SLÁN 2007 agus a thug lámh chúnata chun an staidéar tábhachtach seo a chur i gcrích.

Pat the Cope Gallagher, TD

Aire Cothú Sláinte agus Sábháilteacht Bia



ACKNOWLEDGEMENTS

SLÁN 2007 has been possible because of assistance from many individuals and organisations. Our first thanks go to the survey participants – over 10,000 people across the country who gave time and information to us to make possible a national profile. We also thank the interviewers, field support staff and data entry staff from the Economic and Social Research Institute Survey Unit and the interviewers from Amárach Consulting, who collected and processed this information in an increasingly challenging environment for recruiting participants to surveys.

The survey was enabled with the support of a number of occupational health organisations who conducted the physical examination sub-study. Nurses and other staff from the following companies are gratefully acknowledged: the Well at Work, Dundrum, Dublin (Ms Áine Donovan, Ms Ann Barry, Ms Eileen O’Hara and Ms Wendy Buckley); Employment Health Advisors, Blackrock, Cork (Pat Rowland and Dr John Gallagher); Mid-West Occupational Health, Charlotte Quay, Limerick (Ms Theresa Dowling, Ms Audrey McMahon and Dr Pat Lee); D’Alton House Medical Centre, Salthill, Co. Galway (Ms Áine Hanley and Dr Deirdre Sugrue); and the Keogh Practice, Waterford (Ms Miriam Foley, Ms Miriam Macklin and Dr Fergus McNamara). Particular thanks to Ms Áine Donovan, the Well at Work, Dublin, and Dr John Gallagher, Employment Health Advisors, Cork, for their coordinating assistance to achieve national coverage for the physical examination sub-study. Thanks to Mr Mark McKeever, Ms Susan Maher, Mr John Carroll and staff at Claymon Laboratories Ltd, Dublin, for managing the collection and analysis of physical examination blood and urine assessments. Information from the physical examinations was interpreted for feedback to respondents and their nominated doctors by Dr Una O’Neill and Dr Killian McGrogan at Mercers Medical Centre, Royal College of Surgeons in Ireland (RCSI), Dublin. Thanks to them for design advice on this component of the study and for speedy processing of complex sets of results so respondents got timely feedback on their tests.

Many people helped with survey planning. Dr Kevin Sweeney of the Central Survey Unit, Northern Ireland Statistics and Research Agency, provided advice to optimise comparability of this survey with the recent Northern Ireland health and well-being survey. Professor Cecily Kelleher and colleagues Ms Celine Murrin and Mr Juzer Loyola at the School of Population Sciences and Public Health, University College Dublin, provided dietary advice and the computer programme to analyse the Food Frequency Questionnaire. Ms Janis Morrissey of the Irish Heart Foundation and Ms Vera McCarthy provided training for nurses and survey interviewers on physical assessment. Ms Mary Ledwith and Ms Stephanie O’Connor of Biosys (RCSI) provided advice on laboratory issues and ongoing storage of physical samples. Advice on other aspects of study planning was gratefully received from Professor Alice Stanton, RCSI (physical examination assessments), Professor Helen Whelton, University College Cork (oral health), Dr Anne Hope (alcohol use), Ms Maureen Fallon, Health Service Executive (breast-feeding), Mr Barry McGowan, RCSI (tenders and contracts) and Dr Tony Fitzgerald, University College Cork (statistical analyses). Thanks to An Oifig Aistriúcháin, Acadamh na hOllscolaíochta Gaeilge, National University of Ireland, Galway, for translation of the questionnaire into Irish. Translation into other languages was by Dublin City University’s Language Service. In terms of logistics, Ms Carole Caetano, secretary to the Department of Psychology, RCSI, provided invaluable ongoing support. Ms Rebecca Colleran, Ms Charlene Molloy and Ms Oonagh Mullen ably assisted in project tasks while on studentships

at the RCSI in 2007. Others involved with specific reports within the overall project will be acknowledged in the relevant reports.

Finally, as a research team, we thank the Department of Health and Children for the opportunity to conduct this survey. Input from the Management and Advisory Groups was much appreciated during the project, in particular the coordinating roles of Mr Brian Mullen and Mr Robbie Breen and their staff in the Health Promotion Policy Unit of the Department. We hope that the combined efforts of those named and acknowledged in delivering SLÁN 2007 will inform and benefit policy and practice in the pursuit of good health in the coming years in this country.

Hannah McGee, Dorothy Watson, Ivan Perry and Margaret Barry

Principal Investigators

SLÁN 2007 Consortium

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

INTRODUCTION AND METHODS

- This is the third national Survey of Lifestyle, Attitudes and Nutrition (SLÁN) in Ireland, conducted in 2007 using face-to-face interviews with adults aged 18 years or over, interviewed at home addresses. SLÁN 2007 follows on from two previous surveys using postal questionnaires – in 1998, involving 6,539 respondents with a 62% response rate, and in 2002, involving 5,992 respondents with a 53% response rate.
- The SLÁN 2007 main survey involved 10,364 respondents (62% response rate), with a sub-study on body size with 967 younger adults (aged 18-44 years) and a more detailed physical examination involving nurse assessment and blood and urine sampling in 1,207 adults (aged 45 years and over). The sample was representative of the general population in Ireland when compared with Census 2006 figures and was further weighted to match the Census for analysis. Most findings were analysed by gender, age and social class categories. The results of SLÁN 2007 are compared with those of SLÁN 1998 and 2002 where possible, and with HBSC 2006 where relevant.

HEALTH STATUS

- Self-rated health was recorded as 'excellent' or 'very good' by over half the sample (58%), with very few (3%) reporting their health as poor. Levels of self-rated health have increased from 1998 (45% 'excellent' or 'very good') and 2002 (50% 'excellent' or 'very good').
- One-tenth of respondents (11%) reported a long-term illness, health problem or disability that limited their daily activity. While there were no gender differences, one-quarter of respondents (25%) aged 65 and over reported a chronic long-term condition. Long-term illness was also more common among respondents in lower social class groups. Overall, 12% reported recent ill-health and limitations because of mental or physical health problems in the last 30 days. The most common chronic illness in the past year was back pain, with 16% reporting this problem.

HEALTH SERVICE USE

- Three-quarters of respondents (74%) had visited a general practitioner (GP) in the past year. Just over half (52%) had attended a dentist, while 9% had attended a complementary or alternative medicine practitioner. Women were more likely to use all of these services. Older people were more likely to visit the GP, but less likely to visit the dentist or alternative/complementary practitioner. There were no social class differences in attending a GP at least once in the last year, while those in higher social class groups were more likely to have attended the other professionals.

BREAST-FEEDING

- Four in 10 women (42%) reported breast-feeding at least one of their children. This represents an increase from 32% from SLÁN 2002, with larger increases in younger women (aged 18-29 years).

MENTAL HEALTH AND WELL-BEING

- Respondents were asked a series of questions on three distinct components of mental health and well-being: (i) positive mental health; (ii) non-specific psychological distress; and (iii) diagnosed mental health problems, including depression and generalised anxiety disorder.
- Overall, 90% of respondents described their quality of life as 'good' or 'very good'. Similarly, relatively high levels of positive mental health were reported. The prevalence of major depression was 6%, while 3% had generalised anxiety disorder. In general, men, younger people and those in higher social class groups reported lower levels of mental health problems.
- A small percentage (0.4%) reported some form of self-harm (e.g. taking an overdose of medication) in the past year. The percentages were too small to draw conclusions about gender, age or social class patterns.
- Mental health problems were seen to be stigmatising. Two-thirds of respondents (66%) said they would not want people to know if they were having mental health problems. This was similar across gender and social class, while more of the younger respondents reported not wanting others to know. Figures exclude neutral responses (21%).

PHYSICAL ACTIVITY

- Being 'physically active' was defined as taking part in exercise or sport 2-3 times per week for 20 or more minutes at a time or engaging in more general activities, such as walking, cycling or dancing, 4-5 times per week accumulating to at least 30 minutes per day. Over half the respondents (55%) reported being physically active, with 49% having been physically active for more than 6 months. Almost one-quarter (24%) reported some activity but not at the level great enough to be considered 'physically active'. Over one-fifth of respondents (22%) reported being physically inactive.
- Of the physically inactive respondents, less than half (41%) were thinking about becoming physically active in the next 6 months. While older people were less likely to be active than younger people, there were few gender and social class differences in activity/inactivity. Respondents who reported that they were physically inactive were asked to indicate the main reason for their inactivity. The most common response for men and women across all social classes and most age groups was having 'no time' (41%). The only exception was among those aged 65 and over, a higher percentage of whom gave 'injury/disability/medical condition' as the main reason for physical inactivity. Other reasons cited for inactivity included ill-health (18%), lack of interest (14%) and interested but unwilling to commit the time (14%). Lack of access to facilities was mentioned as a barrier to physical activity by very few respondents (3%).

- There was little evidence of a change in levels of physical activity from SLÁN 1998 to 2002 to 2007. For example, the percentage reporting moderate and/or strenuous exercise 3 or more times per week for at least 20 minutes each time were similar across the three surveys: 38% (1998), 40% (2002) and 41% (2007).

HEALTHY EATING AND THE FOOD PYRAMID

- A major concern is the overconsumption of foods high in fat, sugar and salt, which, according to the Food Pyramid, should be consumed sparingly. The majority of respondents (86%) consumed more than 3 daily servings of these types of foods from the top shelf of the Food Pyramid.
- One in 4 respondents (26%) were consuming the recommended 6 or more daily servings of cereals, breads and potatoes. Two-thirds (65%) were consuming the recommended 5 daily portions of fruit and vegetables. One-fifth (20%) were consuming the recommended 3 daily servings of milk, cheese and yoghurt products; men were more likely than women to consume more than 3 servings (25% compared to 14%). More than one-third of respondents (39%) were consuming the recommended 2 daily servings of meat, fish, poultry and alternatives; women were more likely than men to consume fewer than 2 servings (23% compared to 16%).
- Since 1998, the percentage of respondents consuming the recommended 6 or more daily servings of cereals, breads and potatoes has decreased: 40% (1998), 36% (2002) and 26% (2007). Since 2002, there has also been a decrease in the percentage of respondents consuming the recommended 3 daily servings of milk, cheese and yoghurt products: 22% (1998), 23% (2002) and 20% (2007). Conversely, the percentage of respondents consuming at least 4 daily servings of fruit and vegetables has increased: 56% (1998), 68% (2002) and 77% (2007). Consumption of the recommended 2 daily servings of meat, fish, poultry and alternatives and consumption of foods high in fat and sugar has remained similar between 1998 and 2007.

OTHER EATING HABITS

- Almost one-third of respondents either always or usually added salt to food while cooking (30%) or added salt to food at the table (32%).
- Half (48%) snacked between meals, most commonly on biscuits and cakes.
- Overall, 10% of respondents did not eat breakfast on the day prior to the survey. The most common location for consumption of the breakfast, main meal and light meal on the day prior to the survey was at home (80%, 83% and 60% respectively). 7% of respondents purchased their breakfast outside the home, 12% purchased their main meal and 23% purchased their light meal.

FOOD AFFORDABILITY

- The majority of respondents could 'always' (84%) or 'usually' (12%) afford to buy enough food for their household. One in 25 respondents (4%) sometimes could not afford to buy enough food for their household.

SMOKING

- Half of respondents (48%) had smoked at some point in their lives, with 29% reporting being current smokers (31% men and 27% women). Younger people were more likely to smoke (35% of those aged 18-29 years), as were those in lower social class groups (SC 5-6: 37%).
- Rates of smoking have decreased since 1998 across men and women, all ages and all social class groups. The decrease has occurred mainly from 1998 to 2002, with no reduction in smoking from 2002 to 2007. Rates were 33% in 1998, 27% in 2002 and 29% in 2007. Comparisons across years are reported with caution because of the different survey methods (self-report postal questionnaire in 1998 and 2002, and personal interview in 2007). Almost one in 10 smokers (9%) were actively trying to quit, with others in various stages of thinking about quitting, while 41% were not planning to quit. Younger respondents and those in higher social class groups were more likely to have tried to quit in the previous year.
- Most respondents (82%) had some rules about smoking in their own homes – 59% did not allow smoking anywhere inside their home, with an additional 23% reporting that smoking was allowed only in certain places or at certain times.

ALCOHOL AND USE OF ILLICIT DRUGS

- Most men (85%) and women (77%) drank alcohol on some occasions. One-quarter (28%) reported excessive drinking (i.e. having 6 or more standard drinks on one occasion) in the last year. This was more common in younger respondents and those in lower social class groups.
- Comparisons with previous surveys were made, again with caution because of the changed survey methods (from self-report postal questionnaire in 1998 and 2002, to personal interview in 2007). Of those respondents who have had an alcoholic drink within the previous year, the average number of alcoholic drinks consumed in an average week across the three surveys decreased from 11 drinks (1998) to 9 (2002) to 7 (2007).
- The percentage of drivers who reported driving a car after consuming 2 or more standard drinks in the past year has also decreased from 2002 (16%) to 2007 (12%).
- There was a decrease in the percentage of respondents who reported consuming 6 or more standard drinks at least once a week, from 45% (2002) to 28% (2007). Comparable data were not available for 1998. The percentages consuming over the recommended weekly alcohol limit (21 or more units for men and 14 or more units for women) also decreased over the course of the three surveys, from 15% (1998) to 13% (2002) to 8% (2007).
- Across 5 categories of illicit drugs assessed, only marijuana was used by more than one in 100 respondents in 2007 (5% reported using marijuana in the previous year). Use of all 5 categories of drug was similar or lower in 2007 than in 1998.

INJURIES NECESSITATING MEDICAL CONSULTATION

- Almost one in 10 respondents (9%) reported an injury requiring medical attention in the previous year. This was more common for men and younger people, and there were no differences between social class groups.

SOCIAL SUPPORT AND COMMUNITY PARTICIPATION

- Perceived social support (i.e. having people who show a friendly interest and can be counted on to help if the respondent has had personal problems) was reported by almost 80% among men and women, and across age and social class groups. The majority also reported finding it easy to get practical help, with older people saying it was easier to get such help.
- Participation in at least one community activity on a regular basis in the last year was reported by 55% of respondents. Similar percentages of men (56%) and women (54%) were involved, with higher percentages of those in higher social class groups (SC 1-2: 68% compared to SC 5-6: 43%). Levels of involvement were higher among younger people, with 58% of 18-29 year-olds, compared to 47% of 65+ year-olds, reporting participation in one or more community activities. Participation in community activity has reduced from 59% in 2002 to 55% in 2007, and this pattern of decline is evident across gender, age and social class groups.

BODY WEIGHT AND WEIGHT MANAGEMENT

- More than one-third of respondents (36%) reported themselves as being overweight and 14% reported being obese, according to the body mass index (BMI). Men were more likely to report being overweight (43%) or obese (16%) than women (28% overweight and 13% obese).
- Overall, the percentage of respondents who reported themselves (self-reported) as being overweight has increased, from 31% in 1998 to 33% in 2002 to 36% in 2007. Obesity levels have remained steady since 2002: 11% (1998), 15% (2002) and 14% (2007).
- Independently measured height and weight data were collected for a sub-sample of respondents and were compared to the self-reported measurements. The sub-sample consisted of 967 adults aged 18-44 and 1,207 adults aged 45 years and over. Similar to other international studies, BMI figures derived from self-reported data *underestimated* the true prevalence of overweight and obesity, particularly among older respondents. Combining the sub-sample of measured BMI data for the under-45 and over-45 age groups, 1% of all respondents were underweight (1% men and 1% women), 35% had BMIs within the healthy range (30% men and 40% women), 39% were overweight (45% men and 33% women) and 25% were obese (24% men and 26% women).
- One in 10 respondents (10%) was advised by a health professional to manage their weight in the previous year. Almost half (43%) were actively trying to do this. Most were trying to lose weight (67%), while 3% were trying to gain weight. Similar percentages were reducing fat intake (80%) and taking exercise (79%), while over two-thirds (68%) were eating fewer calories in order to maintain or lose weight.

BLOOD PRESSURE AND CHOLESTEROL

- These measures were taken by qualified nurses on a sub-sample of 1,207 respondents aged 45 years and over, who attended a separate physical examination assessment. Blood pressure and cholesterol levels, and whether the respondent was on medication for these conditions, were assessed. While respondents may have been advised to manage blood pressure or cholesterol by other methods, such as diet or physical activity, these were not assessed in the present study.
- 'Normal' blood pressure was categorised according to international guidelines and assessed by trained nurses. 'High' blood pressure was determined as ≥ 140 mmHg systolic blood pressure (SBP) or ≥ 90 mmHg diastolic blood pressure (DBP). One-third of men (33%) had normal blood pressure (below 140/90mmHg) and a further 7% had a blood pressure below 140/90mmHg while on blood pressure medication. The remainder (60%) had high blood pressure, either on no treatment (40%) or on treatment but with high levels when measured at the survey (20%). The corresponding figures for women were 47% normal blood pressure and a further 10% normal on treatment; 43% had high blood pressure, with 27% not on treatment and 16% on treatment but with blood pressure over 140/90mmHg when measured at the survey.
- In sum, a formula of at least '6 in 10' applied to blood pressure. About 6 in 10 respondents (60%) had high blood pressure. Of these, about 6 in 10 (57%) were not on medication for blood pressure. Of those on medication, about 7 in 10 (70%) were not controlled to blood pressure levels below 140/90mmHg.
- 'Normal' total cholesterol was categorised according to international guidelines and assessed from blood samples. 'High' total cholesterol was determined as those having levels of ≥ 5.0 mmol/L. Over three-quarters of the sample (82%) had raised cholesterol, with most (62%) not on cholesterol-lowering medication. One-third (35%) of those treated with medication for cholesterol were not controlled.

COMBINED PHYSICAL EXAMINATION RISK FACTORS

- Respondents having one or more of the three major cardiovascular risk factors – BMI ≥ 30 kg/m² (classified as 'obese'), raised blood pressure or raised cholesterol – were identified. Raised cholesterol was the most common of the three risk factors (82%), followed by raised blood pressure (60%). One-third of respondents (32%) were obese. One-third (32%) had raised cholesterol and were obese. Almost one in 4 (22%) had high blood pressure and were obese. Almost half (48%) had raised cholesterol and high blood pressure. Almost one in 5 (18%) were assessed as having all three cardiovascular risk factors.
- There was little gender or age difference in obesity or raised cholesterol, with a higher proportion of men and older respondents having high blood pressure. There were social class differences for obesity and raised blood pressure, with higher percentages of those in lower social class groups being obese and having high blood pressure. There was no social class pattern for raised cholesterol.
- While the focus of this section of the report was on three major cardiovascular risk factors that required measurement by health professionals in a physical examination sub-study, the one other major risk factor assessed in the main survey – smoking – is considered

here in tandem with other risk factors. Overall, 20% of respondents in the physical examination sub-study smoked. Almost one in 10 (9%) of those assessed as having all three major risk factors were also smokers.

- In conclusion, there was evidence of high levels of individual and combined health risk factors in the physical examination sub-study of the general middle-aged and older Irish population, aged 45 years and over.

COMPARISONS BETWEEN SLÁN 2007 AND HBSC 2006

- The Health Behaviour in School-aged Children (HBSC) Survey assesses school children from the age group 10-17 in school settings (see www.nuigalway.ie/hbhc). SLÁN 2007 assesses adults aged 18 years and over. Many useful comparisons are possible across these two national surveys. This report compares the oldest HBSC adolescents (aged 15-17) and the youngest adults in SLÁN 2007 (aged 18-29).
- In some instances, there was broad similarity in profiles from late adolescence to young adulthood, for example, in self-rated health, levels of food poverty and regularly having breakfast. In other instances, there was wide discrepancy: for example, smoking rates in young adults were twice those in adolescence, while exposure to cannabis in the previous 12 months was higher in adolescents. Some patterns differed by gender: for example, girls and young women were more likely to diet and less likely to engage in strenuous physical activity than boys and young men.

FURTHER REPORTS

Forthcoming reports on SLÁN 2007 will examine the following issues in greater detail:

- Nutrition, health behaviour and physical examination findings.
- Patterns of mental health and social and community participation.
- Comparisons of health behaviour and related profiles between population surveys in the Republic of Ireland and Northern Ireland.
- Policy implications of the major health behaviour profiles.

To ensure maximum and efficient access to further information, ongoing updates on these reports, as well as summary slides for teaching purposes and background details (including questionnaires and references), will be maintained at the website www.slán07.ie.

ACHOIMRE FEIDHMIÚCHÁIN

RÉAMHRÁ AGUS MODHANNA

- Is é seo an tríú Suirbhé Náisiúnta ar Nósanna Maireachtála, Dearcaí agus Cothú (SLÁN) in Éirinn. Rinneadh an suirbhé seo in 2007 trí leas a bhaint as agallaimh duine le duine i dtithe daoine fásta 18 mbliana d'aois nó níos sine. Rinneadh dhá shuirbhé eile roimh SLÁN 2007 ag baint úsáide as ceistneoirí poist – i 1998, bhí 6,539 freagróir agus ráta freagartha 62%, agus in 2002, bhí 5,992 freagróir agus ráta freagartha 53%.
- Bhí 10,364 freagróir (ráta freagartha 62%) páirteach i bpríomhshuirbhé SLÁN 2007, agus rinneadh fostaidéar ar mheáchan daoine fásta le 967 duine fásta níos óige (idir 18-44 bliain d'aois) mar aon le scrúdú fisiciúil níos mionsonraithe ar ghlac 1,207 aosach (45 bliain d'aois agus níos sine) páirt ann – scrúdú a raibh measúnú altraí agus sampláil fola agus fuail i gceist leis. Thug an sampla léargas ar phobal ginearálta na hÉireann i gcomparáid le figiúirí Dhaonáireamh 2006 agus úsáideadh scéim staitistiúil chun anailís a dhéanamh leis an Daonáireamh. Déantar anailís ar fhorhóir na dtorthaí bunaithe ar inscne, aois agus aicme shóisialta. Déantar comparáid idir torthaí SLÁN 2007 agus torthaí SLÁN 1998 agus 2002 nuair is féidir, agus le HBSC 2006 nuair atá sé oiriúnach.

STÁDAS SLÁINTE

- Léirigh os cionn leath den sampla (58%) go raibh sláinte 'den scoth' nó 'an-mhaith' acu, agus léirigh céatadán beag (3%) go raibh siad i ndrochshláinte. Tá na leibhéil sláinte féinráitithe méadaithe ó 1998 (45% 'den scoth' nó 'an-mhaith') go 2002 (50% 'den scoth' nó 'an-mhaith').
- Thuairiscigh os cionn freagróir amháin as gach deichniúr (11%) go raibh breoiteacht fhadtréimhseach, fadhb sláinte nó míchumas acu a chuir bac ar a g(h)níomhaíocht laethúil. Cé nach léir go bhfuil difríochtaí inscne i gceist, thuairiscigh ceathrú de na freagróirí (25%) os cionn 65 bliain d'aois go raibh riocht ainsealach fadtréimhseach ag dul dóibh. Bhí breoiteacht fhadtréimhseach níos coitianta i measc freagróirí i measc grúpaí sna haicmí sóisialta níos ísle. Tríd is tríd, thuairiscigh 12% go raibh siad i ndrochshláinte agus go raibh bac éigin orthu le 30 lá anuas de dheasca fadhbanna meabhairshláinte nó fadhbanna sláinte fhisiciúil. Ba é an bhreoiteacht ainsealach ba choitianta le bliain anuas pian droma. Thuairiscigh 16% go raibh an fhadhb seo acu.

ÚSÁID SEIRBHÍSÍ SLÁINTE

- Thug trí cheathrú d'fhreagróirí (74%) cuairt ar dhochtúir teaghlaigh (GP) le bliain anuas. Thug os cionn leath (52%) cuairt ar fhiacloir, agus thug 9% cuairt ar liachleachtóir comhlántach nó malartach. Bhí níos mó seans ann gur mná a d'úsáid na seirbhísí seo. Bhí níos mó seans ann go mbeadh daoine níos sine ag tabhairt cuairte ar dhochtúir teaghlaigh, seachas cuairt a thabhairt ar an bhfiacloir nó ar chleachtóir malartach/comhlántach. Ní raibh difríochtaí ar bith sna haicmí sóisialta a d'fhreastail ar dhochtúir

teaghaigh uair amháin, ar a laghad, le bliain anuas, cé go raibh níos mó seans ann go bhfreastalódh daoine ó aicmí sóisialta níos airde ar na gairmithe eile.

BEATHÚ CÍCHE

- Thuairiscigh ceathrar as gach deichniúr ban (42%) gur bheathaigh siad, ar a laghad, leanbh amháin dá gcuid trí bheathú cíche. Is ionann é seo agus méadú 32% ó SLÁN 2002, agus bhí na méaduithe is suntasaí le tabhairt faoi deara i measc ban níos óige (18-29 bliain).

MEABHAIRSHLÁINTE AGUS FOLLÁINE

- Fiafraíodh sraith ceisteanna de fhreagróirí maidir le trí ghné ar leith de mheabhairshláinte agus d'fholláine: (i) meabhairshláinte dhearfach; (ii) anacair neamhshonrach shíceolaíoch; agus (iii) fadhbanna meabhairshláinte diagnóisithe, lena n-áirítear dúlagar agus mí-ord ginearálta buartha.
- Thuairiscigh 90% de fhreagróirí go raibh cáilíocht beatha 'maith' nó 'an-mhaith' acu. Ar an gcuma chéanna, tuairiscíodh leibhéil réasúnta ard de mheabhairshláinte dhearfach. Thuairiscigh 6% dúlagar tromchúiseach, agus thuairiscigh 3% go raibh mí-ord ginearálta buartha ag cur isteach orthu. Go ginearálta, thuairiscigh fir, daoine níos óige agus daoine sna haicmí sóisialta is airde leibhéil níos ísle d'fhadhbanna meabhairshláinte.
- Thuairiscigh céatadán beag (0.4%) foirm éigin d'fhéinghortú (e.g. ag tógáil ródháileog cógais) le bliain anuas. Bhí na céatadán seo róbheag le tátal a bhaint astu maidir le hinscne, aois nó patrúin aicme shóisialta.
- Measadh gur bhain cúis náire le fadhbanna meabhairshláinte. Thuairiscigh dhá thrian de fhreagróirí (66%) nár theastaigh uathu go mbeadh a fhios ag daoine dá mbeadh fadhbanna meabhairshláinte ag cur isteach orthu. Bhí an chosúlacht seo ar an scéal i ndáil le hinscne agus le haicme shóisialta, cé gur thuairiscigh go leor de na freagróirí óga nár theastaigh uathu go mbeadh a fhios ag daoine eile.

GNÍOMHAÍOCHT FHSICIÚIL

- B'ionann a bheith páirteach i 'gníomhaíocht fhisiciúil' agus páirt a ghlacadh in aclaíocht nó spórt 2-3 uair in aghaidh na seachtaine ar feadh 20 nóiméad nó níos mó ag an am, nó gníomhaíochtaí níos ginearálta cosúil le siúl, rothaíocht nó damhsa 4-5 huair in aghaidh na seachtaine, atá cothrom le 30 nóiméad, ar a laghad, in aghaidh an lae. Thuairiscigh os cionn leath de na freagróirí (55%) go raibh siad páirteach i ngníomhaíocht fhisiciúil, agus thuairiscigh 49% go raibh siad páirteach i ngníomhaíocht fhisiciúil ar feadh níos mó ná 6 mhí. Thuairiscigh ceathrú (24%) go raibh siad páirteach i roinnt gníomhaíocht fhisiciúil ach ní ag leibhéal a d'fhéadfaí a rá go raibh siad 'gníomhach go fhisiciúil'. Thuairiscigh cúigiú de na freagróirí (22%) go raibh siad neamhghníomhach go fhisiciúil.
- I measc na bhfreagróirí a thuairiscigh go raibh siad neamhghníomhach go fhisiciúil, bhí níos lú ná leath díobh ag smaoineamh ar pháirt a ghlacadh i ngníomhaíocht fhisiciúil laistigh de 6 mhí. Cé go bhfuil níos lú seans ann go mbeidh daoine níos sine chomh gníomhach le daoine níos óige, is beag difríocht inscne agus aicme shóisialta a bhí le brath i

ngníomhaíocht/neamhghníomhaíocht. Fiafraíodh de fhreagróirí a thuairiscigh go raibh siad neamhghníomhach go fisiciúil príomhchúis na neamhghníomhaíochta a léiriú. Ba é an freagra ba choitianta a thug fir agus mná ó na haicmí sóisialta ar fad agus i bhformhór na ngrúpaí aoise ‘easpa ama’ (41%). Bhain an t-aon eisceacht le daoine 65 bliain d’aois agus níos sine; thug céatadán níos airde den ghrúpa seo ‘gortú/míchumas/riocht sláinte’ mar phríomhchúis do neamhghníomhaíocht fhisiciúil. I measc na gcúiseanna eile a tugadh bhí drochshláinte (18%), easpa suime (14%) agus suim ann ach neamhthoilteanach an t-am a chaitheamh air (14%). Níor luaigh ach fórbheagán freagróirí (3%) easpa rochtana ar acmhainní mar bhacainn ar ghníomhaíocht fhisiciúil.

- Is beag fianaise a bhí ann ar athrú sna leibhéil ghníomhaíochta i gcomparáid le SLÁN 1998, 2002 agus 2007. Mar shampla, bhí cosúlacht le brath idir an céatadán a thuairiscigh aclaíocht mheasartha agus/nó aclaíocht dhian 3 huairé nó níos mó in aghaidh na seachtaine ar feadh, ar a laghad, 20 nóiméad gach babhta sa trí shuirbhé: 38% (1998), 40% (2002) agus 41% (2007).

