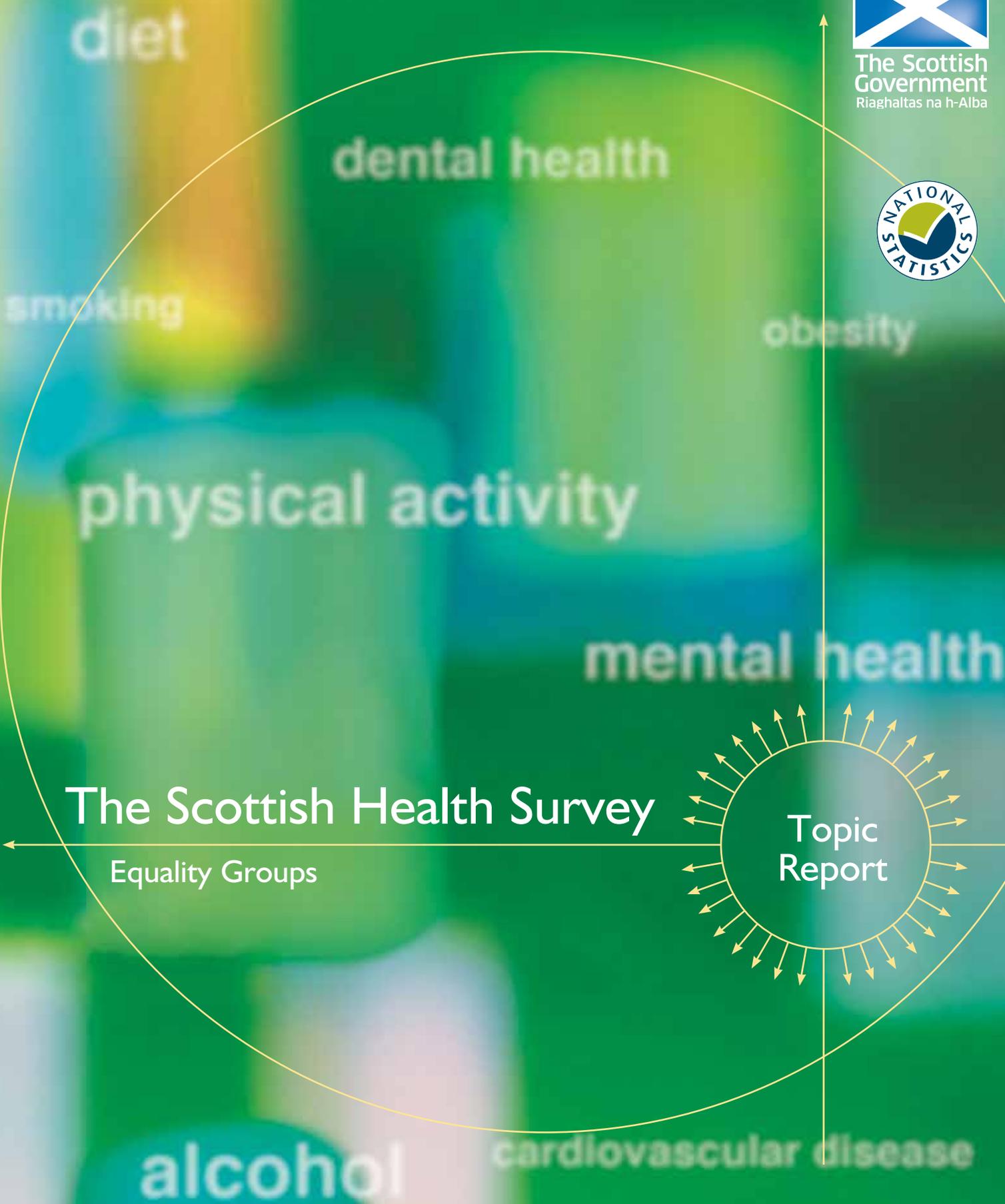




The Scottish  
Government  
Riaghaltas na h-Alba



The Scottish Health Survey

Equality Groups

Topic  
Report

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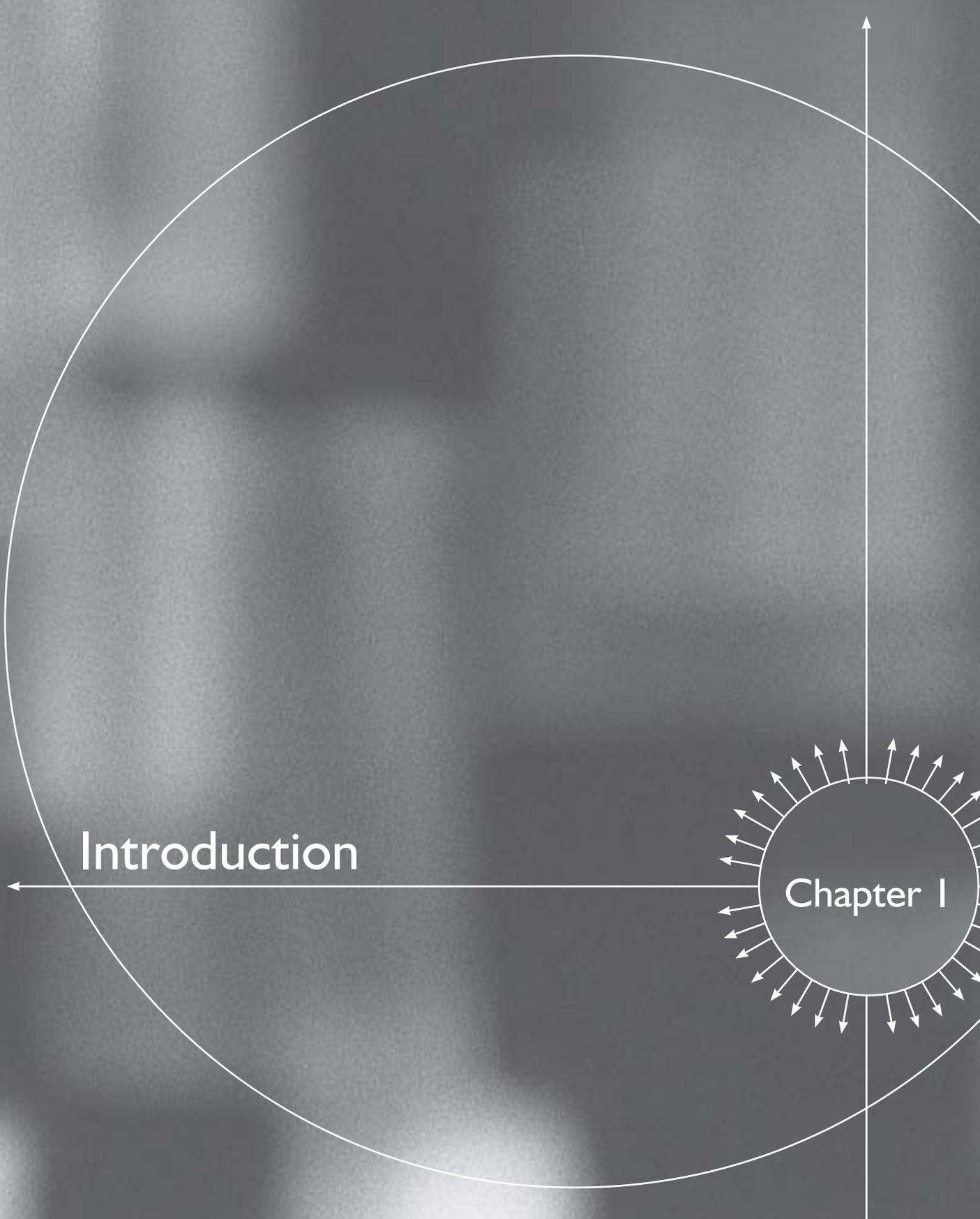
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## NOTES TO TABLES

- 1 The following conventions have been used in tables:
  - n/a no data collected
  - no observations (zero value)
  - 0 non-zero values of less than 0.5% and thus rounded to zero
  - [ ] normally used to warn of small sample bases, if the unweighted base is less than 50. (If a group's unweighted base is less than 30, data are normally not shown for that group.)
- 2 Because of rounding, row or column percentages may not add exactly to 100%.
- 3 A percentage may be quoted in the text for a single category that aggregates two or more of the percentages shown in a table. The percentage for the single category may, because of rounding, differ by one percentage point from the sum of the percentages in the table.
- 4 Values for means, medians, percentiles and standard errors are shown to an appropriate number of decimal places. Standard Error may sometimes be abbreviated to SE for space reasons.
- 5 'Missing values' occur for several reasons, including refusal or inability to answer a particular question; refusal to co-operate in an entire section of the survey (such as a self-completion questionnaire); and cases where the question is not applicable to the participant. In general, missing values have been omitted from all tables and analyses.
- 6 The population sub-group to whom each table refers is stated at the upper left corner of the table.
- 7 Both weighted and unweighted sample bases are shown at the right of each table. The weighted numbers reflect the relative size of each group in the population, not numbers of interviews conducted, which are shown by the unweighted bases.
- 8 The term 'significant' refers to statistical significance (at the 95% level) and is not intended to imply substantive importance.



Introduction

Chapter I

# 1 INTRODUCTION

## 1.1 BACKGROUND

Data on equality and its relationship to health is important because it helps us understand the characteristics of individuals which may have an impact on health and the need for health care services. To date, although we have some evidence to suggest how a person's characteristics can be associated with their health and care, this is limited in Scotland due to small size of some equality groups which makes it difficult to get representative information from surveys.

The analysis in this report represents an important step forward in the availability of survey data on health behaviours and health characteristics for equality groups in Scotland. Scottish Health Survey data has been combined from four consecutive years (2008-2011) in order to allow more in-depth analysis of smaller populations which would not be possible for individual survey years.

The UK Government's Equality Act 2010 includes a new public sector Equality Duty which requires public authorities to be active in promoting equality, eliminating unlawful conduct and fostering good relations. The new Duty came into force on 6 April 2011 and provides a single, consistent framework covering age, disability status, ethnicity, gender/sex, marriage and civil partnership, pregnancy and maternity, religion/belief, sexual orientation, and transgender identity<sup>1</sup>. A public sector duty to provide evidence of compliance with this legislation and to set and report on equality outcomes came into force in Scotland in May 2012<sup>2</sup>. All public sector bodies will require good quality information about equality groups to set and measure progress on equality outcomes. The analysis in this report should provide a useful contribution to the evidence base for setting national equality outcomes, which can then be drawn upon to inform local priorities where appropriate.

## 1.2 EQUALITY GROUPS IN THE SCOTTISH HEALTH SURVEY

The equality groups considered in this report are gender, age, ethnicity, religion, disability and sexual orientation. Whilst data on **gender** and **age** is readily available and easily disaggregated, despite combining survey data for four years the sample sizes for the other equality characteristics are still relatively small, limiting the amount of analysis that can be undertaken.

### 1.2.1 Gender

Gender inequalities in Scotland and the UK have been well-documented in relation to income and employment.<sup>3</sup> However, gender equality is also about the differing roles that men and women occupy

within Scottish society: 90% of single parents are female and women still represent the majority of informal carers.<sup>4</sup>

In the 2008-2011 Scottish Health Surveys, 48% of respondents were men and 52% were women. These figures match the 2011 mid-year population estimates produced by National Records of Scotland.<sup>5</sup>

### **1.2.2 Age**

Younger and older age groups are more likely to be disadvantaged in some way. Scotland has one of the highest teenage pregnancy rates in Europe and, amongst the working population in Scotland, many 18-24 year olds say that they are unable to cope financially. Smoking, drinking and poor diet start young for many Scottish men and women as identity-affirming habits. Although the young body is resilient, the effects of these behaviours are felt by the 45-55 age group.<sup>6</sup>

Older people in Scotland are less likely than the younger age group to display unhealthy behaviours such as smoking and excessive drinking; however their physical activity levels are lower than those of their younger counterparts. Poor oral health and limiting long-term conditions are more common in the older population.<sup>7</sup>

In the 2008-2011 Scottish Health Surveys, 14% of respondents were aged 16-24, with similar proportions in the next four age groups (ranging between 15% and 18% between the ages of 25-34 and 54-64. There were slightly less people aged 65-74 (11%) and fewer aged 75 and over (9%). These figures broadly matched the 2011 mid-year population estimates produced by National Records of Scotland.<sup>5</sup> They differed very slightly due to the survey data covering four years and the population estimates covering one year.

### **1.2.3 Ethnic Group**

There is some evidence to suggest that ethnic group is associated with health and healthcare outcomes. For example, people from minority ethnic groups generally have lower mortality than the general population in Scotland and there is a higher prevalence of heart disease and diabetes among those in the South Asian population.<sup>6</sup>

The question used to determine respondents' ethnic group was changed after the 2008 survey to match the harmonised ethnicity question which was being developed for the 2011 Census.<sup>8</sup>

In 2008, survey participants were asked which of the following groups they considered that they belonged to (only one could be chosen):

- White: Scottish
- White: Other British
- White: Irish
- White: Any other white background
- Mixed: Any mixed background

- Asian, Asian Scottish or Asian British: Indian
- Asian, Asian Scottish or Asian British: Pakistani
- Asian, Asian Scottish or Asian British: Bangladeshi
- Asian, Asian Scottish or Asian British: Chinese
- Asian, Asian Scottish or Asian British: Any other Asian background
- Black, Black Scottish or Black British: Caribbean
- Black, Black Scottish or Black British: African
- Black, Black Scottish or Black British: Any other black background
- Any other ethnic group

From 2009 – 2011, the question was changed slightly to ask respondents which of the following best describes their ethnic group or background:

- A - White: Scottish
- A - White: English
- A - White: Welsh
- A - White: Northern Irish
- A - White: British
- A - White: Irish
- A - White: Gypsy/Traveller
- A - White: Polish
- A - White: Any other white ethnic group
- B - Mixed: Any mixed or multiple ethnic groups
- C - Asian: Pakistani, Pakistani Scottish or Pakistani British
- C - Asian: Indian, Indian Scottish or Indian British
- C - Asian: Bangladeshi, Bangladeshi Scottish or Bangladeshi British
- C - Asian: Chinese, Chinese Scottish or Chinese British
- C - Asian: Other Asian ethnic group
- D - Black: African, African Scottish or African British
- D - Black: Caribbean, Caribbean Scottish or Caribbean British
- D - Black: Black, Black Scottish or Black British
- D - Black: Other Black ethnic group
- E - Other ethnic group: Arab
- E - Other ethnic group: other

In order to combine the data for 2008-2011, some of the categories had to be amalgamated where there were mismatches across the two questions. This related specifically to the White and Other ethnic group categories. In addition, some categories had to be combined where there were too few respondents to allow meaningful analysis. Black African, Black Caribbean and Black Other had to be combined into one category. In addition, the Asian Bangladeshi category was combined with Asian Other. Decisions on which groups to combine were based on analysis of the data and groups were combined where they showed similar results in terms of health behaviours / outcomes.

The ethnic group categories which have been used in this report are:

- White, British
- White, Irish
- White, Other
- Mixed
- Asian, Indian
- Asian, Pakistani
- Asian, Chinese
- Asian, Other
- African, Caribbean or Black
- Other

In the 2008-2011 Scottish Health Surveys, the combined non-white population accounted for only 3% of the total sample. The majority of respondents were white (97%). The largest non-white ethnic groups were Pakistani (0.7%), Indian (0.5%), Asian other and mixed (both 0.4%) and Chinese (0.3%). There were very few Bangladeshi and Black other respondents (0.03%). When categories were combined, African, Caribbean or Black respondents represented 0.5% of the population.

These figures compare to a non-white population of 2% in the 2001 census. At that time, Pakistani was also the largest non-white ethnic group (0.6%) followed by Chinese and Indian (both 0.3%).<sup>9</sup>

#### **1.2.4 Religion**

Previous research has found that self-reported poor health and limiting long-term illness appear to be consistently higher among people whose religion is Muslim, Sikh or Roman Catholic.<sup>6</sup>

In 2008, survey participants were asked whether they regarded themselves as belonging to any particular religion and were given the following list to choose from:

- No religion
- Christian - no denomination
- Roman Catholic
- Church of England/ Anglican/ Episcopal/ Church in Wales
- Presbyterian - Church of Scotland
- Presbyterian - Welsh Calvinistic Methodists
- Free Presbyterian
- Methodist - including Wesleyan
- Baptist
- United Reformed Church/ Congregational
- Brethren
- Other Protestant
- Other Christian
- Jewish
- Hindu
- Islam/Muslim
- Sikh

- Buddhist
- Other non-Christian
- Refused

From 2009 – 2011, the question was simplified. Respondents were asked what religion, religious denomination or body they belonged to and could answer one of the following:

- None
- Church of Scotland
- Roman Catholic
- Other Christian
- Muslim
- Buddhist
- Sikh
- Jewish
- Hindu
- Pagan
- Another religion
- Refused

For the analysis, some categories had to be combined where there were too few respondents to allow meaningful analysis. Sikh, Jewish and Pagan were included in the other religion category.

In the 2008-2011 Scottish Health Surveys, 41% of respondents had no religious faith, 32% were Church of Scotland, 15% Roman Catholic and 9% belonged to other Christian faiths. The largest non-Christian religious group was Muslim (1%).

These figures compare to 28% with no religious faith and 42% Church of Scotland in the 2001 census. The proportion of Roman Catholics (16%) and other Christian faiths (7%) was similar. Muslim was also the largest non-Christian group, representing 1% of the population.<sup>10</sup> The differences between the survey and the 2001 census in the proportions of people who were Church of Scotland and those who had no religious faith are considerable. This may be an issue of timing given the lag between the 2001 census and the 2008-2011 surveys. It will be interesting to compare the 2011 census results when they are published.

### **1.2.5 Disability**

Disabled people report some less positive experiences of inpatient care in Scotland in 2010, although it is not clear whether the variations in experience reported by these groups reflect real inter-group differences in the quality of services received, or inter-group differences in subjective factors such as expectations, perceptions or the way questions are answered, or some combination of these factors.<sup>11</sup>

Disabled people have a diverse range of capacities and needs. There are an estimated 761,000 disabled people living in Scotland<sup>4</sup> and as

many as one in five Scottish men and women report living with some kind of disability.<sup>6</sup> However, the wide variety of disabilities and long-term conditions means that the estimated numbers of this population depends on how disability is defined.

From 2008, the survey asked respondents whether they have any long-term physical or mental condition or illness lasting (or expected to last) more than 12 months. Those who reported having such a condition were then asked whether it limited their daily activities in some way. This allowed conditions to be classified as being either 'limiting' or 'non-limiting'. Limiting long-term condition has been used here as an indicator of disability. Note, however, that disability is self-reported, so may be subject to variation in respondents' perception and interpretations.