BIA SLÁINTIÚIL AGUS AN PHIRIMID BIA

- Ábhar imní is ea an méid bianna lán le saill, siúcra agus salann atá á ithe ag daoine; bunaithe ar an bPirimid Bia níor cheart an iomarca bia den sórt seo a ithe. D’ith formhór na bhfreagróirí (86%) níos mó ná 3 riar laethúla de na cineálacha seo bia ó bharr na Pirimide Bia.
- Bhí freagróirí amháin as gach ceathrar (26%) ag ithe an riar molta laethúil de 6 riar nó níos mó de ghránaigh, arán agus prátaí. Bhí dhá thríar (65%) ag ithe 5 chuid torthaí agus glasraí go laethúil – rud atá inmholta. Bhí cúigiú de na freagróirí (20%) ag ithe 3 chuid táirgí bainne, cáise agus iógairt in aghaidh an lae; bhí seans níos mó ann go mbeadh fir ag ithe níos mó ná 3 chuid in aghaidh an lae i gcomparáid le mná (25% i gcomparáid le 14%). Bhí níos mó ná trian de na freagróirí (39%) ag ithe 2 chuid feola, éisc, éineola agus táirgí cosúla eile in aghaidh an lae; bhí seans níos mó ann go mbeadh mná ag ithe níos lú ná 2 chuid in aghaidh an lae i gcomparáid le fir (23% i gcomparáid le 16%).
- Ó 1998 i leith, laghdaigh céatadán na bhfreagróirí a bhí ag ithe an riar molta laethúil de 6 riar nó níos mó de ghránaigh, arán agus prátaí (1998: 40%; 2002: 36%; 2007: 26%). Ó 2002, tá laghdú tagtha ar chéatadán na bhfreagróirí atá ag ithe an riar molta laethúil de 3 riar táirgí bainne, cáise agus iógairt (1998: 22%; 2002: 23%; 2007: 20%). Go contrártha, tá méadú tagtha ar chéatadán na bhfreagróirí a itheann, ar a laghad, an riar molta laethúil de 4 riar nó níos lú de thorthaí agus de ghlasraí (1998: 56%; 2002: 68%; 2007: 77%). Is beag athrú a tháinig ar an 2 riar laethúla feola, éisc, éineola agus táirgí eile agus bhí cosúlacht le brath idir an méid bianna lán le saill agus siúcra a bhí á ithe ag daoine idir 1998 agus 2007.

NÓSANNA ITHE EILE

- Thuairiscigh trian de na freagróirí gur chuir siad salann lena gcuid bia i gcónaí nó go hiondúil le linn dóibh a bheith ag cócaireacht (30%) nó gur chuir siad salann lena gcuid bia ag an mbord (32%).
- D’ith leath de na freagróirí (48%) sneaiceanna idir béilí – brioscaí agus cácaí den chuid is mó.

- Níor ith 10% de na freagróirí bricfeasta ar bith ar an lá roimh an suirbhé. D'ith formhór na bhfreagróirí bricfeasta, príomhbhéile agus béile éadrom sa bhaile ar an lá roimh an suirbhé (80%, 83% agus 60% faoi seach). Cheannaigh 7% de na freagróirí a mbricfeasta lasmuigh den bhaile, cheannaigh 12% a bpríomhbhéile agus cheannaigh 23% a mbéile éadrom.

PRAGHAS BIA

- Bhí dóthain airgid ag formhór na bhfreagróirí 'i gcónaí' (84%) nó 'de ghnáth' (12%) chun dóthain bia a cheannach don teaghlach. Thuairiscigh freagróir amháin as gach 25 freagróir (4%) nach raibh dóthain airgid acu uaireanta le bia a cheannach don chlann.

CAITHEAMH TOBAC

- Chaith freagróir amháin as gach beirt freagróirí (48%) tobac ag tráth éigin den saol; thuairiscigh 29% go gcaitheann siad tobac i láthair na huaire (31% fir agus 27% mná).
- Bhí níos mó seans ann gur daoine óga a bheadh ag caitheamh tobac (35% díobh siúd idir 18-29 bliain), mar aon leis na daoine sna haicmí sóisialta níos ísle (AS 5-6: 37%).
- Tá rátaí na ndaoine a chaitheann tobac laghdaithe ó 1998 i measc na bhfear agus na mban, i ngach aoisghrúpa agus i measc na n-aicmí sóisialta ar fad. Tharla an laghdú seo den chuid is mó idir 1998 agus 2002, agus níor tháinig laghdú ar bith ar na rátaí caitheamh tobac idir 2002 agus 2007. Bhí na rátaí cothrom le 33% i 1998, 27% in 2002 agus 29% in 2007. Tugtar léargas cúramach ar chomparáid idir na blianta éagsúla bunaithe ar mhodhanna difriúla suirbhé (ceistneoir féintuarascála poist i 1998 agus in 2002, agus agallamh pearsanta in 2007). Bhí beagnach freagróir amháin as gach deichniúr (9%) ag déanamh iarrachta ghníomhaigh éirí as an tobac, agus bhí daoine eile fós ag smaoineamh ar éirí as an tobac, agus bhí 41% nach raibh pleananna ar bith acu éirí as an tobac. Bhí níos mó seans ann go ndearna freagróirí níos óige i gcomparáid le freagróirí a bhaineann leis na haicmí sóisialta níos airde iarracht éirí as an tobac sa bhliain roimhe seo.
- Bhí rialacha áirithe ag formhór na bhfreagróirí (82%) maidir le caitheamh tobac ina dtithe féin – níor cheadaigh 59% freagróirí tobac a chaitheamh taobh istigh dá dteach, agus thuairiscigh 23% breise go raibh cead tobac a chaitheamh in áiteanna áirithe agus ag amanna faoi leith.

ALCÓL AGUS ÚSÁID DRUGAÍ AINDLEATHACHA

- D'ól formhór na bhfear (85%) agus formhór na mban (77%) alcól scaití. Thuairiscigh ceathrú de na freagróirí (28%) gur ól siad an iomarca (i.e. níos mó ná 6 dheoch chaighdeánacha as a chéile) le bliain anuas. Bhí an nós seo níos coitianta i measc freagróirí níos óige agus i measc grúpaí sna haicmí sóisialta níos ísle.
- Tugtar léargas cúramach ar chomparáid idir na suirbhéanna a rinneadh roimhe seo, de dheasca modhanna difriúla suirbhé (ceistneoir féintuarascála poist i 1998 agus in 2002, agus agallamh pearsanta in 2007). As measc na bhfreagróirí sin a raibh deoch alcólach acu an bhliain roimhe sin, laghdaigh an meánlíon deochanna alcólacha a óladh i ngnáthsheachtain sna trí shuirbhé ó 11 deoch (1998) go dtí 9 ndeoch (2002) go dtí 7 ndeoch (2007).

- Tá céatadán na dtiománaithe a thuairiscigh gur thiomáin siad carr i ndiaidh 2 dheoch chaighdeánacha nó níos mó a ól laghdaithe le bliain anuas freisin – 2002 (16%) agus 2007 (12%).
- Tháinig laghdú ar chéatadán na bhfreagróirí a thuairiscigh gur ól siad 6 dheoch chaighdeánacha nó níos mó, ar a laghad, uair sa tseachtain, ó 45% (2002) go dtí 28% (2007). Ní raibh teacht ar shonraí inchomparáide do 1998. Chomh maith leis sin, laghdaigh céatadán na ndaoine a bhí ag ól níos mó ná an teorainn sheachtainiúil alcóil (21 aonad nó níos mó d'fhir agus 14 aonad nó níos mó do mhná) i rith thréimhse na dtrí shuirbhé, ó 15% (1998) go dtí 13% (2002) go dtí 8% (2007).
- Sna 5 chatagóir de dhrugaí aindleathacha a measadh, níor úsáid ach freagróir amháin as gach 100 freagróir marachuan in 2007 (thuairiscigh 5% gur úsáid siad marachuan sa bhliain roimhe sin). Bhí úsáid sa 5 chatagóir drugaí cosúil nó níos ísle in 2007 ná mar a bhí i 1998.

GORTUITHE AR THEASTAIGH COMHAIRLE LEIGHIS INA LEITH

- Thuairiscigh beagnach freagróir amháin as gach deichniúr (9%) gur bhain gortú ar theastaigh comhairle leighis ina leith díobh sa bhliain roimhe seo. Bhí an nós seo níos coitianta i measc na bhfear agus daoine níos óige, agus ní raibh difríocht ar bith le sonrú i measc grúpaí aicme shóisialta.

TACAÍOCHT SHÓISIALTA AGUS RANNPHÁIRTÍOCHT POBAIL

- Thuairiscigh beagnach 80% d'fhir agus de mhná go raibh tacaíocht shóisialta ar fáil (i.e. daoine ar aithne dóibh a léirigh spéis iontu agus a bhféadfadh an freagróir brath orthu dá mbeadh fadhbanna pearsanta acu), sna haoisghrúpaí agus sna grúpaí aicme shóisialta éagsúla. Thuairiscigh formhór na bhfreagróirí go raibh sé éasca teacht ar chúnamh praiticiúil, agus thuairiscigh daoine níos sine go raibh sé níos éasca teacht ar a leithéid de chúnamh.
- Thuairiscigh 55% de fhreagróirí gur ghlac siad páirt i ngníomhaíocht phoiblí amháin, ar a laghad, le bliain anuas. Bhí céatadán chosúla d'fhir (56%) agus de mhná (54%) i gceist, agus bhí céatadán níos airde i measc ghrúpaí na n-aicmí sóisialta is airde (AS 1-2: 68% i gcomparáid le AS 5-6: 43%). Bhí leibhéil rannpháirtíochta níos airde le sonrú i measc daoine níos óige – thuairiscigh 58% díobh siúd idir 18-29, i gcomparáid le 47% díobh siúd 65+ bliain, gur ghlac siad páirt i ngníomhaíocht phoiblí amháin nó níos mó. Tá laghdú suntasach tagtha ar rannpháirtíocht i ngníomhaíocht phoiblí ó 89% in 2002 go dtí 55% in 2007, agus tá an patrún laghdaithe seo le sonrú in inscne, aoisghrúpaí agus grúpaí aicme shóisialta.

MEÁCHAN COIRP AGUS BAINISTÍOCHT MEÁCHAIN

- Thuairiscigh níos mó ná trian de na freagróirí (36%) go raibh siad róthrom agus thuairiscigh 14% go raibh siad murtallach, bunaithe ar innéacs mais coirp (BMI). Bhí seans

níos mó ann go dtuairisceodh fir go bhfuil siad róthrom (43%) nó murtallach (16%) ná mná (28% róthrom agus 13% murtallach).

- Tríd is tríd, tá méadú tagtha ar chéatadán na bhfreagróirí a thuairiscigh go bhfuil siad róthrom ó 1998 (1998: 31%; 2002: 33%; 2007: 36%), cé gur fhan leibhéil mhurtallacha mórán mar a chéile ó 2002 (1998: 11%; 2002: 15%; 2007: 14%).
- Bailíodh sonraí airde agus meáchain, tomhaiste go neamhspleách, d'fhoshampla freagróirí agus cuireadh i gcomparáid iad le tomhais féintuairiscithe. San áireamh san fhoshampla bhí 967 duine fásta idir aois 18-44 agus 1,207 duine fásta 45 bliain d'aois agus níos sine. Dála staidéir idirnáisiúnta eile atá déanta, níor thug na figiúirí BMI ó shonraí féintuairiscithe léargas cruinn ar chomh forleathan is atá daoine atá róthrom nó murtallach, go háirithe i measc na bhfreagróirí níos sine. Trí na sonraí BMI tomhaiste den fhoshampla a chur le chéile d'aoisghrúpaí faoi 45 agus os cionn 45, bhí 1% de na freagróirí ar fad ró-éadrom (1% d'fhir agus 1% de mhná), bhí BMI ag 35% a bhí laistigh den ghnáthraon (30% d'fhir agus 40% de mhná), bhí 39% róthrom (45% d'fhir agus 33% de mhná) agus bhí 25% murtallach (24% d'fhir agus 26% de mhná).
- Lorg freagróirí amháin as gach deichniúr (10%) comhairle ó ghairmí sláinte maidir lena meáchan a bhainistiú an bhliain roimhe sin. Bhí beagnach leath (43%) de na freagróirí ag iarraidh é seo a dhéanamh. Bhí formhór acu ag iarraidh meáchán a chailleadh (67%), cé go raibh 3% ag iarraidh meáchan a chur orthu féin. Bhí céatadán chosúla ag iarraidh a n-iontógáil saille (80%) a laghdú agus aclaíocht a dhéanamh (79%), agus bhí níos mó ná dhá thrian (68%) ag ithe níos lú calraí ar mhaithe le meáchan a chothabháil nó a chailleadh.

BRÚ FOLA AGUS COLAISTÉARÓL

- Altraí cáilithe a thóg na tomhais seo ar fhoshampla 1,207 freagróirí 45 bliain d'aois agus níos sine, a d'fhreastail ar scrúdú fisiciúil ar leith. Measadh brú fola agus leibhéil cholaistéaróil, agus an raibh an freagróir ag tógáil cógas ar bith nuair a measadh na leibhéil seo. Ainneoin go mb'fhéidir gur comhairlíodh do fhreagróirí brú fola nó colaistéaról a bhainistiú trí mhodhanna eile, cosúil le haiste bia nó gníomhaíocht fhisiciúil, níor measadh na modhanna eile seo sa staidéar seo.
- Cuireadh 'gnáthbhrú fola' i gcatagóir bunaithe ar threoirínte idirnáisiúnta agus altraí oilte a mheas na catagóirí seo. Cinneadh gurb ionann brú fola 'ard' agus ≥ 140 mmHg brú fola siostólach (SBP) nó ≥ 90 mmHg brú fola diastólach (DBP). Tá gnáthbhrú fola (faoi 140/90mmHg) ag trian d'fhir (33%) agus tá brú fola faoi bhun 140/90mmHg ag 7% breise le linn dóibh a bheith ag tógáil cógais do bhrú fola. Bhí brú fola ard ag na freagróirí eile (60%), san áireamh bhí daoine nach raibh ag fáil cóir leighis (40%) ar bith nó daoine a bhí ag fáil cóir leighis ach ag a raibh brú fola ard nuair a rinneadh an suirbhé (20%). I gcás na mban bhí gnáthbhrú fola ag 47% agus ag 10% eile a bhí ag fáil cóir leighis; bhí brú fola ard ag 27% nach raibh ag fáil cóir leighis agus bhí brú fola os cionn 140/90mmHg ag 16% a bhí ag fáil cóir leighis nuair a rinneadh an suirbhé.
- Ar an iomlán, bhain foirmle de 'seisear as gach deichniúr', ar a laghad, le brú fola. Bhí brú fola ard ag thart ar 6 as gach 10 freagróirí (60%). Astu seo, bhí thart ar 6 as gach 10 (57%) nach raibh ag tógáil cógais do bhrú fola. As measc na ndaoine a bhí ag tógáil cógais, bhí thart ar 7 as gach 10 (70%) nach raibh an leibhéal brú fola á choinneáil faoi bhun 140/90mmHg.

- Cuireadh ‘gnáthcholaistéaról’ i gcatagóir bunaithe ar threoirilínte idirnáisiúnta agus is bunaithe ar shamplaí fola a measadh colaistéaról. Measadh go raibh colaistéaról ‘ard’ ag daoine a raibh leibhéil cholaistéaróil níos mó ná ≥ 5.0 mmol/L acu. Bhí colaistéaról ardaithe ag níos mó ná trian den sampla (82%), agus ní raibh formhór díobh sin (62%) ag tógáil cógais chun colaistéaról a íslíú. Ní raibh trian (35%) díobh siúd a bhí ag tógáil cógais do cholaistéaról á rialú.

COMHFACHTÓIRÍ RIOSCA AN SCRÚDAITHE FHSICIÚIL

- Aithníodh freagróirí a raibh ceann nó níos mó de thrí mhórfhachtóir riosca ag dul dóibh – BMI ≥ 30 kg/m² (rangaithe mar ‘murtallach’), brú fola ardaithe nó colaistéaról ardaithe. Ba é colaistéaról ardaithe an fhachtóir ba choitianta den trí fhachtóir riosca (82%), agus ina dhiaidh sin brú fola (60%). Bhí trian de na freagróirí (32%) murtallach. Bhí trian de na freagróirí (32%) murtallach agus bhí colaistéaról ardaithe acu. Bhí brú fola ard ag thart ar dhuine amháin as gach 4 freagróirí (22%) mar aon le bheith murtallach. Bhí colaistéaról ardaithe agus brú fola ard ag beagnach leath de na freagróirí (48%). Measadh go raibh na trí fhachtóir brú ag cur isteach ar bheagnach freagróir amháin as gach cúigear (18%).
- Is beag difríocht a bhí le sonrú maidir le hinscne nó aois i ndaoine murtallacha nó daoine a raibh colaistéaról ardaithe acu, agus bhí brú fola ard ag céatadán níos airde d’fhir agus de fhreagróirí níos sine. Bhí difríochtaí le sonrú i measc aicmí sóisialta maidir le murtallacht agus brú fola ardaithe, agus bhí céatadán níos airde de na grúpaí sna haicmí sóisialta níos ísle murtallach agus bhí brú fola ard acu. Níor bhain patrún faoi leith bunaithe ar aicme shóisialta le colaistéaról ardaithe.
- Cé gur dhírigh an chuid seo den tuarascáil ar thrí mhórfhachtóir riosca a raibh sé riachtanach go ndéanfadh gairmithe sláinte iad a thomhas trí fhostaidéar scrúdú fhisiciúil, meastar go bhfuil an t-aon mhórfhachtóir riosca eile sa phríomhstaidéar – caitheamh tobac – ag teacht le modh measta na bhfachtóirí eile. Ar an iomlán, chaith 20% de na freagróirí a ghlac páirt i bhfostaidéar an scrúdaithe fhisiciúil tobac. As na daoine a measadh go raibh na trí mhórfhachtóir riosca ag cur isteach orthu chaith beagnach freagróir amháin as gach deichniúr (9%) tobac.
- Ar deireadh, bhí fianaise ann de leibhéal ard rioscaí sláinte i measc daoine aonair agus i dteannta a chéile san fhostaidéar scrúdaithe fhisiciúla ar dhaoine meánaosta agus níos sine na hÉireann – daoine 45 bliain d’aois agus níos sine.

COMPARÁID IDIR SLÁN 2007 AGUS HBSC 2006

- Is éard a bhí i gceist leis an Suirbhé ar Iompraíocht Sláinte i Leanaí ag Aois Scoile (HBSC) leanaí scoile in aoisghrúpa 10-17 a mheas i suímh scoile (féach www.nuigalway.ie/hbsc). Is éard atá i gceist le SLÁN 2007 daoine fásta os cionn 18 mbliana d’aois a mheas. Is iomaí comparáidí úsáideacha is féidir a dhéanamh idir an dá shuirbhé náisiúnta seo. Déantar comparáid sa tuarascáil seo ar na hógánaigh HBSC is sine (idir 15-17 mbliana d’aois) agus na daoine fásta is óige i SLÁN 2007 (idir 18-29 bliain d’aois).
- I gcásanna áirithe, bhí cosúlacht ghinearálta idir na próifílí a bhain le hógánaigh níos sine agus luath-aosacht – sláinte féinráitáilte, leibhéal bochtaineachta bia agus bricfeasta a ithe go rialta mar shampla. I gcásanna eile, bhí neamhréiteach forleathan le sonrú: mar shampla, bhí na rátaí caitheamh tobac i measc daoine fásta óga cothrom le dhá oiread

na rátaí a bhí le sonrú i measc ógánach, cé go raibh rátaí cannabais sa 12 mhí roimhe sin níos airde i measc ógánach. Bhí patrúin dhifriúla inscne ann freisin: mar shampla, bhí níos mó seans ann go mbeadh cailíní agus mná níos óige ar aiste bia agus is lú seans a bhí ann go nglacfaidís páirt i ngníomhaíocht fhisiciúil i gcomparáid le buachaillí agus fir óga.

TUAIRISCÍ BREISE

Sna tuairiscí a dhéanfar amach anseo bunaithe ar SLÁN 2007 déanfar scrúdú níos mine ar na ceisteanna seo a leanas:

- Cothú, iompraíocht sláinte agus torthaí scrúduithe fisiciúla.
- Patrúin mheabhairshláinte agus rannpháirtíocht shóisialta agus phoiblí.
- Comparáid idir próifílí iompraíocht sláinte agus próifílí gaolmhara idir suirbhéanna daonra i bPoblacht na hÉireann agus i dTuaisceart Éireann.
- Na himpleachtaí a bhíonn ag beartais ar mhórphróifílí iompraíocht sláinte.

D'fhonn a chinntiú nach mbeidh deacracht ar bith teacht ar eolas breise, beidh an t-eolas is déanaí faoi na tuairiscí seo, mar aon le sleamhnáin achoimre chun críche teagaisc agus sonraí cúlra (lena n-áirítear ceistneoirí agus tagairtí), le fáil ar an láithreán gréasáin seo a leanas www.slan07.ie.

1. INTRODUCTION



1. INTRODUCTION

This report presents the main findings from the 2007 Survey of Lifestyle, Attitudes and Nutrition in Ireland (SLÁN 2007). This is the third and largest SLÁN survey and the first to include those participating in languages other than English and Irish. Previous studies were carried out in 1998 (Friel *et al*, 1999) and 2002 (Kelleher *et al*, 2003). Both these reports are available on the website www.healthpromotion.ie/publications.

The main SLÁN 2007 survey was conducted through face-to-face interviews. There were two sub-group studies involving (i) measurement of height, weight and waist circumference (sub-group of younger respondents) and (ii) a detailed physical examination (sub-group of older respondents).

The overall aim was to provide nationally representative data on the general health, health behaviours and health service use of adults living in Ireland. The two sub-group studies aimed to provide vital information regarding the health risk profiles of younger and older adults.

The themes of SLÁN 2007 were selected based on current national policy and service priorities. Key documents were consulted, including the National Health Strategy, *Quality and Fairness* (Department of Health and Children, 2001); the National Health Promotion Strategy (Department of Health and Children, 2000); and the Chief Medical Officer's 4th Annual Report (Department of Health and Children, 2005). Further consultation across the research consortium, funder and Advisory Group produced a prioritised and manageable set of items to assess. A key requirement was to provide a core set of national population health data that would enable comparison within study sub-groups (gender, age and social class), across health service regions within the Health Service Executive (HSE), with other key comparison populations (particularly Northern Ireland) and with previous SLÁN surveys.

The SLÁN 2007 survey was funded by the Health Promotion Policy Unit of the Department of Health and Children. The survey and analyses were carried out by the SLÁN 2007 Consortium, consisting of the Royal College of Surgeons in Ireland (RCSI), the National University of Ireland, Cork (UCC), the National University of Ireland, Galway (NUIG) and the Economic and Social Research Institute (ESRI).

2. METHODS: SLÁN 2007 MAIN SURVEY



2. METHODS: SLÁN 2007 MAIN SURVEY

BACKGROUND

The SLÁN 2007 survey had three distinct components:

1. face-to-face interviews with over 10,364 adults;
2. measurement of body mass index (BMI)/waist circumference of a sub-sample (967) aged 18-44 years;
3. physical examination of a sub-sample (1,207) aged 45 years and over.

The fieldwork was organised so that the BMI/waist circumference measurement and physical examination were conducted on sub-samples of those who had completed the main survey interview. The information on general health status and lifestyle factors could then be linked to physical measurement data.

POPULATION AND SAMPLING

The population for the survey was defined as adults aged 18 years and over, living in private households in the Republic of Ireland. It included both Irish citizens and non-Irish national residents. Provision was made to have a translated version of the questionnaire available for those wishing to complete the survey in Irish (full-length survey questionnaire) and in the main languages as indicated in the 2006 Census (short-form survey questionnaire).

The sampling frame used for the previous SLÁN studies in 1998 and 2002 was the Electoral Register. Since this is no longer an option due to data protection legislation, the GeoDirectory was used instead. This is a list of all addresses in the Republic of Ireland, compiled by An Post, which distinguishes between residential and commercial establishments. Unlike the Electoral Register, the GeoDirectory does not include names of individuals; rather, it is a list of addresses. The residential list was used for this survey. Further details on the sampling and weighting of the data are provided in the Appendix.

SAMPLING FOR THE BMI/WAIST CIRCUMFERENCE MEASUREMENT SUB-STUDY (YOUNGER ADULTS)

A sub-sample of respondents aged 18-44 years were asked if they would allow their height, weight and waist circumference to be measured by trained interviewers. The selection of respondents for measurement was based on a multistage probability sampling design. A starting cluster was selected at random within each of 12 strata¹ and eligible respondents in these clusters, and adjacent clusters, were selected for measurement². Trained interviewers conducted these assessments, at the end of the interview study where possible.

- 1 The 12 strata were based on HSE region and on urban/rural location within the HSE region.
- 2 The number of clusters could not be fixed at the outset as both the willingness to be measured and the number of eligible respondents (aged under 45) were unknown.

SAMPLING FOR THE PHYSICAL EXAMINATION SUB-STUDY (OLDER ADULTS)

All respondents aged 45 and over who took part in the main survey were invited to take part in the physical examination study. This examination was carried out at a separate time, usually in an occupational health setting. Appointments were scheduled to suit respondents.

STUDY DELIVERY

Study protocols were piloted and refined. Protocols were given ethical approval by the Research Ethics Committee of the Royal College of Surgeons in Ireland (RCSI).

Study interviews were conducted by a team of trained survey interviewers, coordinated by the ESRI. Additional training was provided for the sub-set of interviewers conducting the BMI/waist circumference assessments. Survey interviews (>5%) were subject to 'quality checks', either by post or telephone. The more detailed physical examination sub-group study was completed by qualified nurses through a number of occupational health organisations. Nurses involved were provided with a one-day SLÁN training programme and detailed study protocols. Quality checks and an additional nurse training session were conducted during the study to ensure quality.

DATA MANAGEMENT

Quality checking of the data was undertaken and the resultant data checked and weighted. The purpose of survey weighting is to compensate for any imbalances in the distribution of characteristics in the completed survey sample compared to the population of interest, whether such imbalances occur because of sampling error, from the nature of the sampling frame used, or to differential response rates within population sub-groups. Further details on the weighting of the SLÁN 2007 data and how individual respondents were chosen is provided in the Appendix.

RESPONSE RATE

Table 1 shows the overall response rate for the main survey. One of the features of the GeoDirectory is that non-eligible addresses (vacant, derelict, institution addresses) cannot be fully excluded. For example, the GeoDirectory identifies 2.7% of residential addresses as vacant, compared to 15% in Census 2006. This means that there will be a certain percentage of addresses in a sample based on the GeoDirectory that are not eligible. Interviewers were able to identify some of the non-contacts as vacant, but a much smaller percentage than the Census figures have indicated.³ In calculating the response rate for the main survey, an adjustment was made to the non-contacts for the percentage of dwellings that are vacant in each HSE region, according to Census 2006 figures. In total, 10,364 interviews were conducted, with a response rate of 62%. The Food Frequency Questionnaire was completed by 9,223 respondents (89%) following the main interview.

³ An interviewer's ability to identify an address as vacant depends on information available locally (neighbours, etc.), which people are increasingly reluctant to share with someone whom they do not know. Interviewers were instructed to code an address as 'vacant' only if this could be substantiated locally, otherwise to code as 'non-contact'.

Response rates for the BMI/waist circumference and physical examination are also outlined in Table 1. Of the 1,662 respondents selected for inclusion in the BMI/waist circumference measurement, the full set of three measurements was conducted on 967 cases, representing a response rate of 58%.⁴

Table 1: SLÁN 2007 response rates

	MAIN SURVEY	BMI/WAIST CIRCUMFERENCE MEASUREMENTS	PHYSICAL EXAMINATION
Age	18+	18-44	45+
Completed	10,364	967	1,207
Refused	1,868	524	613
Other non-response*	735	171	179
Non-contact (adjusted)	3,714	<i>n/a</i>	<i>n/a</i>
Not eligible – vacant (adjusted)	2,231	<i>n/a</i>	<i>n/a</i>
Not eligible – other**	273	<i>n/a</i>	<i>n/a</i>
Response rate	62%	58%	66%

* Includes cases where the respondent was too ill, temporarily away.

** Includes addresses that were non-residential, buildings that were demolished and addresses that could not be located.

n/a not applicable

AGE, GENDER, MARITAL STATUS, NATIONALITY AND ETHNICITY COMPARED TO CENSUS 2006

Table 2 provides a profile of the overall survey sample, showing actual numbers of cases and weighted percentage distributions. Census 2006 figures (for persons usually resident in the State) are included for comparison where available.

The weighted sample very closely approximated Census 2006 figures for gender, age, marital status and ethnicity. Prior to weighting, the data would have under-represented the groups that are typically hard to reach in surveys, i.e. men and younger single adults.

4 Survey time commitment: The main interview took on average 40 minutes, completion of the Food Frequency Questionnaire an additional 10 minutes and a further 10 minutes to set up equipment and measure for those aged 18-44 invited for the BMI/waist circumference assessment. Physical examinations for those aged 45+ took approximately 30 minutes at a separate time and place from the main interview.

Table 2: Characteristics of SLÁN 2007 sample compared to characteristics of population from Census 2006

		NUMBER OF CASES	UNWEIGHTED SAMPLE %	WEIGHTED SAMPLE %	CENSUS 2006
Age group	18-29 years	1,907	18	25	26
	30-44 years	3,310	32	31	30
	45-64 years	3,178	31	29	29
	65 years and over	1,969	19	15	15
Gender	Men	4,369	42	50	50
	Women	5,995	58	50	50
Marital status	Single (including cohabiting)	3,602	35	41	40
	Married	5,211	50	48	49
	Separated or divorced	639	6	4	5
	Widowed	912	9	7	6
Country of birth	Ireland	8,820	85	83	85
	Northern Ireland	116	1	1	1
	Other UK	644	6	6	5
	Other EU-27	376	4	5	4
	Other Europe	24	0	0	1
	Africa	96	1	1	1
	USA, Canada, South America	67	1	1	1
	Elsewhere or unknown	221	2	3	2
Ethnicity	White or white Irish	9,333	90.0	87.0	87.0
	Irish Traveller	31	0.3	0.4	0.4
	Any other white background	634	6.1	8.0	8.0
	Black or black Irish; African	60	0.6	0.7	0.7
	Any other black background	19	0.2	0.1	0.1
	Asian or Asian Irish; Chinese	32	0.3	0.4	0.4
	Any other Asian background	62	0.6	0.9	0.9
	Other including mixed ethnic background	71	0.7	1.0	1.0
	Unknown	122	1.2	1.5	1.5

OTHER SOCIO-DEMOGRAPHIC CHARACTERISTICS

The profile of other socio-demographic characteristics could not readily be compared with Census figures because of differences in definition and measurement.

In terms of education, one-fifth of respondents (20%) had primary-level education only, 17% had incomplete second-level education, 27% had complete second-level education and over one-third (36%) had some form of third-level education. Household social class was constructed for each respondent: approximately one-third (31%) were in higher (professional and managerial) social classes (SC 1-2), while 38% were in non-manual and skilled manual categories (SC 3-4), 16% in semi-skilled and unskilled occupational categories (SC 5-6) and 15% were unclassifiable on the basis of present or last occupation.⁵

The geographic distribution of the sample included 41% of respondents from rural settings (open country or village), 35% from towns and cities other than Dublin, and 24% from Dublin city or county.

FOOD FREQUENCY QUESTIONNAIRE, BMI AND PE SUB-SAMPLES

Table 3 compares the characteristics of respondents completing the Food Frequency Questionnaire (FFQ) and the two sub-studies (BMI/waist circumference measurement and physical examination) to the characteristics of respondents who completed the main questionnaire. In general, the characteristics of the sub-samples were a close match to the characteristics of the main sample. Because of this, the figures were weighted with one overall weighting profile based on the complete survey sample. A separate weight was constructed for the physical examination sub-study since there was a tendency for those with less education and in lower socio-economic classes to be under-represented in this part of the study. The weights ensure that the reported results are representative of the population in question.

Table 3: Characteristics of full sample and of those completing the Food Frequency Questionnaire (FFQ), BMI/waist circumference measurement sub-study and physical examination (PE) sub-study

		TOTAL	FFQ	ALL	BMI	ALL	PE
		%	SAMPLE	UNDER	SAMPLE	OVER	SAMPLE
			%	45	%	45	%
				%		%	
Age group	18-29 years	25	25	45	43	0	0
	30-44 years	31	31	55	57	0	0
	45-64 years	29	29	0	0	67	67
	65 and over	15	15	0	0	33	33
Gender	Men	50	49	51	52	48	48
	Women	50	51	49	48	52	52

⁵ Those not classified are mainly those who never worked (and no other member of the household is at work) and those where information on occupation was not provided.

Table 3 (continued)

		TOTAL	FFQ SAMPLE	ALL UNDER 45 %	BMI SAMPLE	ALL OVER 45 %	PE SAMPLE
		%	%	%	%	%	%
Marital status	Single	36	35	55	51	12	12
	Married or cohabiting	53	54	42	45	68	69
	Separated or divorced	4	4	3	3	5	5
	Widowed	7	7	0	1	15	14
Economic status	At work	61	61	72	71	47	47
	Unemployed	4	4	5	4	2	2
	Student	6	6	10	11	1	1
	Home duties	17	17	11	12	24	24
	Retired	9	9	0	0	21	21
	Other	3	3	2	2	5	5
Education	Some primary (not complete)	3	3	1	1	6	3
	Primary or equivalent	16	16	5	7	30	28
	Inter/Junior/Group Certificate	17	17	15	16	20	21
	Leaving Certificate or equivalent	27	27	32	28	20	21
	Diploma/Certificate	19	19	25	25	12	14
	Primary Degree	10	10	12	12	6	7
	Post-graduate/Higher Degree	8	8	10	11	5	6
Social class	Managers and professionals	31	32	33	34	30	32
	Clerical, administrative and skilled manual	38	38	38	41	37	38
	Semi-skilled and unskilled manual	16	17	14	15	19	19
	Not classified	15	13	15	10	15	11

Table 3 (continued)

		TOTAL	FFQ	ALL	BMI	ALL	PE
		%	SAMPLE	UNDER	SAMPLE	OVER	SAMPLE
			%	45	%	45	%
				%		%	
HSE region	Dublin/Mid-Leinster	30	29	31	30	27	29
	Dublin/North East	22	22	24	19	19	19
	South	25	26	24	27	28	28
	West	23	23	21	24	26	24
Self-reported BMI	Underweight 15-18.49kg/m ²	2	2	3	2	1	1
	Normal weight 18.5-24.99kg/m ²	45	45	52	52	36	34
	Overweight 25-29.99kg/m ²	33	33	28	27	40	43
	Obese 30-34.99kg/m ²	14	14	11	11	17	17
	Missing or invalid	6	6	6	8	6	5

COMPARISON OF METHODS BETWEEN SLÁN 1998, SLÁN 2002 AND SLÁN 2007

The methods used in the 1998, 2002 and 2007 SLÁN surveys are summarised in Table 4.

Table 4: Summary of SLÁN survey methods

	SLÁN 1998	SLÁN 2002	SLÁN 2007
Population	Adults aged 18+	Adults aged 18+	Adults aged 18+
Sampling frame	Electoral register	Electoral register	GeoDirectory
Sample	Multistage sample, drawn by electoral division	Multistage sample, drawn by electoral division	Multistage probability sample
Stratification	Percentage distribution across each of 26 counties, locality and gender	Percentage distribution across each of 26 counties, locality and gender	Percentage distribution across townlands, age groups, social classes and urban-rural location
Methods	Self-completion questionnaire and self-completion of Food Frequency Questionnaire	Self-completion questionnaire and self-completion of Food Frequency Questionnaire	Face-to-face interview and self-completion of Food Frequency Questionnaire
Obtained sample	6,539	5,992	10,364
Response rate⁶	62%	53%	62%

In order to ensure the comparability of the earlier SLÁN surveys to SLÁN 2007, the data from the earlier surveys were reweighted on a similar basis as SLÁN 2007. Details are provided on this weighting in the Appendix.

The structure of the Irish component of the Health Behaviour in School-aged Children (HBSC) Survey is presented in the Appendix since patterns in this national survey of children and adolescents provide useful comparisons with data on young adults in SLÁN. The most recent HBSC survey was in 2006 and included 10,344 pupils, aged 10-17 years.

⁶ SLÁN 2007 also reports on two sub-samples: BMI/waist circumference (age 18-44) (n = 967) and physical examination (age 45+) (n = 1,207).

3. OVERVIEW OF FINDINGS



3. OVERVIEW OF FINDINGS

SLÁN 2007 has obtained a large volume of information on a very diverse set of issues relating to health. This is the first of five substantial reports to present the findings of the study and to derive policy and practice implications. The role of the first report, as in previous SLÁN projects, is to present a clear overview of key health indices, as soon as the information becomes available, with little commentary or policy reflection. The aim is to get the core information to the diverse health-related research, policy, management, practice and research communities, which can then interpret and use the information to inform their work and to inform further reflection by the health sector generally on the implications of the findings.

In this first report, findings are presented on overall levels and on gender (men and women), age groups (age 18-29 years; 30-44 years; 45-64 years; and 65+ years) and social class groups (SC 1-2: professional and upper managerial grades; SC 3-4: routine non-manual and skilled manual grades; SC 5-6: semi-skilled and unskilled grades).

Where possible, questions are compared with findings from SLÁN 1998 and 2002. In some instances, questions were not directly comparable as the 2007 survey met the combined challenges of comparing with previous studies in Ireland and with being able to compare with Northern Ireland and with EU counterparts in a climate of changing methods of health status assessment. Similarly, with many new topics being added as important to the survey instrument on the basis of the Advisory Group and other consultations, space and time commitments of respondents were limiting factors.

Where comparisons are made with previous SLÁN surveys, it is **extremely important** to remember the different methodologies of SLÁN 2007 and the previous surveys. In terms of sampling, SLÁN 1998 and 2002 were postal self-report surveys based on the Electoral Register. SLÁN 2007 was a face-to-face interview study in the respondents' own home. SLÁN 1998 and 2002 used the Electoral Register to identify those to contact. SLÁN 2007 used a GeoDirectory listing all residential addresses. These two systems will inevitably over-select and under-select different sectors of the population. In terms of methods, self-report and personal interview provide very differing challenges in assessing health. The self-report method has the challenge to ensure questions are stated unambiguously and answered in the way the research team intended, whereas the interview can provide opportunities for clarification and/or provide more complex question formats to evaluate issues. On the other hand, the interview is a complex social interaction, with social desirability challenges when reporting on sensitive health matters such as alcohol or illicit drug use. It is not possible to fully determine the effects of these differing methods of assessment on results when comparing across 1998, 2002 and 2007. Response rates also differed to some extent across the three surveys: 62% (1998), 53% (2002) and 62% (2007).

Overall, the message is that comparisons must be handled with *significant caution* and further reports will assess if there is corroborating evidence from other sectors (e.g. revenue or health service use data) to confirm, or otherwise, patterns of similarity or difference seen in this first summary report.

The remainder of this report will provide:

1. the results from the main interview survey questionnaire and the Food Frequency Questionnaire, which were completed by almost all respondents;
2. the results from the assessment of BMI in the younger and older groups, and the first details of blood pressure and cholesterol from the physical examination of the older group;
3. a brief comparison of SLÁN 2007 with HBSC 2006, its 'sister' survey of Health Behaviour in School-aged Children, aged 10-17 years.

4. GENERAL HEALTH RESULTS

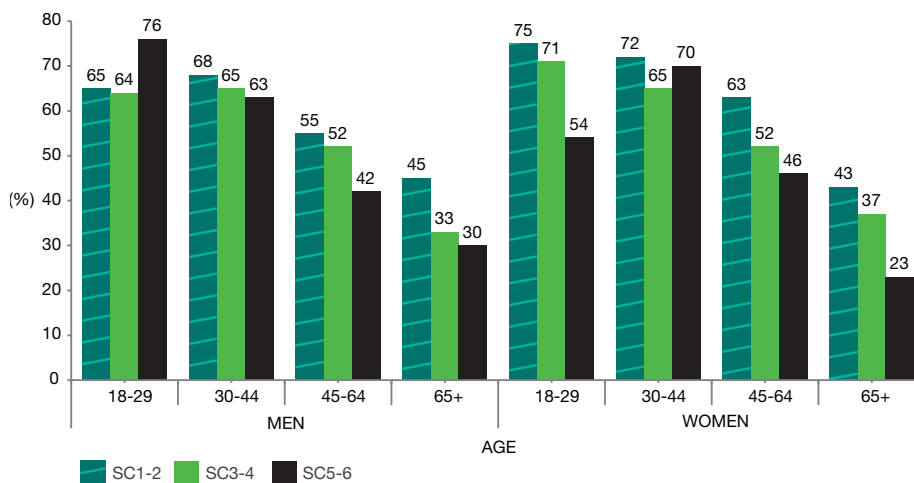


4. GENERAL HEALTH RESULTS

SELF-RATED HEALTH

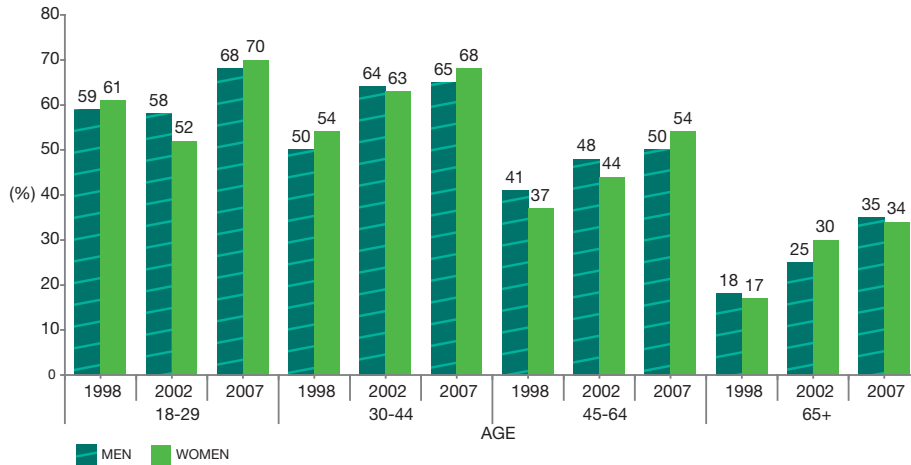
Respondents were asked to rate their health on a 5-point scale ranging from 'excellent' to 'poor'. Overall, 58% rated their health as being either 'excellent' (22%) or 'very good' (36%) (see *Figure 1*). There were age and social class patterns, but no gender differences in ratings. A higher percentage of younger respondents rated their health as being 'excellent' or 'very good' (age 18-29: 69%; 30-44: 66%; 45-64: 52%; 65+: 34%). While few rated their health as 'poor', the highest percentage of respondents giving this as their health rating were in the 65+ age group (age 18-29: 1%; 30-44: 1%; 45-64: 3%; 65+: 6%) and in social classes 5-6 (SC 1-2: 1%; SC 3-4: 2%; SC 5-6: 4%).

Figure 1: Percentage of respondents rating their health as 'excellent' or 'very good', by age, gender and social class



The percentage of respondents rating their health as 'excellent' or 'very good' has increased, from 45% in 1998 to 50% in 2002 to 58% in 2007. This was evident across all groups (see *Figure 2*). This pattern of increased self-rated health was also evident across all social class groups. At the other end of the scale, there has been little change in the percentage of respondents rating their health as 'poor': 2% (1998); 2% (2002) and 3% (2007). The pattern of increased percentages of respondents rating their health as 'excellent' or 'very good' was observed across all but the youngest age group (18-29 years), where there was a decrease in the percentage of respondents rating their health as 'excellent' or 'very good', from 60% (1998) to 55% (2002) and a subsequent increase to 69% (2007). The percentage of respondents in social classes 3-4 and 5-6 reporting 'excellent' or 'very good' health also increased over the three time points, while in social classes 1-2 there was a decrease in the percentage of respondents rating their health as 'excellent' or 'very good', from 60% (1998) to 57% (2002) and a subsequent increase to 64% (2007).

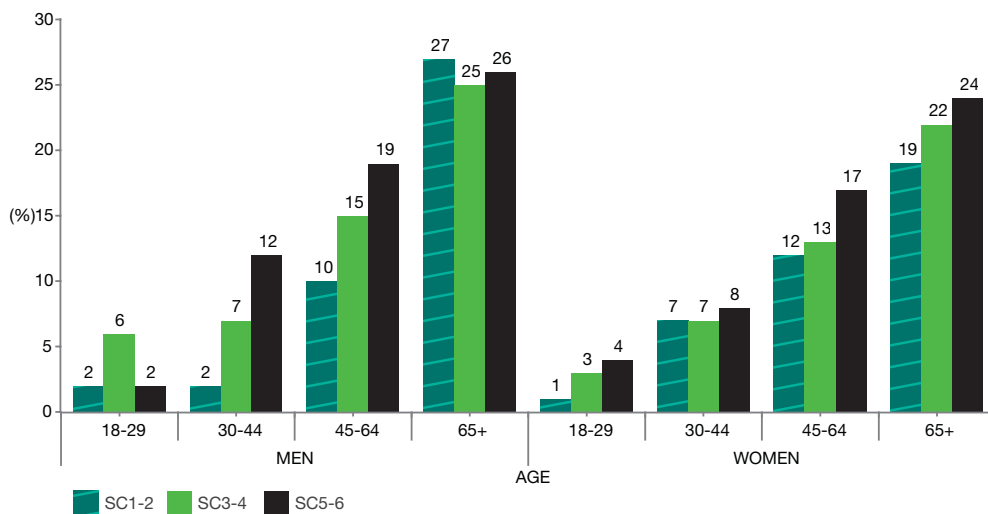
Figure 2: Percentage of respondents rating their health as 'excellent' or 'very good', by age, gender and year (1998, 2002 and 2007)



LONG-TERM ILLNESS

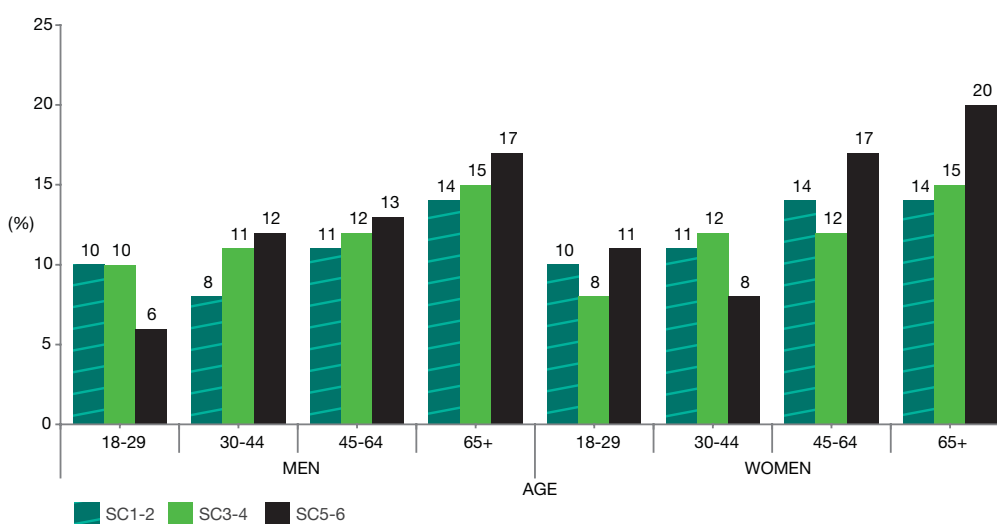
A standard Census question was used to assess long-term illness. Overall, 11% of respondents reported having a long-term illness, health problem or disability that limited their daily activity (see Figure 3). Similar rates of reporting were observed for men (11%) and women (10%). Higher percentages of older adults reported a limitation of their daily activity due to long-term illness (age 18-29: 3%; 30-44: 7%; 45-64: 14%; 65+: 25%), as did respondents in social classes 5-6 (SC 1-2: 8%; SC 3-4: 10%; SC 5-6: 14%).

Figure 3: Percentage of respondents reporting that their daily activity was limited by a long-term illness, health problem or disability, by age, gender and social class



In terms of recent ill-health, 12% of respondents reported that their daily activity had been limited by physical or mental ill-health within the previous 30 days, with similar percentages for men (11%) and women (12%) (see Figure 4). As with long-term illness, there was a differentiated pattern by age, with older respondents reporting more limitation than younger respondents (age 18-29: 9%; 30-44: 10%; 45-64: 13%; 65+: 16%). In relation to social class, the highest percentage was reported in social classes 5-6 (SC 1-2: 11%; SC 3-4: 11%; SC 5-6: 13%).

Figure 4: Percentage of respondents reporting that their daily activity was limited by physical/mental ill-health within the previous 30 days, by age, gender and social class



CHRONIC ILLNESSES

Respondents were asked if they had experienced any chronic illnesses in the previous 12 months (see Table 5). Overall, 38% of respondents reported at least one chronic illness. Women reported chronic illness more than men (40% women and 35% men). Older respondents were more likely to report chronic illness than their younger counterparts (age 18-29: 23%; 30-44: 31%; 45-64: 44%; 65+: 62%) and respondents in social classes 5-6 reported more chronic illness than respondents in the other social classes (SC 1-2: 35%; SC 3-4: 37%; SC 5-6: 40%). The most frequently reported chronic illness was back pain (16%).

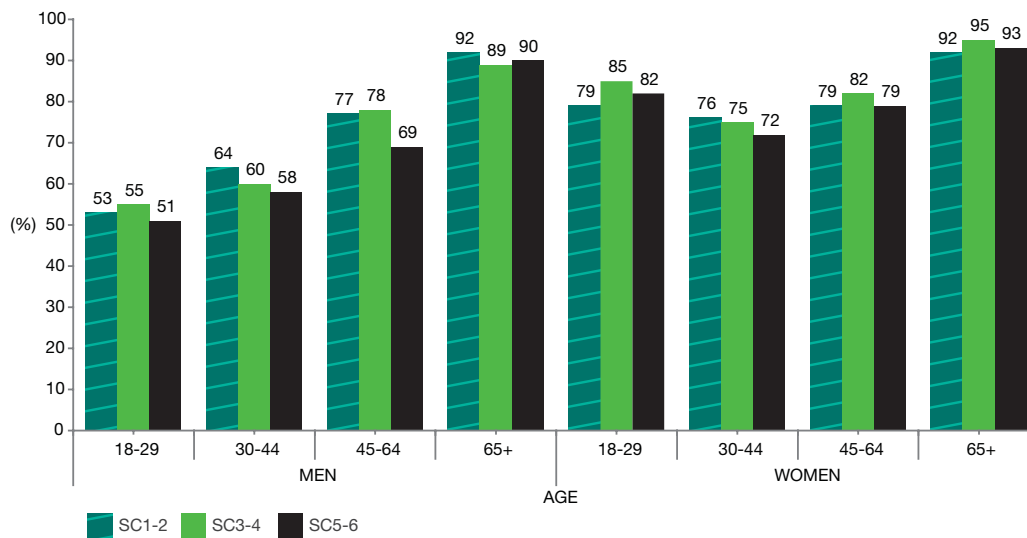
Table 5: Number and percentage of respondents reporting chronic illness in the previous 12 months

TOTAL (N = 10,184)	HEALTH PROBLEM DURING THE LAST 12 MONTHS %
Back condition	16
Anxiety	6
Asthma	6
Rheumatoid arthritis	6
Depression	5
Osteoarthritis	5
Diabetes	3
Urinary/bladder problems	3
Chronic bronchitis	3
Angina	2
Cancer	1
Heart attack	<1
Stroke	<1
Other	4
Total	38

ATTENDING A GENERAL PRACTITIONER

Overall, 74% of respondents had attended a general practitioner (GP) in the previous 12 months (see Figure 5). Higher percentages of women (80%) reported attendance than men (67%). There was an age pattern, with higher percentages of older respondents reporting attendance (age 18-29: 65%; 30-44: 68%; 45-64: 78%; 65+: 92%). There were no notable social class differences.

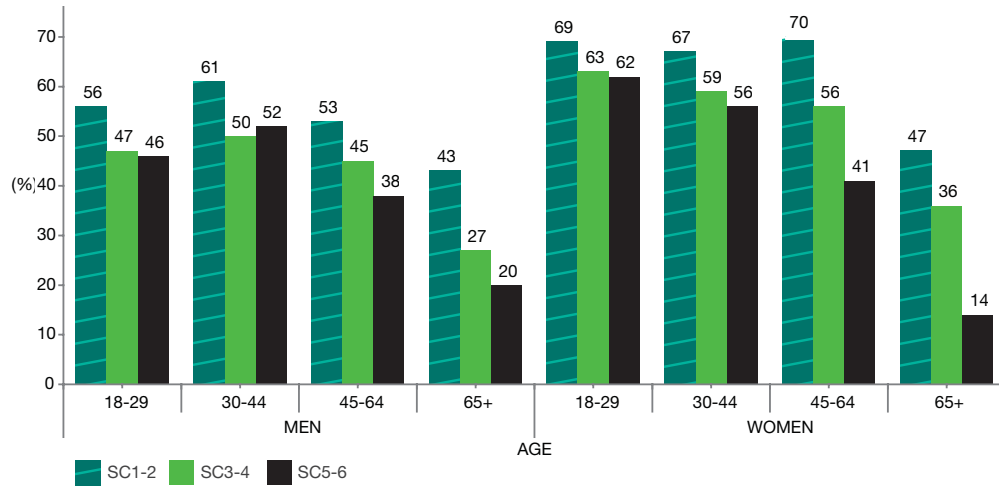
Figure 5: Percentage of respondents who reported attending a GP within the previous 12 months, by age, gender and social class



ATTENDING A DENTIST

Overall, 52% of respondents reported attending a dentist within the previous 12 months (see Figure 6). More women reported attendance than men (56% compared to 48%). Lower percentages of older respondents reported attendance (age 18-29: 58%; 30-44: 58%; 45-64: 52%; 65+: 29%). There was a difference across social classes, with higher percentages of respondents in social classes 1-2 reporting attendance (SC 1-2: 61%; SC 3-4: 51%; SC 5-6: 42%).

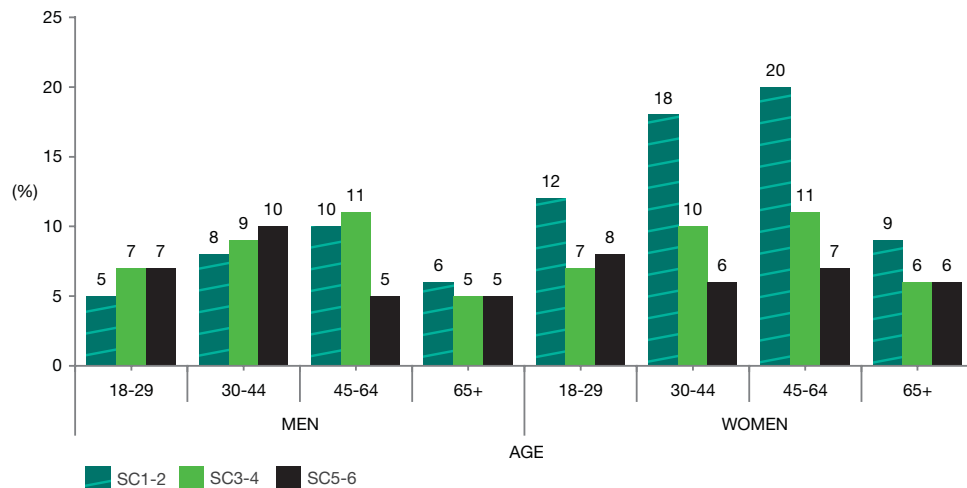
Figure 6: Percentage of respondents who reported attending a dentist within the previous 12 months, by age, gender and social class



ATTENDING A COMPLEMENTARY/ALTERNATIVE PRACTITIONER

Overall, 9% of respondents had attended a complementary/alternative practitioner in the last 12 months (see Figure 7). Higher percentages of women (11%) reported attendance in the last 12 months compared to men (8%). Higher percentages of respondents in the 30-44 and 45-64 age groups reported attendance compared with the other age groups (18-29: 7%; 30-44: 11%; 45-64: 11%; 65+: 6%). There was a social class pattern, with higher percentages of respondents in social classes 1-2 reporting attendance (SC 1-2: 12%; SC 3-4: 9%; SC 5-6: 7%). An additional 10% of respondents reported attending a complementary/alternative practitioner at some time more than 12 months previously.

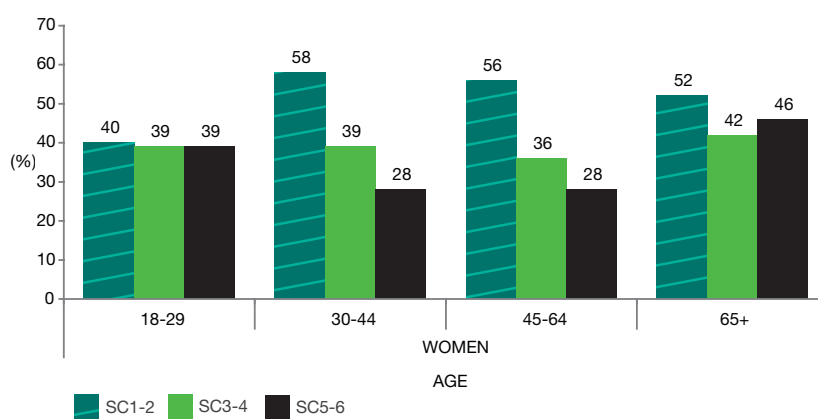
Figure 7: Percentage of respondents who reported attending a complementary or alternative practitioner within the previous 12 months, by age, gender and social class



BREAST-FEEDING

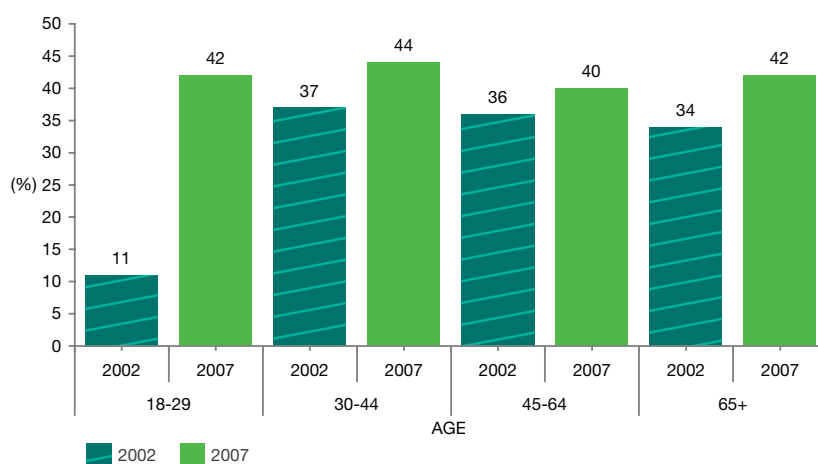
Women with children were asked about breast-feeding: 42% answered 'Yes' to the question 'Did you breast-feed any of your children?' (see Figure 8). There was little difference across age groups (age 18-29: 42%; 30-44: 44%; 45-64: 40%; 65+: 42%). Higher percentages of women in social classes 1-2 answered 'Yes' (SC 1-2: 56%; SC 3-4: 38%; SC 5-6: 33%). The similarity across social class groups in the youngest women (age 18-29) was notable.

Figure 8: Percentage of women who reported having breast-fed any of their children, by age and social class



The percentage of women who reported having breast-fed any of their children increased from 32% in 2002 to 42% in 2007. This increase can be seen across all age groups (see Figure 9), with the largest increase in the youngest age group of 18-29 years (2002: 11%; 2007: 42%).⁷

Figure 9: Percentage of women who reported having breast-fed any of their children, by age of mother in 2002 and 2007

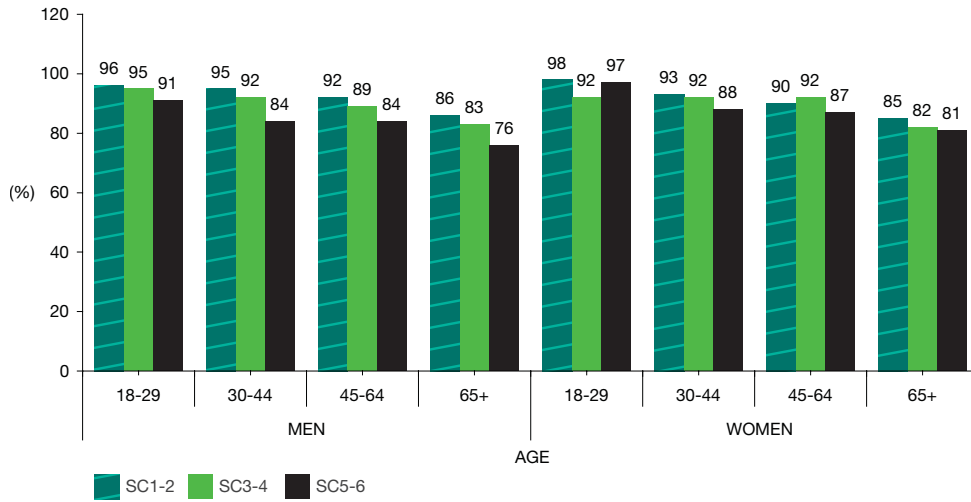


⁷ Differences in sampling, particularly of non-Irish women, identified by postal Electoral Register survey (2002) compared with interviews at residential addresses (2007) may explain most of this difference.