In the 2008-2011 Scottish Health Surveys, 42% of respondents reported a longstanding condition/illness. Of these, 27% had a limiting long-term condition and 15% had a non-limiting condition. 58% of respondents had no long-term condition.

Data from the 2001 census suggest that 1 in 5 people had a long term limiting illness.<sup>12</sup> However, this figure includes children, and previous health survey reports<sup>13</sup> have shown that the prevalence of limiting long-term conditions among children are lower than in adults so we could expect that the census data for adults only would be slightly higher than 1 in 5.

### **1.2.6 Sexual Orientation**

The Dimensions of Diversity report suggests that lesbian, gay and bisexual people in Scotland face a range of health issues arising from homophobic prejudice and discrimination – including verbal abuse, physical assault and fear of crime – with poor levels of mental health and higher levels of smoking and substance use.<sup>6</sup>

The survey has asked respondents about their sexual orientation as part of the self-completion questionnaire since 2008. Respondents are asked which of the following best describes their sexual orientation (if forming any of the following relationships: girlfriend / boyfriend / wife/ husband/ partner – with which sex(es) would that be?):

- Bisexual (both sexes)
- Gay or lesbian (same sex)
- Heterosexual (opposite sex)
- Other
- Prefer not to answer

In 2010 the question was adapted to remove the 'Prefer not to answer' category. Respondents were free (as in all questions in the survey) to refuse to answer the question even when that category was not explicitly displayed.

From 2012 the survey has adopted the following harmonised question on sexual orientation:

Which of the following options best describes how you think of yourself?

- Heterosexual or Straight
- Gay or Lesbian
- Bisexual
- Other

In the 2008-2011 Scottish Health Surveys, the vast majority (91%) of respondents were heterosexual. 0.9% reported being bisexual, 0.8% were gay or lesbian and 0.9% reported another sexual orientation. 7% of respondents either refused to answer the question or ticked 'prefer not to answer'. When those who refused to answer are removed from the analysis, the proportions become: 97% heterosexual, 1.0% bisexual, 0.9% gay or lesbian, and 1.0% other.

The Government Equalities Office report on UK inequalities says not only that there is insufficient data on this group, but that the information available is likely to be misleading due to participants under-reporting.<sup>14</sup> It is understood that survey respondents typically under-report non-heterosexual orientations due to the sensitive nature of the topic. The Equality and Human Rights Commission report<sup>15</sup> estimates the proportion of lesbian, gay and bisexual people to be more like 6%, although actually the true proportions are unknown.

There is evidence to suggest that lesbian and gay experience is very different, and it has been suggested that grouping gay and lesbian people into a single category for analysis may prove to be unsatisfactory. Due to the sample size for this group in the 2008-2011 surveys, it was not possible to split this group by gender for the purposes of this report. Further analysis could be done in future, either by combining more years of data together to get a larger sample, or by using the pooled data from the combined population surveys from 2012 onwards, as sexual orientation is one of the harmonised core questions.

### **1.3 STRUCTURE OF THE REPORT**

In the following report, each chapter focuses on a specific health condition or behaviour, such as smoking, obesity or coronary heart disease. Data from the six equality groups outlined above are presented and discussed.

As the survey is cross-sectional, it should be noted that, in all of the analyses, association between two variables does not imply causation.

## **1.4 AGE STANDARDISATION**

To ensure that the comparisons are not confounded by the different age profiles of the sub-groups, the data have been age-standardised for all equality groups apart from age. Each of the five equality groups had different age profiles, for example, women are generally older than men and disabled people tend to be older than people without a disability.

Age standardisation is used in order to enable groups to be compared after adjusting for the effects of any differences in their age distributions. When different sub-groups are compared in respect of a variable on which age has an important influence, any differences in age distributions between these sub-groups are likely to affect the observed differences in the proportions of interest.

For example, as physical activity is strongly associated with age whereby activity levels fall as age increases, an analysis of physical activity by disability may show that disabled people were less likely to be physically active than people without a disability. It wouldn't be clear how much of this pattern was related to the older age profile of disabled people and how much was related to their disability. Age standardising removes the effect of the differences in age profiles to allow a clearer picture of the association between physical activity and disability.

## **1.5 CONFIDENCE INTERVALS**

Due to the small sample sizes for some of the groups, confidence intervals have been provided for all estimates in this report. 95% confidence intervals have been used, meaning that if the survey were repeated 100 times, we would expect the estimate to lie within the range of the confidence interval 95 times out of 100.

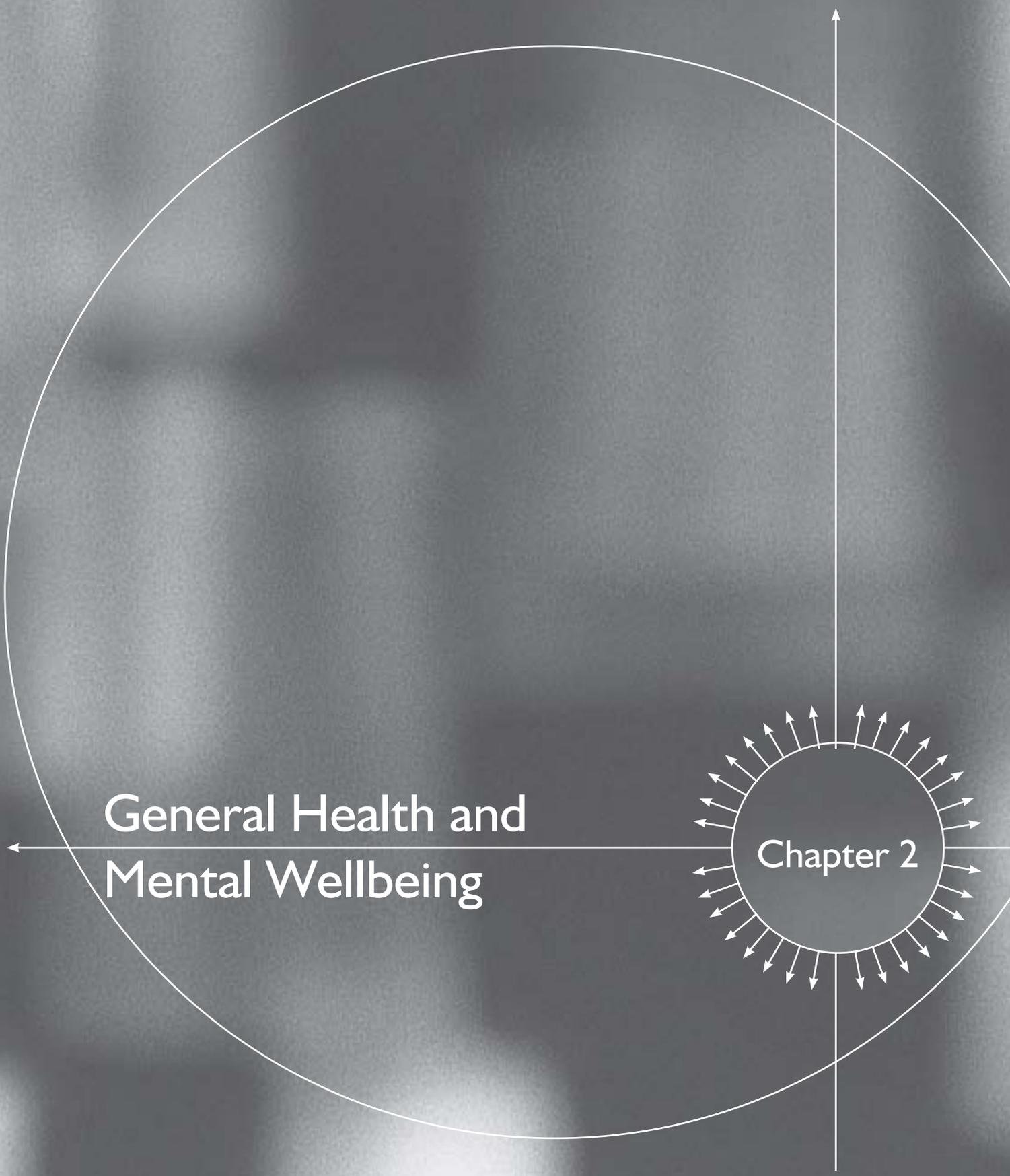
Confidence intervals are depicted on the charts by the thin black vertical lines with bars on either end. If confidence intervals for two groups overlap the results are not considered to be significantly different<sup>16</sup>.

## REFERENCES AND NOTES

- <sup>1</sup> <http://www.scotland.gov.uk/Topics/People/Equality/PublicEqualityDuties>
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- <sup>3</sup> Scottish Government (2010) Equalities Research Findings No.5/2010: Reporting on Progress Towards Equality of Opportunity for Women and Men made by Public Authorities in Scotland: Ministerial Priorities for Gender Equality. Tackling Violence Against Women - Research Findings <http://www.scotland.gov.uk/Publications/2010/06/29111400/0>
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- <sup>7</sup> Rutherford, L., Sharp, C., Bromley, C. (eds.).(2012) *The Scottish Health Survey 2011. Volume 1: Adults*. Edinburgh: The Scottish Government. <http://www.scotland.gov.uk/Publications/2012/09/7854>
- <sup>8</sup> See <http://www.scotland.gov.uk/Resource/Doc/233640/0063967.pdf> Note that the classification was subsequently changed for the 2011 census. The new classification is being used in the Scottish Health Survey from 2012 onwards.
- <sup>9</sup> <http://www.scotland.gov.uk/Publications/2004/02/18876/32937>
- <sup>10</sup> <http://www.scotland.gov.uk/Topics/People/Equality/Equalities/DataGrid/Religion/RelPopMig>
- <sup>11</sup> Scottish Government. *Scottish Inpatient Patient Experience Survey 2010, Volume 1: National Results*. Edinburgh: Scottish Government; 2010.
- <sup>12</sup> <http://www.scotland.gov.uk/Topics/People/Equality/Equalities/DataGrid/Disability/DisabPopMig>
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- <sup>14</sup> Hills J, Brewer M, Jenkins S, et al. *An anatomy of economic inequality in the UK: report of the National Equality Panel*. London: Government Equalities Office and Centre for Analysis of Social Exclusion, LSE, 2010. <http://sticerd.lse.ac.uk/case/new/publications/NEP.asp>
- <sup>15</sup> Aspinall, P.J. (2009) Estimating the size and composition of the lesbian, gay, and bisexual population in Britain. *Equality and Human Rights Commission Research Report 37*: 67-71
- <sup>16</sup> In some cases, if the extent of the overlap is very small, the difference between the two figures may be significant. As a general rule, however, overlapping confidence intervals suggest that there is no real difference between the two estimates.

General Health and  
Mental Wellbeing

Chapter 2



## 2 GENERAL HEALTH AND MENTAL WELLBEING

### SUMMARY

- Men had a more positive view of their general health and reported higher mental wellbeing than women.
- Levels of mental wellbeing dip during the middle years and among the oldest age groups.
- Chinese people had the highest levels of self-assessed health.
- Hindus had the highest levels of self-assessed health and were the least likely to have a high GHQ-12 score.
- There was a strong association between disability, poor self-assessed health and low mental wellbeing.
- People who self-reported as bisexual reported poorer self-assessed health and lower mental wellbeing while the self-assessed health and mental wellbeing of gay men and lesbians was not significantly different from the average.

### 2.1 MEASURES OF GENERAL HEALTH AND MENTAL WELLBEING

This chapter considers general health and mental wellbeing by three indicators: self-assessed health, the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) and the General Health Questionnaire (GHQ12).

Self-assessed health is a useful measure of how individuals regard their own overall health status. It is strongly related to the presence of chronic and acute disease, as well as being a good predictor of hospital admissions and mortality.<sup>1</sup> All survey participants were asked to rate their health in general as 'very good', 'good', 'fair', 'bad' or 'very bad'. This question is used to monitor the National Indicator "improve self-assessed health".<sup>2</sup>

Mental wellbeing was measured using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). It has 14 items designed to assess: positive affect (optimism, cheerfulness, relaxation) and satisfying interpersonal relationships and positive functioning (energy, clear thinking, self-acceptance, personal development, mastery and autonomy).<sup>3</sup> The scale uses positively worded statements with a five-item scale ranging from '1 - None of the time' to '5 - All of the time'. The lowest score possible is therefore 14 and the highest score possible is 70. The analysis presented in this report focuses on mean scores. WEMWBS is not designed to identify individuals with exceptionally high or low levels of positive mental health, so cut off points have not been developed<sup>4</sup>. This question is used to monitor the National Indicator "improve mental wellbeing".<sup>5</sup>

GHQ12<sup>6</sup> is a widely used standard measure of mental distress and psychological ill-health. It consists of 12 questions on concentration abilities, sleeping patterns, self-esteem, stress, despair, depression and confidence in the previous few weeks. Responses are scored with one point given for each

time a particular feeling or type of behaviour was reported to have been experienced 'more than usual' or 'much more than usual' over the past few weeks. Scores are combined to create an overall score of between zero and twelve. A score of four or more (referred to as a 'high' GHQ12 score) has been used here to indicate the presence of a possible psychiatric disorder. GHQ12 measures deviations from people's usual functioning in the previous few weeks. It cannot, therefore, be used to detect chronic conditions. Research has shown GHQ12 scores to be associated with increased risk of mortality from several major causes in a dose-response pattern, even when controlling for health-related behaviours.<sup>7</sup>

It is well-known that general health and mental wellbeing are strongly associated with SIMD and household income and this is discussed in the main report.<sup>8</sup>

## **2.2 GENERAL HEALTH AND MENTAL WELLBEING BY GENDER**

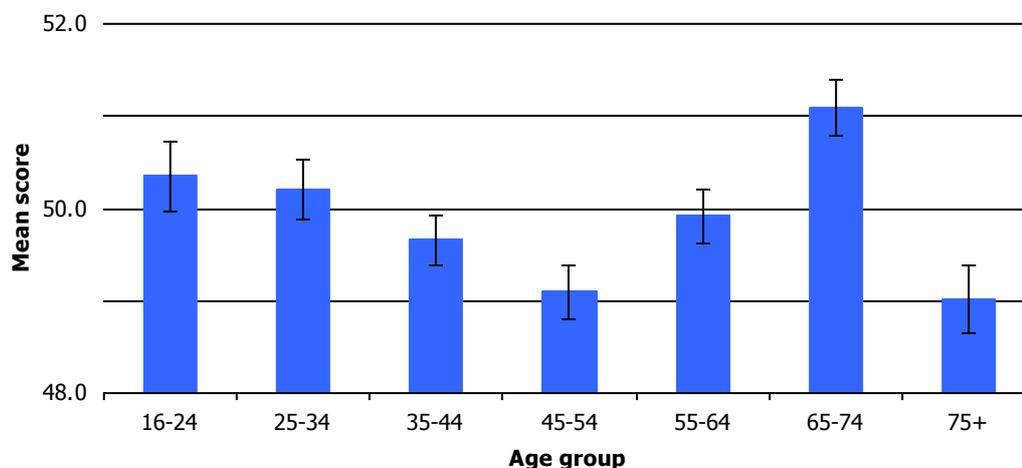
Men were significantly more likely than women to assess their health as being good or very good (77% compared with 75%). However, these may be partly be due to gender-specific assessments rather than objective differences.<sup>9</sup> Men also had higher levels of positive wellbeing (score of 50.1 versus 49.7 on the WEMWBS scale). A higher proportion of women (17%) than men (12%) had a high GHQ-12 score.

## **2.3 GENERAL HEALTH AND MENTAL WELLBEING BY AGE**

Self-assessed health was associated with age, with older groups significantly less likely to report being in good or very good health than younger age groups. 89% of 16-24 year olds reported being in good or very good health and this fell consistently with increasing age to reach a level of 53% for those aged 75 and over.

There was a complex association between mental wellbeing and age. People aged 16-24 (50.3) and 65-74 (51.1) had the highest levels of positive wellbeing and those aged 45-54 (49.1) and 75 and over (49.0) had the lowest. The relationship between GHQ12 and age showed an inverse pattern to that observed for WEMWBS. 45-54 year olds were most likely to have high GHQ scores (18%) whilst 65-74 year olds were least likely (10%). These patterns fit with the widely cited 'U-curve' in subjective wellbeing, where levels of self-reported subjective wellbeing dip during the middle years and among the oldest in society.<sup>10</sup>

**Figure 2A**  
WEMWBS mean score, by age, 2008-2011 combined



## 2.4 GENERAL HEALTH AND MENTAL WELLBEING BY ETHNIC GROUP

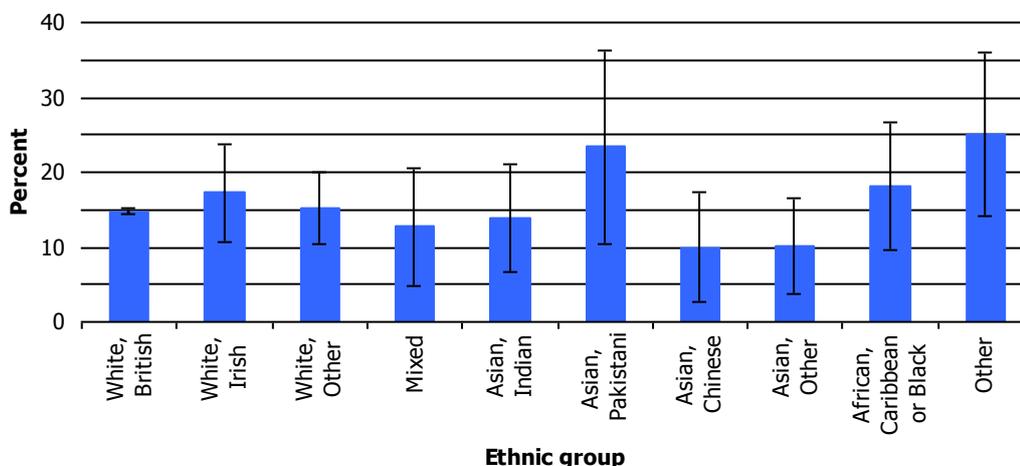
Those who reported their ethnic group as Pakistani were least likely to rate their health as good or very good (66%) although due to small sample sizes this was not significantly different from the national average of 76%. However, although it is not statistically significant, this does corroborate with other research which found that Pakistanis in Britain are less likely to report good health.<sup>11</sup> Chinese respondents were the most likely to rate their health as good or very good (91%) and this was significantly different from the national average.

White British respondents had the lowest levels of wellbeing of all ethnic groups (mean WEMWBS score of 49.8). This was significantly lower than that the scores of White Other (51.2), African, Caribbean or Black (53.7) and Asian Other (53.5) ethnic groups.

Other ethnic groups (25%), Pakistani (23%) and African, Caribbean or Black groups (18%) had the highest proportion of respondents with high GHQ12 scores but none of these was significantly different from the Scottish average (15%). Chinese and Other Asian ethnic groups had the lowest proportion of high GHQ12 scores (both 10%) but again, these weren't significantly different from the national average.

**Figure 2B**

Prevalence of high GHQ-12 scores, by ethnic group, 2008-2011 combined

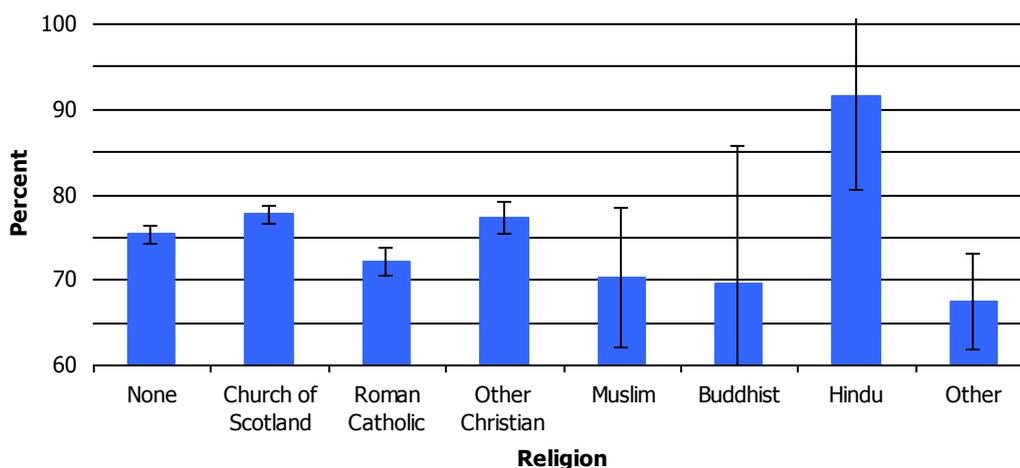


## 2.5 GENERAL HEALTH AND MENTAL WELLBEING BY RELIGION

Hindus had the highest self-assessed health (92% rated their health as good or very good) whilst those who reported their religious faith as Other were the least likely to rate their health as good or very good (67%). Respondents whose religion was Church of Scotland were slightly, but significantly, more likely to rate their health as good or very good (78%) than the Scottish average (76%) and Roman Catholics were significantly less likely to do so (72%).

**Figure 2C**

Proportion of adults with 'very good' or 'good' health, by religion, 2008-2011 combined



Hindus also had the highest levels of positive mental wellbeing (53.2) but this was not significantly different from the Scottish average (49.9). Roman Catholics had significantly lower than average wellbeing (49.4) and Other Christians had slightly, but significantly, higher wellbeing (50.9).

The only religious groups with a significantly lower proportion of high GHQ12 scores than the Scottish average were Hindus (7%) and Church of Scotland (14%). Roman Catholics were significantly more likely than the average to have a GHQ12 score of 4 or more (17%). Although Muslims had the highest proportion of high GHQ12 scores, this was not significantly different from the national average.

There is a small but growing field of research into the relationship between religion and health and wellbeing. There is some suggestion that religious faith may be a pathway to better health.<sup>12</sup> In the Chief Medical Officer's Annual Report for 2009, he argued strongly for the health importance of having resources for ordering and making sense of the environment in which people live.<sup>13</sup> Religion may be such a resource in that faith provides ways of ordering and understanding the world. Furthermore religious practice also has a related religious community with benefits to social capital. The analysis presented above suggests that the picture may be more complex.

## **2.6 GENERAL HEALTH AND MENTAL WELLBEING BY DISABILITY**

The association between self-assessed health and disability was very strong, as might be expected. Only 39% of respondents with a limiting long-term condition reported being in good or very good health compared to 81% of those with a non-limiting condition and 92% of those without any condition. Respondents with a limiting long-term condition also had significantly lower mental wellbeing (mean WEMWBS score of 45.8 compared with 50.6 for those with non-limiting conditions and 51.5 for those with no condition).

Respondents with a limiting long-term condition were significantly more likely to have a high GHQ12 score (30% compared with 11% of those with a non-limiting condition and 9% of those with no condition). Overall, the evidence suggests that disabled respondents have notably poorer general health and mental wellbeing. However, the association may be partly artefactual as limiting long-term conditions recorded in the survey include incidences of diagnosed psychiatric disorders.

## **2.7 GENERAL HEALTH AND MENTAL WELLBEING BY SEXUAL ORIENTATION**

Respondents who identified themselves as bisexual were less likely to report being in good or very good health than the national average (68% compared with 76%). Those who self-identified as 'other' sexual orientation and those who chose not to provide details on their sexual orientation were the least likely to assess their health as good or very good, significantly less than the average. There was no significant difference between those who identified as heterosexual or as gay or lesbian in terms of self-assessed health.

Heterosexual respondents had significantly higher mental wellbeing (mean WEMWBS score of 50.0), than bisexual respondents (47.9), those with other

sexual orientations (47.0) and those that preferred not to disclose their sexual orientation (47.3). The mental wellbeing of gay men and lesbians (48.8) was not significantly different from the average.

Bisexual respondents were more likely to have a high GHQ12 score (23%) than heterosexuals (15%). Gay men and lesbians (16%) were not significantly different from the average.

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<sup>2</sup> See [www.scotland.gov.uk/About/Performance/scotPerforms/indicator/generalhealth](http://www.scotland.gov.uk/About/Performance/scotPerforms/indicator/generalhealth)

<sup>3</sup> The briefing paper on the development of WEMWBS is available online from:  
[www.wellscotland.info/about/indicators/wemwbs/index.aspx](http://www.wellscotland.info/about/indicators/wemwbs/index.aspx)

<sup>4</sup> Stewart-Brown, S. and Janmohamed, K. (2008). *Warwick-Edinburgh Mental Well-being Scale (WEMWBS). User Guide Version 1*. Warwick and Edinburgh: University of Warwick and NHS Health Scotland

<sup>5</sup> See [www.scotland.gov.uk/About/Performance/scotPerforms/indicator/wellbeing](http://www.scotland.gov.uk/About/Performance/scotPerforms/indicator/wellbeing)

<sup>6</sup> Goldberg, D. and Williams, P.A. (1988). *Users' Guide to the General Health Questionnaire*. Windsor: NFER-Nelson.

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<sup>8</sup> Bromley, C. and Given, L. (eds.).(2011) *The Scottish Health Survey 2010 Main Report*. Edinburgh: The Scottish Government. <http://www.scotland.gov.uk/Publications/2011/09/27084018/0>

<sup>9</sup> Schneider, U., Pfarr C., Schneider, B.S. and Volker Ulrich (2012) *I feel good! Gender differences and heterogeneity in self-assessed health* The European Journal of Health Economics Volume 13, Number 3: 251-265

<sup>10</sup> Blanchflower, DG and Oswald, AJ. (2007) *Is well-being U-shaped over the life cycle?* Working paper. Coventry: University of Warwick, Department of Economics.

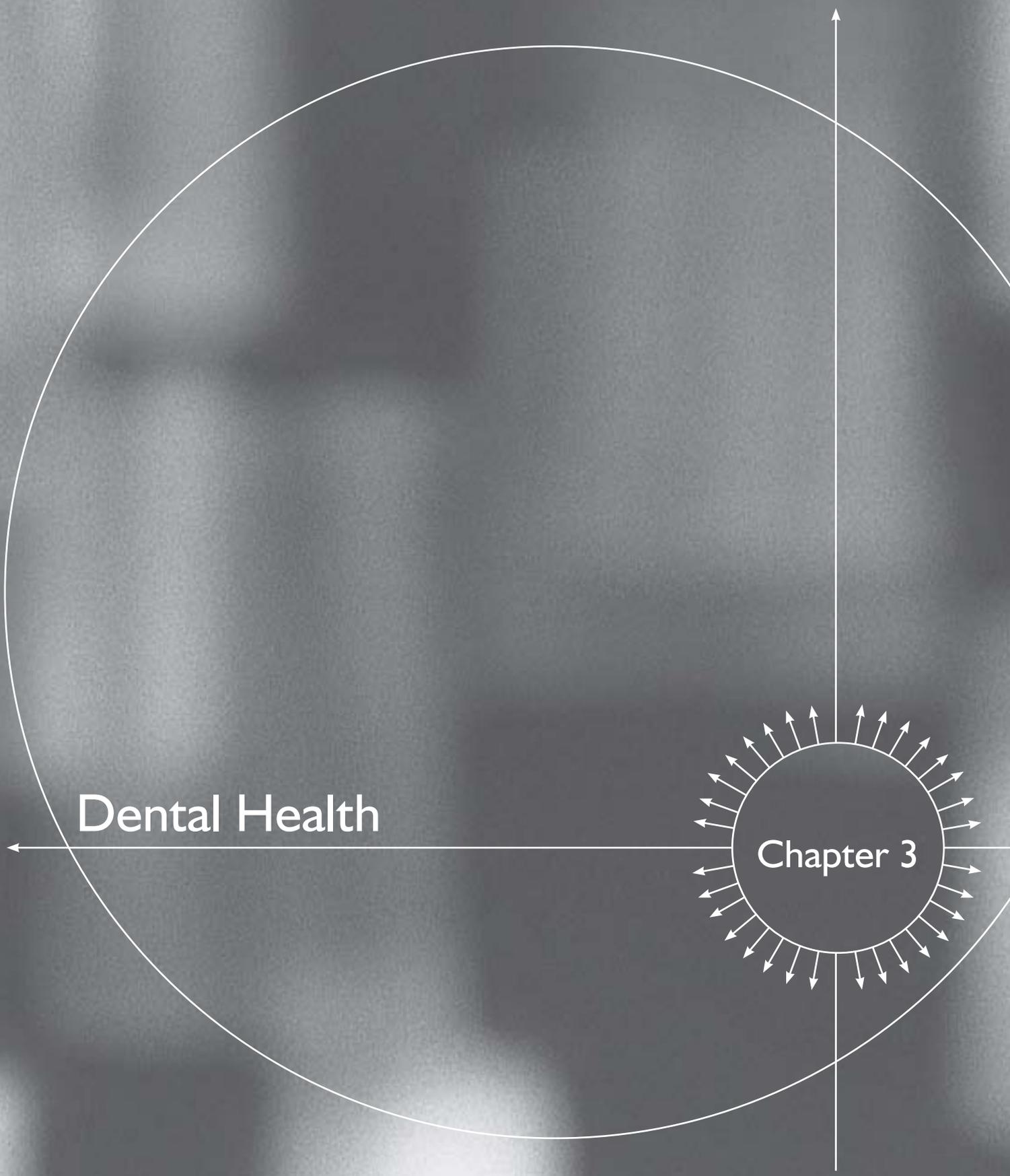
<sup>11</sup> *How fair is Britain?* Equality, Human Rights and Good Relations in 2010. The Triennial Review. Equality and Human Rights Commission. <http://www.equalityhumanrights.com/key-projects/how-fair-is-britain/full-report-and-evidence-downloads/>

<sup>12</sup> Krause, N. (2011) *Religion and Health: Making Sense of a Dishevelled Literature*. Journal of Religion and Health. 50: 20-35

<sup>13</sup> <http://www.scotland.gov.uk/Publications/2009/12/16103619/2>

Dental Health

Chapter 3



### **3 DENTAL HEALTH**

#### **SUMMARY**

- Men were slightly more likely than women to have 20 or more natural teeth.
- As age increased, the proportion of adults with 20 or more natural teeth declined and the prevalence of toothache reduced.
- White British and White Irish were the least likely of all ethnic groups to have 20 or more natural teeth.
- Muslims, Hindus and Buddhists were the most likely to have 20 or more natural teeth.
- Disabled people were less likely to have 20 or more natural teeth and more likely to have experienced toothache than those without a disability.
- Respondents who preferred not to disclose their sexual orientation, and those who reported their sexuality as 'other' were significantly less likely to have 20 or more natural teeth than the national average.

#### **3.1 MEASURES OF DENTAL HEALTH**

Respondents were asked how many natural teeth they had and those with natural teeth were asked whether they had experienced toothache or mouth pain within the last month.

#### **3.2 DENTAL HEALTH BY GENDER**

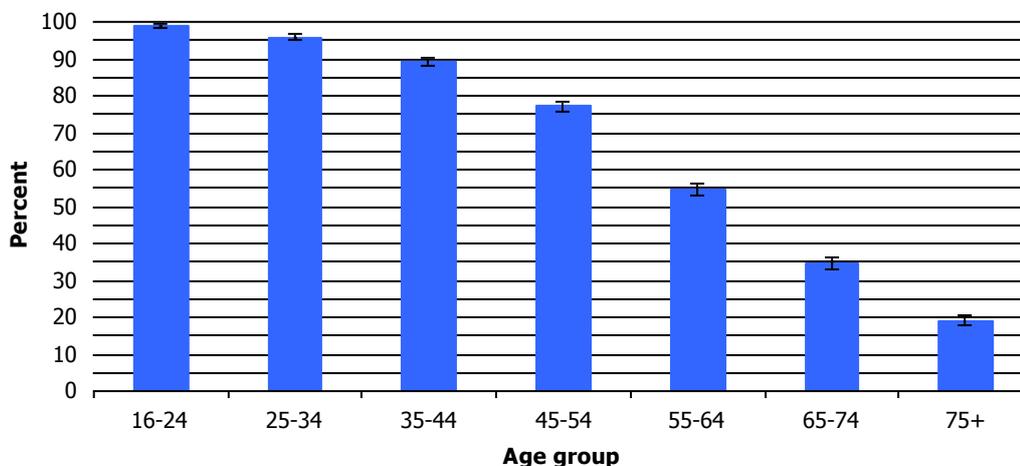
There was a small, but significant difference in the proportion of men (73%) and women (71%) who had 20 or more natural teeth. There was no significant difference in the experience of toothache between men and women. 13% of both men and women had experienced toothache in the previous month.

#### **3.3 DENTAL HEALTH BY AGE**

Dental health has a strong, linear association with age. Almost all adults aged 16-24 (99%) had 20 natural teeth or more compared with one in five adults over 75 (19%).

**Figure 3A**

Proportion of adults with 20 or more natural teeth, by age, 2008-2011 combined



Prevalence of toothache in the previous month was inversely associated with age. Younger age groups were more likely to report having experienced toothache in the last month with 18% of 16-24 year olds reporting this compared to 7% of those aged 75 and over.

### 3.4 DENTAL HEALTH BY ETHNIC GROUP

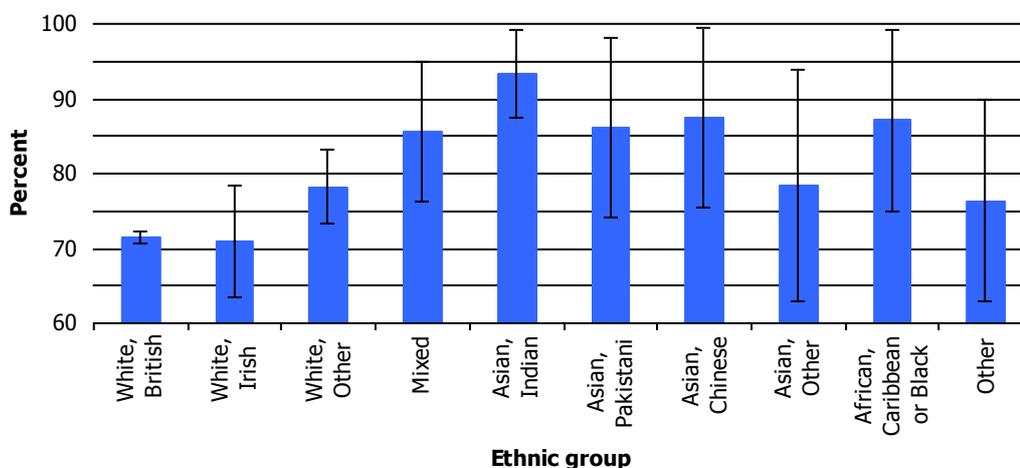
White British and White Irish ethnic groups had the lowest proportion of adults with twenty or more natural teeth (both 71%). Indian (93%), Chinese (88%), African, Caribbean or Black (87%) Pakistani (86%), Mixed ethnic groups (86%) and White Other (78%) all had significantly higher proportions of adults with twenty or more teeth than the national average.

In terms of toothache, there were few significant differences between ethnic groups. Pakistani respondents had a significantly higher prevalence of toothache (24%) than the national average whilst White Irish respondents had a significantly lower prevalence (8%) of toothache.

Previous studies of dental health in Scotland found that African and African-Caribbean people were more likely than the general population to brush their teeth twice a day and to have their own teeth.<sup>1</sup>

**Figure 3B**

Proportion of adults with 20 or more natural teeth, by ethnic group, 2008-2011 combined



### 3.5 DENTAL HEALTH BY RELIGION

Religious faith appears to have a strong association with how many natural teeth respondents have. Only 69% of Roman Catholics had 20 or more natural teeth, which was significantly lower than the national average of 72%. Muslims were the most likely to have twenty or more natural teeth (95%) followed by Hindus (93%) and Buddhists (89%).

There was no significant association between toothache and religion.

### 3.6 DENTAL HEALTH BY DISABILITY

Dental health was associated with disability. 65% of people with a limiting long-term condition had 20 or more natural teeth compared with 75% of those with no longstanding condition.

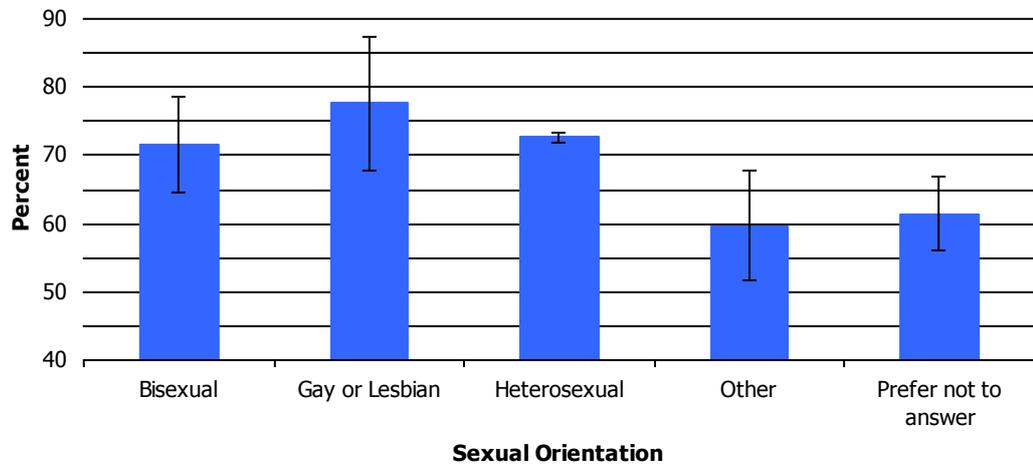
Disability was also associated with the experience of toothache. 19% of respondents with a limiting long-term condition reported having experienced toothache in the last month compared to 11% of those without a condition.