QUALITY OF LIFE

Respondents were asked to rate their quality of life on a 5-point scale from 'very good' to 'very poor'. Overall, 90% of respondents rated their quality of life as being 'good' (50%) or 'very good' (40%) (see Figure 10). There were no differences between men and women, with 90% rating their quality of life as 'good' or 'very good'. Higher percentages of younger respondents (age 18-29: 94%; 30-44: 91%; 45-64: 89%; 65+: 82%) and respondents in social classes 1-2 reported having a 'good' or 'very good' quality of life (SC 1-2: 93%; SC 3-4: 91%; SC 5-6: 86%).

Figure 10: Percentage of respondents reporting their quality of life as 'good' or 'very good', by age, gender and social class



5. MENTAL HEALTH AND WELL-BEING



5. MENTAL HEALTH AND WELL-BEING

Respondents were asked a series of questions on distinct components of mental health and well-being. As recommended by the European Commission-funded project *Establishment of a set of mental health indicators for the European Union (1999-2001)*, the measures assessed three key aspects of mental health and mental ill-health:

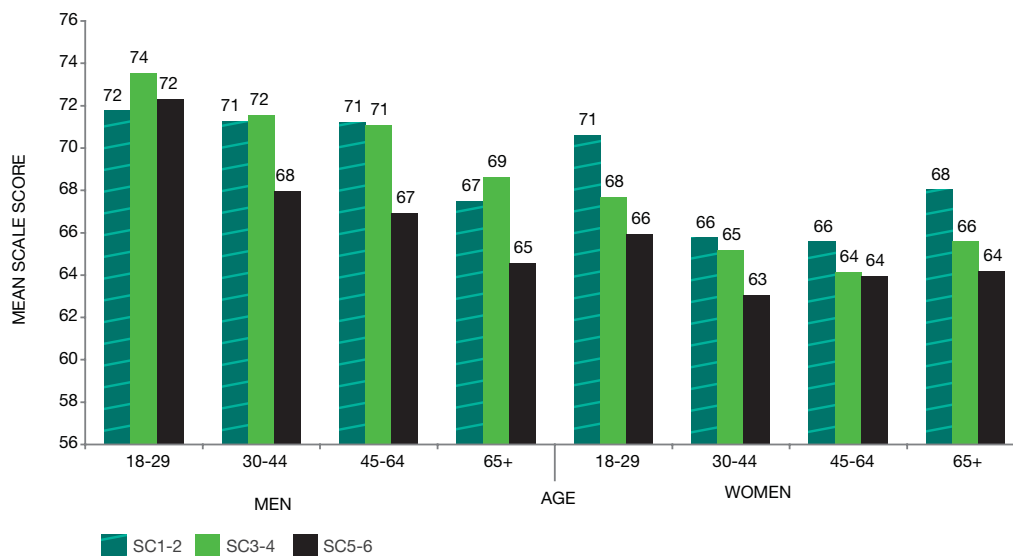
- positive aspects of mental health and well-being;
- non-specific psychological distress;
- diagnoses of major depression and generalised anxiety disorder.

Respondents were also asked questions relating to self-harm and perceived stigma of mental health problems.

POSITIVE MENTAL HEALTH: ENERGY AND VITALITY INDEX

Positive aspects of mental health and well-being have not typically been studied in population surveys. SLÁN 2007 included the Energy and Vitality Index (EVI) from a widely used health status measure, the RAND SF-36 questionnaire. The EVI asks respondents questions such as whether they ‘felt full of life’ or ‘had lots of energy’ in the previous 4 weeks. Higher scores indicate greater levels of positive mental health and well-being (range 0-100). Findings show that the overall mean score was 68, which suggests relatively high levels of energy and vitality (see Figure 11). Men had higher average scores than women (70 compared to 66) and respondents in the youngest age group (18-29) had higher average scores than older respondents (age 18-29: 71; 30-44: 68; 45-64: 67; 65+: 66). Average scores were lower among respondents in lower social classes (SC 5-6) than in other social classes (SC 1-2: 69; SC 3-4: 69; SC 5-6: 66).

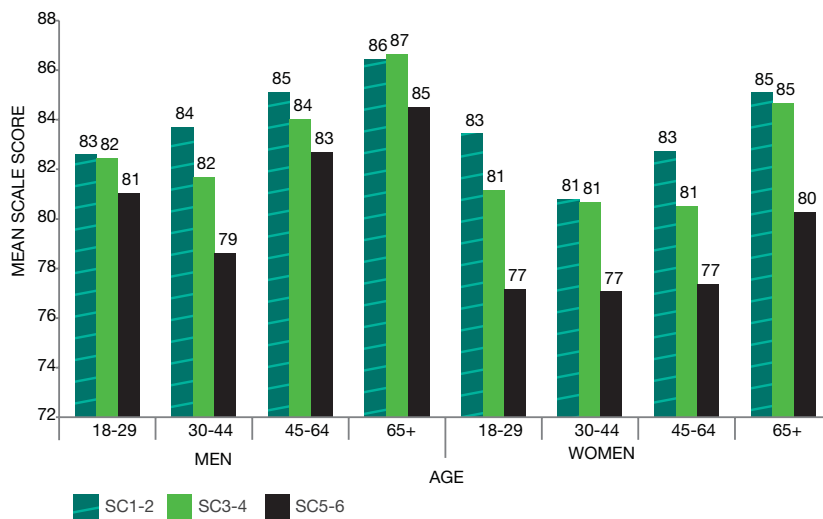
Figure 11: Mean score on SF-36 energy and vitality scale, by age, gender and social class (higher scores indicate more energy and vitality)



PSYCHOLOGICAL DISTRESS

SLÁN 2007 included a measure of psychological distress, the Mental Health Index (MHI-5) from the SF-36. This index asks respondents questions such as whether they felt ‘particularly nervous’ or ‘downhearted and miserable’ in the previous 4 weeks. Higher scores indicate less psychological distress (range 0-100). Findings show that the overall mean score was 82, which suggests relatively low levels of psychological distress (see Figure 12). Men had slightly higher average scores than women (83 compared to 81). There were no clear patterns across age groups, although those aged 65+ years had a higher average score (less psychological distress) than younger respondents (age 18-29: 82; 30-44: 80; 45-64: 82; 65+: 84). Respondents in higher social classes reported higher scores (SC 1-2: 83; SC 2-3: 82; SC 5-6: 80).

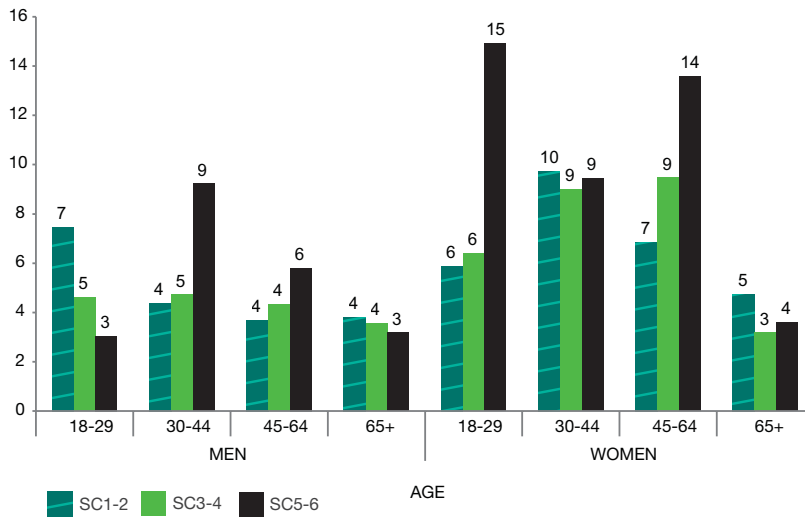
Figure 12: Mean score on Mental Health Index scale, by age, gender and social class (higher scores indicate less psychological distress)



DEPRESSION

Overall, 6% of all respondents reported experiencing major depression within the previous year, with men (5%) less likely to experience depression than women (8%) (see Figure 13). Those over 65 years of age were less likely to have experienced major depression than respondents in other age groups (18-29: 6%; 30-44: 7%; 45-64: 7%; 65+: 3%). Those in lower social classes (SC 5-6) were more likely to have experienced major depression than others (SC 1-2: 6%; SC 3-4: 6%; SC 5-6: 8%).

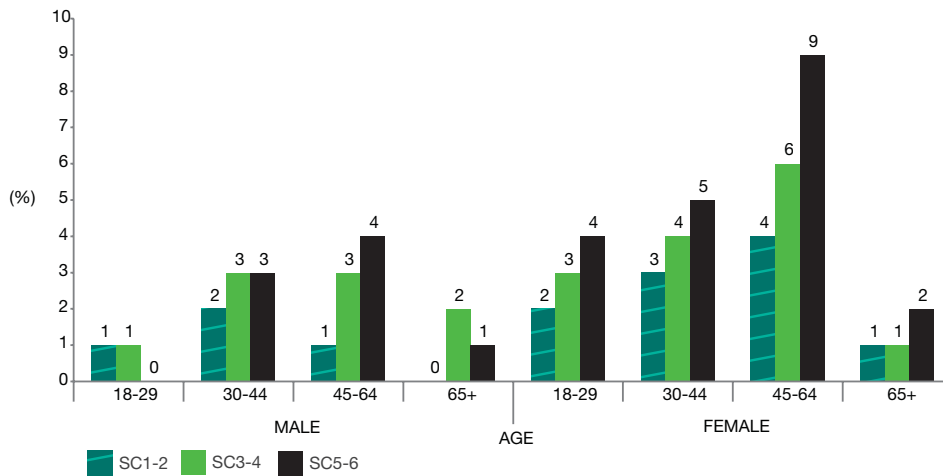
Figure 13: Percentage of respondents who reported major depression within the previous year, by age, gender and social class



ANXIETY

Overall, 3% of respondents had generalised anxiety disorder within the past year (2% men and 3% women) (see Figure 14). Generalised anxiety disorder was more prevalent in the 30-44 and 45-64 age groups (age 18-29: 2%; 30-44: 3%; 45-64: 4%; 65+: 1%) and in social classes 5-6 (SC 1-2: 2%; SC 3-4: 3%; SC 5-6: 4%).

Figure 14: Percentage of respondents diagnosed as having generalised anxiety disorder within the previous year, by age, gender and social class



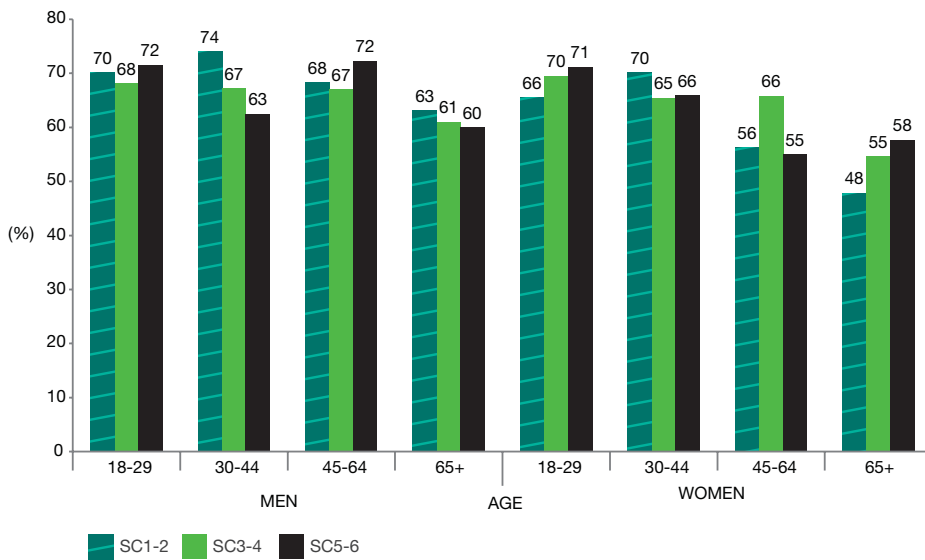
SELF-HARM

Overall, 0.4% of respondents (40 respondents: 0.43% men and 0.38% women) answered 'Yes' to the question 'In the last 12 months have you deliberately taken an overdose (e.g. of pills or other medication) or tried to harm yourself in some other way (such as cut yourself)?' The breakdown by age group was 18-29: 0.6%; 30-44: 0.5%; 45-64: 0.3%; 65+: 0.1%. The breakdown by social class was SC 1-2: 0.2%; SC 3-4: 0.4%; SC 5-6: 0.2%.

STIGMA

Two-thirds of respondents (66%) reported that they 'agree' or 'strongly agree' with the statement 'If I was experiencing mental health problems, I wouldn't want people knowing about it', with more men (68%) agreeing than women (63%) (see Figure 15). Younger respondents tended to agree more often with this statement (age 18-29: 69%; 30-44: 68%; 45-64: 65%; 65+: 57%), with little difference across social classes (SC 1-2: 67%; SC 3-4: 66%; SC 5-6: 65%). Figures exclude neutral responses (21%).

Figure 15: Percentage of respondents who agreed with the statement 'If I was experiencing mental health problems, I wouldn't want people knowing about it', by age, gender and social class



6. PHYSICAL ACTIVITY



6. PHYSICAL ACTIVITY

LEVELS OF PHYSICAL ACTIVITY

Respondents were asked a series of questions relating to the time they spend being physically active. The responses were used to calculate a physical activity score (based on the International Physical Activity Questionnaire or IPAQ) for each respondent. These scores were categorised as high (over 10,000 steps per day), moderate (approximately 5,000-10,000 steps per day) or low (less than 5,000 steps per day).

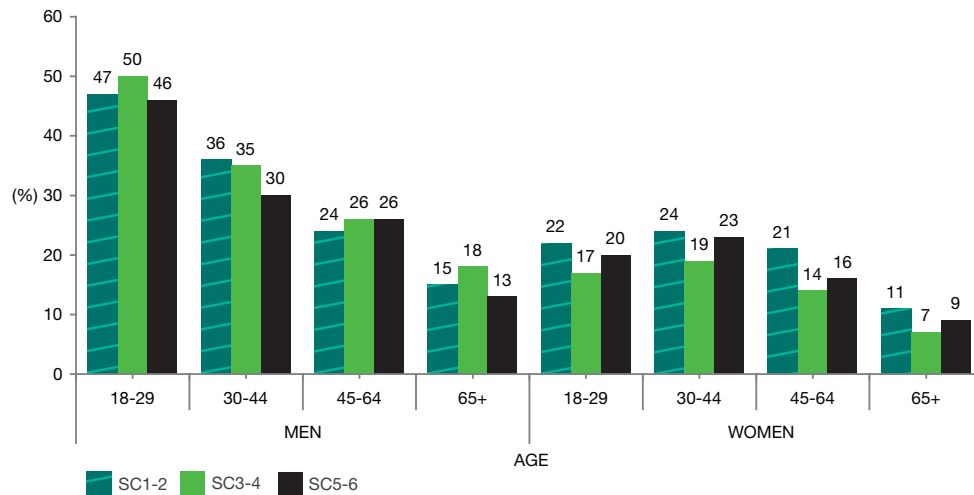
Overall, 71% of respondents had physical activity scores that fell within the moderate (47%) or high (24%) range. As outlined in Table 6, high scores were obtained by a higher percentage of men (32%) compared with women (16%). A greater percentage of younger respondents reported high levels of activity compared with older respondents (age 18-29: 32%; 30-44: 27%; 45-64: 21%; 65+: 10%). There was little overall difference between the social classes for those reporting high levels of physical activity (SC 1-2: 27%; SC 3-4: 25%; SC 5-6: 25%) (see Figure 16). The overall pattern of higher levels of physical activity in younger men, reducing with increasing age, contrasts with the relatively low level of physical activity in women across all age groups.

Table 6: Physical activity scores (IPAQ) of respondents, by gender, age and social class

TOTAL (N = 10,176)	LOW %	MODERATE %	HIGH %
Total	29	47	24
Gender			
Men	26	42	32
Women	31	53	16
Age group			
18-29	22	46	32
30-44	27	46	27
45-64	28	51	21
65+	44	46	10
Social class			
1-2	23	50	27
3-4	28	47	25
5-6	30	45	25
Unc*	39	47	14

* Unc = unclassified

Figure 16: Percentage of respondents with high physical activity (IPAQ) scores, by age, gender and social class



Respondents were also asked to state how physically active or inactive they had been for the previous 12 months. 'Physically active' was defined as taking part in exercise or sport 2-3 times per week for a minimum of 20 minutes at a time or engaging in more general activities, like walking, cycling or dancing, 4-5 times per week accumulating to at least 30 minutes per day.

Over half of respondents (55%) reported being physically active, with 49% having been physically active for more than 6 months. Almost one-quarter (24%) reported some activity but not at the level great enough to be considered 'physically active'. Over one-fifth (22%) of respondents reported being physically inactive. Of the physically inactive respondents, less than half (41%) were thinking about becoming physically active in the next 6 months. There were no gender differences across the categories of activity/inactivity, although a higher percentage of men (52%) reported being physically active for longer than 6 months compared to women (46%).

A difference was observed across age groups. The youngest age group had the highest percentage of respondents who were physically active for more than 6 months (age 18-29: 60%; 30-44: 54%; 45-64: 55%; 65+: 47%). Conversely, the oldest age group had the highest percentage of physically inactive respondents (age 18-29: 17%; 30-44: 22%; 45-64: 20%; 65+: 31%). Somewhat higher levels of physical activity were reported by respondents in social classes 1-2 compared with the other social classes (SC 1-2: 59%; SC 3-4: 55%; SC 5-6: 53%).

REASONS FOR INACTIVITY

Respondents who reported that they were physically inactive were asked to indicate the main reason for their inactivity (see Table 7). The most frequent response for both men and women across all social classes and most age groups was 'no time'. The only exception was among those aged 65 and over, a higher percentage of whom gave 'injury/disability/medical condition' as the main reason for physical inactivity.

Table 7: Reasons for inactivity for those who were physically inactive, by gender, age and social class

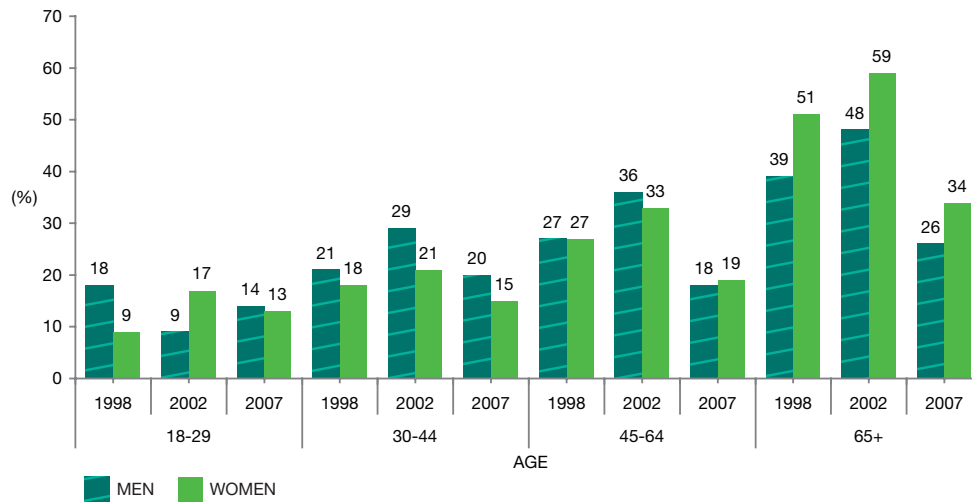
TOTAL (N = 4,518)	NOT INTERESTED %	INTERESTED BUT NOT WILLING TO SPEND TIME %	NO TIME %	NO FACILITIES %	INJURY/ DISABILITY/ MEDICAL CONDITION %	OTHER %
Total	14	14	41	3	18	10
Gender						
Men	15	15	39	3	19	9
Women	12	14	44	3	16	11
Age group						
18-29	14	16	54	5	4	7
30-44	11	15	56	3	8	7
45-64	15	16	37	2	23	7
65+	17	6	8	1	44	24
Social class						
1-2	8	15	49	3	15	10
3-4	12	15	44	2	17	10
5-6	21	14	31	3	22	9
Unc*	19	12	36	3	19	11

* Unc = unclassified

PHYSICAL ACTIVITY COMPARISON WITH 1998 AND 2002 SLÁN SURVEYS

Physical inactivity levels were compared across the 1998, 2002 and 2007 surveys. IPAQ scores were not available for 1998 and 2002. However, questions asking about frequency and level of exercise in an average week could be compared across surveys. The percentage reporting they took no exercise in an average week was 23% (1998), 28% (2002) and 19% (2007). These results are presented by age and gender in Figure 17. At the other end of the scale, the percentage reporting moderate and/or strenuous exercise 3 or more times per week for at least 20 minutes each time were similar across the three surveys: 38% (1998), 40% (2002) and 41% (2007).

Figure 17: Percentage of respondents who reported no exercise in an average week, by age, gender and year (1998, 2002 and 2007)



7. DIET AND NUTRITION



7. DIET AND NUTRITION

FOOD PYRAMID SERVINGS CONSUMPTION PROFILE

Irish healthy eating guidelines encourage people to eat a variety of foods based on the Food Pyramid (see *Figure 18*). This chapter summarises the findings for consumption from each shelf of the Food Pyramid by age, gender and social class. Foods from the top shelf of the Food Pyramid are of particular health concern if consumed in excessive amounts.

Figure 18: Irish Food Pyramid

Use the Food Pyramid to plan your healthy food choices every day and watch your portion size



Source: Department of Health and Children (2005)

Figure 19 summarises compliance with the recommended number of servings from each shelf of the Food Pyramid in 2007. Each of the 5 food shelves is outlined in detail in the following sections.

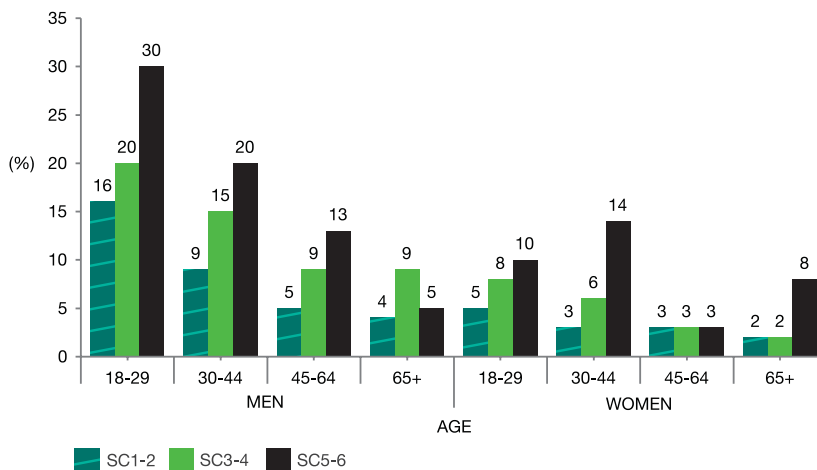
Figure 19: Percentage of respondents consuming the recommended number of daily servings from each shelf of the Food Pyramid



FOOD PYRAMID: FOODS HIGH IN FATS AND SUGAR (USE SPARINGLY)

Foods that contain high levels of fat and sugar and salt are grouped on the top shelf of the Food Pyramid. It is recommended to consume these foods sparingly on a daily basis. Most respondents (86%) had at least 3 servings per day of these foods in 2007. Consumption trends for foods on this shelf were similar across the three surveys: 86% (1998), 84% (2002) and 86% (2007). Overall, the percentage who reported consuming fried foods 4 times per week (9% in 2007) has decreased since the previous studies in 1998 (14%) and 2002 (13%). A higher percentage of men (14%) reported consuming fried foods on more than 4 occasions per week when compared to women (6%), as did younger respondents when compared with their older counterparts (age 18-29: 15%; 30-44: 10%; 45-64: 6%; 65+: 5%). A social class pattern in fried food consumption was evident for both men and women, with higher percentages of respondents in social classes 5-6 consuming fried foods 4 or more times per week compared to others (SC 1-2: 6%; SC 3-4: 9%; SC 5-6: 14%) (see Figure 20).

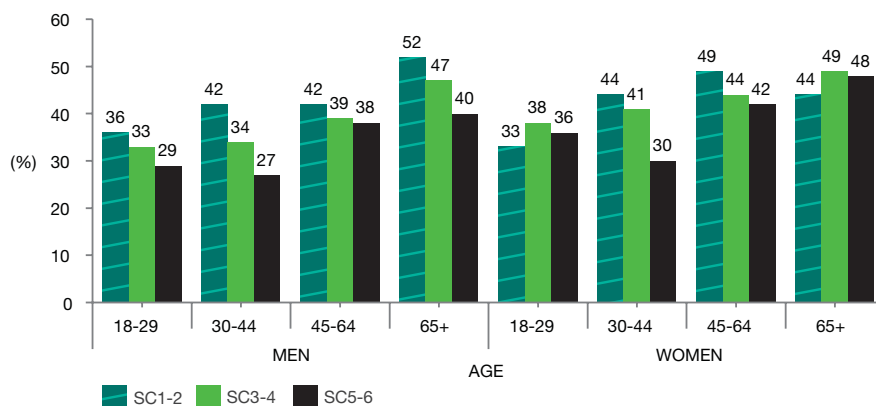
Figure 20: Percentage of respondents consuming fried foods 4 or more times per week, by age, gender and social class



FOOD PYRAMID: MEAT, FISH, POULTRY AND ALTERNATIVES (2 DAILY SERVINGS RECOMMENDED)

It is recommended that 2 servings of foods from the meat, fish, poultry and alternatives shelf of the Food Pyramid be consumed on a daily basis. Over- or under-consumption may have a negative impact on nutritional health. Overall, 39% of respondents consumed the recommended number of servings in 2007, compared to 39% in 2002 and 36% in 1998. Men were more likely to consume 2 servings daily (37% men and 41% women). Higher percentages of older respondents (age 18-29: 35%; 30-44: 37%; 45-64: 42%; 65+: 46%) and respondents in social classes 1-2 (SC 1-2: 43%; SC 3-4: 40%; SC 5-6: 36%) met the daily recommendations for consumption of meat, fish, poultry and alternatives (see Figure 21).

Figure 21: Percentage consuming the recommended 2 daily servings of meat, fish, poultry and alternatives, by age, gender and social class



One-fifth of respondents (20%) consumed less than the 2 recommended daily servings and 41% consumed more than the 2 servings. Men were more likely than women to consume more than the recommended 2 servings (46% men and 35% women). Younger respondents were also more likely to exceed the daily recommended guidelines (age 18-29: 48%; 30-44: 43%; 45-64: 37%; 65+: 33%), as well as respondents in lower social classes (SC 1-2: 35%; SC 3-4: 42%; SC 5-6: 47%) (see Figure 22). Overall, a higher percentage of women consumed fewer than 2 servings per day (16% men and 23% women). Under-consumption was less likely among younger respondents (age 18-29: 17%; 30-44: 20%; 45-64: 22%; 65+: 21%) and among respondents in social classes 3-4 and 5-6 (SC 1-2: 23%; SC 3-4: 18%; SC 5-6: 18%) (see Figure 23).

Figure 22: Percentage consuming more than the recommended 2 daily servings of meat, fish, poultry and alternatives, by age, gender and social class

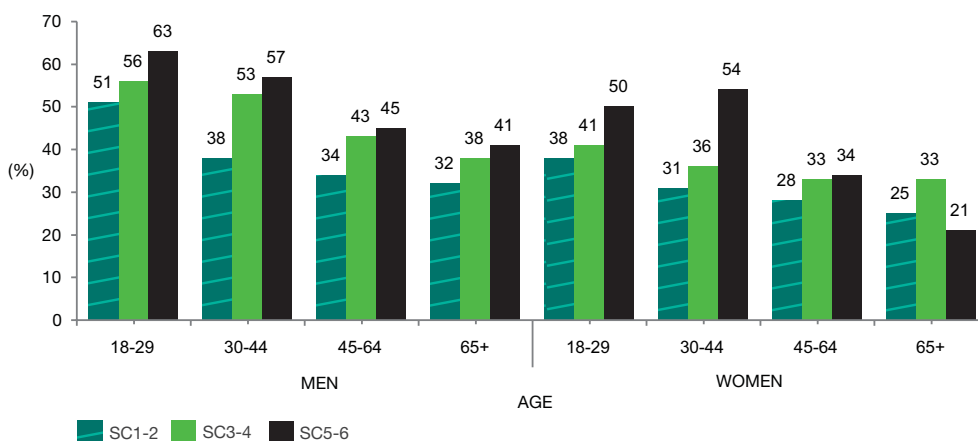
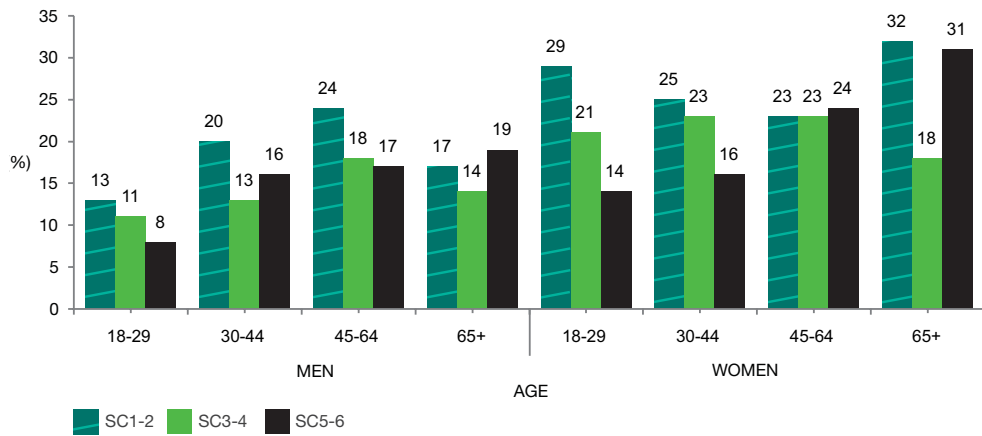


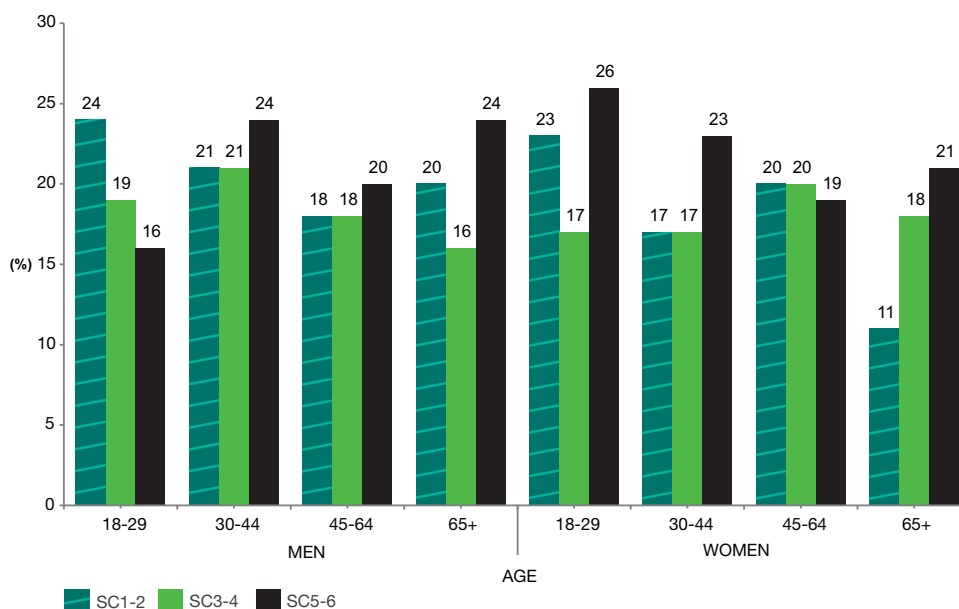
Figure 23: Percentage consuming less than the recommended 2 daily servings of meat, fish, poultry and alternatives, by age, gender and social class



FOOD PYRAMID: MILK, CHEESE AND YOGHURT (3 DAILY SERVINGS RECOMMENDED)

It is recommended that 3 servings of foods from the milk, cheese and yoghurt shelf of the Food Pyramid be consumed on a daily basis. Over- or under-consumption may have a negative impact on nutritional health. Overall, 20% of respondents reported consuming 3 daily servings of milk, cheese and yoghurt products in 2007, compared to 22% in 1998 and 23% in 2002. No obvious gender (21% men and 19% women), age (age 18-29: 21%; 30-44: 20%; 45-64: 19%; 65+: 19%) or social class patterns (SC 1-2: 20%; SC 3-4: 19%; SC 5-6: 21%) emerged for consumption of the recommended 3 daily servings of milk, cheese and yoghurt products (see Figure 24).