### 3.7 DENTAL HEALTH BY SEXUAL ORIENTATION

There were no significant differences in the proportion of heterosexual, lesbian and gay, or bisexual respondents who had 20 or more teeth. Those who preferred not to disclose their sexual orientation, and those who reported their sexuality as 'other' were significantly less likely to have 20 or more natural teeth than the national average, with 61% and 60% respectively. There was no significant association between toothache and sexual orientation.

**Figure 3C**

Proportion of adults with 20 or more natural teeth, by sexual orientation, 2008-2011 combined

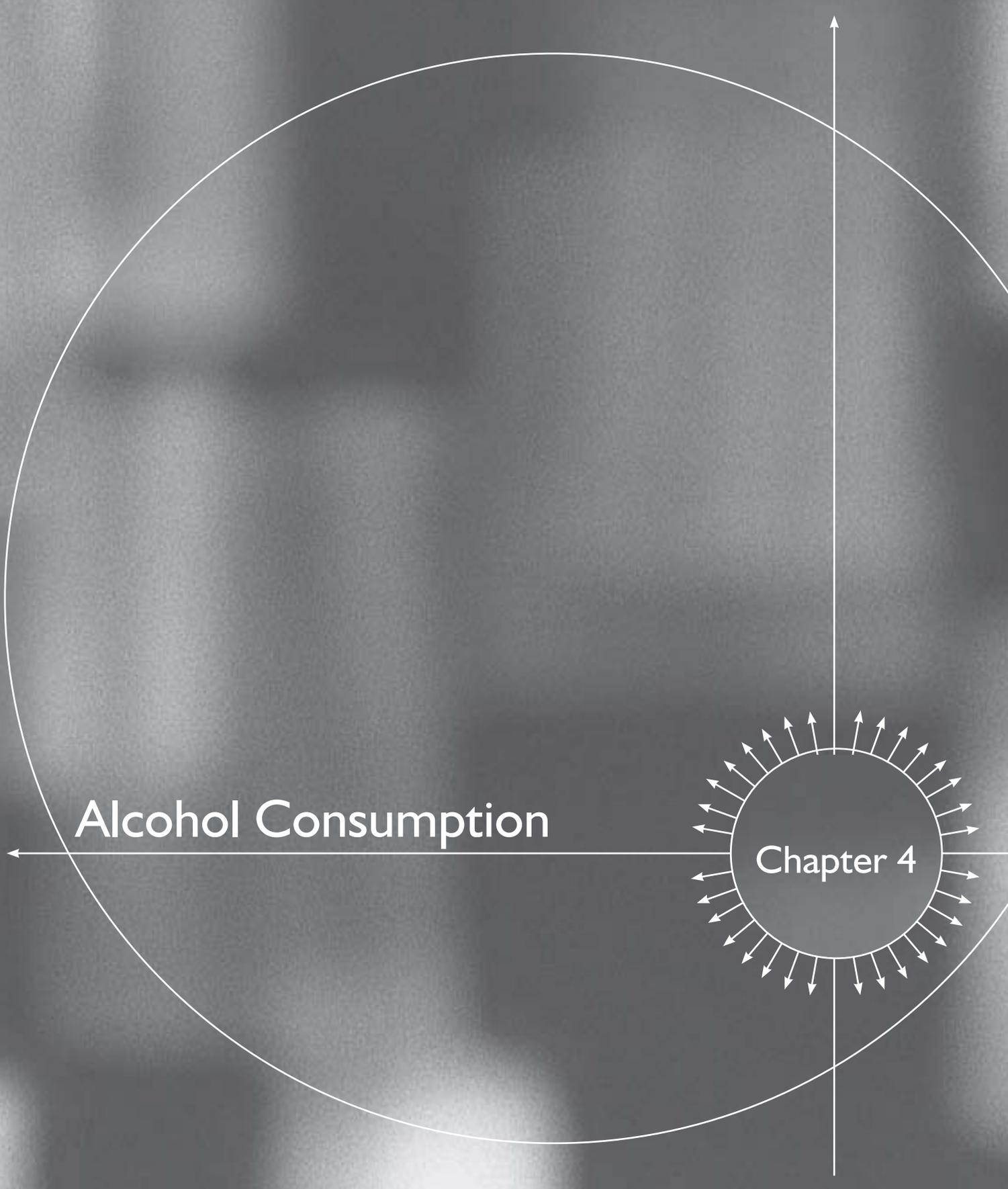


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<sup>1</sup> NHS Health Scotland. Health in our Multi-ethnic Scotland. Future Research Priorities. Glasgow: NHS Health Scotland; 2009. [www.healthscotland.com/documents/3768.aspx](http://www.healthscotland.com/documents/3768.aspx)

Alcohol Consumption

Chapter 4



## 4 ALCOHOL CONSUMPTION

### SUMMARY

- Men were more likely than women to drink at hazardous or harmful levels and to exceed the daily recommended alcohol units.
- Weekly alcohol consumption generally decreased with age, with 16-24 year olds consuming the most. The proportion exceeding daily limits was similar between the ages of 16 to 54 before declining for older groups.
- Pakistani, Chinese, Other Asian, and African, Caribbean or Black respondents were all significantly less likely to drink at hazardous or harmful levels than the national average.
- People who belonged to no religious group were most likely to drink excessively whilst Muslims, Hindus and Buddhists were the least likely religious groups to drink at hazardous or harmful levels.
- Respondents with a disability were less likely to drink excessively and to exceed daily limits than those who did not.
- Respondents who identified themselves as lesbian or gay were significantly more likely to drink at hazardous or harmful levels than the national average.

### 4.1 ALCOHOL CONSUMPTION RECOMMENDATIONS

The recommended sensible drinking guideline in the UK is that women should not regularly drink more than 2-3 units of alcohol per day and men should not regularly exceed 3-4 units a day. In addition, the Scottish Government recommends that everyone aim to have at least 2 alcohol free days per week. Over the course of a week, it is also recommended that women and men should not exceeded 14 units and 21 units respectively. The term 'harmful drinking' is used to describe those who are drinking at a level which is already causing physical, social or psychological harm. People whose drinking is not currently causing clear evidences of harm, but which may cause harm in the future have been described as 'hazardous' drinkers.<sup>1</sup> In terms of units, men who consume over 21 and up to 50 units per week and women who consume over 14 and up to 35 units are usually classes as 'hazardous' drinkers, while those who consume above 50/35 units a week are considered to be drinking at 'harmful' levels.<sup>2</sup>

### 4.2 MEASURES OF ALCOHOL CONSUMPTION

Three aspects of alcohol consumption are measured in the Scottish Health Survey: typical weekly consumption, consumption on the heaviest drinking day, and indicators of a potential drinking problem (including physical dependence).

To estimate weekly consumption, participants aged 16 and over were asked preliminary questions on whether they drank alcohol at all; followed by questions on how often during the past 12 months they had drunk each of six different types of alcoholic drink:

- normal beer, lager, cider and shandy
- strong beer, lager and cider
- sherry and martini
- spirits and liqueurs
- wine
- alcoholic soft drinks (“alcopops”).

The average number of days a week the participant had drunk each type of drink was estimated from these questions. A follow-up question asked how much of each drink type they had usually drunk on each occasion. These data were converted into units of alcohol and multiplied by the amount they said they usually drank on any one day (see notes for discussion of this process).<sup>3</sup>

Because the survey’s estimates of alcohol consumption are based on self-reported data, it should be noted that surveys often obtain lower estimates of consumption than implied by alcohol sales data. The most recently available estimates of alcohol sales in Scotland show that 11.2 litres of pure alcohol per person aged 16 and over were sold in 2011. This volume is sufficient for every adult to exceed the weekly recommended limits for men of 21 units. Although survey estimates are typically lower than sales estimates, surveys can provide information about the social patterning of individuals’ alcohol consumption which sales data cannot. For example, the analysis presented in this report by equality group would not be possible with sales data.

Daily consumption was measured by asking about drinking in the week preceding the interview, and looked at actual consumption on the heaviest drinking day in that week.<sup>4</sup> The questions asked for details of the amounts consumed of each of the six types of drink listed above, rather than asking participants to give a direct estimate of units consumed. This part of the process was therefore similar to the one used to estimate weekly drinking.

The CAGE questionnaire was asked of participants aged 16 and over, and highlights up to six indicators of problem drinking, including three indicators of physical dependency on alcohol. Due to the sensitive nature of the questions, this questionnaire was administered in self-completion format.

### **4.3 ALCOHOL CONSUMPTION BY GENDER**

Men were more likely than women to be hazardous or harmful drinkers (27% of men drank at hazardous or harmful levels compared to 19% of women). They were also significantly more likely to drink above the recommended daily limit on their heaviest drinking day in the previous week (43% of men compared to 34% of women).

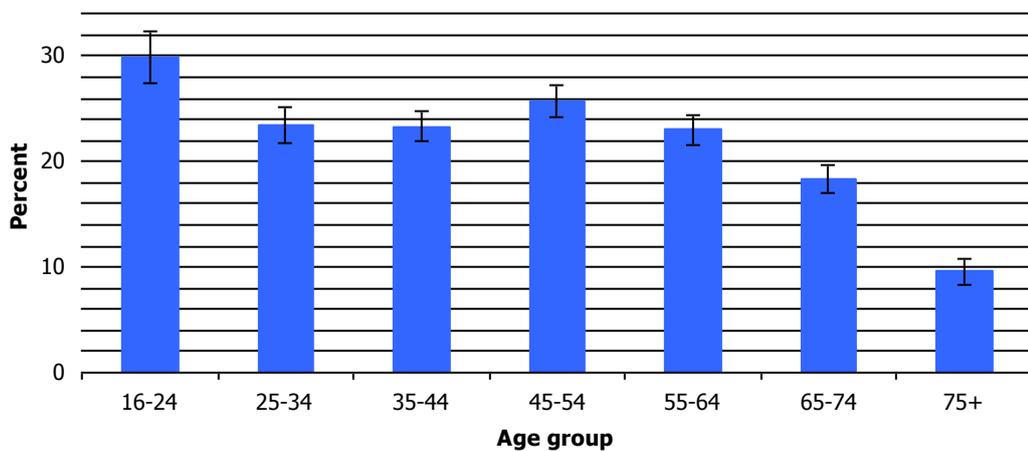
These findings support gendered differences in drinking behaviour found elsewhere.<sup>5</sup>

#### 4.4 ALCOHOL CONSUMPTION BY AGE

Prevalence of hazardous or harmful drinking was greatest among 16-24 year olds (30%) and dropped to 23%-26% between the ages of 25-64 before falling to 18% for 65-74 year olds and 10% for those aged 75 and over. The proportion of 16-24 year olds drinking above daily recommended limits on their heaviest drinking day was not significantly different from other age groups under 55 (figures ranged from 45% to 47%). From the age of 55 onwards, the proportion of adults drinking over the daily limit decreased with increasing age, reducing to 9% for the 75 and over age group.

**Figure 4A**

Proportion of adults drinking at hazardous/harmful levels, by age, 2008-2011 combined



#### 4.5 ALCOHOL CONSUMPTION BY ETHNIC GROUP

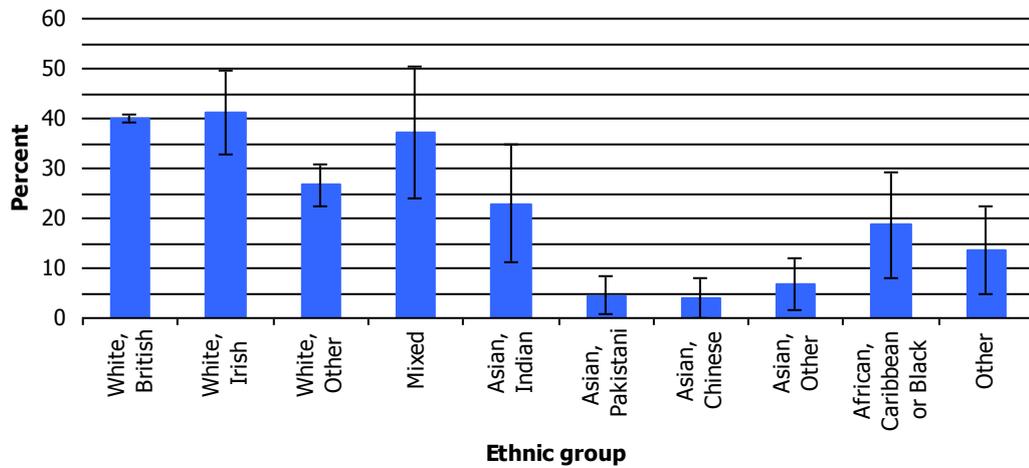
White ethnic groups were broadly similar to each other in terms of weekly alcohol consumption. Pakistani (3%), Chinese (4%), Other Asian (4%) and African, Caribbean or Black respondents (7%) were all significantly less likely to drink at hazardous or harmful levels than the national average (23%).

In relation to exceeding daily limits, the picture was similar but in addition, the White Other group (27%) was significantly less likely to drink above limits than the national average (39%). Pakistani and Chinese respondents (both 4%) were again significantly less likely than White British (40%) and White Irish respondents (41%) to have exceeded the daily limit on their heaviest drinking day. Previous studies have found similar ethnic differences in drinking behaviour; for example, alcohol-related mortality is higher in men and women born in the UK than those born in Pakistan.<sup>6</sup> Furthermore, Indian, Chinese, and Pakistani youths in Glasgow were found to consume less alcohol than the general population.<sup>7</sup>

African, Caribbean or Black respondents (19%) were also significantly less likely than to be drinking above daily limits than the national average.

**Figure 4B**

Proportion of adults exceeding daily alcohol limits, by ethnic group, 2008-2011 combined



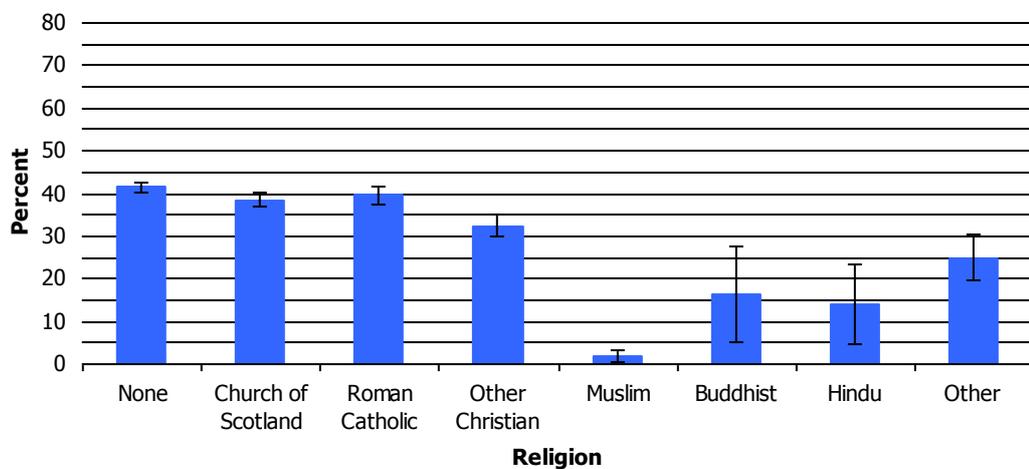
#### 4.6 ALCOHOL CONSUMPTION BY RELIGION

Muslims, Hindus and Buddhists were the least likely religious groups to drink at hazardous or harmful levels with 5%, 6% and 10% doing so respectively. Christian faiths (Church of Scotland, Roman Catholic and other Christians) were significantly more likely to drink at hazardous or harmful levels than Muslims, Hindus and Buddhists.

Very few Muslims (2%) reported exceeding daily limits; significantly less than Hindus (14%) and Buddhists (16%), and substantially less than those with Christian faiths (ranging between 32% and 40%) and those who did not belong to any religious group (41%).

**Figure 4C**

Proportion exceeding daily alcohol limits, by religion, 2008-2011 combined



A notable finding is that respondents who did not belong to any religious group were the most likely to drink excessively. 26% reported drinking at

hazardous or harmful levels, significantly higher than the average (23%) and 41% exceeded daily limits compared to the average of 39%. The difference in alcohol consumption between religious and non-religious adults has been noted in previous research. For example, in a study of drinking behaviours in greater Glasgow, those who professed a religious belief were found to drink less alcohol.<sup>8</sup>

#### **4.7 ALCOHOL CONSUMPTION BY DISABILITY**

Respondents who reported a disability were less likely to drink excessively than those who did not. 19% of respondents with a limiting long-term condition drank at hazardous or harmful levels compared with 24% of those without a long-term condition. They were also significantly less likely to exceed daily limits (31% compared to 41%).

There was no difference in alcohol consumption between those with a non-limiting condition and those without a condition.

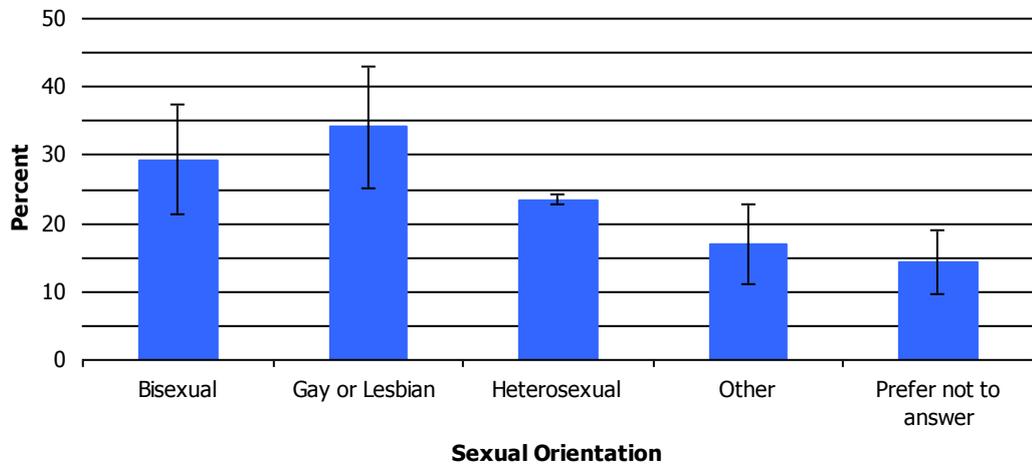
#### **4.8 ALCOHOL CONSUMPTION BY SEXUAL ORIENTATION**

Respondents who identified themselves as lesbian or gay (34%) were significantly more likely to drink at hazardous or harmful levels than the average (23%). They were also more likely to exceed daily limits (50%) as were those who identified themselves as bisexual (49%) when compared to the average (39%). There was no significant difference in alcohol consumption between non-heterosexual groups, although gay and lesbian respondents had the highest levels of both hazardous/harmful drinking and exceeding daily limits. This corroborates with other research that found that lesbians and gay men may be at increased risk due to high levels of drinking and smoking.<sup>9</sup>

Those who preferred not to answer the question on sexuality were significantly less likely to exceed daily limits and drink at hazardous / harmful levels than those who identified themselves as heterosexual, gay, lesbian or bisexual.

**Figure 4D**

Proportion of adults drinking at hazardous/harmful levels, by sexual orientation, 2008-2011 combined



## REFERENCES AND NOTES

<sup>1</sup> Drummond, C., Deluca, P., Oyefeso, A., Rome, A., Scrafton, S., Rice, P. (2009). *Scottish Alcohol Needs Assessment*. London: Institute of Psychiatry, King's College.

<sup>2</sup> See for example the North west Public Health Observatory's Local Alcohol Profiles for England, which use these definitions – [www.nwph.net/alcohol/lape/](http://www.nwph.net/alcohol/lape/)

<sup>3</sup> For participants aged 16 and 17, details on alcohol consumption were collected as part of a special smoking and drinking self-completion questionnaire. Some 18 and 19 year olds also completed the self-completion if the interviewer felt it was appropriate. For all other adult participants, the information was collected as part of the face-to-face interview. The method of estimating consumption follows that originally developed for use in the General Household Survey and is also used in the Health Survey for England. For six types of alcoholic drink (normal strength beer/lager/cider/shandy, strong beer/lager/cider, spirits/liqueurs, fortified wines, wine, and alcoholic soft drinks), participants were asked about how often they had drunk each one in the past twelve months, and how much they had usually drunk on any one day. The amount given to the latter question was converted into units of alcohol, with a unit equal to half a pint of normal strength beer/lager/cider/alcoholic soft drink, a single measure of spirits, one glass of wine, or one small glass of fortified wine. A half pint of strong beer/lager/cider was equal to 1.5 units. The number of units was then multiplied by the frequency to give an estimate of weekly consumption of each type of drink. The frequency multipliers were:

Drinking frequency	Multiplying factor
Almost every day	7.0
5 or 6 times a week	5.5
3 or 4 times a week	3.5
Once or twice a week	1.5
Once or twice a month	0.375
One every couple months	0.115
Once or twice a year	0.029

The separate consumption figures for each type of drink were rounded to two decimal places and then added together to give an overall weekly consumption figure. The results were then banded, using the same bands as the ones used in the 1995 Scottish Health Survey and in all years of the Health Survey for England. The bandings for men are as follows:

- 1 Under 1 unit (less than or equal to 0.50 units)
- 2 1-10 units (over 0.50 units, but less than or equal to 10.00 units)
- 3 Over 10-21 units (over 10.00 units, but less than or equal to 21.00 units)
- 4 Over 21-35 units (over 21.00 units, but less than or equal to 35.00 units)
- 5 Over 35-50 units (over 35.00 units, but less than or equal to 50.00 units)
- 6 Over 50 (over 50.00 units)

The bands for women were similar, but with breaks at 7, 14, 21 and 35 units, instead of 10, 21, 35 and 50.

<sup>4</sup> Participants aged 16 and over were asked whether they had drunk alcohol in the past seven days. If they had, they were asked on how many days and, if on more than one, whether they had drunk the same amount on each day or more on one day than others. If they had drunk more on one day than others, they were asked how much they drank on that day. If they had drunk the same on several days, they were asked how much they drank on the most recent of those days. If they had drunk on only one day, they were asked how much they had drunk on that day.

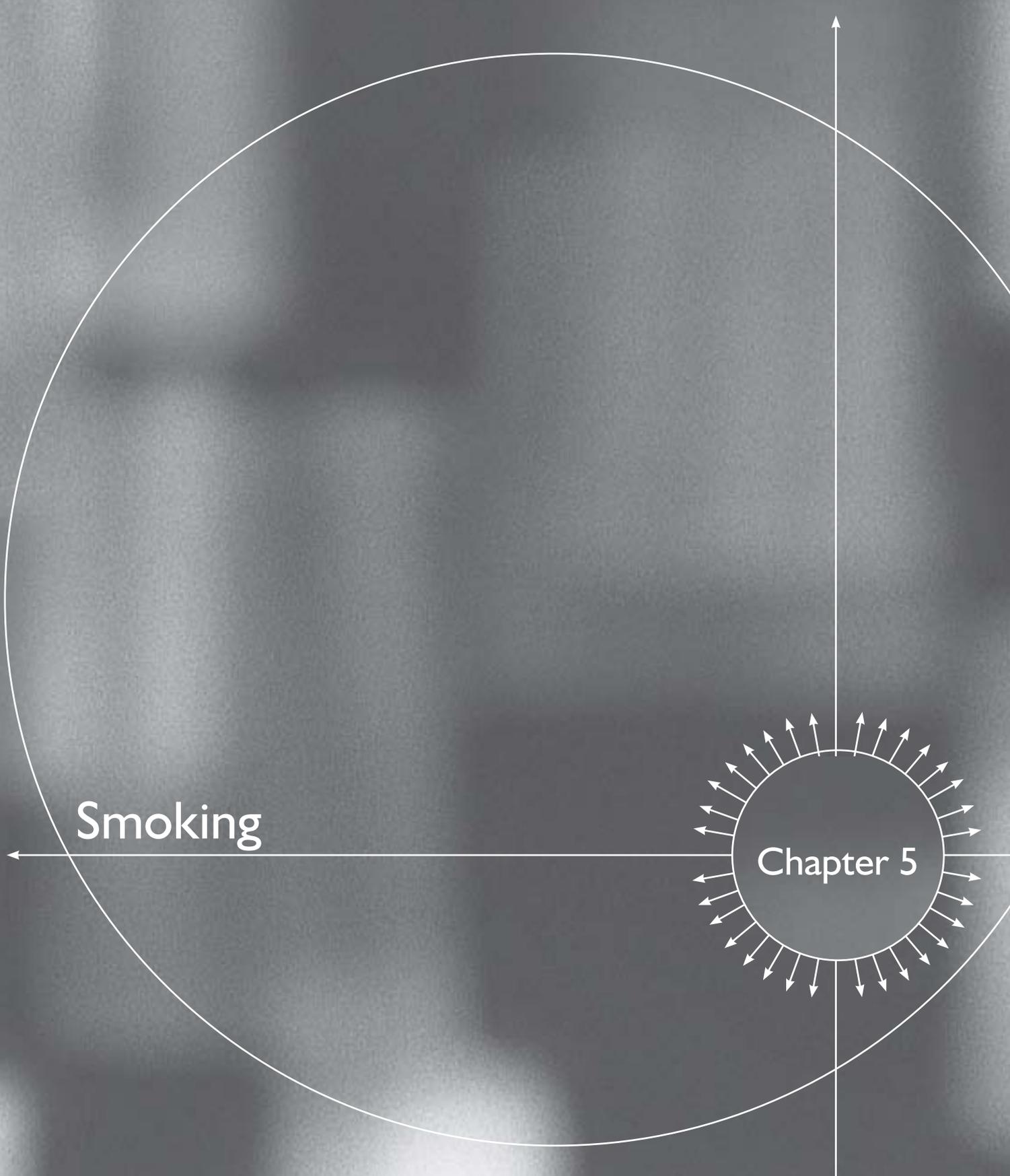
<sup>5</sup> Grant, I., Springbett, A., and Graham, L. *Alcohol attributable mortality and morbidity: alcohol population attributable fractions for Scotland*, 2009. ISD Scotland/Scottish Public Health Observatory. [www.scotpho.org.uk/alcohol/PAFreport/](http://www.scotpho.org.uk/alcohol/PAFreport/)

<sup>6</sup> Bhala, N., Fischerbacher, C. and Bhopal, R. (2010) *Mortality for Alcohol-related Harm by Country of Birth in Scotland, 2000-2004: Potential Lessons for Prevention*. Alcohol and Alcohol

<sup>7</sup> Heim, D., Hunter, S.C., Ross, A.J., Bakshi, N., Davies, J.B., Flatley, K.J. & Meer, N. (2004) *Alcohol Consumption. Perceptions of Community Responses and Attitudes to Service Provision: Results from a Survey of Indian, Chinese and Pakistani Young People in Greater Glasgow, Scotland, UK*. Alcohol and Alcoholism. Vol. 3, No 3. pp. 220-226

<sup>8</sup> Heim, D., Hunter, S.C., Ross, A.J., Bakshi, N., Davies, J.B., Flatley, K.J. & Meer, N. (2004) *Alcohol Consumption. Perceptions of Community Responses and Attitudes to Service Provision: Results from a Survey of Indian, Chinese and Pakistani Young People in Greater Glasgow, Scotland, UK*. Alcohol and Alcoholism. Vol. 3, No 3. pp. 220-226

<sup>9</sup> Gruskin, E.P., Gordon, N. (2006) *Gay/Lesbian sexual orientation increased risk of cigarette smoking and heavy drinking among members of a large Northern California health plan*. BMC Public Health. 6:241



Smoking

Chapter 5

## 5 SMOKING

### SUMMARY

- There was no difference in smoking prevalence between men and women but men smoked more cigarettes per day and started smoking at a younger age.
- Prevalence of smoking was highest among 25-34 year olds and decreased with age but 45-54 year old smokers smoked the most cigarettes per day.
- Pakistani and Asian Other ethnic groups were least likely to smoke.
- Roman Catholics and those who did not belong to any religion were most likely to be smokers whilst Muslims and Other Christians were least likely to smoke.
- Respondents who reported a disability were significantly more likely to smoke than those who did not.
- Smoking prevalence among bisexual, gay and lesbian respondents was not significantly different from that among heterosexuals.

### 5.1 MEASURES OF SMOKING

Information about cigarette smoking was collected from adults aged 16 and 17 by means of a self-completion questionnaire which offered them the privacy to answer without disclosing their smoking behaviour in front of other household members. For adults aged 20 and over it was collected as part of the main interview. Those aged 18 and 19, at the interviewers' discretion, could answer the questions either in the self-completion booklet or the main interview.

For young adults, the smoking questions in the self-completion questionnaire focus upon:

- current smoking status
- frequency and pattern of current smoking
- the number of cigarettes smoked by current smokers
- ex-smokers' previous smoking history
- exposure to second-hand smoke.

The self-completion and main interview questions are mostly similar. However the main interview also asked about past smoking behaviour, desire to give-up smoking and medical advice to stop smoking. The question about non-smokers' exposure to second-hand smoke covers a range of domestic and public places, including some locations covered by the 2006 smoking ban (such as pubs).

### 5.2 SMOKING BY GENDER

There was no real difference in smoking prevalence between men and women. The rate for men was slightly higher but the difference wasn't

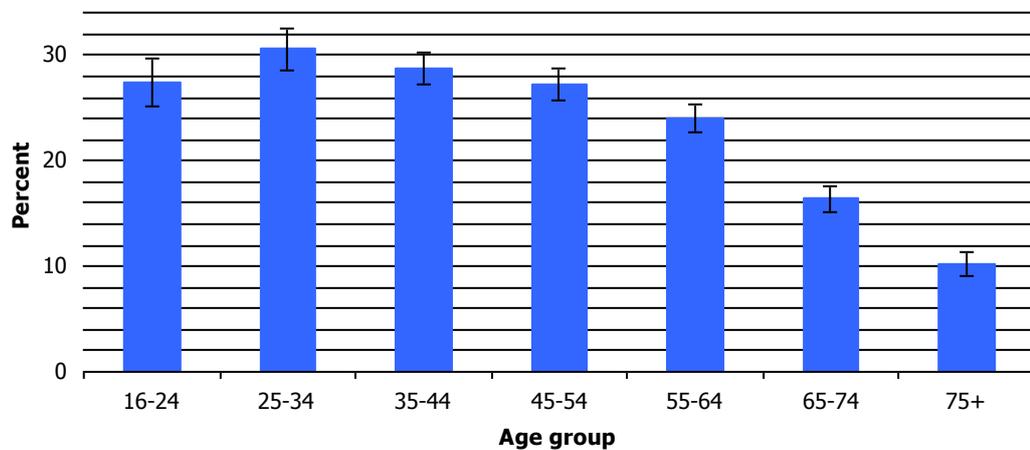
significant (26% compared with 24%). However, men smoked an average of 2 cigarettes per day more than women (15.2 compared with 13.3) and started smoking at a younger age (17.2 years) than women (17.8 years).

### 5.3 SMOKING BY AGE

Age was significantly associated with smoking prevalence and the amount of cigarettes smoked. Prevalence was highest in the 25-34 year old age group (31%) before falling gradually until the age of 55-64 and dropping more dramatically from the age of 65 onwards.

**Figure 5A**

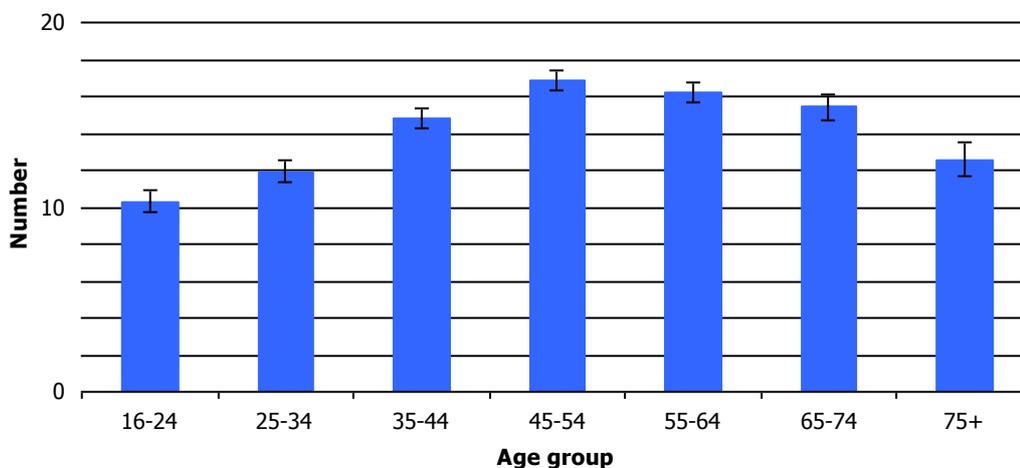
Prevalence of smoking, by age, 2008-2011 combined



The pattern was somewhat reversed when looking at the average number of cigarettes smoked. 16-24 year-old smokers smoked the least (10.3 cigarettes a day) and smokers between the ages of 45-54 smoked the most (16.9 per day). Levels dropped off among older groups to reach an average of 12.6 among those aged 75 and over.

**Figure 5B**

Average number of cigarettes smoked per day, by age, 2008-2011 combined



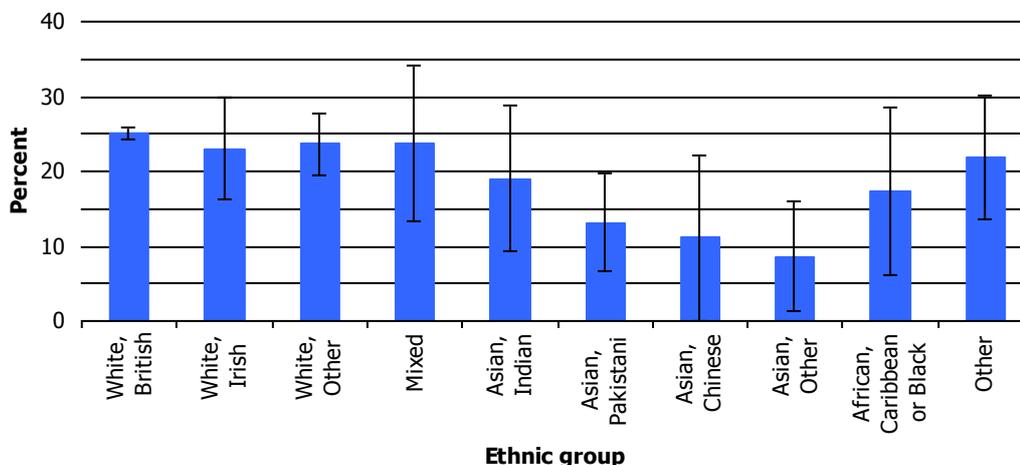
The average age at which people started smoking was 17.5 years. This was broadly similar between the ages of 16 and 64 (ranging between 17.0 and 17.3 years) but increased with age thereafter with 65-74 year olds having started smoking at 18.0 years and the 75+ group starting at age 19.5 on average.

### 5.4 SMOKING BY ETHNIC GROUP

Respondents from Pakistani and Asian Other ethnic groups were significantly less likely to smoke than the national average (prevalence of 13% and 9% respectively). This significant ethnic difference in smoking corroborates with research into smoking and ethnicity in Glasgow.<sup>1</sup>

**Figure 5C**

Prevalence of smoking, by ethnic group, 2008-2011 combined



Because of the smaller sample sizes available (as analysis is restricted to current smokers only) it is not possible to provide robust estimates of the mean number of cigarettes smoked by any of the non-white ethnic groups. White British smokers smoked an average of 14.4 cigarettes a day, significantly more than those from Other White ethnic groups (12.1).

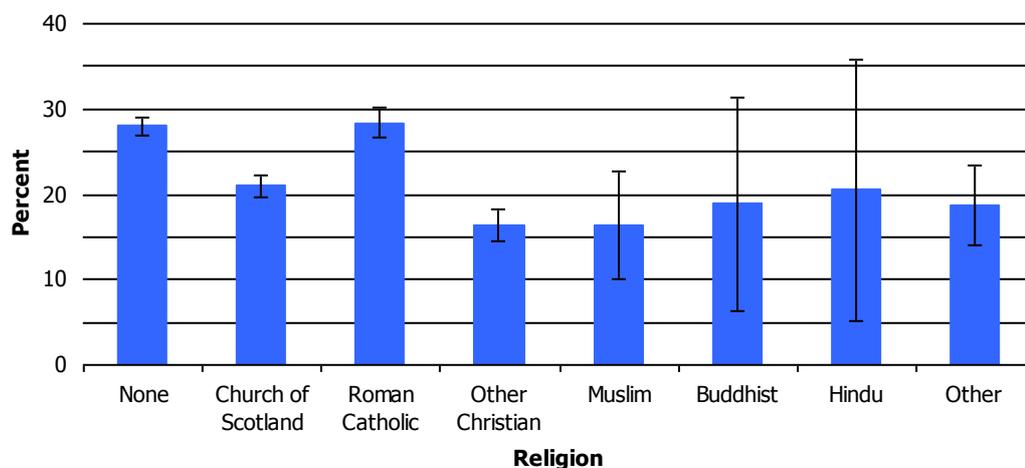
The only significant difference between ethnic groups in the age of starting smoking was among the White Other group where respondents started smoking at an average age of 19.3, significantly higher than the national average of 17.5.