Figure 24: Percentage of respondents consuming the recommended 3 daily servings of milk, cheese and yoghurt products, by age, gender and social class



Overall, 19% of respondents reported consuming more than 3 servings of dairy produce per day. Higher percentages of men (25%) consumed more than 3 servings compared to women (13%), as well as younger respondents (age 18-29: 27%; 30-44: 21%; 45-64: 14%; 65+: 13%). Respondents in social classes 1-2 were the least likely to consume more than 3 daily servings (SC 1-2: 17%; SC 3-4: 21%; SC 5-6: 20%) (see Figure 25). However, 61% of respondents reported consuming fewer than 3 daily servings of dairy produce. A higher percentage of women consumed fewer than 3 servings (55% men and 68% women) (see Figure 26). Under-consumption was higher among older respondents (age 18-29: 52%; 30-44: 60%; 45-64: 67%; 65+: 68%) and somewhat higher for respondents in social classes 1-2 (SC 1-2: 64%; SC 3-4: 61%; SC 5-6: 59%).

Figure 25: Percentage of respondents consuming more than the recommended 3 daily servings of milk, cheese and yoghurt products, by age, gender and social class

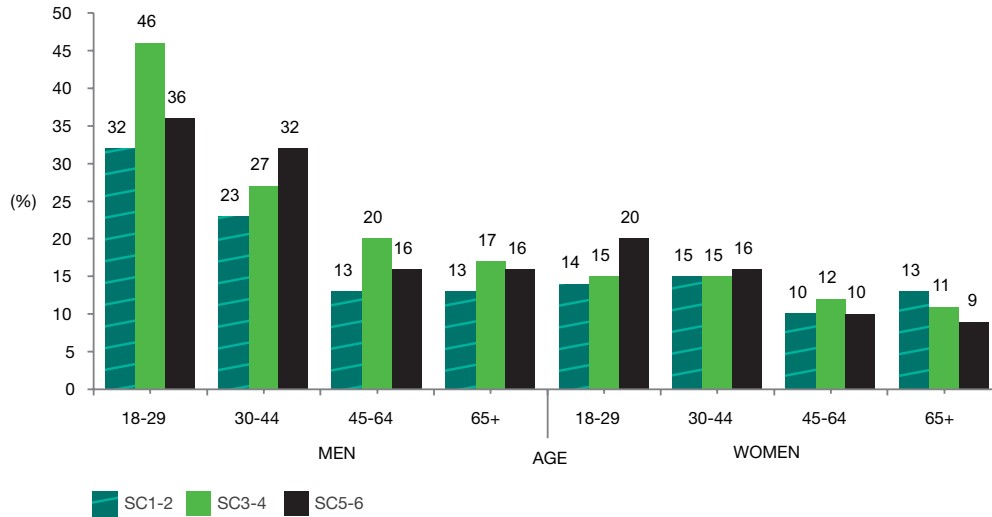
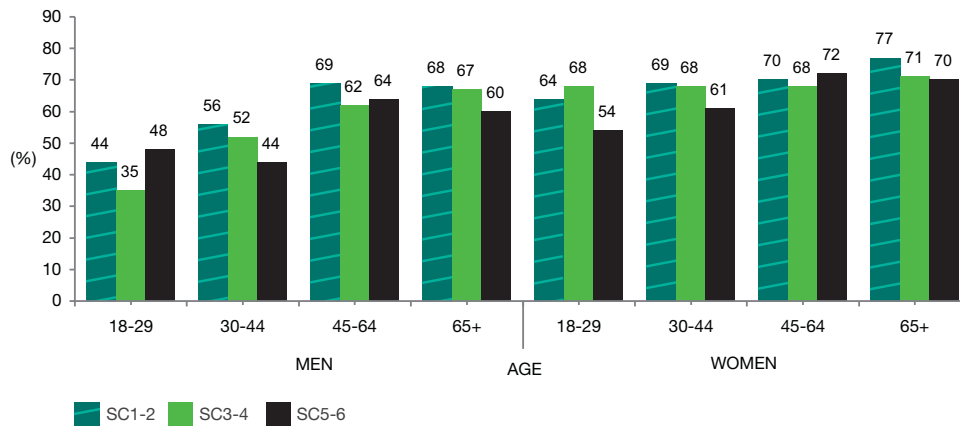


Figure 26: Percentage of respondents consuming less than the recommended 3 daily servings of milk, cheese and yoghurt products, by age, gender and social class

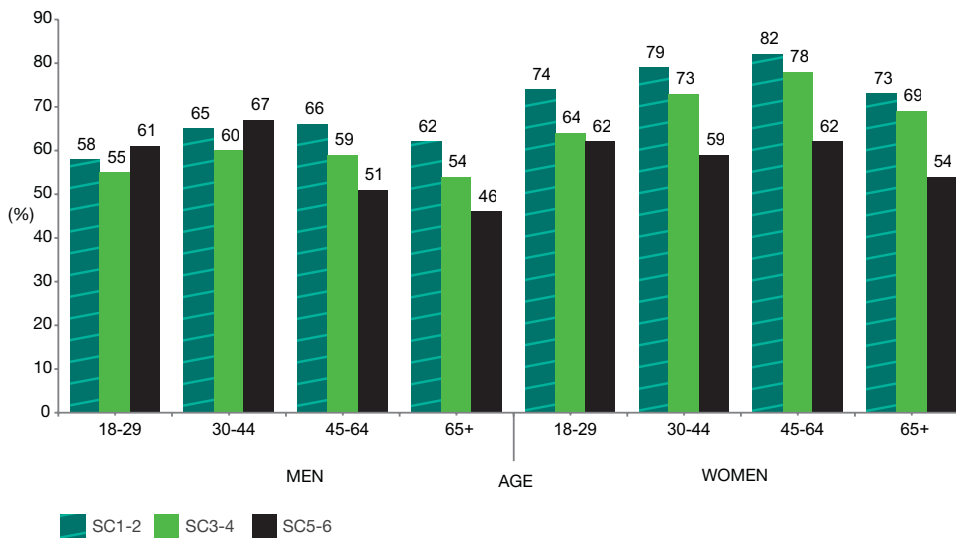


FOOD PYRAMID: FRUIT AND VEGETABLES (5 DAILY SERVINGS RECOMMENDED)

It is recommended that 5 servings of fruit and vegetables are consumed on a daily basis. This is a change in policy since SLÁN 2002, when 4 daily servings were recommended. The composition of this shelf in the Food Pyramid has also changed: peas and beans are now included as foods on this shelf, where previously they were only included with the protein foods on the meat, fish, poultry, and alternatives shelf.

Overall, 65% of respondents in 2007 reported consuming 5 or more daily servings of fruit and vegetables, with differences in consumption across gender, age and social class (see Figure 27). While 12% consumed the recommended 5 daily servings, most (53%) consumed more than the recommended number of servings. To allow for comparability with previous SLÁN surveys, the recommendation of 4 or more daily servings was also analysed: overall, 77% of respondents in 2007 consumed at least 4 daily servings of fruit and vegetables, compared to 56% in 1998 and 68% in 2002.

Figure 27: Percentage of respondents consuming 5 or more daily servings of fruit and vegetables, by age, gender and social class

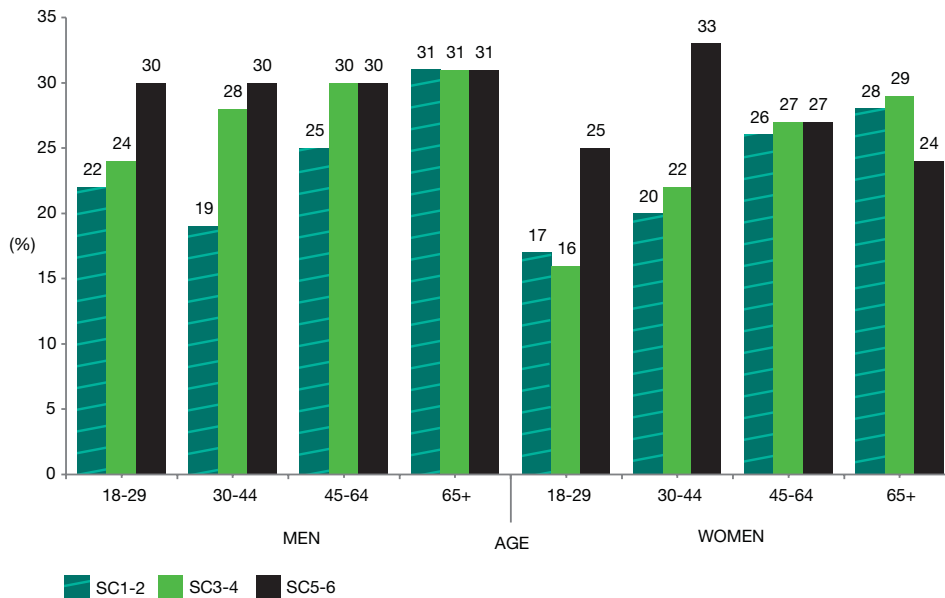


Women were more likely than men to consume at least 5 daily servings (59% men and 71% women). The youngest and oldest respondents were less likely to consume the recommended daily number of servings (age 18-29: 62%; 30-44: 68%; 45-64: 68%; 65+: 59%). There was a social class gradient, with respondents in higher social classes more likely to consume 5 or more daily servings of fruit and vegetables (SC 1-2: 71%; SC 3-4: 64%; SC 5-6: 58%).

FOOD PYRAMID: CEREALS, BREADS AND POTATOES (6 OR MORE DAILY SERVINGS RECOMMENDED)

The bottom shelf of the Food Pyramid relates to cereals, breads and potatoes, with 6 or more servings recommended on a daily basis for the general adult population. Overall, 26% reported consuming the recommended number of servings in 2007, compared to 40% in 1998 and 36% in 2002. Consumption patterns varied across gender, age and social class in 2007 (see Figure 28). Men were somewhat more likely to consume 6 or more daily servings (27% men and 24% women), as well as older respondents (age 18-29: 22%; 30-44: 24%; 45-64: 28%; 65+: 29%). A higher percentage of respondents in social classes 1-2 reported consuming 6 or more servings each day (SC 1-2: 78%; SC 3-4: 75%; SC 5-6: 71%).

Figure 28: Percentage of respondents consuming 6 or more daily servings of cereals, breads and potatoes, by age, gender and social class



FOOD PYRAMID: COMPARISONS FROM SLÁN 1998 TO 2002 AND 2007

In summary, food consumption patterns as assessed by SLÁN have changed from 1998 to 2002 and 2007 (see *Table 8*). Changes in consumption were seen in 3 of the 5 shelves of the Food Pyramid: cereals, breads and potatoes; fruit and vegetables; and milk, cheese and yoghurt products.

Table 8: Percentage of respondents complying with Food Pyramid Serving Consumption Guidelines, by gender and year (1998, 2002 and 2007)

	MEN			WOMEN			TOTAL		
	1998 %	2002 %	2007 %	1998 %	2002 %	2007 %	1998 %	2002 %	2007 %
Cereals, breads and potatoes (6+ daily servings)	42	37	27	38	35	24	40	36	26
Fruit and vegetables (4+ daily servings) ⁸	49	61	73	63	74	82	56	68	77
Milk, cheese and yoghurt products (3 daily servings)	23	24	21	20	23	19	22	23	20
Meat, fish, poultry and alternatives (2 daily servings)	34	38	37	39	39	41	36	39	39
Top shelf: Foods high in fats, sugar or salt (less than 3 daily servings)	13	16	13	15	15	16	14	15	14

Consumption of cereals, breads and potatoes declined for both men and women from 1998 to 2007. Overall, only 26% of 2007 respondents reported eating the recommended 6 or more daily servings, compared to 40% in 1998. Comparing the consumption data for fruit and vegetables in 2007 to those in 1998 and 2002, using the policy recommendation of 4 daily servings for best comparison, consumption rates increased in 2007 (77%) for both men and women, compared to 56% in 1998. Overall, consumption of the recommended 3 daily servings of milk, cheese and yoghurt products decreased from previous years, while the percentage of those consuming less than the recommended 3 servings increased: in 2007, 61% of respondents consumed less than 3 servings, compared to 44% in 2002 and 53% in 1998. Consumption of recommended levels of meat, fish, poultry and alternatives increased between 1998 (36%) and 2002 (39%) and stabilised in 2007 (39%). Consumption of foods high in fats, sugar or salt from the top shelf of the Food Pyramid remained stable from 1998 to 2007 (see *Table 8*).

8 For best comparisons with 1998 and 2002, the 2007 data for the fruit and vegetable shelf have been analysed as per previous policy recommendations of 4+ servings per day.

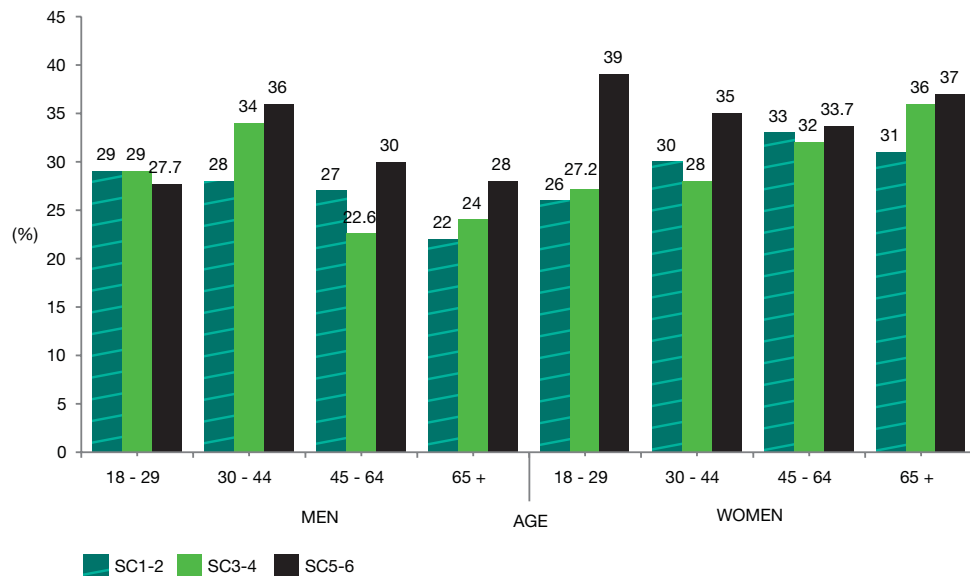
EATING HABITS

In addition to adherence to Food Pyramid guidelines, respondents were asked a variety of questions to determine their eating habits. The frequency of salt use while cooking and while eating at the table was assessed. Snacking habits and location of meal consumption were also recorded.

USE OF SALT

Approximately one-third of respondents (30%) reported that they either always or usually added salt to food while cooking, 19% sometimes added salt and 51% rarely or never used salt while cooking. Among respondents who reported that they always/usually added salt to food while cooking, no differences were evident across gender (30% men and 31% women) or age (age 18-29: 30%; 30-44: 32%; 45-64: 30%; 65+: 30%). However, respondents in social classes 5-6 were more likely to always/usually add salt while cooking (SC 1-2: 28%; SC 3-4: 29%; SC 5-6: 33%) (see Figure 29). Among respondents who reported that they rarely/never added salt to food while cooking, there were few differences across gender (52% men and 51% women), age (age 18-29: 50%; 30-44: 49%; 45-64: 54%; 65+: 54%) or social class (SC 1-2: 54%; SC 3-4: 52%; SC 5-6: 49%).

Figure 29: Percentage of respondents who always/usually add salt to food while cooking, by age, gender and social class

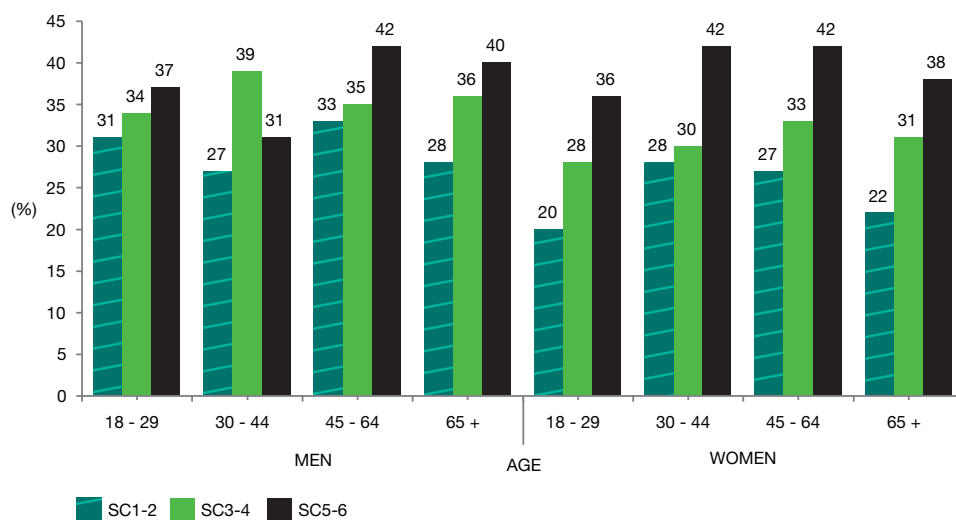


Similarly, one-third of respondents (32%) reported that they either always or usually added salt to food while at the table. Another 20% sometimes added salt, while 48% either rarely or never added salt to food at the table. Men were more likely to always/usually add salt compared to women (35% men and 30% women), while women were somewhat more likely to rarely/never add salt compared to men (45% men and 50% women). No obvious trends were seen across age groups among respondents who always/usually added salt to food at the table (age 18-29: 31%; 30-44: 32%; 45-64: 34%; 65+: 32%); however, older respondents

were more likely to rarely/never add salt (age 18-29: 45%; 30-44: 46%; 45-64: 49%; 65+: 52%). A social class pattern was evident: respondents from social classes 5-6 were more likely to always/usually add salt to their food at the table (SC 1-2: 28%; SC 3-4: 33%; SC 5-6: 38%), while respondents from social classes 1-2 were the most likely to rarely/never add salt (SC 1-2: 52%; SC 3-4: 46%; SC 5-6: 42%) (see Figure 30).

Most respondents (61%) who always/usually added salt to food at the table would also always/usually add salt to food while cooking. Similarly, the majority of respondents (75%) who rarely/never added salt to food at the table would rarely/never add salt while cooking. This pattern did not differ across gender, age or social class.

Figure 30: Percentage of respondents who always/usually add salt to food while at the table, by age, gender and social class

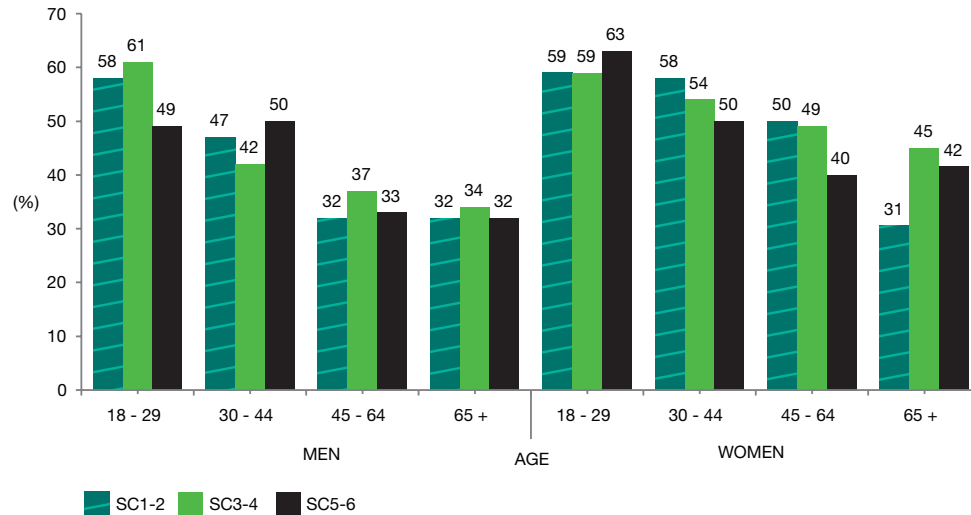


SNACKS

Respondents were asked if they consumed snacks between meals and to indicate the number and types of snacks they would usually consume. There were 10 response options for types of snacks (biscuits/cakes; crisps/popcorn/pretzels; fruit; nuts; vegetables; scone; chocolate; dried fruit; yoghurt; other); respondents were able to indicate multiple snack types.

Almost half of respondents (48%) reported eating snacks between meals. Higher percentages of women (52%) snacked between meals compared to men (44%) and younger respondents were more likely to snack compared to older respondents (age 18-29: 60%; 30-44: 50%; 45-64: 41%; 65+: 37%). Higher percentages of respondents in social classes 1-4 snacked between meals compared to respondents in social classes 5-6 (SC 1-2: 48%; SC 3-4: 49%; SC 5-6: 44%) (see Figure 31).

Figure 31: Percentage of respondents who reported that they eat snacks between meals, by age, gender and social class



Among all respondents, 45% of all snacks consumed came from the top shelf of the Food Pyramid, which contains foods that should only be consumed sparingly (high in fats, sugar or salt). The most common type of snack consumed from this shelf were biscuits and cakes (24% of all snacks consumed), followed by chocolate (11%) and crisps (10%). 15% of respondents reported snacking on fruit, while vegetables were the least common snack consumed (1%) from the list of 10 types.

MEAL HABITS

Respondents were asked to indicate where they ate each of their main meals on the day prior to completing the survey. Table 9 summarises the findings (see *Table A1 in Appendix for further details*).

Table 9: Percentage of respondents consuming their meals at home or outside the home, by gender

		MEN %	WOMEN %	TOTAL %
Breakfast	Did not have breakfast	11	9	10
	Purchased outside the home	9	5	7
Main meal of the day	Did not have main meal	3	4	4
	Purchased outside the home	14	10	12
Light meal	Did not have a light meal	6	5	6
	Purchased outside the home	27	19	23

BREAKFAST

Overall, 10% of respondents did not have a breakfast on the day prior to completing the survey. Of those who did have breakfast, the majority (80%) did so at home. Breakfast habits of men and women were different. Similar percentages of men (11%) and women (9%) did not have breakfast. Respondents who did not have breakfast tended to be in the younger age groups (age 18-29: 14%; 30-44: 12%; 45-64: 7%; 65+: 3%). A social class pattern was not evident (SC 1-2: 9%; SC 3-4: 11%; SC 5-6: 10%).

MAIN MEAL

The majority of respondents (84%) consumed their main meal at home on the day prior to completing the survey, while 5% consumed their main meal at a restaurant. Consumption patterns differed across gender, age and social class. Men were somewhat more likely to have their main meal outside the home than women (14% men and 10% women). Those in the youngest age group were the most likely to consume their main meal outside the home (age 18-29: 18%; 30-44: 16%; 45-64: 9%; 65+: 7%). Respondents in social classes 1-2 were somewhat more likely to consume their main meal away from home than others (SC 1-2: 16%; SC 3-4: 13%; SC 5-6: 12%).

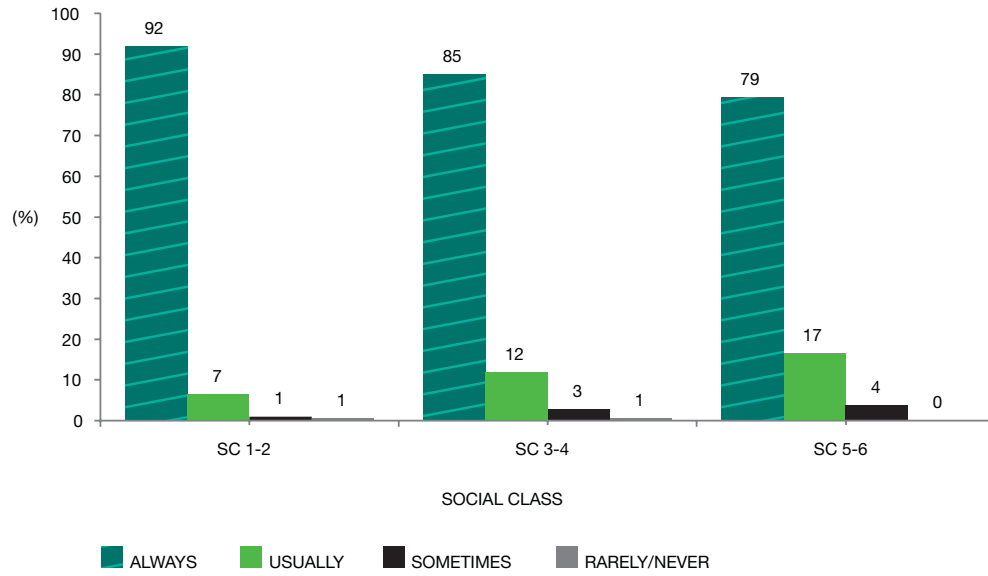
LIGHT MEAL

The majority of respondents (60%) consumed their light meal at home, while 23% purchased their light meal in a food outlet (e.g. a canteen, deli, restaurant or fast food restaurant). Gender, age and social class differences were evident. Men were more likely to have their light meal outside the home than women (27% men and 19% women). Those in the older age groups were more likely to consume their light meal at home compared to their younger counterparts (age 18-29: 41%; 30-44: 53%; 45-64: 69%; 65+: 90%). Those in lower social class groups were also more likely to consume this meal at home (SC 1-2: 53%; SC 3-4: 60%; SC 5-6: 67%).

HOUSEHOLD FOOD AFFORDABILITY

Respondents were asked to indicate how often they could afford to buy enough food for their household ('always', 'usually', 'sometimes', 'rarely' or 'never'). Almost all respondents (96%) reported that they could 'always' (84%) or 'usually' (12%) afford to buy food. While no gender differences existed in food affordability, differences were evident across age groups and social classes. Older respondents were more likely to report 'always' being able to afford food (age 18-29: 78%; 30-44: 84%; 45-64: 89%; 65+: 88%). Respondents in social classes 5-6 were less likely to report that they were 'always' able to afford food compared with other social classes (SC 1-2: 92%; SC 3-4: 84%; SC 5-6: 79%). A notable 3% and 4% of respondents from social classes 3-4 and 5-6 respectively could only 'sometimes' afford to buy enough food for their household (see *Figure 32*).

Figure 32: Household food affordability, by social class



8. SMOKING



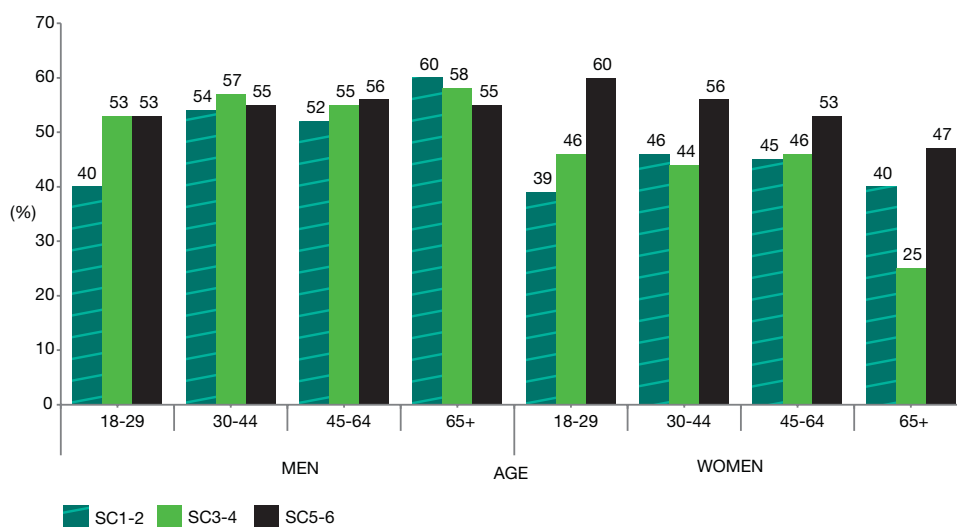
8. SMOKING

Respondents were asked a number of questions about smoking, attempts to quit (current smokers only) and rules regarding smoking in the home. Being a smoker was defined as 'having smoked at least 100 cigarettes during my lifetime'. 'Former smokers' were current non-smokers who had smoked at least 100 cigarettes in the past.