## 5.5 SMOKING BY RELIGION

There were notable differences in prevalence of smoking by religious faith. 28% of Roman Catholic respondents and respondents who did not belong to any religion were smokers, significantly higher than the national average of 25%. Muslims and Other Christians had the lowest smoking prevalence at 16% and Church of Scotland was also significantly lower than average with 21% smoking within this group.

**Figure 5D**

Prevalence of smoking, by religion, 2008-2011 combined



Of those who smoked, respondents belonging to no religion, and Church of Scotland, Roman Catholic and other Christian respondents all smoked around 14 cigarettes a day on average. Muslim smokers and those from other religions smoked the least, averaging 8.6 and 11.6 cigarettes a day respectively. There was little difference in the age of starting smoking between different religious groups.

## 5.6 SMOKING BY DISABILITY

Respondents who reported a disability were significantly more likely to smoke than those who did not. 34% of those with a limiting long-term condition

smoked, compared with only 23% and 22% of those with a non-limiting condition or with no condition. Those with a limiting long-term condition also smoked more on average (15.2) than those with a non-limiting condition (14.2) and those with no condition (13.7 cigarettes per day).

Disability was not significantly associated with the age of starting smoking.

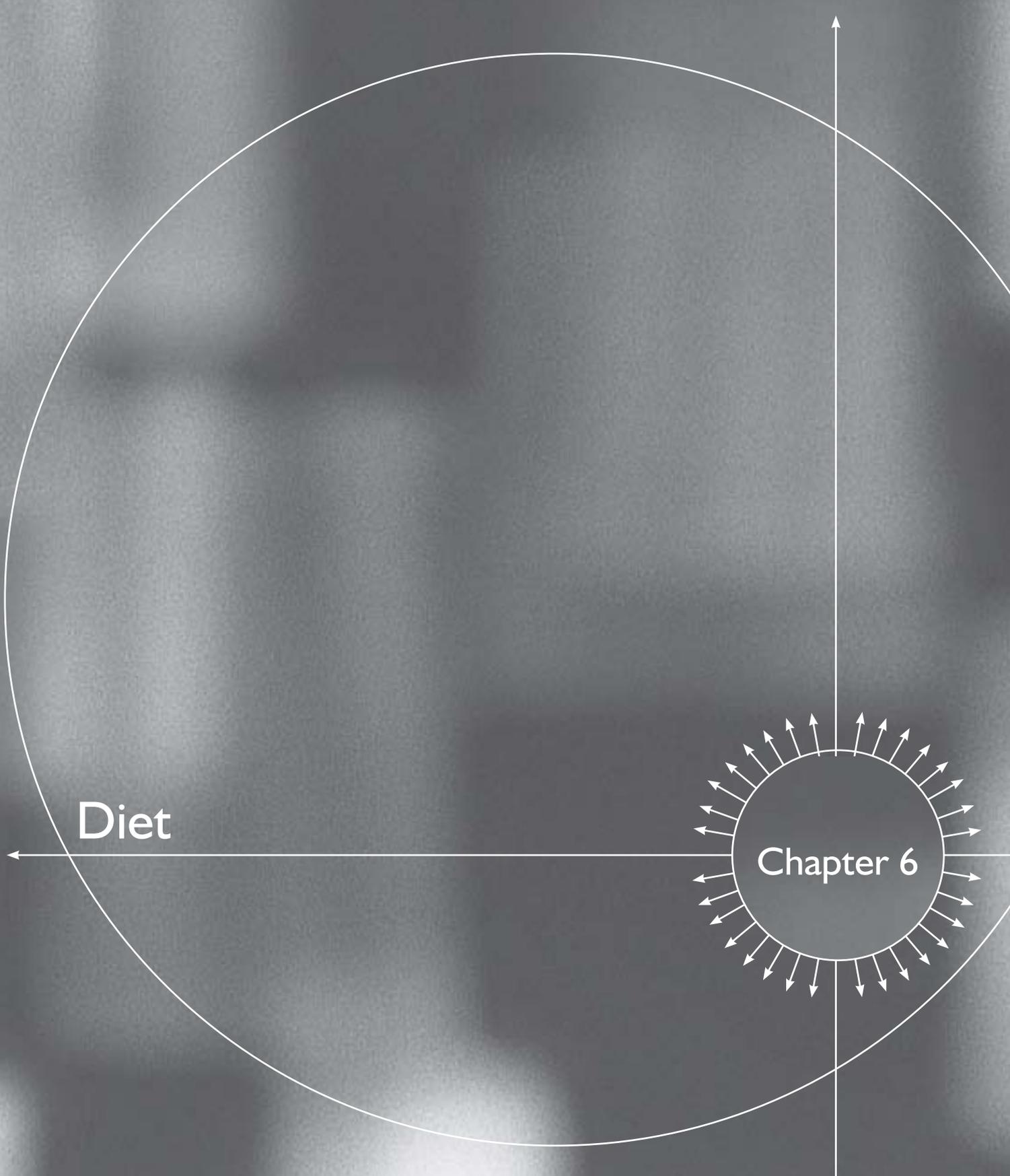
## **5.7 SMOKING BY SEXUAL ORIENTATION**

Self-identified bisexual (27%) and gay and lesbian respondents (28%) had a slightly higher smoking prevalence than heterosexuals, but the difference was not significant. Those who self-identified as having an 'other' sexual orientation were significantly more likely to smoke than heterosexual respondents (36% compared to 24%). Those who preferred not to answer the question on sexual orientation also had significantly higher smoking prevalence (33%).

Gay and lesbian smokers smoked significantly more than the national average (17.8 compared with 14.2 cigarettes per day). Bisexual smokers started smoking at 15.9 years old on average, significantly younger than heterosexual smokers (17.5 years).

## REFERENCES AND NOTES

<sup>1</sup> NHS Greater Glasgow. Black and Minority Ethnic Health in Greater Glasgow. Glasgow: NHS Greater Glasgow; 2006.



Diet

Chapter 6

## 6 DIET

### SUMMARY

- Women were slightly more likely than men to eat 5 portions of fruit and vegetables a day.
- 16-24 year olds were least likely to eat 5-a-day with consumption peaking at age 55-64 before dropping slightly for older age groups.
- White British respondents were least likely to eat 5 portions of fruit and vegetables a day whilst respondents from White Other, Pakistani, Chinese, Asian Other and Other ethnic groups were all had significantly higher consumption than the national average.
- Buddhists, Muslims and Hindus were most likely to meet the 5-a-day recommendation and consumed the highest mean daily portions of fruit and vegetables.
- Fewer adults with a limiting long-term condition ate 5 portions of fruit and vegetables a day than those without a condition.
- A significantly lower proportion of those who reported their sexual orientation as 'other' and those that preferred not to answer the question ate the recommended quantities of fruit and vegetables than the national average.

### 6.1 MEASURES OF DIET

The Scottish Health Survey includes a module of questions on fruit and vegetable consumption which was designed to monitor the '5-a-day' policy. To determine the total number of portions that had been consumed in the 24 hours preceding the interview, the fruit and vegetable module asked about the following food types: vegetables (fresh, frozen or canned); salads; pulses; vegetables in composites (e.g. vegetable chilli); fruit (fresh, frozen or canned); dried fruit; and fruit in composites (e.g. apple pie). A portion was defined as the conventional 80g of a fruit or vegetable. As 80g is difficult to visualise, a 'portion' was described using more everyday terms, such as tablespoons, cereal bowls and slices. Examples were given in the questionnaire to aid the recall process, for instance, tablespoons of vegetables, cereal bowls full of salad, pieces of medium sized fruit (e.g. apples) or handfuls of small fruits (e.g. raspberries). In spite of this, there may be some variation between participants' interpretations of 'a portion'. These everyday measures were converted back to 80g portions prior to analysis. The following table shows the definitions of the portion sizes used for each food item included in the survey:

<b>Food item</b>	<b>Portion size</b>
Vegetables (fresh, frozen or canned)	3 tablespoons
Pulses (dried)	3 tablespoons
Salad	1 cereal bowlful
Vegetables in composites, such as vegetable chilli	3 tablespoons
Very large fruit, such as melon	1 average slice
Large fruit, such as grapefruit	Half a fruit
Medium fruit, such as apples	1 fruit
Small fruit, such as plum	2 fruits
Very small fruit, such as blackberries	2 average handfuls
Dried fruit	1 tablespoon
Fruit in composites, such as stewed fruit in apple pie	3 tablespoons
Frozen fruit/canned fruit	3 tablespoons
Fruit juice	1 small glass (150 ml)

Since the '5-a-day' policy stresses both volume and variety, the number of portions of fruit juice, pulses and dried fruit was capped so that no more than one portion could contribute to the total number of portions consumed. Interviewers recorded full or half portions, but nothing smaller.

Two measures are covered in this chapter: the proportion of respondents consuming the recommended 5 portions of fruit and vegetables a day; and the average portions of fruit and vegetables eaten a day.

## **6.2 FRUIT AND VEGETABLE CONSUMPTION BY GENDER**

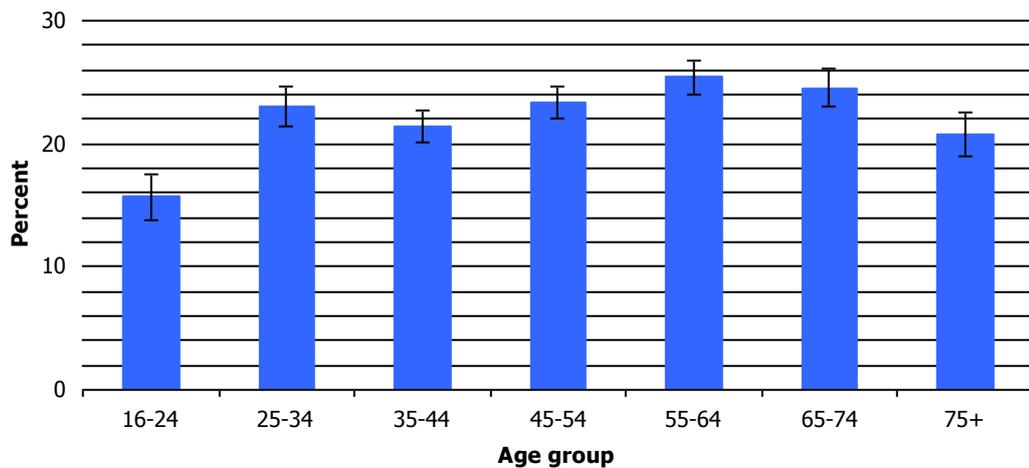
There was a small but significant gender difference in the proportion of men and women eating 5 or more portions per day (24% of women compared with 21% of men) with a similar pattern in the mean number of portions eaten per day (women ate 3.4 portions compared to 3.1 for men).

## **6.3 FRUIT AND VEGETABLE CONSUMPTION BY AGE**

Consumption of 5-a-day was significantly associated with age. Adults aged 16-24 were least likely to eat 5 or more portions per day (16%) and ate the fewest portions per day (2.7). Consumption peaked at age 55-64 (when 25% ate 5 or more portions per day with an average of 3.5 portions) before decreasing to a level of 21% (and 3.3 portions) at age 75 and over.

**Figure 6A**

Proportion eating 5 or more portions of fruit and vegetables a day, by age, 2008-2011 combined

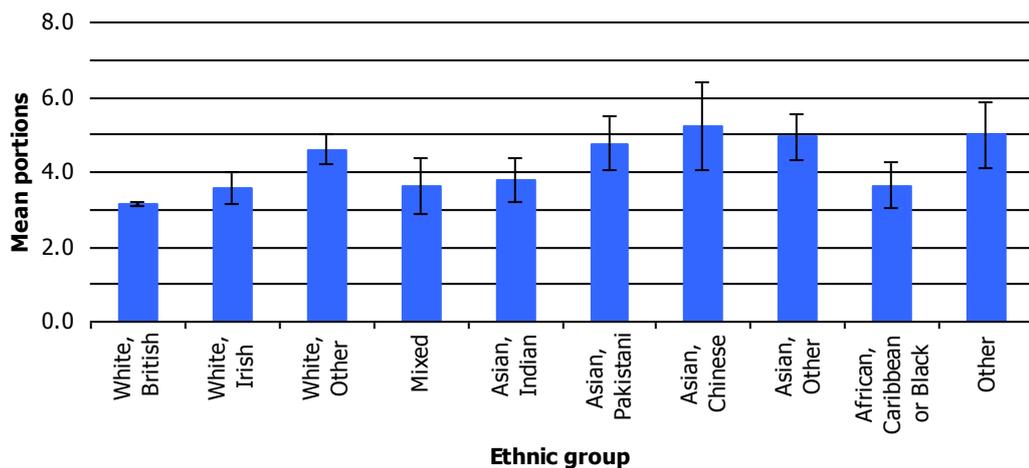


#### 6.4 FRUIT AND VEGETABLE CONSUMPTION BY ETHNIC GROUP

There was a significant association between fruit and vegetable consumption and ethnic group. White British respondents were the least likely to eat 5-a-day (21%). Conversely, White Other (40%, 4.6 mean portions), Pakistani (48%, 4.8 mean portions), Chinese (49%, 5.2 mean portions), Asian Other (51%, 5.0 mean portions) and Other ethnic groups (46%, 5.0 mean portions) were all significantly higher than the national average (22%, 3.2 mean portions) in terms of their consumption of 5 or more portions per day.

**Figure 6B**

Mean daily portions of fruit and vegetables, by ethnic group, 2008-2011 combined



Previous studies have found that people with a Pakistani background are more likely to be eating fruit and vegetables in Scotland<sup>1</sup> and in the UK generally.<sup>2</sup> However, in the Multi-ethnic Scotland report, Pakistanis living in Glasgow were found to be less likely to eat five portions of fruit and vegetables a day.<sup>3</sup> Studies in the USA have found more dramatic dietary differences within multi-ethnic populations.<sup>4</sup>

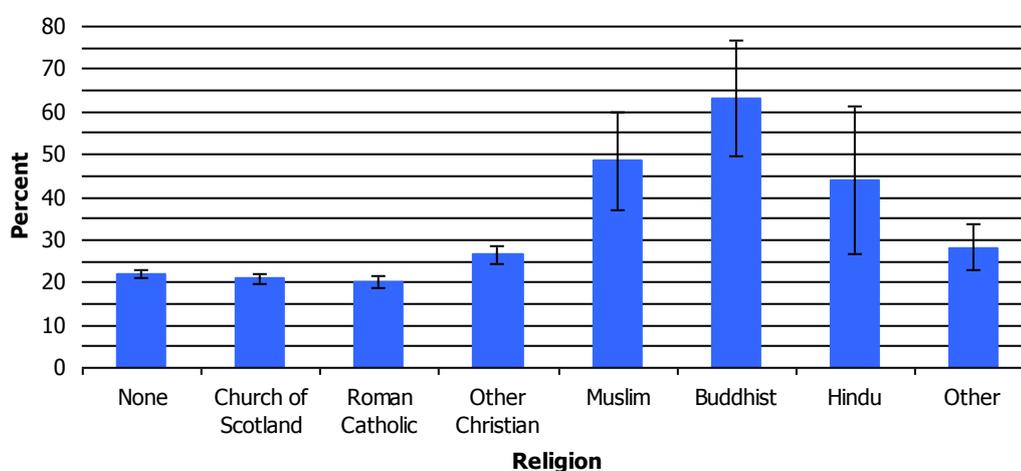
## 6.5 FRUIT AND VEGETABLE CONSUMPTION BY RELIGION

Buddhists (63%), Muslims (49%) and Hindus (44%) were most likely to meet the 5-a-day recommendation and consumed the highest mean daily portions (6.8, 5.1 and 4.5 portions respectively), significantly greater than the national average (22% and 3.2 portions). This is slightly more than has been reported elsewhere.<sup>5</sup> Although Buddhism in general does not have a strict dietary code, some schools of Buddhism forbid eating meat and many Buddhists are vegetarian, which may explain the high fruit and vegetable intake. It has been suggested that religious belief may well impact on the health of the members because of the modest dietary requirements that many denominations have.<sup>6</sup>

Church of Scotland and Roman Catholic respondents ate slightly, but significantly, less portions per day than the national average (3.1 compared with 3.2) and Roman Catholics were significantly less likely to eat 5 or more portions per day than the national average (20% compared with 22%). This data corresponds with the Dimensions of Diversity report, which reported one in five Church of Scotland and Roman Catholics eating sufficient fruit and vegetables.<sup>7</sup>

**Figure 6C**

Proportion eating 5 or more portions of fruit and vegetables a day, by religion, 2008-2011 combined



## 6.6 FRUIT AND VEGETABLE CONSUMPTION BY DISABILITY

There was some variation in diet between disability groups. Fewer adults with a limiting long-term condition (19%) ate 5 portions of fruit and vegetables a day than those without a condition (23%). On average, respondents with a limiting longstanding condition ate 3.0 portions of fruit and vegetables a day compared with 3.3 for those with a non-limiting condition and 3.4 for those with no condition.

## **6.7 FRUIT AND VEGETABLE CONSUMPTION BY SEXUAL ORIENTATION**

Respondents who identified themselves as lesbian or gay were the most likely to have eaten 5 or more portions of fruit and vegetables on the day prior to interview (28%) and had the highest mean daily portions (3.7), although this wasn't significantly different from the national average (22%, 3.2 portions). A significantly lower proportion of those who reported their sexual orientation as 'other' and those that preferred not to answer the question (both 15%) ate the recommended quantities of fruit and vegetables than the national average. These two groups also ate the lowest number of daily portions on average (both 2.7).

## REFERENCES AND NOTES

<sup>1</sup> NHS Health Scotland. Health in our Multi-ethnic Scotland. Future Research Priorities. Glasgow: NHS Health Scotland; 2009. [www.healthscotland.com/documents/3768.aspx](http://www.healthscotland.com/documents/3768.aspx)

<sup>2</sup> <http://www.esrc.ac.uk/news-and-events/press-releases/16005/differing-lifestyles-a-study-of-ethnicity-and-health.aspx>

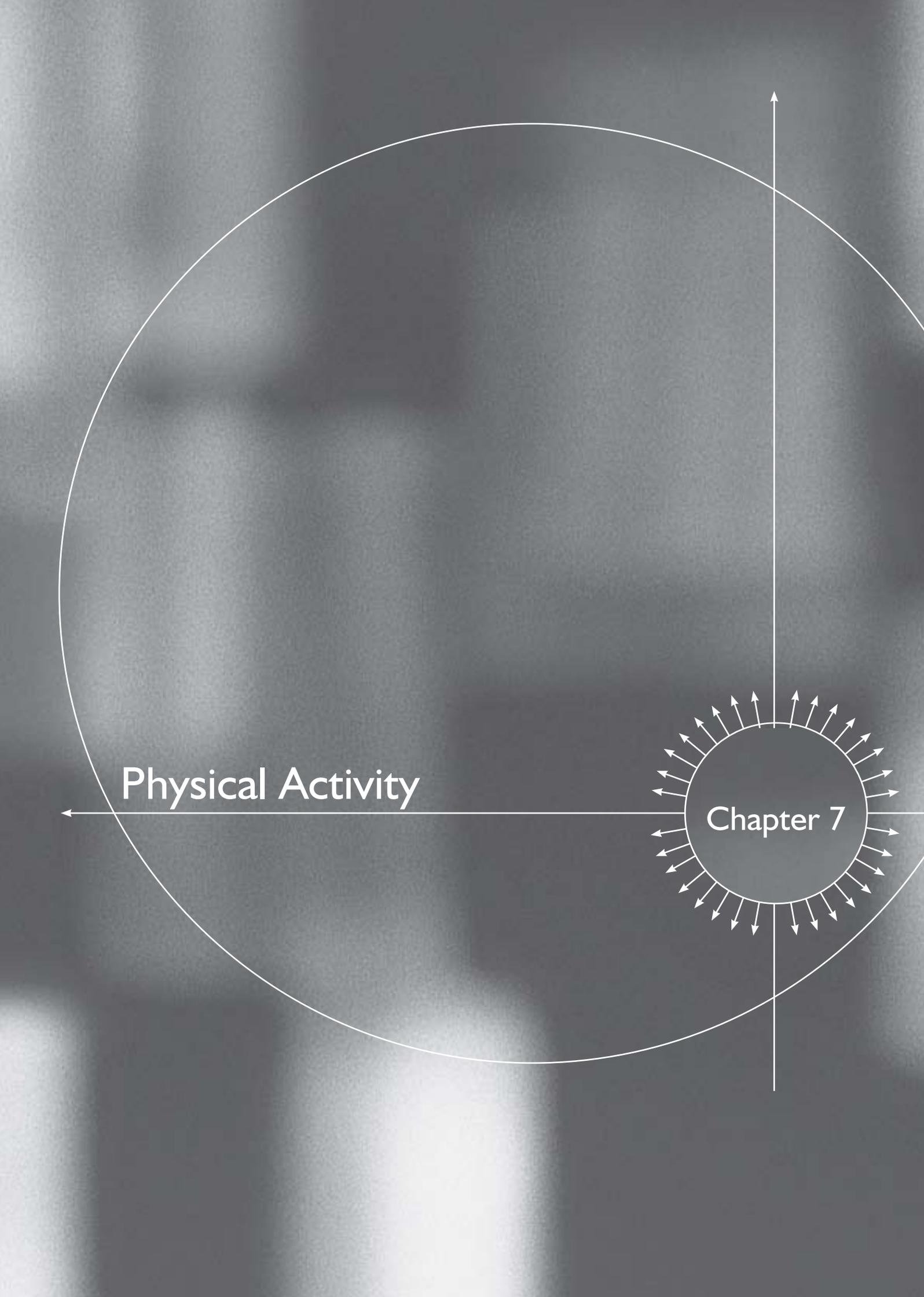
<sup>3</sup> NHS Health Scotland. Health in our Multi-ethnic Scotland. Future Research Priorities. Glasgow: NHS Health Scotland; 2009. [www.healthscotland.com/documents/3768.aspx](http://www.healthscotland.com/documents/3768.aspx)

<sup>4</sup> Yeh, M., Ickles, S.B., Lowenstein, L.M. Shuval, K. Ammerman, A.S. Farris, R. and Katz, D.L. (2008) *Understanding barriers and facilitators of fruit and vegetable consumption among a diverse multi-ethnic population*. Health Promotion International, Vol 23 No. 1: 42-51

<sup>5</sup> NHS Health Scotland (2010) *Dimensions of Diversity*: <http://www.healthscotland.com/documents/3988.aspx>

<sup>6</sup> Sabaté, J. (2004) *Invited commentary: Religion, diet and research*. British Journal of Nutrition. 92: 199-201

<sup>7</sup> NHS Health Scotland (2010) *Dimensions of Diversity*: p111 <http://www.healthscotland.com/documents/3988.aspx>



Physical Activity

Chapter 7

## 7 PHYSICAL ACTIVITY

### SUMMARY

- Men participated more in sport and were more likely to meet the physical activity recommendations than women.
- Physical activity and sport participation declined with age.
- Pakistani respondents had the lowest levels of sport and physical activity of all ethnic groups.
- Muslims had low levels of sport and physical activity whilst those with no religious faith were the most likely to meet the physical activity recommendations.
- Disabled people were less likely to participate in physical activity and sport than those without a disability.
- People who identified as other sexual orientation were least likely to meet the physical activity recommendations.

### 7.1 PHYSICAL ACTIVITY GUIDELINES

Over the period to which this report relates (2008-2011), the physical activity recommendations for adults were to accumulate at least 30 minutes of moderate physical activity on most days of the week (i.e. on at least five), which can be accumulated in shorter bouts of as little as 10 minutes. More detailed recommendations were published jointly in July 2011 by the UK's four Chief Medical Officers.<sup>1</sup> The new UK guidelines for adults are tailored to specific age groups across the lifecourse<sup>2</sup>. Changes have been made to the SHeS questionnaire from 2012 to help monitor adherence to some of these new and more detailed targets, but as this report relates to the period before the new recommendations were published, it uses the previous measure of 30 minutes on 5 or more days per week.

### 7.2 MEASURES OF PHYSICAL ACTIVITY

The adult physical activity module is based on the Allied Dunbar National Fitness Survey, a major study of physical activity among the adult population in England conducted in 1990.<sup>3</sup> The module examined:

- The time spent being active
- The intensity of the activities undertaken, and
- The frequency with which activities are performed.

Four main types of physical activity were asked about:

- Home-based activities (housework, gardening, building work and DIY)
- Walking
- Sports and exercise, and
- Activity at work.

For the first three categories, participants were asked to report any activities lasting at least 10 minutes and to say on how many days in the past four weeks they had taken part in such activities. For walking, they were also asked on how many days they had taken more than one walk of at least 10 minutes. Where they had taken more than one walk, the total time spent walking for that day was calculated as twice the average reported walk time.

Those in full or part-time employment were also asked about activity at work. They were asked to rate how physically active they were in their job (options were: very physically active, fairly physically active, not very physically active and not at all physically active). Occupational activity was counted as 20 days in the last 4 weeks for full-time workers and 12 days for part-time workers. Each of the activities mentioned were classified according to their intensity level. The four categories of 'intensity' of physical activity were:

- Vigorous
- Moderate
- Light, and
- Inactive.

Home-based activities were classified as either 'moderate' or 'light' depending on their nature. Participants were given examples of types of housework, gardening, building work and DIY which were described as either 'heavy' or 'light'. All cases of 'heavy' home-based activity were classified as being of 'moderate' physical intensity. Light gardening, building work and DIY were all classified as 'light' physical intensity. Due to its very low intensity, light housework was not included in the calculations of physical activity in this report.<sup>4</sup>

For walking, participants were asked to assess their usual walking pace as 'slow', 'steady average', 'fairly brisk' or 'fast – at least 4mph'. Walks of 10 minutes or more at a brisk or fast pace were classified as being of 'moderate' intensity. Walks at slow or steady average pace were classified as 'light'.

The intensity levels of different sports and exercises were determined according to a combination of the nature of the activity and the participant's assessment of the amount of effort it involved. For example, all instances of playing squash or running/jogging were counted as 'vigorous' intensity. However, other activities, like swimming or cycling, were counted as 'vigorous' only if the participant reported that the effort involved was enough to make them 'out of breath or sweaty'; if not, they were classified as 'moderate' intensity. Similarly, other activities, like dancing, counted as 'moderate' if they made the participant out of breath or sweaty, but 'light' if not.<sup>5</sup>

Activities at work were classified using a combination of (a) the participant's assessment of how active they are in their job (described above), and (b) the Standard Occupational Classification (SOC) code assigned to their job type. For example, if participants' jobs were among a short list of particularly strenuous occupations (including, for example, miners and construction workers) and they described themselves as 'very physically active' at work, then their jobs were classified as involving 'vigorous' activity. Those who

described their jobs as 'very physically active' but whose jobs were not among the list of strenuous occupations were classified as 'moderately active' at work, as were those who considered themselves 'fairly physically active' but whose occupations were classed as either strenuous (see above) or involving heavy or moderate work (for example, plasterers or refuse collectors).<sup>6</sup>

### 7.3 PHYSICAL ACTIVITY BY GENDER

Men were significantly more likely to meet the physical activity recommendations than women (45% compared with 33%) and to participate in sport (53% of men did so in the previous four weeks compared to 45% of women).

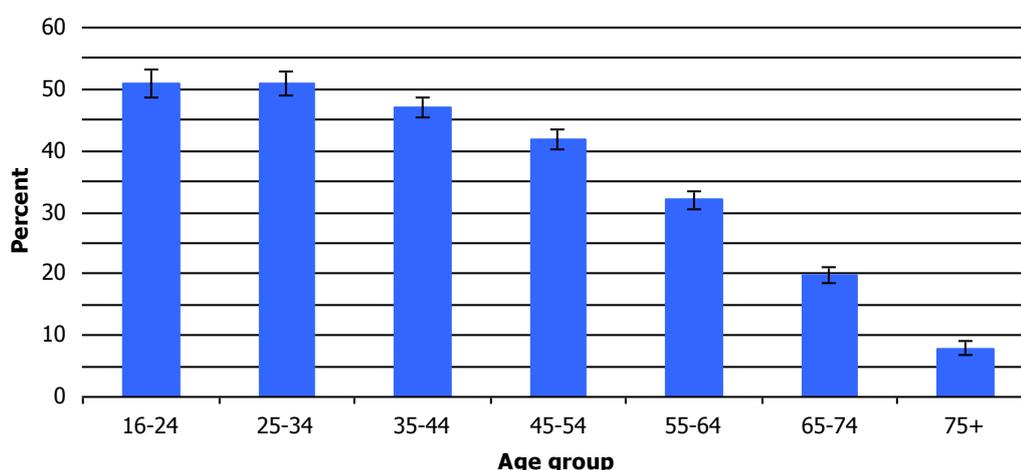
### 7.4 PHYSICAL ACTIVITY BY AGE

The likelihood of adhering to the physical activity recommendations fell steadily after the age of 34. Over half of respondents aged 16-24 and 25-34 met the recommendations, compared to only 20% of 65-74 year olds and 8% of those aged 75 and over. Recent research confirmed that being active after 75 years old can significantly prolong life.<sup>7</sup>

A similar pattern was seen when looking at sport participation whereby 71% of 16-24 year olds did sport in the previous 4 weeks compared to only 19% of those aged 75+.

**Figure 7A**

Proportion meeting physical activity recommendations, by age, 2008-2011 combined

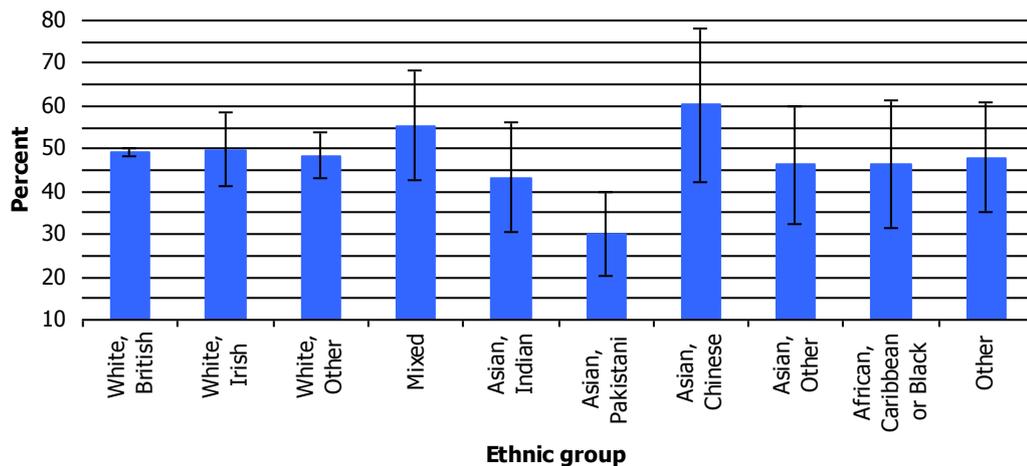


### 7.5 PHYSICAL ACTIVITY BY ETHNIC GROUP

Pakistani respondents were the least likely to achieve the recommended physical activity levels (27% did so compared to the national average of 38%) and were also the least likely to participate in sport (30% compared to 49% on average). This finding corresponds with other research that found that, in Britain, Pakistani individuals<sup>8</sup> and south Asian ethnic groups generally,<sup>9</sup> are

less likely to be sufficiently active. Recent studies highlight the importance of gender differences of physical activity within ethnic groups. Pakistani respondents were found to be less active overall, but also with a gender difference most prominent in the younger age groups.<sup>10</sup> Findings show that ethnic variation in physical activity and sedentary behaviour in the UK are present as early as eleven years of age.<sup>11</sup>

**Figure 7B**  
Participation in sport, by ethnic group, 2008-2011 combined



No other ethnic groups were significantly different from the national average in relation to physical activity or sport participation.

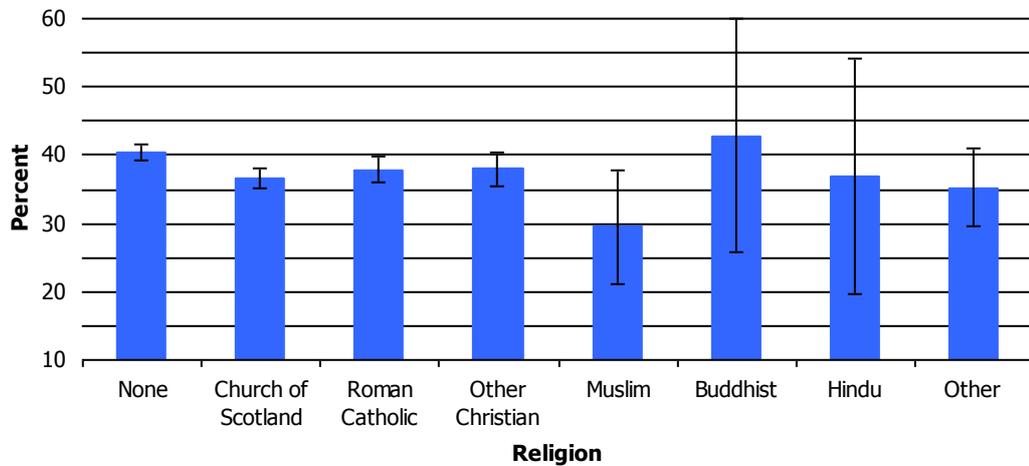
## 7.6 PHYSICAL ACTIVITY BY RELIGION

Respondents who said they belonged to no religion were most likely to meet the physical activity recommendations. 40% did so, which was significantly higher than the national average of 38%. Muslims (29%) and members of the Church of Scotland (37%) had significantly lower proportions meeting the recommendations than the average.

In terms of sport participation, Muslims were also the least likely to participate in sport (39% did so in the previous four weeks). Roman Catholics also had significantly lower sport participation than the average (46% compared to 49%). Respondents from Other Christian groups had significantly higher sport participation than average (52%).

**Figure 7C**

Proportion meeting physical activity recommendations, by religion, 2008-2011 combined



### 7.7 PHYSICAL ACTIVITY BY DISABILITY

There was a strong relationship between disability and physical activity as respondents with a long-term limiting condition were substantially less likely to meet the physical activity recommendations. Only 26% of respondents with a limiting long-term condition met the physical activity recommendations compared to 41% with a non-limiting condition and 44% of those without a condition. Furthermore, only a third (36%) participated in sport compared to more than half (54%) of those without a condition.

### 7.8 PHYSICAL ACTIVITY BY SEXUAL ORIENTATION

Respondents who identified as having an 'other' sexual orientation were significantly less likely to meet the physical activity recommendations than the national average (29% did so compared to a national average of 38%). There was a similar pattern in relation to sport participation where 39% of respondents who identified as other sexual orientation and those who preferred not to answer the sexual orientation question did sport in the previous 4 weeks compared to a national average of 49%. Bisexual, lesbian and gay respondents were not significantly different from heterosexuals in relation to sport and physical activity.

## REFERENCES AND NOTES

<sup>1</sup> *Start Active, Stay Active – A report on physical activity for health from the four home countries' Chief Medical Officers.* (web only). UK Department of Health, July 2011.  
<[www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_128209](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_128209)>

<sup>2</sup> Note that young people aged 16-18 are treated as adults in SHeS and complete the adult version of the physical activity questionnaire. The different methods used to measure physical activity in adults and children mean that it is not appropriate to combine the data from young people aged 16-18 and those aged 5-15 to provide estimates for the 5-18 age group.

<sup>3</sup> *Allied Dunbar National Fitness Survey.* London: Health Education Authority and Sports Council, 1992.

<sup>4</sup> **Home activities:**

Examples of 'heavy' gardening or DIY work classified as *moderate* intensity:

Digging, clearing rough ground, building in stone/bricklaying, mowing large areas with a hand mower, felling trees, chopping wood, mixing/laying concrete, moving heavy loads, refitting a kitchen or bathroom or any similar heavy manual work.

Examples of 'heavy' housework classified as *moderate* intensity:

Walking with heavy shopping for more than 5 minutes, moving heavy furniture, spring cleaning, scrubbing floors with a scrubbing brush, cleaning windows, or other similar heavy housework.

Examples of 'light' gardening or DIY work classified as *light* intensity:

Hoeing, weeding, pruning, mowing with a power mower, planting flowers/seeds, decorating, minor household repairs, car washing and polishing, car repairs and maintenance.

<sup>5</sup> **Sports and Exercise activities – Intensity:**

*Vigorous:*

- a) All occurrences of running/jogging, squash, boxing, kick boxing, skipping, trampolining.
- b) Sports coded as vigorous intensity if they had made the participant breathe heavily or sweaty, but otherwise coded as moderate intensity including: cycling, aerobics, keep fit, gymnastics, dance for fitness, weight training, football, rugby, swimming, tennis, badminton.

*Moderate:*

- a) See 'vigorous' category b).
- b) All occasions of a large number of activities including: basketball, canoeing, fencing, field athletics, hockey, ice skating, lacrosse, netball, roller skating, rowing, skiing, volleyball.
- c) Sports coded as moderate intensity if they had made the participant breathe heavily or sweaty, but otherwise coded as light intensity, including: exercise (press-ups, sit-ups etc), dancing.