CURRENT AND FORMER CIGARETTE SMOKERS

Figure 33 presents the percentage of respondents who have smoked at least 100 cigarettes in their lifetime, by age, gender and social class. Almost half of respondents (48%) reported being a current or former smoker. More men (53%) than women (42%) reported being current or former smokers. Somewhat higher rates of current or former smoking were observed in the age groups 30-44 and 45-64 years (age 18-29: 43%; 30-44: 51%; 45-64: 50%; 65+: 44%) and in social classes 5-6 (SC 1-2: 48%; SC 3-4: 49%; SC 5-6: 55%).

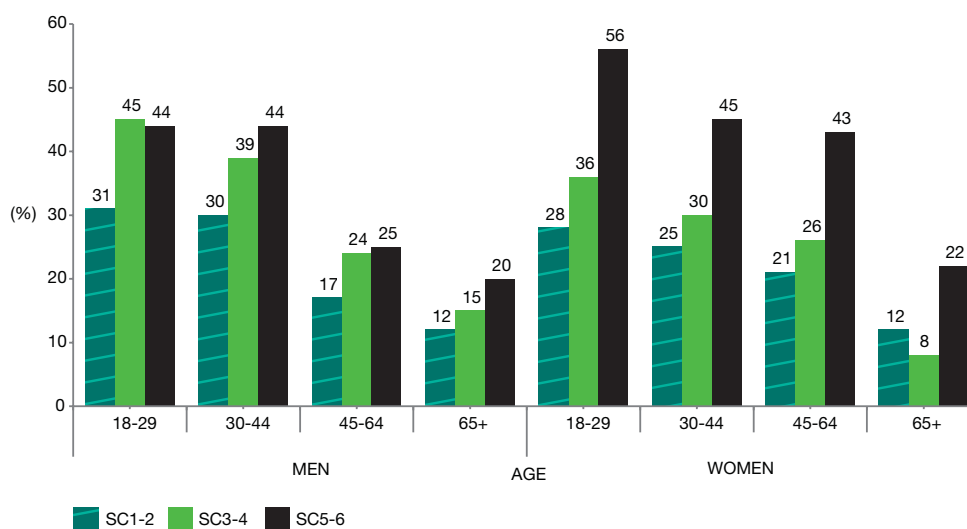
Figure 33: Percentage of respondents who reported smoking at least 100 cigarettes in their life, by age, gender and social class



CURRENT CIGARETTE SMOKERS

Overall, 29% of respondents reported being current cigarette smokers (see Figure 34). Rates of smoking were higher for men (31%) than for women (27%). This pattern persisted across all age groups. 83% of smokers reported smoking on a daily basis, while 17% reported that they smoke 'some days'.

Higher rates of smoking were reported by younger respondents (age 18-29: 35%; 30-44: 34%; 45-64: 25%; 65+: 14%) and respondents in social classes 5-6 (SC 1-2: 24%; SC 3-4: 30%; SC 5-6: 37%).

Figure 34: Percentage of smokers in 2007, by age, gender and social class

Details of smoking status by age, gender and social class are presented for SLÁN 1998, 2002 and 2007 in Table 10. The overall percentage of the population smoking decreased for men and women and across all age groups and social classes from 1998 to 2007: 33% (1998), 27% (2002) and 29% in 2007. The overall percentage smoking in 2007 did not differ significantly from 2002.

Two patterns emerge for trends in smoking over time. In older age groups (men aged 45-64 and 65+, and women aged over 30) and in social classes 5-6, the decrease was mainly from 1998 to 2002, with little further overall change from 2002 to 2007 (see Table 10). However, in the youngest age groups (men aged 18-29 and 30-44, and women aged 18-29) and in social classes 1-2 and 3-4, smoking prevalence decreased between 1998 and 2002, but increased again in 2007, although mainly to levels lower than they had been in 1998.

Table 10: Percentage of respondents smoking, by gender, age, social class and year (1998, 2002 and 2007)

	MEN			WOMEN			TOTAL		
	1998	2002	2007	1998	2002	2007	1998 (N = 6,211)	2002 (N = 5,856)	2007* (N = 10,237)
	%	%	%	%	%	%	%	%	%
Total	34	27	31	32	27	27	33	27	29
Age group									
18-29	42	29	38	44	31	32	43	30	35
30-44	38	33	37	34	32	29	36	33	34
45-64	29	23	23	26	25	27	28	24	25
65+	19	20	17	16	14	13	17	17	14
Social class									
1-2	30	19	24	31	19	23	30	19	24
3-4	36	27	33	37	27	28	36	27	30
5-6	39	33	34	38	38	41	39	35	37
Unc**	32	32	35	27	33	20	30	33	25

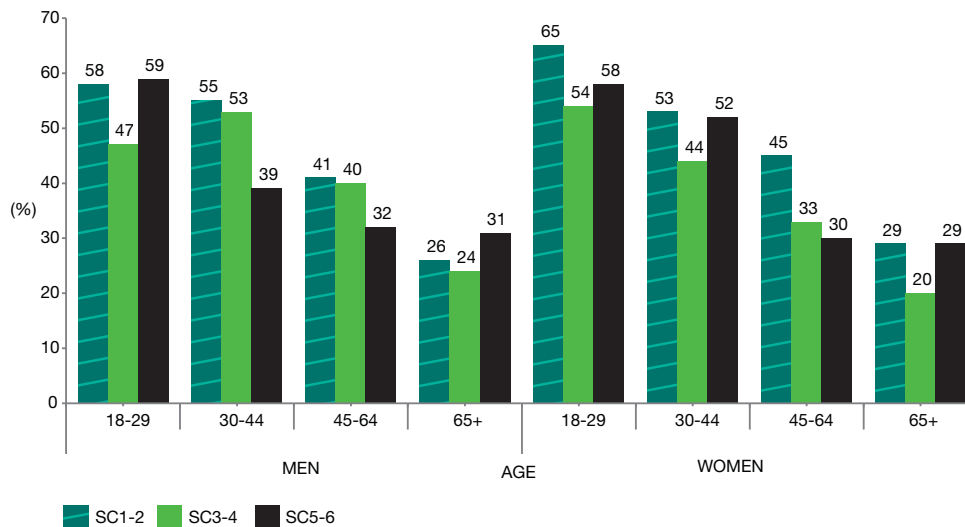
* There were some differences in the questions asked in different years in line with changing research practice and more recent opportunities to compare findings with other EU countries. Findings must thus be viewed with some caution and will be the subject of further analysis in detailed reports (see *Appendix for further detail on weighting procedure*).

** Unc unclassified

ATTEMPTS TO QUIT

Almost half of both male and female smokers (46%) reported attempting to quit within the previous 12 months (see *Figure 35*). Higher percentages of younger respondents reported attempting to quit (age 18-29: 54%; 30-44: 49%; 45-64: 37%; 65+: 30%), as did higher percentages of respondents in social classes 1-2 (SC 1-2: 52%; SC 3-4: 45%; SC 5-6: 43%).

Figure 35: Percentage of cigarette smokers who reported trying to quit smoking in the previous 12 months, by age, gender and social class



INTENTIONS TO QUIT

When asked about their stage of change regarding current intentions to quit, 9% of smokers reported that they were trying to quit, 17% reported actively planning to quit, 33% reported thinking about quitting but not planning to, while 41% reported that they were not thinking about quitting at all. Higher percentages of younger respondents reported actively planning to quit when compared with older respondents (age 18-29: 19%, 30-44: 19%, 45-64: 14%, 65+: 5%). Higher percentages of respondents in social classes 1-2 also reported attempting to quit in the previous 12 months compared with other social class groups (SC 1-2: 21%; SC 3-4: 15%; SC 5-6: 15%).

HOUSEHOLD SMOKING RULES

Respondents were asked if there were rules about smoking in their household. Over half (59%) reported that smoking was not allowed anywhere inside their home. An additional 23% stated that smoking was only allowed in their home in some places or at some times.

In terms of social class, a higher percentage of respondents from social classes 1-2 (67%) reported that smoking was not allowed anywhere inside their home compared to social classes 3-4 (58%) and social classes 5-6 (50%).

9. ALCOHOL AND OTHER SUBSTANCES



9. ALCOHOL AND OTHER SUBSTANCES

Respondents were asked a number of questions relating to alcohol and drug misuse.

FREQUENCY OF DRINKING

Almost one-quarter of women (23%) reported never drinking alcohol in the past year, compared with 15% of men. Men drank alcohol more often than women, with 45% of men reporting that they drank at least 2-3 times a week, compared to 29% of women.

In terms of age, the highest percentage of respondents reporting that they drank alcohol at least 2-3 times a week were aged 45-64 years (age 18-29: 38%; 30-44: 38%; 45-64: 41%; 65+: 28%). There were also differences across social class groups, with a higher percentage of respondents in social classes 1-2 reporting drinking alcohol 2-3 times a week or more often (SC 1-2: 46%; SC 3-4: 36%; SC 5-6: 33%). Table 11 outlines the frequency of drinking alcohol in the past year as reported by SLÁN 2007 respondents, by gender, age and social class.

Table 11: Frequency of drinking alcohol in the past year, by gender, age and social class

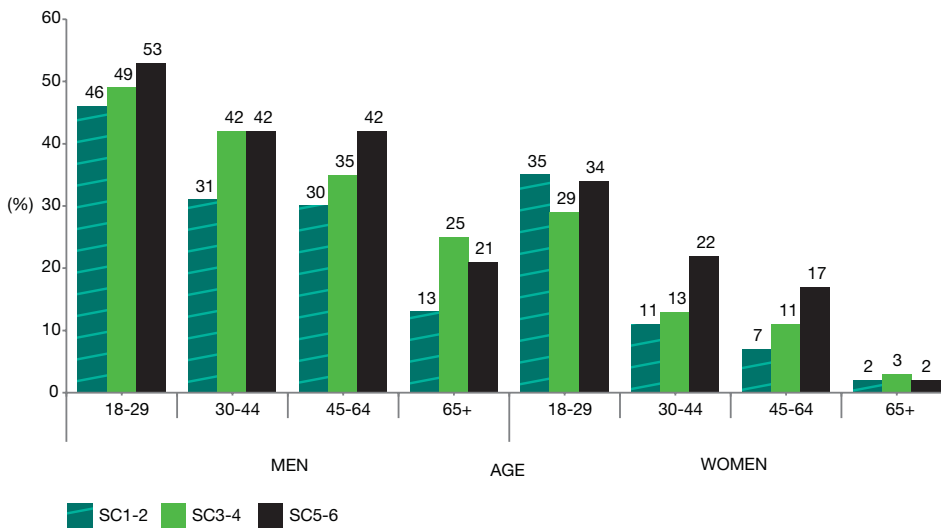
TOTAL (N = 10,313)	NEVER	MONTHLY OR LESS	2-4 TIMES PER MONTH	2-3 TIMES PER WEEK	4 OR MORE TIMES PER WEEK
	%	%	%	%	%
Total	19	16	27	30	8
Gender					
Men	15	13	27	34	11
Women	23	19	28	25	5
Age group					
18-29	11	14	37	34	4
30-44	14	17	31	31	7
45-64	21	17	21	30	11
65+	41	16	15	18	10
Social class					
SC 1-2	13	13	28	35	11
SC 3-4	18	17	29	29	7
SC 5-6	24	18	25	27	6
Unc*	29	19	25	22	5

* Unc = unclassified

DRINKING 6 OR MORE STANDARD DRINKS ON ONE OCCASION

Respondents who reported that they drank alcohol were asked how often they had 6 or more ‘standard’ drinks⁹ on one occasion in the last year. Over one-quarter of respondents (28%) reported doing so at least once a week (38% men and 17% women). Higher percentages of younger respondents (age 18-29: 40%; 30-44: 27%; 45-64: 23%; 65+: 12%) and respondents in social classes 5-6 (SC 1-2: 24%; SC 3-4: 29%; SC 5-6: 34%) reported having 6 or more standard drinks on at least one occasion per week (see *Figure 36*).

Figure 36: Percentage of drinkers who reported having 6 or more ‘standard’ drinks on one or more occasions per week, by age, gender and social class



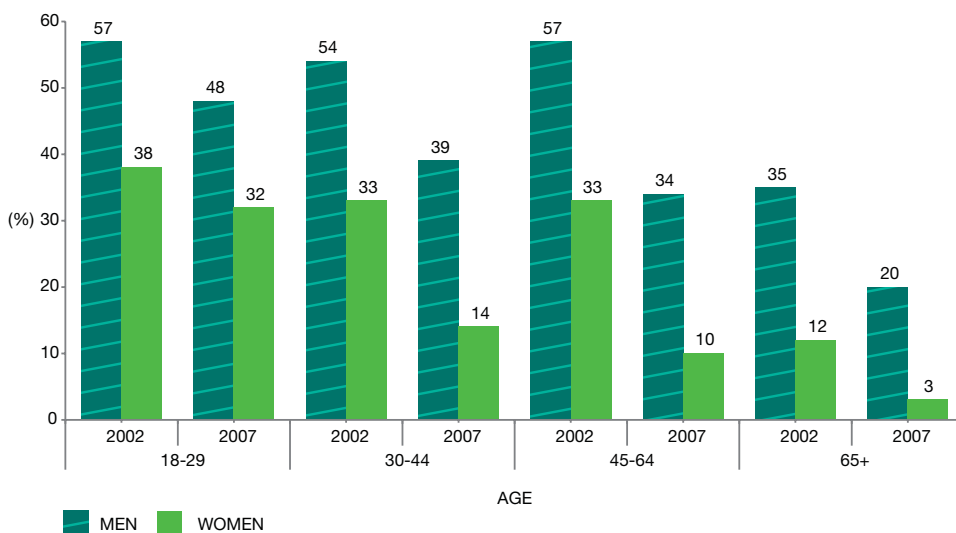
The percentage of respondents reporting that they had 6 or more standard drinks at least once per week has fallen, from 45% in 2002 to 28% in 2007.¹⁰ This pattern was reflected across gender, age and social class (see *Figure 37*). The percentage of women reporting that they had 6 or more standard drinks at least once per week has halved, from 34% in 2002 to 17% in 2007 (compared to 54% men in 2002 and 38% men in 2007). The older age groups show the largest decrease in drinking – age 18-29: 48% (2002) to 40% (2007); 30-44: 42% (2002) to 27% (2007); 45-64: 47% (2002) to 23% (2007); 65+: 27% (2002) to 12% (2007). There was also a decrease in each of the social class groups – SC 1-2: 41% (2002) to 24% (2007); SC 3-4: 44% (2002) to 29% (2007); SC 5-6: 52% (2002) to 34% (2007); unclassified: 45% (2002) to 28% (2007).

Findings must be viewed with caution since the survey method has changed over this period of time (from postal self-report questionnaires in 2002 to face-to-face interviews in 2007) and willingness to report drinking excessively may differ by survey method.

⁹ A ‘standard’ drink is defined as one unit of alcohol, e.g. half pint or a glass of beer, lager or cider; a single measure of spirits; a single glass of wine, sherry or port; or a bottle of alcopop (long neck).

¹⁰ Comparison data were not available for 1998.

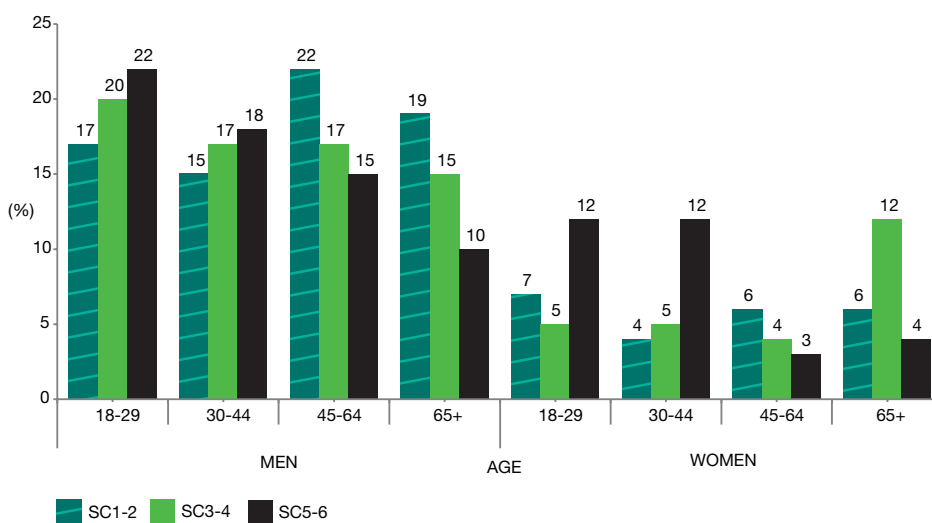
Figure 37: Percentage of drinkers who reported having 6 or more 'standard' drinks on one or more occasions per week, by age, gender and year (2002 and 2007)



ALCOHOL AND DRIVING

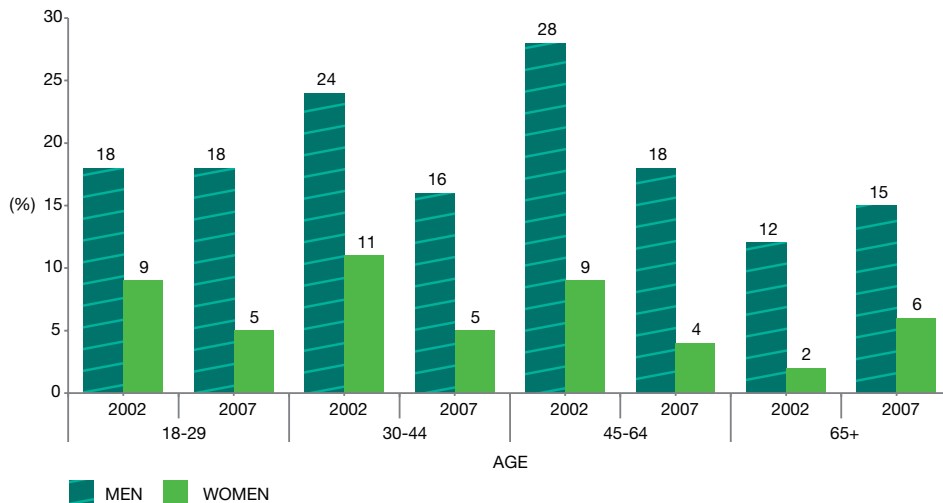
Among drinkers who drive a car (67% of overall population), 12% reported they had driven a car after consuming 2 or more standard alcoholic drinks in the previous year (see Figure 38). More men (17%) than women (5%) reported doing this. There were no age differences. Respondents in social classes 5-6 were somewhat more likely to report driving after drinking (SC 1-2: 12%; SC 3-4: 12%; SC 5-6: 15%).

Figure 38: Percentage of drivers (who were also drinkers) who reported driving a car after consuming 2 or more standard alcoholic drinks in the previous year, by age, gender and social class



The percentage of drivers who reported driving a car after consuming 2 or more standard alcoholic drinks in the previous 12 months has decreased somewhat between 2002 and 2007, from 16% to 12% (see Figure 39). The decrease was evident for both men and women, drivers in all age groups and also in all social classes. Again, the findings must be viewed with caution because of the potential impact of changing survey methods (from self-report in 2002 to interview in 2007).

Figure 39: Percentage of drivers (who were also drinkers) who reported driving a car after consuming 2 or more standard alcoholic drinks in the previous year, by age, gender and year (2002 and 2007)



The pattern of alcohol use across the three SLÁN surveys was compared. Of those respondents who have had an alcoholic drink within the previous year, the average number of alcoholic drinks consumed in an average week across the three surveys decreased from 11 drinks (1998) to 9 (2002) to 7 (2007).

Table 12 outlines the percentages drinking above the recommended units of alcohol for men and women over the three surveys. Earlier surveys asked about typical weeks and drinks, while SLÁN 2007 asked more precisely about each day of the previous 7 days. Drinking over the recommended limits was lower for women than for men in all three surveys and was also lower with each increase in age group (older respondents being less likely to drink over the recommended amounts). There were no broad differences across social class groups.

Table 12: Percentage of respondents who drank alcohol in the previous 12 months and consumed above the recommended number of units of alcohol per week, by gender, age, social class and year (1998, 2002 and 2007)

	MEN			WOMEN			TOTAL		
	1998 %	2002 %	2007* %	1998 %	2002 %	2007* %	1998 (N = 6,020) %	2002 (N = 5,875) %	2007* (N = 10,185) %
Total	20	18	11	11	8	5	15	13	8
Age group									
18-29	28	23	15	22	11	9	25	17	12
30-44	19	15	10	8	11	5	13	13	7
45-64	17	18	11	6	6	4	11	12	8
65+	6	9	5	2	2	1	4	5	3
Social class									
1-2	23	10	10	13	18	7	17	14	9
3-4	22	9	12	15	18	5	19	13	8
5-6	20	8	12	6	21	5	13	16	9
Unc**	15	4	9	7	11	3	11	7	5

* There were some differences in the questions asked in different years in line with changing research practice and more recent opportunities to compare findings with other EU countries. Findings must thus be viewed with some caution and will be the subject of further analysis in detailed reports (see *Appendix for further detail on weighting procedure*).

** Unc = unclassified

Table 13 outlines those respondents who did not drink alcohol in the past 12 months across the three surveys. Percentages are higher for women than for men and the patterns of non-use are similar across the three surveys.

Table 13: Percentage of respondents who did not drink alcohol in the previous 12 months, by gender and year (1998, 2002 and 2007)

	1998 (N = 1,020) %	2002 (N = 951) %	2007 (N = 2,114) %
Men	14	14	15
Women	22	19	23
Total	18	17	19

USE OF ILLICIT DRUGS

Respondents were asked about their use of illicit drugs in the previous year. The most commonly used illicit drug for both men (8%) and women (3%) in 2007 was marijuana (see Table 14). Reported use of illicit drugs was higher for men than women across all categories of illicit drugs. Percentages were too small to examine further by age or social class groups. Across all categories, use was similar or lower in 2007 than in 1998.

Table 14: Reported use of illicit drugs in the previous 12 months, by gender and year (1998, 2002 and 2007)

	1998			2002			2007		
	MEN %	WOMEN %	TOTAL %	MEN %	WOMEN %	TOTAL %	MEN %	WOMEN %	TOTAL %
Marijuana	8	4	6	9	2	5	8	3	5
Ecstasy	3	2	3	4	2	3	1	<1	1
Tranquillisers without prescription	1	2	1	2	1	2	1	<1	1
Cocaine	2	1	1	4	2	3	2	<1	1
Heroin	1	<1	<1	<1	1	<1	<1	<0.1	<1
Total	10	7	8	10	4	7	9	4	6

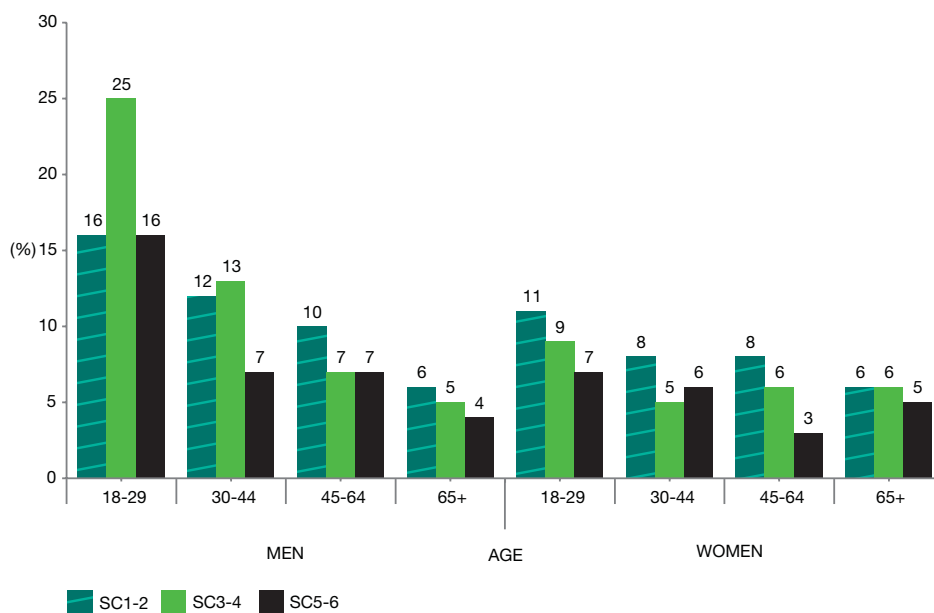
10. INJURIES



10. INJURIES

Respondents were asked about injuries that necessitated medical consultation. Overall, 9% reported one or more such injury in the previous 12 months (11% men and 7% women) (see Figure 40). Injuries were more common among the younger population (age 18-29: 14%; 30-44: 9%; 45-64: 7%; 65+: 5%). Respondents in social classes 5-6 were less likely to report an injury (SC 1-2: 10%; SC 3-4: 10%; SC 5-6: 7%).

Figure 40: Percentage of respondents who reported experiencing one or more injuries in the previous year, by age, gender and social class

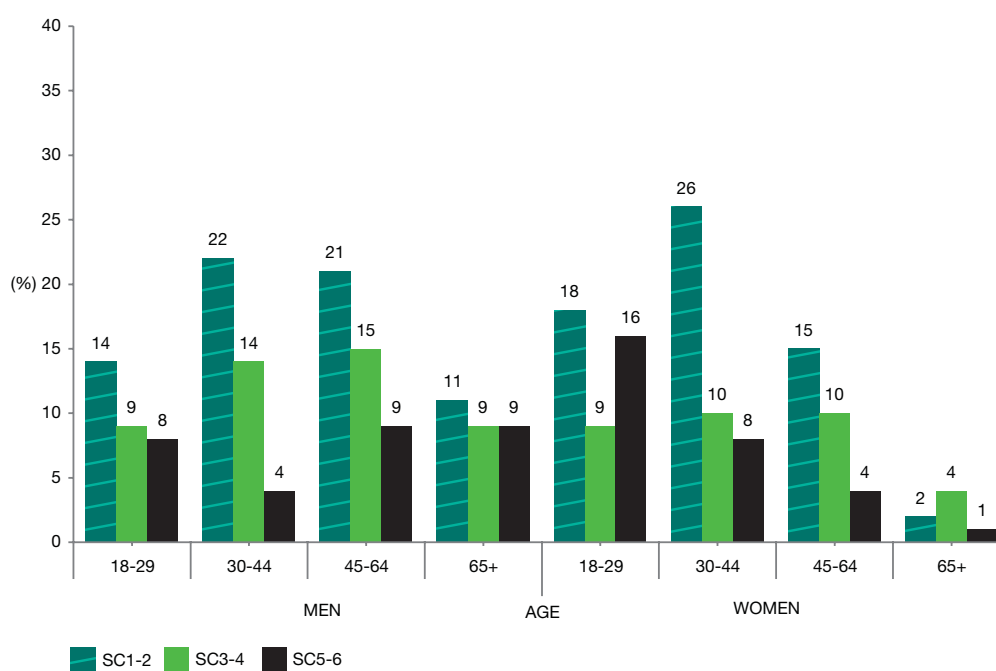


Of those reporting an injury, 51% reported missing 3 or more days of work or other daily activity due to injury. There were no gender differences nor was there a clear pattern of differences in age groups (age 18-29: 50%; 30-44: 47%; 45-64: 57%; 65+: 52%) or social classes (SC 1-2: 42%; SC 3-4: 57%; SC 5-6: 50%).

HELMET USE

A minority of respondents (28%) reported cycling in the previous year. Of those, 13% reported that they always wore a helmet when riding a bicycle (14% men and 12% women) (see Figure 41). Age differences in wearing a helmet were also found (age 18-29: 11%; 30-44: 17%; 45-64: 14%; 65+: 4%). Respondents in social classes 1-2 were more likely to report always wearing a bicycle helmet compared to others (SC 1-2: 19%; SC 3-4: 11%; SC 5-6: 7%).

Figure 41: Percentage of respondents who reported that they always wore a helmet when riding a bicycle, by age, gender and social class



Comparisons between 2002 and 2007 surveys were possible. Percentages of the overall sample cycling in 2002 and 2007 were 26% and 28% respectively. The percentage always wearing a bicycle helmet was 15% in 2002 and 13% in 2007 (see Figure 42). Figures for men were 13% (2002) and 14% (2007), and for women 19% (2002) and 12% (2007). In most age groups, the percentage of respondents reporting that they always used a bicycle helmet has decreased between 2002 and 2007.

Figure 42: Percentage of respondents who reported that they always wore a helmet when riding a bicycle, by age, gender and year (2002 and 2007)



11. FAMILY, SOCIAL NETWORK AND NEIGHBOURS



11. FAMILY, SOCIAL NETWORK AND NEIGHBOURS

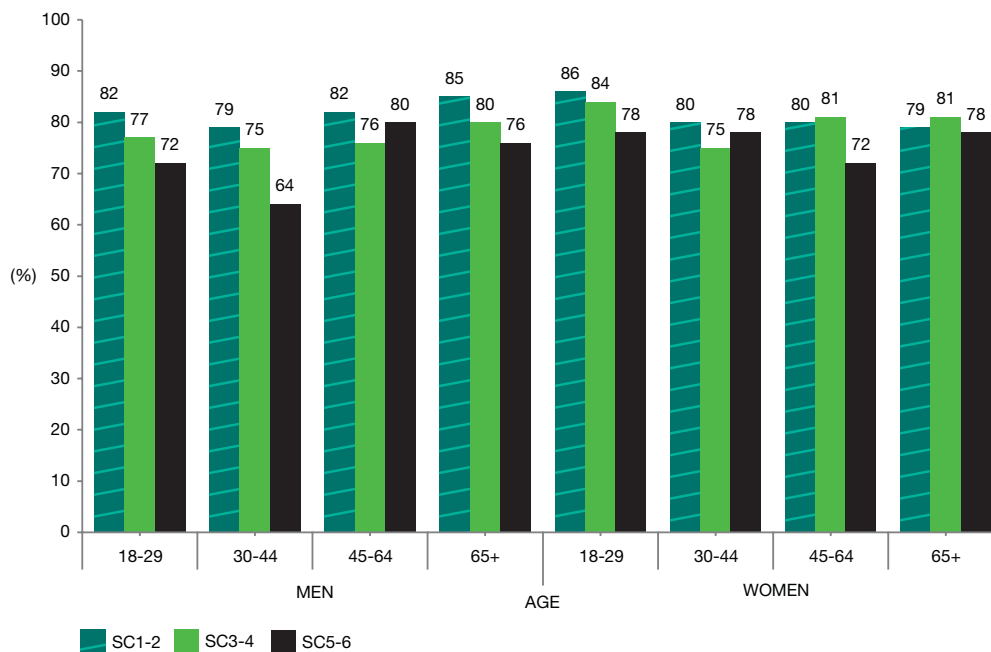
Respondents were asked a number of questions relating to perceived personal social support and social participation.

SOCIAL SUPPORT

Social support as perceived by respondents was assessed using three questions concerning the number of people close to respondents, the interest people take in what respondents do and how easy it is to get practical help from neighbours if needed (questions from the Oslo Social Support Scale¹¹).

Overall, 78% of respondents reported that they had 3 or more people close to them that they could count on if they had serious personal problems (see Figure 43). The figure was similar for women (79%) and men (77%). No age pattern was evident (age 18-29: 80%; 30-44: 74%; 45-64: 79%; 65+: 80%). There was a lower level of reporting having 3 or more close friends in social classes 5-6 compared to others (SC 1-2: 81%; SC 3-4: 78%; SC 5-6: 74%).

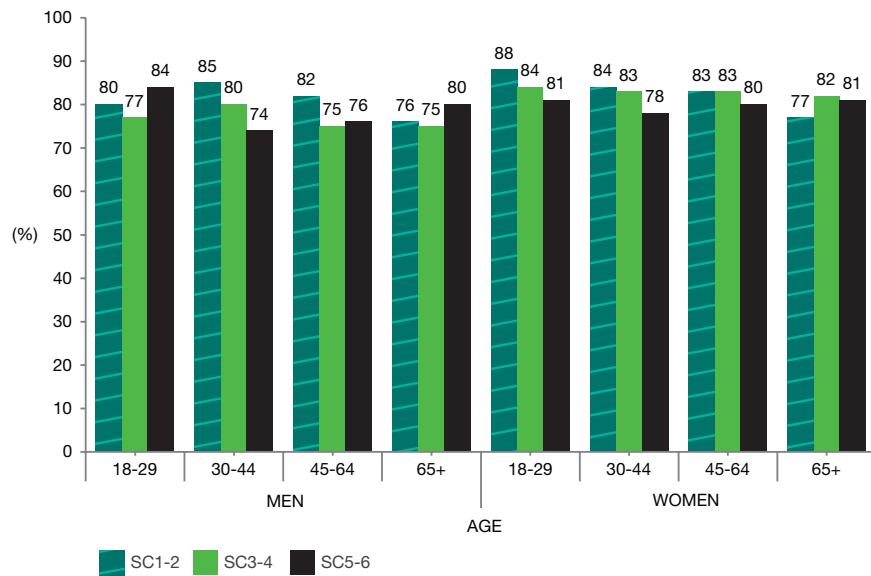
Figure 43: Percentage of respondents who reported having 3 or more close people they could count on if they had serious personal problems, by age, gender and social class



11 Survey instruments are referenced in detail on www.slán07.ie

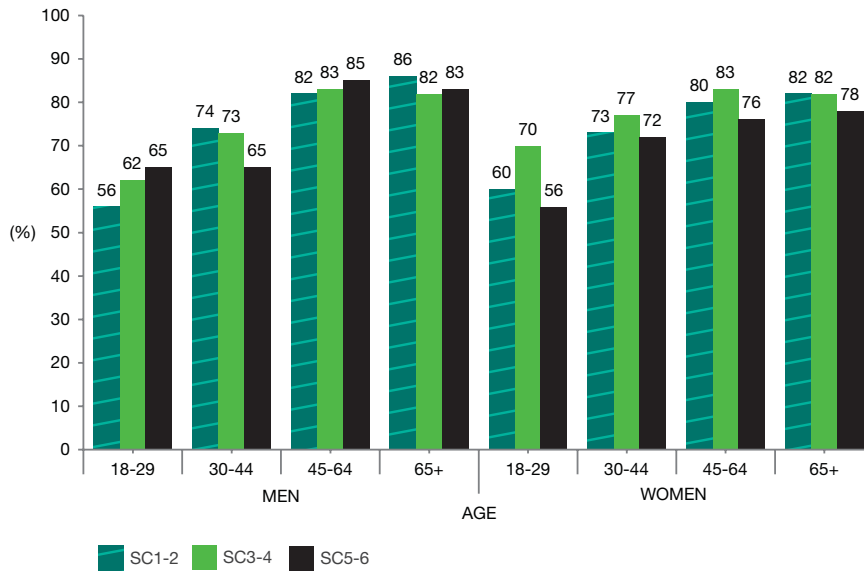
Most respondents (81%) reported that other people take a friendly interest in what they are doing. There were no clear patterns for gender (83% women and 79% men), age (age 18-29: 82%; 30-44: 82%; 45-64: 80%; 65+: 78%) or social class (SC 1-2: 83%; SC 3-4: 80%; SC 5-6: 79%) (see Figure 44).

Figure 44: Percentage of respondents who reported that people take some or a lot of friendly interest in what they are doing, by age, gender and social class



In addition, 74% of respondents reported that they found it 'easy' or 'very easy' to get practical help from their neighbours (see Figure 45). There were no gender differences (73% women and 75% men) or social class differences (SC 1-2: 74%; SC 3-4: 76%; SC 5-6: 73%). There were, however, age differences, with higher percentages of older respondents reporting that they found it 'easy' or 'very easy' to get practical help from neighbours (age 18-29: 63%; 30-44: 72%; 45-64: 82%; 65+: 83%).

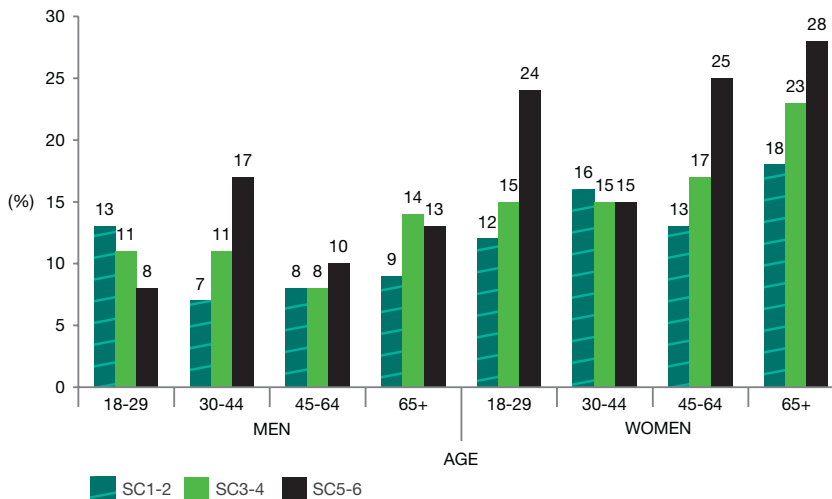
Figure 45: Percentage of respondents who reported finding it 'easy' or 'very easy' to get practical help from neighbours, by age, gender and social class



LONELINESS

14% of respondents (10% men and 17% women) answered 'Yes' to the question 'Have you often felt lonely in the last 4 weeks?' (see Figure 46). Older respondents felt somewhat more lonely (age 18-29: 12%; 30-44: 13%; 45-64: 13%; 65+: 17%), as did respondents in social classes 5-6 (SC 1-2: 11%; SC 3-4: 13%; SC 5-6: 16%).

Figure 46: Percentage of respondents who answered 'Yes' to the question 'Have you often felt lonely in the last 4 weeks?', by age, gender and social class

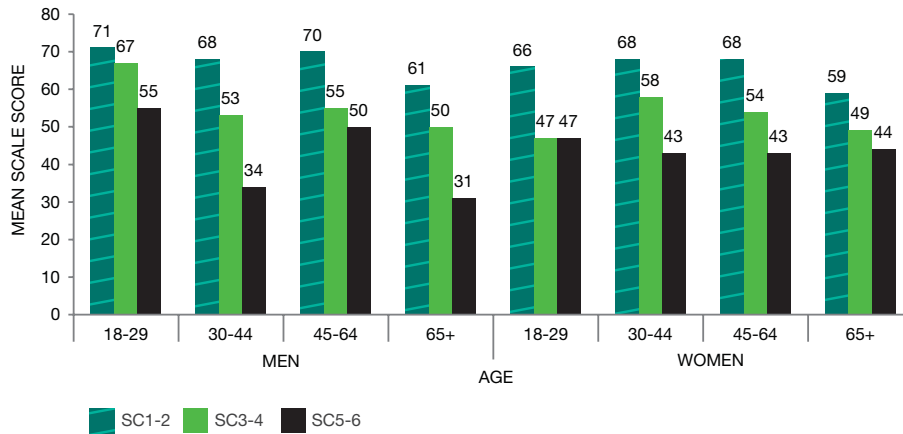


INVOLVEMENT IN THE COMMUNITY

Respondents were asked if they regularly take part in the activities of community organisations, such as sport clubs, political parties, trade unions, environmental groups, parent-children associations, tenant groups, neighbourhood safety, religious or voluntary activities, evening classes and social clubs.

Overall, 55% of respondents reported attending at least one community activity on a regular basis (56% men and 54% women) (see *Figure 47*). Involvement in community activities was more common in higher social classes (SC 1-2: 68%; SC 3-4: 55%; SC 5-6: 43%) and among younger people (age 18-29: 58%; 30-44: 56%; 45-64: 56%; 65+: 47%).

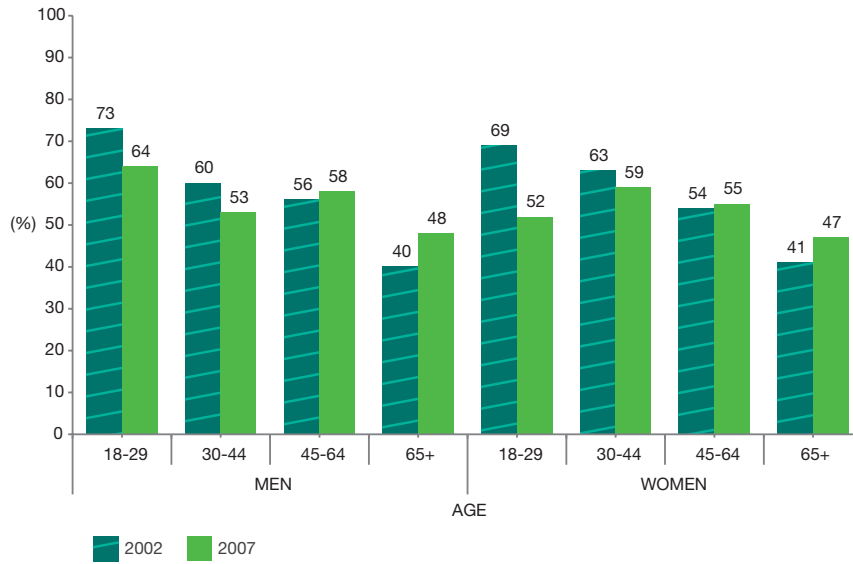
Figure 47: Percentage of respondents who reported regularly attending one or more community activities, by age, gender and social class



Comparing SLÁN 2002 and 2007, the percentage of respondents who reported participating in at least one community activity has decreased from 59% in 2002 to 55% in 2007 (see *Figure 48*). This decrease was evident among men and women, among 18-44 year olds. The pattern was also evident by social class – SC 1-2: 71% (2002) to 68% (2007); SC 3-4: 60% (2002) to 55% (2007); SC 5-6: 52% (2002) to 43% (2007).¹²

¹² This may be accounted for by the changed sampling framework of SLÁN 2007 compared to previous surveys, as discussed in Chapter 2, 'Methods'.

Figure 48: Percentage of respondents who reported regularly attending one or more community activities, by age, gender and year (2002 and 2007)



12. SUB-STUDIES: BODY WEIGHT AND PHYSICAL EXAMINATION



12. SUB-STUDIES: BODY WEIGHT AND PHYSICAL EXAMINATION

This chapter provides the results based on the two sub-studies conducted as part of SLÁN 2007, involving (i) a sub-sample of 967 respondents aged 18-44 who had their body height, weight (body mass index: BMI) and waist circumference measured; and (ii) a sub-sample of 1,207 respondents aged 45+ who took part in a physical examination, which included blood and urine sampling, and medical history and clinical assessment by trained nurses. The sub-samples were representative of the overall study samples for their age groups (*for full details, see Chapter 2, Table 3*).

Three major health-related profiles are presented here – body mass index (BMI), blood pressure and serum cholesterol. Other indices assessed are listed in the Appendix and will be described in later reports.

BODY MASS INDEX (BMI)

Obesity has been defined as a condition in which excess body fat has accumulated to an extent that health is adversely affected. Body mass index (BMI) is used to estimate the prevalence and associated risks of overweight and obesity within a population. The BMI is calculated as follows:

$$\text{BMI kg/m}^2 = \frac{\text{Weight (kg)}}{\text{Height (m) x Height (m)}}$$

All respondents in the main survey were asked to report their height and weight. These measurements were used to calculate BMI scores, which were categorised as:

- healthy BMI within the range 18.5-24.99kg/m²
- underweight BMI within the range 15-18.49kg/m²
- overweight BMI within the range 25-29.99kg/m²
- obese BMI ≥30kg/m²

The two sub-samples of respondents aged 18-44 and 45+ years also had their height and weight measured independently, by trained interviewers/nurses. (Respondents provided self-reported data at interview before they were asked to agree to have their height and weight measured independently.)

OVERALL BMI DISTRIBUTIONS USING SELF-REPORTED DATA

Self-reported BMIs were calculated for 9,735 respondents. Overall, 2% of respondents were underweight, 48% had BMIs within the healthy range, 36% were overweight and 14% were obese. Women were more likely to have BMIs categorised as healthy than men (56% compared to 40%). Compared to women, higher percentages of men were overweight (43% men compared to 28% women) and obese (16% men compared to 13% women) (*see Figures 49 and 50*). Younger respondents were more likely to have BMIs categorised

as healthy, while higher percentages of older respondents were either overweight or obese (see Appendix, Table A2).

While no obvious social class pattern emerged for overweight respondents, a social class pattern was evident for obesity. There were higher percentages of obese adults in social classes 5-6 compared to other groups (SC 1-2: 13%; SC 3-4: 15%; SC 5-6: 18%). This pattern was evident across all age groups for men, but not for women (see Appendix, Table A3).

Figure 49: Self-reported BMI scores for men, by age

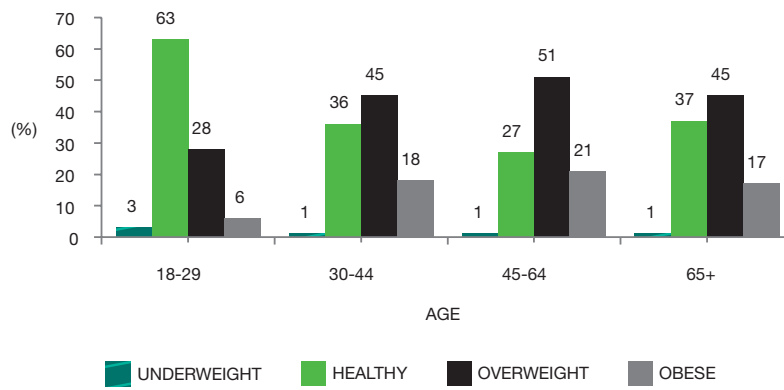
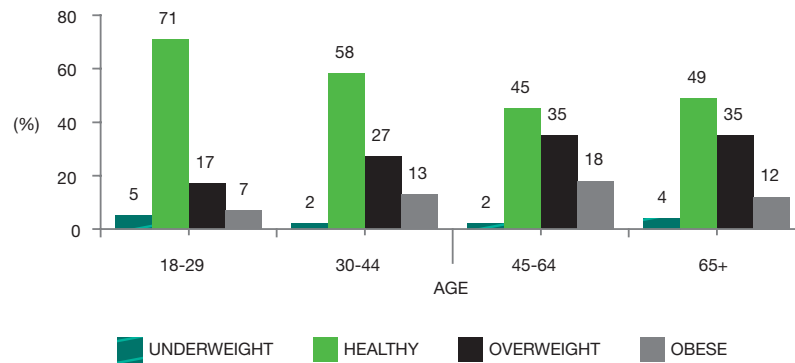


Figure 50: Self-reported BMI scores for women, by age



BMI DISTRIBUTIONS COMPARING SELF-REPORTED AND MEASURED DATA

For the two sub-samples of respondents, BMI was calculated using both self-reported and independently measured data. The data from the two methods of assessment suggest that self-reported height and weight measurements give a systematic *underestimation* of the true prevalence of respondents who are overweight or obese (see Figures 51 and 52). This finding is consistent with other international surveys and does not detract from the importance of monitoring trends since this underestimation would also have been present in the 1998 and

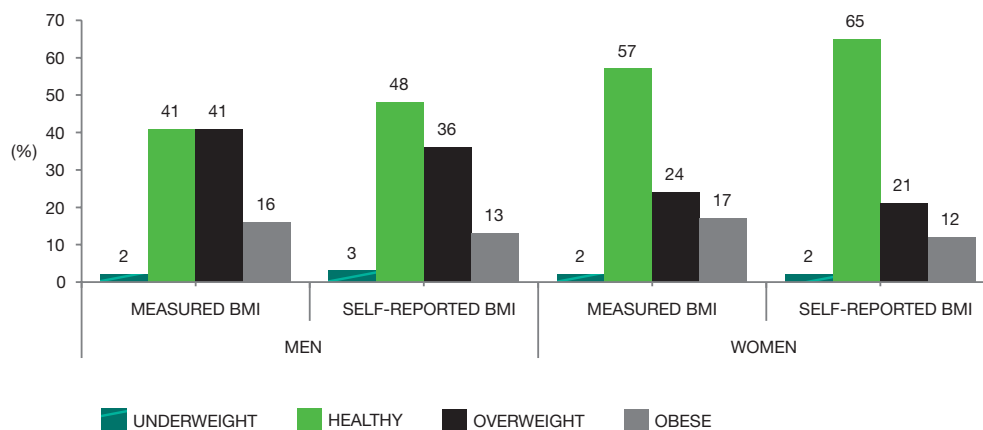
2002 SLÁN surveys. BMI scores derived from self-reported height and weight estimates continue to be widely used (e.g. by the US Center for Disease Control and Prevention Behavioral Risk Factor Surveillance Survey) to monitor BMI distributions over time despite the systematic differences that may occur.

Comparison of self-reported and measured data for both sub-samples in SLÁN 2007 and the implications for the whole study population will be examined in more detail in a subsequent specialist report, which will also include data on waist circumference measurements.

RESPONDENTS AGED 18-44

Based on measured data for 967 younger respondents, men under the age of 45 were more likely to be categorised as being overweight than women (41% compared to 24%), whereas the percentages of obesity were similar (16% men and 17% women) (see *Figure 51 and Appendix, Table A4*).

Figure 51: BMI scores calculated using self-reported and measured data for 967 respondents aged 18-44, by gender

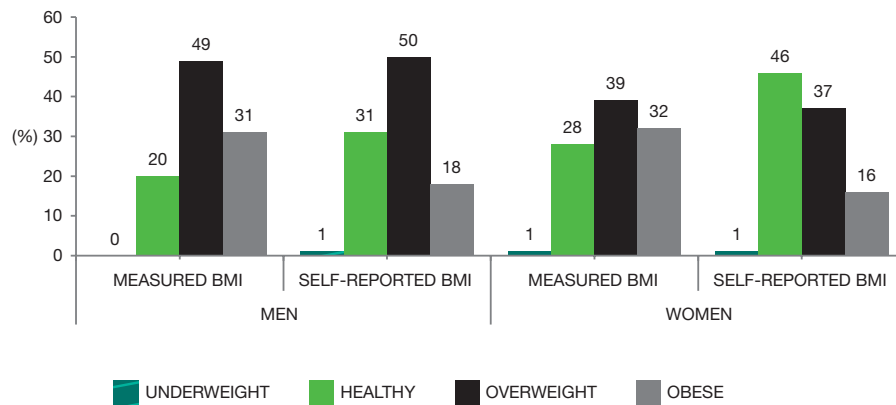


RESPONDENTS AGED 45+

Based on measured data for 1,207 older respondents, men aged 45 years or over were more likely to be classified as overweight than women (49% men and 39% women), but similar percentages of men and women were obese (31% men and 32% women) (see *Figure 52*).

BMI was also underestimated among respondents aged 45 years and over. Approximately one-fifth of men (21%) and 41% of women who were overweight based on measured data were classified as healthy weight based on self-reported data. Almost half of men (49%) and 43% of women who were obese based on measured data were classified as overweight based on self-reported data.

Figure 52: BMI scores calculated using self-reported and measured data for 1,207 respondents aged 45+, by gender



In conclusion, combining the sub-sample of measured BMI data for the under-45 and over-45 age groups, 1% of all respondents were underweight (1% men and 1% women), 35% had BMIs within the healthy range (30% men and 40% women), 39% were overweight (45% men and 33% women) and 25% were obese (24% men and 26% women).

COMPARISON WITH 1998 AND 2002 SLÁN SURVEYS

Obesity levels based on self-reported data have increased over the period of the three surveys, from 11% in 1998 to 15% in 2002 and levelled off at 14% in 2007. Overweight levels have increased somewhat between 1998 (31%) and 2002 (33%) and increased again in 2007 (36%). For men, the percentages reporting BMIs in the healthy category has declined steadily, from 48% (1998) to 46% (2002) to 40% (2007) (see Figure 53). For women, the percentages reporting BMIs in the healthy category decreased between 1998 (60%) and 2002 (55%), but stabilised in 2007 (56%) (see Figure 54). Increases in obesity levels were seen in women in the 45-64 age group (see Appendix, Table A5).

Figure 53: Self-reported BMI distributions for men, by year

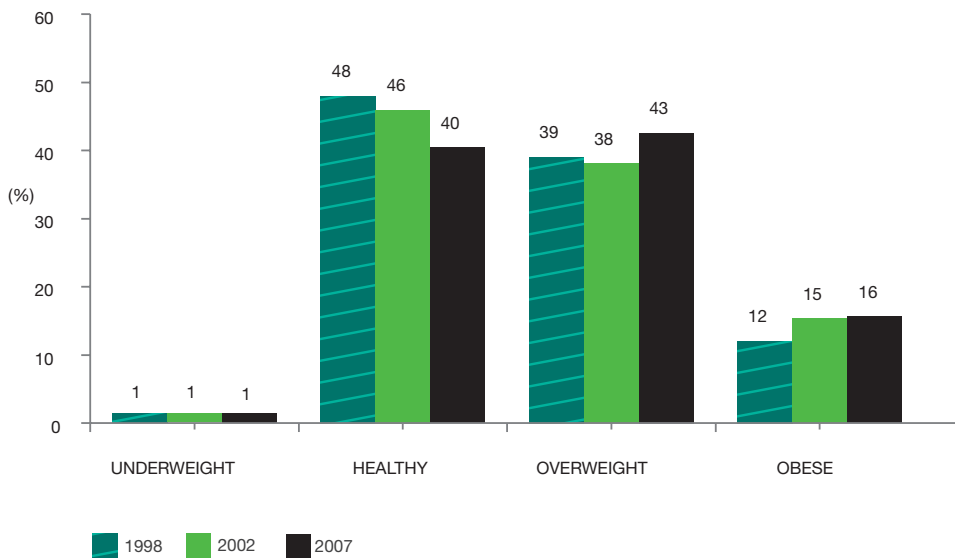
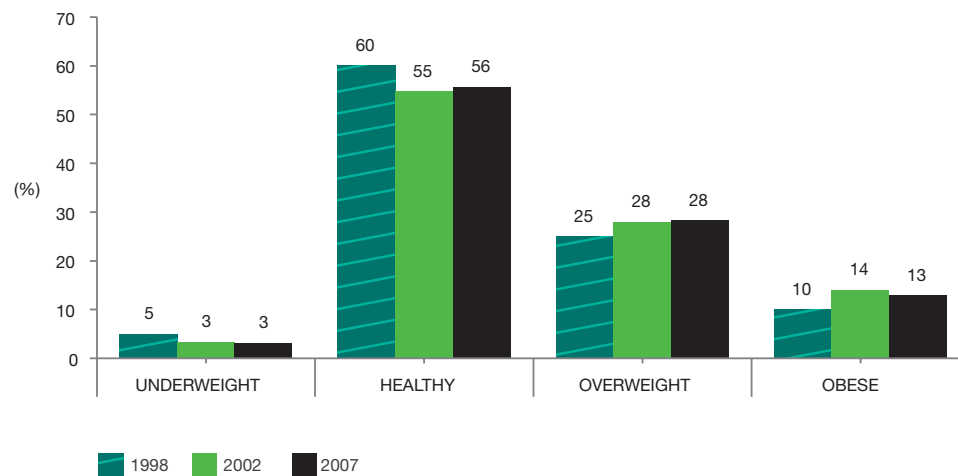


Figure 54: Self-reported BMI distributions for women, by year

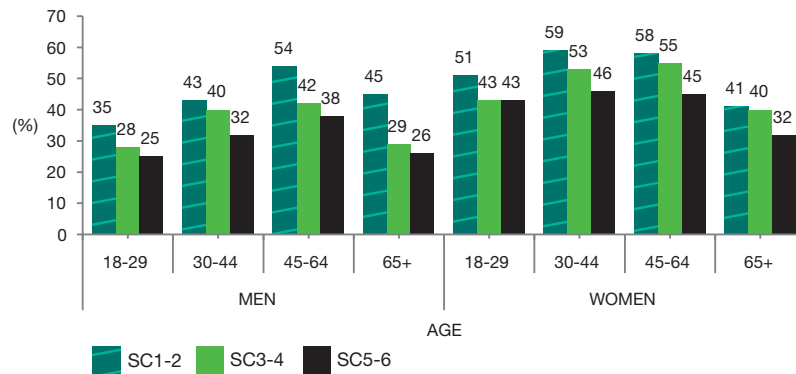


WEIGHT MANAGEMENT

Overall, 43% of respondents in the main survey were actively trying to manage their weight. The majority (67%) were trying to lose weight, one-third (30%) were trying to maintain their current weight and 3% were trying to gain weight. Women were more likely to report trying to manage their weight than men (49% women and 37% men). Age and social class differences were evident (see *Figure 55*).

Respondents aged between 30 and 64 years were more likely to be trying to manage their weight when compared to their younger and older counterparts (age 18-29: 37%; 30-44: 46%; 45-65: 50%; 65+: 34%). Higher percentages of those from social classes 1-2 were actively trying to manage their weight compared to other groups (SC 1-2: 50%; SC 3-4: 43%; SC 5-6: 35%). Respondents who were actively trying to manage their weight and those trying to lose weight had higher mean BMIs than those not trying to manage their weight.

Figure 55: Percentage of respondents who reported actively trying to manage their weight, by age, gender and social class



With regard to weight management, men were more likely to be trying to maintain their current weight compared to women (34% compared to 28%), while women were more likely to be trying to lose weight compared to men (71% compared to 61%).

Among respondents attempting to lose or maintain their weight, 80% reported that they were trying to eat less fat. A similar percentage (79%) also reported that they were taking exercise. Over two-thirds (68%) were trying to eat fewer calories as part of their weight management regimen. Similar percentages of men (78%) and women (80%) reported taking exercise. Women were somewhat more likely than men to report eating less fat (82% compared to 76%) and eating fewer calories (71% compared to 64%).

Similar percentages of respondents across age groups and social classes reported eating less fat and fewer calories to manage their weight. While percentages of respondents reporting taking exercise to manage their weight were similar across all age categories, respondents in social classes 5-6 were less likely to take exercise than others (SC 1-2: 82%; SC 3-4: 79%; SC 5-6: 74%).

In the previous year, 10% of respondents had been advised by a doctor or other health professional to lose weight, while 3% were advised to maintain their weight and 1% were advised to gain weight. Those who were advised to lose weight had a mean BMI of 31kg/m² (SD 4.5), compared to a BMI of 25kg/m² (SD 3.7) for those advised to maintain current weight. Higher percentages of older adults were advised to lose weight by a doctor or other health professional (age 18-29: 3%; 30-44: 9%; 45-64: 16%; 65+: 11%). There were no differences across gender or social class.

BLOOD PRESSURE

Results in this section refer to those respondents aged 45 years and over who took part in the physical examination sub-study. The sample size was 1,207 adults. A result on all three assessments (BMI, blood pressure and cholesterol) was not available for a small number of participants. Blood pressure measurements in a population survey can only be taken as an indicator of raised blood pressure in the population. With more detailed investigations, some of those with raised blood pressure may be reclassified as having a normal blood pressure. Nevertheless, survey measurements give a good indicator of the prevalence of raised blood pressure in the population and allow comparison with other surveys.

For this report, blood pressure was categorised using the European Society of Cardiology (ESC) 2007 *Guidelines for Cardiovascular Disease Prevention*. 'Normal' is categorised as <140mmHg systolic blood pressure (SBP) and <90mmHg diastolic blood pressure (DBP). 'High' is categorised as ≥140mmHg SBP or ≥90mmHg DBP. Blood pressure was assessed by trained nurses according to a standard protocol, where the average of the second and third readings was recorded.

The prevalence of normal blood pressure, without using anti-hypertensive medication to lower the blood pressure, was 40% (see *Table 15*). This was higher in women (47%) compared to men (33%). Nearly half (47%) of those aged 45-64 were in this normal blood pressure category (without use of medication). This was the case for only 26% of those over the age of 65. There was no evidence of social class differences in blood pressure.

Those who did not fall into the normal blood pressure category were categorised as having high blood pressure, either treated with medication or untreated. Less than half (43%) of those with blood pressure above the normal range (i.e. 26% of the 60% whose blood pressure was high, see *Table 15*) were on medication for blood pressure. With regard to management of high blood pressure, it appears that only a minority of those with high blood pressure were optimally managed: only one-quarter (27%) had blood pressure levels within the normal range (8% of 26% treated). Two-thirds of men (67%) had raised blood pressure or lower blood pressure on treatment; 40% of men had a blood pressure lower than 140/90mmHg when measured at the survey, while a further 20% were on treatment but had levels higher than 140/90mmHg when measured. More than half of the women (53%) had high blood pressure; 10% were on treatment with a blood pressure level lower than 140/90mmHg when measured at the survey, and a further 16% were on treatment but had a blood pressure above 140/90mmHg when measured.

Overall, one-third of men (33%) had normal blood pressure and a further 7% had a blood pressure below 140/90mmHg on treatment. The remainder (60%) had high blood pressure, either on no treatment (40%) or on treatment but with high levels when measured at the survey (20%). The corresponding figures for women were 47% with normal blood pressure and 10% with normal on treatment; 43% had high blood pressure, with 27% not on treatment and 16% on treatment but with blood pressure over 140/90mmHg when measured at the survey.

Table 15: Percentage of respondents with normal or high blood pressure and whether or not they were taking anti-hypertensive (blood pressure) medication

	NORMAL BLOOD PRESSURE (and not on anti-hypertensive medication)	HIGH BLOOD PRESSURE (HYPERTENSIVE)		
		On anti-hypertensive medication		Not on anti-hypertensive medication
	<140/90mmHg %	<140/90mmHg %	≥140/90mmHg %	≥140/90mmHg %
Total	40	8	18	34
Gender				
Men	33	7	20	40
Women	47	10	16	27
Age group				
45-64	47	6	13	34
65+	26	13	28	33
Social class				
1-2	40	5	20	35
3-4	40	11	16	33
5-6	36	7	18	39
Unc*	48	10	17	25

* Unc = unclassified

In sum, 6 in 10 respondents (60%) had high blood pressure. Of those with high blood pressure, about 6 in 10 (57% – 34% of the 60%) were not on medication for blood pressure. Of those on medication, 7 in 10 (70% – 18% of the 26%) were not controlled to levels below 140/90mmHg.

TOTAL SERUM CHOLESTEROL

Less than one-fifth of respondents (18%) had normal cholesterol levels without the use of cholesterol-lowering medication (see Table 16). Over half (62%) had cholesterol levels of 5.0mmol/L or higher, and were not receiving treatment. The prevalence of normal levels of cholesterol without the use of medication was higher among men (22%) than women (15%). The percentage of respondents with normal levels of cholesterol managed by medication was similar in men (15%) and women (12%). A greater percentage of women (67%) had high cholesterol that was not being managed by medication compared to men (56%). A greater number of respondents aged 45-64 years (69%) had high cholesterol levels and were not receiving treatment, compared to 49% of those aged 65 and over. There were no clear social class patterns in terms of levels of cholesterol or cholesterol management.

Table 16: Percentage of respondents with normal or high total cholesterol levels and whether or not they were taking cholesterol-lowering medication

	NORMAL LEVELS OF TOTAL CHOLESTEROL	RAISED LEVELS OF TOTAL CHOLESTEROL		
		On cholesterol-lowering medication		Not on cholesterol-lowering medication
	<5.0mmol/L %	<5.0mmol/L %	>=5.0mmol/L %	>=5.0mmol/L %
Total	18	13	7	62
Gender				
Men	22	15	7	56
Women	15	12	6	67
Age group				
45-64	18	8	5	69
65+	17	25	9	49
Social class				
1-2	17	14	7	62
3-4	22	9	6	63
5-6	16	19	6	59
Unc*	12	15	9	64

* Unc = unclassified

COMBINED PHYSICAL EXAMINATION RISK FACTORS

This section assesses the profile of respondents who took part in the physical examination sub-study in relation to the combination of three major cardiovascular risk factors – BMI (levels of $\geq 30\text{kg/m}^2$ indicating ‘obesity’ are used), raised blood pressure and raised total cholesterol. Table 17 summarises the three cardiovascular risk factor profiles by gender, age and social class. As seen above, raised cholesterol is the most common risk factor (82%), followed by raised blood pressure (60%). One-third (32%) of the respondents were obese. There were little gender or age differences in obesity or cholesterol, with a higher proportion of men and older respondents having high blood pressure. There were social class differences for obesity and blood pressure, with higher percentages of those in lower social class groups being obese and having high blood pressure. There was no social class pattern for cholesterol. A fourth major cardiovascular risk factor, smoking, is also considered here in tandem with other risk factors (*see below*).

Table 17: Percentage of respondents with main cardiovascular risk factors (includes those with normal levels but receiving treatment), by gender, age and social class

	MEASURED BMI $\geq 30\text{kg/m}^2$ %	CHOLESTEROL $\geq 5.0\text{mmol/L}$ %	ABOVE NORMAL BLOOD PRESSURE ($\geq 140/90\text{mmHg}$) %
Total	32	82	60
Gender			
Men	31	78	67
Women	32	86	53
Age group			
45-64	32	81	53
65+	30	83	74
Social class			
1-2	28	83	60
3-4	33	78	60
5-6	36	84	64
Unc*	32	88	52
Smoking: % of group reporting risk factor who also smoked	13	19	17

* Unc = unclassified

The combination of risk factors is outlined in Table 18. One-quarter (24%) had raised cholesterol and were obese. One in 4 (24%) had high blood pressure and were obese. Half (48%) had raised cholesterol and high blood pressure. Almost one in 5 (18%) were assessed as having all three risk factors.

Table 18: Percentage of respondents with combined cardiovascular risk factors (includes those with normal levels but receiving treatment)

	UNWEIGHTED NUMBER (N)	PHYSICAL EXAMINATION WEIGHTED PERCENTAGE %
Measured BMI $\geq 30\text{kg/m}^2$	356	32
Cholesterol $\geq 5.0\text{mmol/L}$	949	82
Above normal blood pressure ($\geq 140/90\text{mmHg}$)	688	60
Any one of:	1,115	94
Measured BMI $\geq 30\text{kg/m}^2$ and cholesterol $\geq 5.0\text{mmol/L}$	267	24
Measured BMI $\geq 30\text{kg/m}^2$ and above normal blood pressure ($\geq 140/90\text{mmHg}$)	253	22
Cholesterol $\geq 5.0\text{mmol/L}$ and above normal blood pressure ($\geq 140/90\text{mmHg}$)	559	48
Measured BMI $\geq 30\text{kg/m}^2$ and cholesterol $\geq 5.0\text{mmol/L}$ and above normal blood pressure ($\geq 140/90\text{mmHg}$)	199	18

The pattern of combined cardiovascular risk factors across gender, age and social class is outlined in Table 19. Smoking is also considered as a fourth major risk factor (*see below*). There were no gender, age or social class differences in the overall proportion having at least one risk factor – almost all of the population over the age of 45 (94%) were assessed as having one of the three major risk factors. In terms of multiple risk factors, there were no gender or age differences in those having all three risk factors. There was a social class gradient, with those in lower social class groups more likely to have all three risk factors – 16% in SC 1-2 compared with 22% in SC 5-6, thus respondents in SC 5-6 were 50% more likely to have all three risk factors than those in SC 1-2.

Table 19: Percentage of respondents with main and combined cardiovascular risk factors, by gender, age and social class

	Any one of measured BMI $\geq 30\text{kg/m}^2$ OR cholesterol $\geq 5.0\text{mmol/L}$ OR above normal blood pressure ($\geq 140/90\text{mmHg}$) %	Measured BMI $\geq 30\text{kg/m}^2$ and cholesterol $\geq 5.0\text{mmol/L}$ %	Measured BMI $\geq 30\text{kg/m}^2$ and above normal blood pressure ($\geq 140/90\text{mmHg}$) %	Cholesterol $\geq 5.0\text{mmol/L}$ and above normal blood pressure ($\geq 140/90\text{mmHg}$) %	Measured BMI $\geq 30\text{kg/m}^2$ and cholesterol $\geq 5.0\text{mmol/L}$ and above normal blood pressure ($\geq 140/90\text{mmHg}$) %
Total	94	24	22	48	18
Gender					
Men	94	23	22	53	18
Women	93	24	22	44	18
Age group					
45-64	93	24	21	43	17
65+	94	23	26	58	20
Social class					
1-2	95	21	19	48	16
3-4	91	23	23	48	19
5-6	95	28	27	54	22
Unc*	95	23	21	41	14
Smoking: % of group reporting risk factor who also smoked	19	10	12	17	9

* Unc = unclassified

SMOKING AS A RISK FACTOR

While the focus of this section has been on the three major cardiovascular risk factors that required measurement by health professionals in a physical examination sub-study (BMI, blood pressure and cholesterol), the one other major risk factor assessed in the main survey – smoking – is considered here in tandem with other risk factors. Overall, 20% of the respondents in the physical examination sub-study smoked. Tables 17 and 19 report the smoking status of those assessed as having other major risk factors. For example, 17% of those with high blood pressure were also current smokers. Almost one-tenth (9%) of those assessed as having all three major cardiovascular risk factors were also smokers.

Survey of Lifestyle, Attitudes and Nutrition (SLÁN) 2007

In conclusion, there was evidence of high levels of individual and combined health risk factors in this physical examination sub-study of the general middle-aged and older Irish population.

Chapter 13 links the SLÁN 2007 survey with the HBSC 2006 survey, a similar survey conducted periodically on the health behaviour of school-aged children, aged 10-17 years.

**13. COMBINING FINDINGS FROM
THE HBSC 2006 AND SLÁN 2007
FOR ADOLESCENTS AND
YOUNG ADULTS**



13. COMBINING FINDINGS FROM THE HBSC 2006 AND SLÁN 2007 FOR ADOLESCENTS AND YOUNG ADULTS

The Health Behaviour in School-aged Children (HBSC) Survey assesses school children aged 10-17 years in school settings (see *Appendix, Table A6*). SLÁN 2007 assesses adults aged 18 years and over. Many useful comparisons are possible about questions and concepts across these two national surveys. Table 20 illustrates some direct comparisons of the oldest adolescents in HBSC 2006 (aged 15-17 years) and the youngest adults in SLÁN 2007 (aged 18-29 years).

In some instances, there is broad similarity in profiles from late adolescence to young adulthood, for example, in self-rated health, quality of life or happiness, levels of food poverty and regularly having breakfast. In other instances, there is wide discrepancy. For example, smoking rates in young adults were twice those of older adolescents. However, exposure to cannabis in the previous 12 months was higher in the younger group. Some patterns differ by gender: for example, girls and young women were more likely to diet and less likely to engage in strenuous physical activity. Questions about alcohol use were not comparable across the two surveys.

Table 20 illustrates the potential for considering health behaviour patterns across the lifespan by combining the HBSC and SLÁN surveys. This will be explored further in subsequent publications.

Table 20: Comparison of 15-17 year-olds (HBSC 2006) and 18-29 year-olds (SLÁN 2007) on a range of survey questions

	N (BOYS/ MEN)	%	N (GIRLS/ WOMEN)	%
Self-rated health				
HBSC: <i>'Excellent or good health'</i>	1,782	86	1,447	79
SLÁN: <i>'Excellent or very good health'</i>	887	79	917	70
Quality of life or happiness				
HBSC: <i>'Very happy or quite happy with life'</i>	1,893	92	1,559	85
SLÁN: <i>'Very good or good quality of life'</i>	1,192	95	1,195	94
Food poverty				
HBSC: <i>'Never went to bed hungry because there was not enough food at home'</i>	1,729	83	1,528	83
SLÁN: <i>'Can always afford to buy food'</i>	952	78	992	79
Having regular breakfast				
HBSC: <i>'Have breakfast on a weekday'</i>	1,745	85	1,433	79
SLÁN: <i>'Had breakfast yesterday'</i>	1,097	86	1,097	87
Smoking				
HBSC: <i>'Smoke once a month or more'</i>	471	23	206	28
SLÁN: <i>'Current smoker'</i> (includes smoking daily or some days of the week)	494	38	412	35
Illicit drug use: Cannabis or marijuana				
HBSC: <i>'Used cannabis in previous 12 months'</i>	469	25	342	20
SLÁN: <i>'Used marijuana/cannabis in previous year'</i>	231	18	108	8
Weight management				
HBSC: <i>'On a diet'</i>	176	9	362	20
SLÁN: <i>'Actively trying to manage weight'</i>	375	29	595	46
Vigorous physical activity				
HBSC: <i>'Exercising 4+ times weekly'</i>	1,050	55	497	28
SLÁN: <i>'Strenuous exercise 4+ times weekly for more than 20 minutes each time'</i>	261	21	76	6

FURTHER REPORTS

Forthcoming reports on SLÁN 2007 will examine the following issues in greater detail:

- Nutrition, health behaviour and physical examination findings.
- Patterns of mental health and social and community participation.
- Comparisons of health behaviour and related profiles between population surveys in the Republic of Ireland and Northern Ireland.
- Policy implications of the major health behaviour profiles.

To ensure maximum and efficient access to further information, ongoing updates on these reports, as well as summary slides for teaching purposes and background details (including questionnaires and references), will be maintained at the website www.slán07.ie.

SLÁN 2007 PROJECT TEAM

SLÁN 2007 PROJECT TEAM

SLÁN 2007 CONSORTIUM

Professor Hannah McGee	Director	Royal College of Surgeons in Ireland
Professor Ivan Perry	Principal Investigator	University College Cork
Professor Margaret Barry	Principal Investigator	National University of Ireland, Galway
Dr Dorothy Watson	Principal Investigator	Economic and Social Research Institute
Professor Ruairí Brugha	Member	Royal College of Surgeons in Ireland
Professor Ronan Conroy	Member	Royal College of Surgeons in Ireland
Professor Richard Layte	Member	Economic and Social Research Institute
Dr Michal Molcho	Researcher, Member	National University of Ireland, Galway
Ms Janas Harrington	Researcher, Member	University College Cork
Ms Karen Morgan	Research Manager, Member	Royal College of Surgeons in Ireland
Dr Emer Shelley	Member	Royal College of Surgeons in Ireland and Population Health Directorate, HSE

SLÁN 2007 ADDITIONAL RESEARCH TEAM MEMBERS

Ms Nuala Tully	Researcher	Royal College of Surgeons in Ireland
Mr Eric van Lente	Researcher	National University of Ireland, Galway
Mr Mark Ward	Researcher	Royal College of Surgeons in Ireland
Ms Jennifer Lutomski	Researcher	University College Cork
Ms Sylvia Blackwell	Research Analyst	Economic and Social Research Institute
Ms Carly Cheevers	Research Analyst	Economic and Social Research Institute
Mr Pat Kane	Survey Operations Manager	Economic and Social Research Institute

DEPARTMENT OF HEALTH AND CHILDREN MANAGEMENT COMMITTEE AND NATIONAL ADVISORY GROUP MEMBERS

Mr Brian Mullen	Health Promotion Policy Unit
Mr Robbie Breen	Health Promotion Policy Unit
Ms Marian Beakey	Health Promotion Policy Unit
Ms Deirdre Mahony	Health Promotion Policy Unit
Ms Sheila Kulkarni	Health Promotion Policy Unit

OTHER NATIONAL ADVISORY GROUP MEMBERS

Dr John Devlin	Deputy Chief Medical Officer	Department of Health and Children
Dr Brian Gaffney	Chief Executive	Health Promotion Agency, Northern Ireland
Dr David Gordon	Head of Observatory Division	Public Health Science Directorate, NHS Health Scotland
Dr Sinéad Hanafin	Head of Research	Office of the Minister for Children
Dr Karen Harrington	Senior Community Dietician	Health Service Executive, South
Ms Carolyn Hillery	Community Dietician Manager	Health Service Executive, Dublin Mid-Leinster
Mr Hugh Magee	Senior Statistician	Department of Health and Children
Dr Maureen McGowan	Community Dietician Manager	Health Promotion Services, Health Service Executive, Dublin Mid-Leinster
Mr Brian Neeson	Functional Manager, Health Promotion Research and Development	Health Service Executive
Dr Saoirse Nic Gabhainn	Senior Lecturer in Health Promotion	Department of Health Promotion, National University of Ireland, Galway
Ms Ursula O'Dwyer	National Nutrition Policy Advisor	Department of Health and Children

REFERENCES

REFERENCES

Department of Health and Children (2005) *Annual Report 2004*. Dublin: The Stationery Office.

Department of Health and Children (2001) *Quality and Fairness – A Health System for You*. Dublin: The Stationery Office.

Department of Health and Children (2000) *The National Health Promotion Strategy 2000-2005*. Dublin: The Stationery Office.

European Society of Cardiology (2007) *European Guidelines on Cardiovascular Disease Prevention in Clinical Practice*. Sophia-Antipolis, France: European Society of Cardiology (ESC).

Friel, S., Nic Gabhainn, S. and Kelleher, C. (1999) *The National Health and Lifestyles Surveys. Survey of Lifestyle, Attitudes and Nutrition (SLÁN) and the Irish Health Behaviour in School-aged Children (HBSC) Survey 1998*, Department of Health and Children. Dublin: The Stationery Office.

Kelleher, C., Nic Gabhainn, S., Friel, S., Corrigan, H., Nolan, G., Sixsmith, J., Walsh, O. and Cooke, M. (2003) *The National Health and Lifestyles Surveys. Survey of Lifestyle, Attitudes and Nutrition (SLÁN) and the Irish Health Behaviour in School-aged Children (HBSC) Survey 2002*, Department of Health and Children. Dublin: The Stationery Office.

Nic Gabhainn, S., Kelly, C. and Molcho, M. (2007) *HBSC Ireland 2006: National Report of the 2006 Health Behaviour in School-aged Children in Ireland*, Department of Health and Children. Dublin: The Stationery Office.

APPENDIX

APPENDIX

SLÁN 2007 – SAMPLING AND WEIGHTING

As discussed in Chapter 2, 'Methods', the sample for the SLÁN 2007 survey was selected from the GeoDirectory, which is a listing of all addresses in Ireland. The sample used was probabilistic and was selected using the ESRI's RANSAM program, which results in probability samples where each dwelling has a known probability of selection. RANSAM is a process for selecting samples in three stages. The first stage involved making a random selection of sampling points based on aggregates of townlands, using a minimum population criterion.¹³ These form the primary sampling units (PSUs) or clusters. Following a sort by area characteristics¹⁴ and region, 400 PSUs were systematically selected using a random starting point. Once the required number of PSUs had been selected, a systematic sample of addresses was drawn from within each, again using a random starting point. This resulted in 46 selected addresses per cluster. The third stage involved selecting a respondent at each address. Respondent selection within a household involved implementing a simple randomisation procedure, the so-called 'next birthday' rule.¹⁵ To maintain the random nature of the sampling, no substitution of respondents within households was allowed.

The design is such that the sample selected is eprob (equal probability) in dwellings. When used to select a sample of individuals, the completed sample is biased in favour of individuals in smaller households as individual selection probability is inversely proportional to household size¹⁶. This is adjusted at the weighting stage of the analysis, using a design weight (see *below*).

WEIGHTING SLÁN 2007 – OVERALL SAMPLE DATA

The purpose of survey weighting is to compensate for any imbalances in the distribution of characteristics in the completed survey sample compared to the population of interest, whether such imbalances occur because of sampling error, from the nature of the sampling frame used, or to differential response rates within population sub-groups.

13 The criterion was that each cluster has a minimum of 1,000 addresses.

14 Area characteristics matched to the clusters from the SAPS ED-Level data were percentage of persons age 65+, percentage of persons in professional or managerial occupations, and percentage urban.

15 The interviewer first asked how many adults aged 18 and over lived at the address. If there was more than one, the adult with the next birthday was selected for interview.

16 The relevant measure of household size for this purpose is number of persons aged 18 and over, rather than number of persons of any age.

Weighting was a two-stage process:

1. Construction of a design weight to compensate for the over-representation of individuals in smaller households (a consequence of the sampling frame used).
2. Calibration of the sample distribution to population totals along a number of dimensions:¹⁷
 - age group (9 categories) by gender;
 - age by gender (2 categories) by marital status (4 categories);
 - gender by economic status (5 categories);
 - gender by level of education (4 categories);
 - occupational category (9 categories);
 - ethnicity (7 categories);
 - household size (5 categories);
 - geographic region (8 categories).

WEIGHTING SLÁN 2007 – PHYSICAL EXAMINATION DATA

As noted in Chapter 2, there was some tendency for those with lower levels of education and in lower socio-economic classes to be under-represented in the physical examination sub-study. To ensure that the physical examination results are representative of the population aged 45 and over, the data from the physical examination sub-sample were re-weighted. This was done by calibrating to the population age 45 and over along the following dimensions:¹⁸

- age group (5 categories) by gender;
- age by gender (2 categories) by marital status (4 categories);
- gender by economic status (5 categories);
- gender by level of education (4 categories);
- occupational category (9 categories);
- ethnicity (7 categories);
- household size (5 categories);
- geographic region (8 categories).

SLÁN COMPARISONS – WEIGHTING OF DATASETS

A key strategy in the SLÁN 2007 survey has been to provide comparisons with previous SLÁN surveys (1998 and 2002). This required adopting similar weighting schemes for each dataset to ensure that any observed differences were not an artefact of the different approaches taken to sample weighting.

A number of options were considered, including:

1. Applying weighting schema used in previous surveys to the 2007 data.
2. Choosing a weighting schema for all three years and applying this across all three surveys. At a minimum, this would include rebalancing for age, gender, education and marital status. Nationality was only available for the 2002 and 2007 surveys, and so it was impossible to include this factor in a general weighting regime for all three surveys.

¹⁷ This involved using GROSS, a program using a minimum distance algorithm and iterative process to calibrate to external controls from national sources, such as the Quarterly National Household Survey (QNHS) or Census 2006.

¹⁸ Again, the GROSS program was used with the totals from the weighted full sample of those aged over 45 years.

3. Choosing a comparable weighting schema for all three years, but adding in design effects for specific years. This approach would yield more realistic weights and should provide estimates that are closer to the population in each year.

The third option was adopted since this strategy provided the closest match to the actual population figures in each period. There are some limitations in the application of strictly comparable weighting schema to data from all three SLÁN surveys, related to the measurement of the relevant variables in each survey and the availability of the population figures for each of the years.¹⁹ In terms of previous SLÁN surveys, the weighting schema applied here will mainly address under-representation of those with lower levels of education and from manual social classes, compared with Census data, in the 1998 and 2002 SLÁN surveys. Overall, using a comparable weighting strategy for all three surveys minimises the extent to which observed differences in health-related behaviours or outcomes reflect differences in the extent to which the survey sample matched the population at the time.

¹⁹ For example, the 1998 QNHS (as the population survey closest in time to SLÁN 1998) did not have a measure of education level of adults. Furthermore, information on country of origin for respondents was not asked in the 1998 SLÁN survey.

ADDITIONAL TABLES

Table A1: Location where respondents consumed the previous day's meals, by gender

	MEN		WOMEN		TOTAL	
	%	N	%	N	%	N
Breakfast						
Did not have breakfast	11	533	9	445	10	978
Breakfast at home	76	3,804	83	4,249	80	8,053
Elsewhere, taken from home	4	184	3	157	3	341
Elsewhere	9	443	5	280	7	723
Main meal						
Did not have main meal	3	174	4	197	4	371
Main meal at home	81	3,971	85	4,347	83	8,318
Elsewhere, taken from home	2	87	1	39	1	126
Elsewhere	14	672	10	501	12	1,173
Light meal						
Did not have light meal	6	317	5	271	6	588
Light meal at home	54	2,643	67	3,376	60	6,019
Elsewhere, taken from home	13	635	9	471	11	1,106
Elsewhere	27	1,303	19	959	23	2,262

Table A2: Self-reported BMI distribution, by gender and age

BMI Category	MEN							
	18-29		30-44		45-64		65+	
	%	N	%	N	%	N	%	N
Underweight	3	38	1	21	1	4	1	6
Healthy	63	776	36	571	27	390	37	242
Overweight	28	345	45	717	51	734	45	290
Obese	6	77	18	275	21	304	17	108

BMI Category	WOMEN							
	18-29		30-44		45-64		65+	
	%	N	%	N	%	N	%	N
Underweight	5	62	2	32	2	25	4	30
Healthy	71	846	58	831	45	625	49	386
Overweight	17	205	27	395	35	491	35	277
Obese	7	84	13	187	18	259	12	93

Table A3: Self-reported BMI distribution, by gender, age and social class

BMI CATEGORY	MEN					
	AGE 18-29			AGE 30-44		
	SC 1-2	SC 3-4	SC 5-6	SC 1-2	SC 3-4	SC 5-6
	%	%	%	%	%	%
Underweight	1	4	3	0	0	2
Healthy	60	64	61	34	38	34
Overweight	33	26	28	51	44	40
Obese	6	6	8	15	18	24

BMI CATEGORY	MEN					
	AGE 45-64			AGE 65+		
	SC 1-2	SC 3-4	SC 5-6	SC 1-2	SC 3-4	SC 5-6
	%	%	%	%	%	%
Underweight	0	0	1	1	1	1
Healthy	24	26	32	35	38	40
Overweight	56	54	42	48	45	42
Obese	20	20	25	16	16	17

BMI CATEGORY	WOMEN					
	AGE 18-29			AGE 30-44		
	SC 1-2	SC 3-4	SC 5-6	SC 1-2	SC 3-4	SC 5-6
	%	%	%	%	%	%
Underweight	2	5	8	2	2	3
Healthy	72	67	73	61	57	49
Overweight	20	20	11	26	28	32
Obese	6	8	8	11	13	16

BMI CATEGORY	WOMEN					
	AGE 45-64			AGE 65+		
	SC 1-2	SC 3-4	SC 5-6	SC 1-2	SC 3-4	SC 5-6
	%	%	%	%	%	%
Underweight	2	2	3	3	3	7
Healthy	49	45	39	53	48	47
Overweight	33	33	40	32	37	34
Obese	16	20	18	12	12	12

Table A4: Comparison of BMI scores using self-reported and measured data for respondents aged 18-44, by gender

BMI CATEGORY		SELF-REPORTED BMI			MEASURED BMI		
		% (N)	MEAN (SD)	MEDIAN	% (N)	MEAN (SD)	MEDIAN
Underweight	Men	3 (15)	17.6 (0.4)	17.5	2 (10)	17.5 (1.1)	18.3
	Women	2 (10)	18.7 (1.3)	18.9	2 (8)	17.8 (0.5)	17.8
	Total	3 (25)	17.9 (0.9)	17.8	2 (18)	17.6 (0.8)	18.1
Healthy	Men	48 (244)	22.2 (1.9)	22.2	41 (206)	22.5 (1.6)	22.8
	Women	65 (300)	21.7 (1.9)	21.6	57 (262)	22.2 (1.7)	22.3
	Total	56 (544)	21.9 (1.9)	21.9	49 (468)	22.4 (1.7)	22.6
Overweight	Men	36 (183)	26.4 (2.2)	26.3	41 (209)	27.2 (1.3)	27.1
	Women	21 (98)	25.7 (2.4)	25.6	24 (111)	27.1 (1.4)	27.0
	Total	29 (281)	26.2 (2.3)	26.0	33 (320)	27.2 (1.4)	27.1
Obese	Men	13 (65)	31.5 (3.4)	31.1	16 (79)	33.4 (3.2)	32.2
	Women	12 (54)	31.3 (4.6)	30.7	17 (79)	34.2 (3.4)	33.2
	Total	12 (119)	31.4 (4.0)	30.9	16 (158)	33.8 (3.3)	32.8

Key: % (N) = % of respondents (and number of respondents) in each BMI category
Mean (SD) = Mean (standard deviation) of BMI score for each BMI category
Median = Median BMI score for each BMI category

Table A5: Self-reported BMI distribution, by gender, age and year (1998, 2002 and 2007)

BMI CATEGORY	MEN											
	AGE 18-29						AGE 30-44					
	1998		2002		2007		1998		2002		2007	
	%	N	%	N	%	N	%	N	%	N	%	N
Underweight	2	18	1	6	3	38	1	6	1	3	1	21
Healthy	68	611	75	583	63	776	41	257	33	186	36	571
Overweight	25	220	19	147	28	345	43	266	47	262	45	717
Obese	5	42	5	41	6	77	15	91	19	107	18	275

	AGE 45-64						AGE 65+					
	1998		2002		2007		1998		2002		2007	
	%	N	%	N	%	N	%	N	%	N	%	N
Underweight	1	7	0	1	1	4	1	5	3	10	1	6
Healthy	32	268	22	154	27	390	47	174	47	146	37	242
Overweight	49	418	53	377	51	734	41	153	37	116	45	290
Obese	18	153	25	178	21	304	11	41	13	40	17	108

BMI CATEGORY	WOMEN											
	AGE 18-29						AGE 30-44					
	1998		2002		2007		1998		2002		2007	
	%	N	%	N	%	N	%	N	%	N	%	N
Underweight	5	48	4	30	5	62	3	27	3	21	2	32
Healthy	72	674	70	537	71	846	61	508	55	436	58	831
Overweight	18	164	20	149	17	205	24	200	26	210	27	395
Obese	5	45	6	45	7	84	12	95	16	126	13	187

	AGE 45-64						AGE 65+					
	1998		2002		2007		1998		2002		2007	
	%	N	%	N	%	N	%	N	%	N	%	N
Underweight	1	12	2	13	2	25	15	68	5	22	4	30
Healthy	52	423	45	321	45	625	48	222	42	173	49	386
Overweight	33	267	34	243	35	491	25	116	35	147	35	277
Obese	14	119	19	134	18	259	12	56	18	73	12	93

FULL LIST OF PHYSICAL EXAMINATION ASSESSMENTS

- Height
- Weight
- Waist circumference
- Blood pressure
- Carbon monoxide
- Peak expiratory flow rate

BLOOD TESTS

- Haemoglobin
- Erythrocyte mean cell volume
- White cell count
- Platelets
- Total cholesterol
- Low-density lipoprotein (LDL) cholesterol
- High-density lipoprotein (HDL) cholesterol
- Triglycerides
- Blood glucose (non-fasting)
- Glycosylated Haemoglobin (HbA1c)
- Urea
- Creatinine
- Aspartate aminotransferase
- Gamma-glutamyl transferase (GGT)
- Thyroid stimulating hormone (TSH)
- Free thyroxine (FT4)

URINE TESTS (Note: not 24-hour)

- Creatinine
- Urea
- Sodium
- Potassium
- Microalbumin
- Albumin:Creatinine ratio

Note: A technical report outlining key score profiles for these parameters will be completed and available on www.slán07.ie in due course.

HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN (HBSC) SURVEY

The HBSC is a cross-national research study conducted in collaboration with the World Health Organization (WHO) Regional Office for Europe. It aims to provide current information on the health and lifestyles of children and adolescents, aged 10-17 years. The study is school-based and runs on an academic 4-year cycle. Surveys were carried out in Ireland in 1997/98, 2001/2002 and 2005/2006. The study method is summarised in Table A6.

Table A6: Methods summary for the Irish HBSC Survey

Population	School-going children, aged 10-17 years
Sampling frame	Department of Education and Science school lists
Sample	Cluster sample of students in a given classroom
Stratification	Proportionate to the distribution of pupils across geographic regions
Survey instrument	Self-completion questionnaire
Response rate	63% of invited schools/83% of students
Obtained sample	215 schools/10,344 pupils