*Light:*

- a) See 'moderate' category c).
- b) All occasions of a large number of activities including: abseiling, baseball, bowls, cricket, croquet, darts, fishing, golf, riding, rounders, sailing, shooting, snooker, snorkelling, softball, table tennis, yoga.

<sup>6</sup> **Work activities:**

*Vigorous:*

Considers self very physically active in job and is in one of a small number of occupations defined as involving heavy work including:

fishermen/women, furnace operators, rollerman, smiths and forge workers, faceworking coal-miners, other miners, construction workers and forestry workers.

*Moderate:*

Considers self very physically active in job and is not in occupation groups listed above OR considers self fairly physically active in job and is one of a small number of occupations involving heavy or moderate work including:

any listed above OR fire service officers, metal plate workers, shipwrights, riveters, steel erectors, benders, fitters, galvanisers, tin platers, dip platers, plasterers, roofers, glaziers, general building workers, road surfacers, stevedores, dockers, goods porters, refuse collectors.

*Light:*

Considers self fairly physically active in job and is not in one of the occupation groups listed above.

<sup>7</sup> Rizzuti, D., Orini, N., Chenxuan, Q., (2012) *Lifestyle, social factors, and survival after age 75: population based study*. BMJ. 345:e5568

<sup>8</sup> <http://www.esrc.ac.uk/news-and-events/press-releases/16005/differing-lifestyles-a-study-of-ethnicity-and-health.aspx>

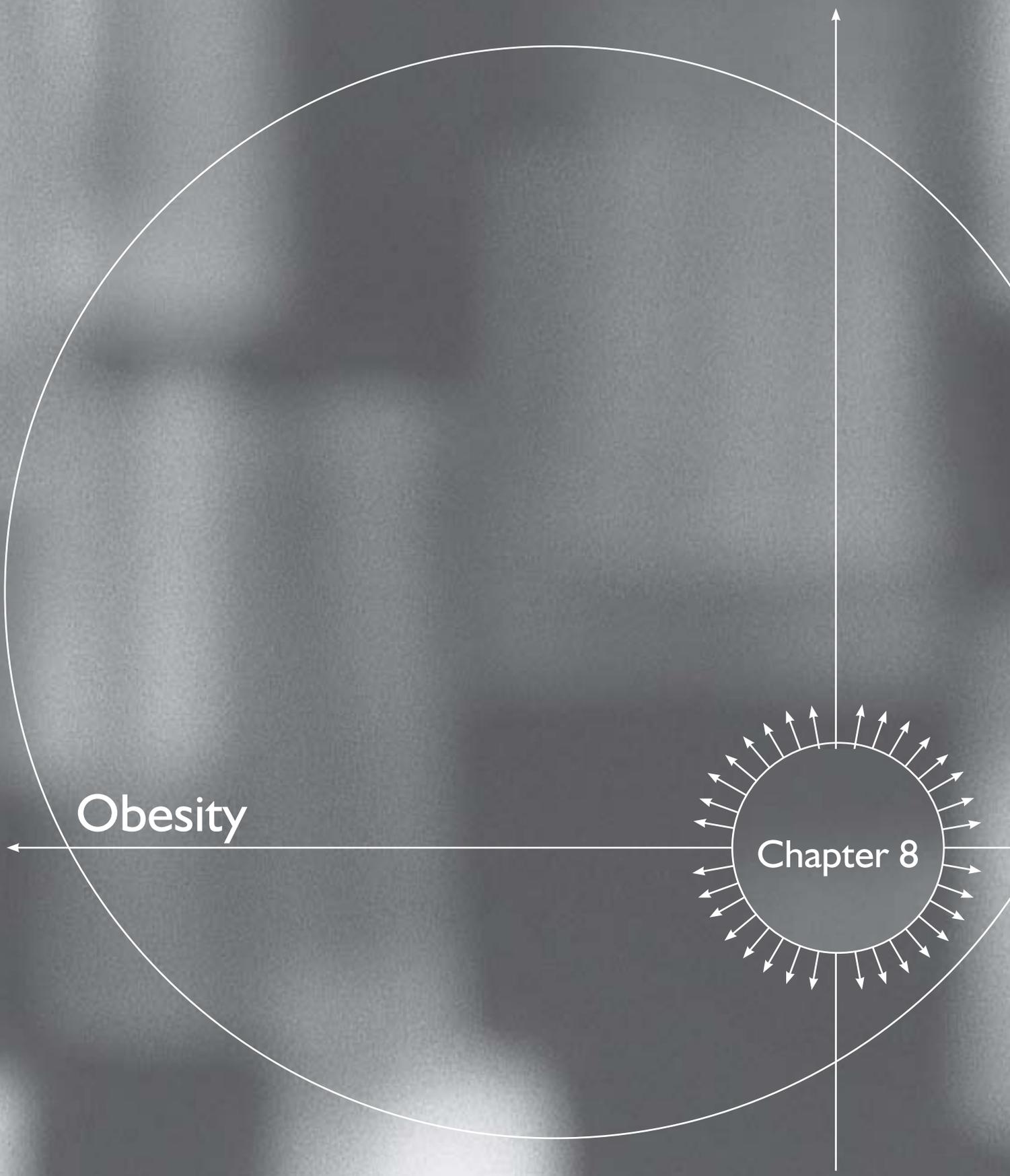
<sup>9</sup> Fischbacher, C.M., Hunt, S. and Alexander, L. (2004) *How physically active are South Asians in the United Kingdom? A literature review*. Journal of Public Health. Vol. 26, No. 3 pp 250-258

<sup>10</sup> Higgins, V., Dale, A. (2010) 'Ethnic Differences in Physical Activity and Obesity' in *Ethnicity and Integration: Understanding Population Trends and Processes*. Stillwell, J. and van Ham, M. (ed). Springer Netherlands.

<sup>11</sup> Henning Brodersen, N., Steptoe, A. Boniface, D.R. and Wardle, J. (2007) *Trends in physical activity and sedentary behaviour in adolescence: ethnicity and socioeconomic differences*. British Journal of Sports Medicine. Vol 41: 140-144.

Obesity

Chapter 8



## 8 OBESITY

### SUMMARY

- Men were more likely to be overweight than women.
- Prevalence of overweight and obesity increased with age, peaking at age 55-64.
- Chinese and Asian Other respondents had significantly lower levels of overweight and obesity than other ethnic groups.
- Buddhists and Hindus had low levels of obesity whilst Church of Scotland members had significantly higher levels than the national average.
- Respondents with limiting long-term conditions were more likely to be obese than those with non-limiting conditions but there was no difference in the rates of overweight for these two groups.

### 8.1 MEASURES OF OVERWEIGHT AND OBESITY

Participants' height and weight were measured during the interview. Body Mass Index (BMI), defined as weight (kg)/height (m<sup>2</sup>), is a widely accepted measure that allows for differences in weight due to height. However, BMI has some limitations: it does not distinguish between mass due to body fat and mass due to muscular physique. It also does not take account of the distribution of fat. The merits of BMI as an indicator are discussed in more detail in the Scottish Health Survey topic report on obesity.<sup>1</sup>

BMI was calculated for all those participants for whom a valid height and weight measurement was recorded and were classified into the following BMI groups:

BMI (kg/m <sup>2</sup> )	Description
Less than 18.5	Underweight
18.5 to less than 25	Normal
25 to less than 30	Overweight
30 to less than 40	Obese, excluding morbidly obese
40+	Morbidly obese

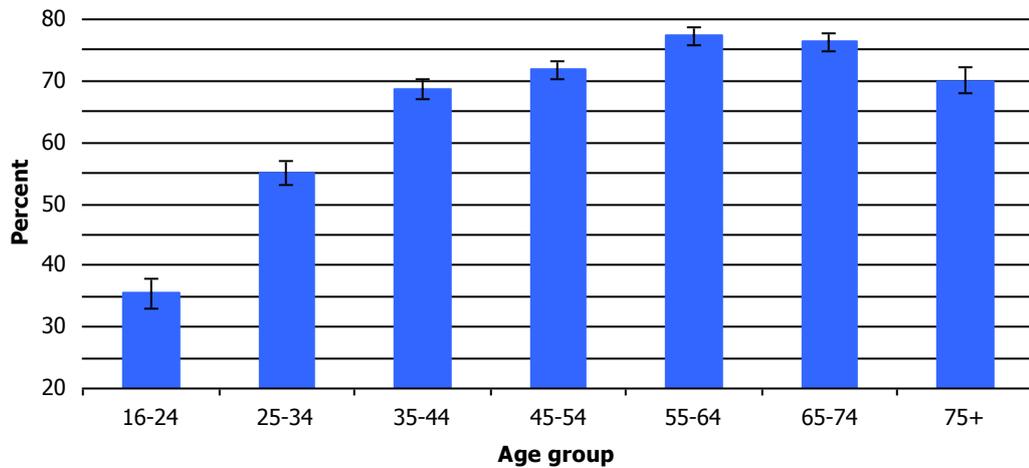
### 8.2 OVERWEIGHT AND OBESITY BY GENDER

There was no significant gender difference in the prevalence of obesity, although men were more likely to be overweight than women (69% compared with 61%).

### 8.3 OVERWEIGHT AND OBESITY BY AGE

Prevalence of overweight and obesity increased with age, peaking at age 55-64, before falling slightly for older age groups. 16-24 year olds were least likely to be overweight (35%) or obese (13%) whilst 55 to 64 year olds were the most likely to be overweight (77%) or obese (36%).

**Figure 8A**  
Prevalence of overweight including obesity, by age, 2008-2011 combined

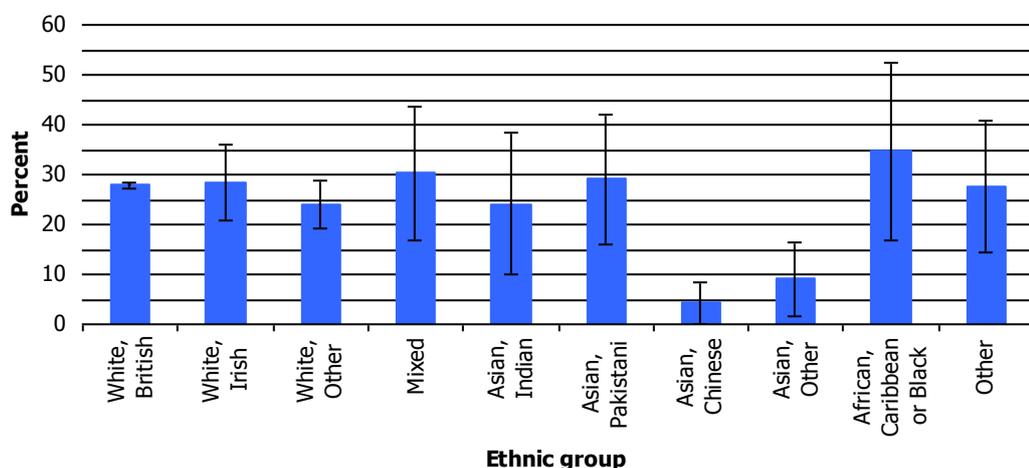


### 8.4 OVERWEIGHT AND OBESITY BY ETHNIC GROUP

The highest prevalence of obesity was among African, Caribbean or Black respondents (35%) but this was not significantly different from the average.

Previous research has found that Asians in Britain were almost four times as likely to be obese than White ethnic groups<sup>2</sup>. Similarly another study found that South Asian children born in Britain between 1991 and 1999 were more likely to be overweight and obese than White children.<sup>3</sup> These findings have not been replicated in the Scottish Health Survey results as they show no significant difference between White British and Asian Indian and Pakistani ethnic groups. This may be down to small sample sizes, however. What is interesting is the difference between Asian ethnic groups. Chinese and Asian Other respondents had the lowest prevalence of overweight (41% and 45% respectively) and obesity (4% and 9% respectively), and this was significantly lower than the national average.

**Figure 8B**  
Prevalence of obesity, by ethnic group, 2008-2011 combined



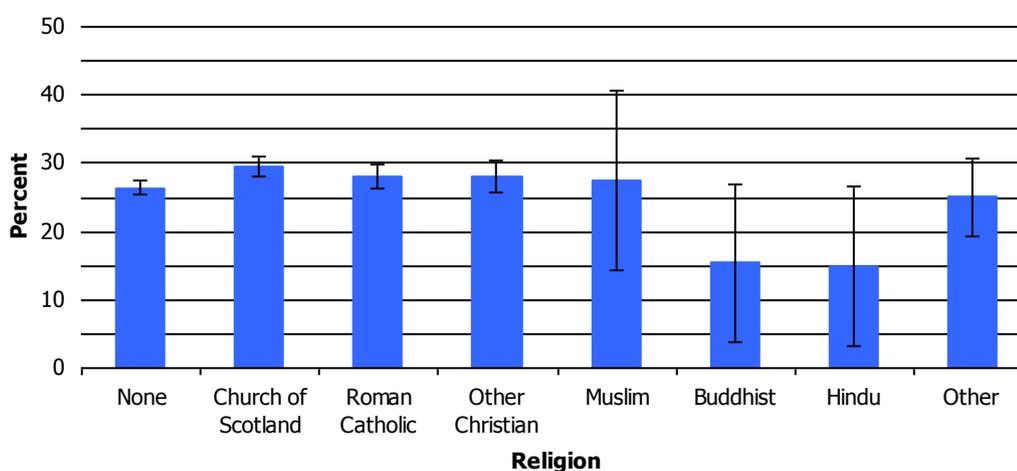
## 8.5 OVERWEIGHT AND OBESITY BY RELIGION

Buddhist and Hindu respondents had the lowest prevalence of obesity (both 15%); significantly lower than the national average (27%). People who said they belonged to no religion also had a slightly, but significantly, lower prevalence of obesity than the average (26%). Respondents who were members of the Church of Scotland were most likely to be obese (30%), significantly more so than average.

These patterns were similar but less marked, in relation to overweight including obesity prevalence. The only religions which stood out as significantly different to the national average (65%) were Church of Scotland (67%) and Buddhist (42%).

**Figure 8C**

Prevalence of obesity, by religion, 2008-2011 combined



## 8.6 OVERWEIGHT AND OBESITY BY DISABILITY

Prevalence of obesity was significantly associated with disability. 34% of respondents with a limiting, long-term condition were obese, compared to 30% of those with a non-limiting condition, and 24% of those without a condition. There was no difference in the prevalence of overweight including obese between those with a limiting and non-limiting condition (both 68%). This was, however, significantly higher than the prevalence of overweight including obese among those with no long-term condition (63%).

It is possible that respondents with physical impairments may become overweight as they are less capable of being physically active. It is also possible that those who are overweight and obese develop debilitating and longstanding condition as a consequence of their unhealthy weight. The point has been made, however, that whether obesity is the cause or the result of having a disability, the association presents a major challenge to public health.<sup>4</sup>

## **8.7 OVERWEIGHT AND OBESITY BY SEXUAL ORIENTATION**

There was no significant association between sexual orientation and the prevalence of overweight or obesity.

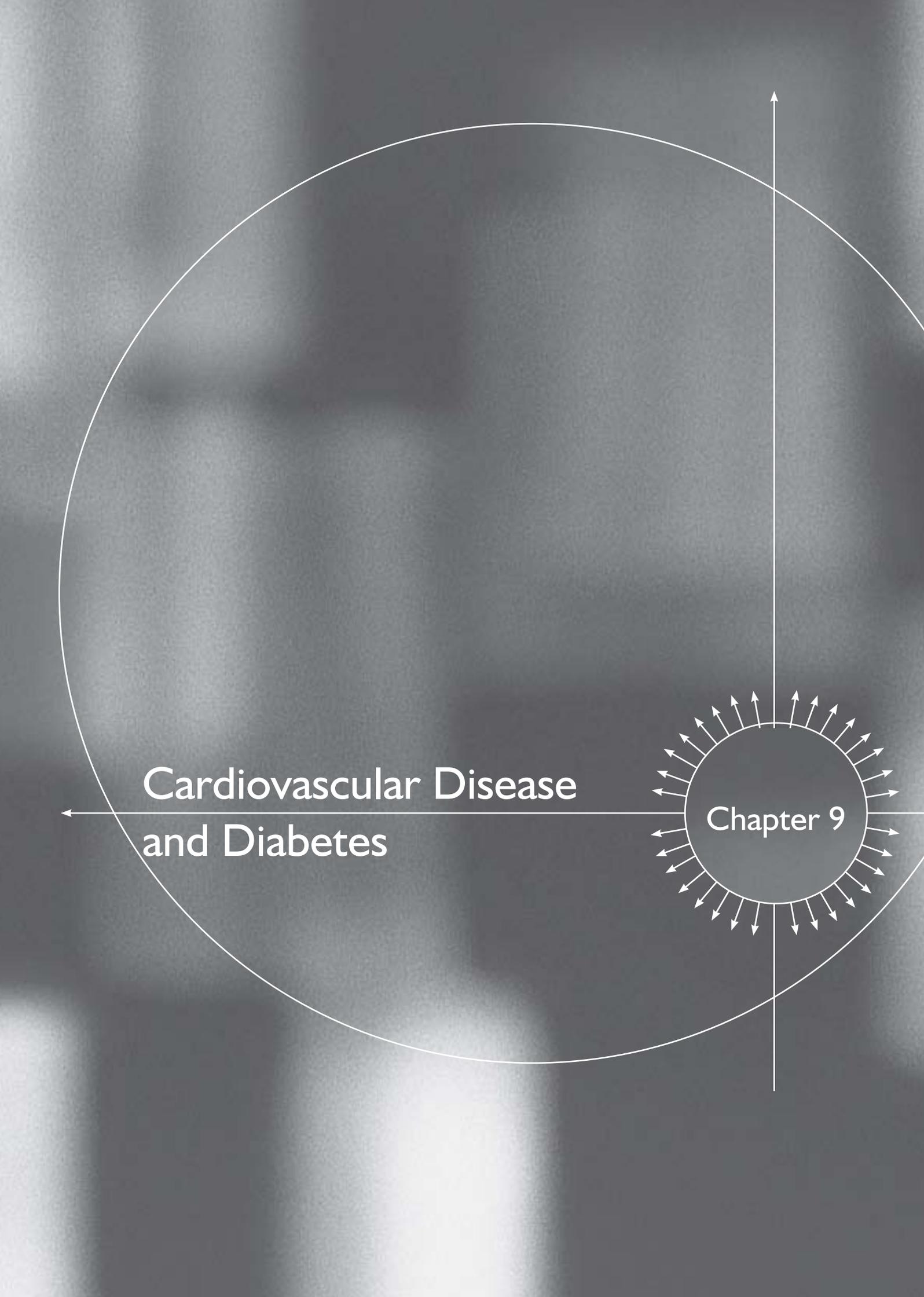
## REFERENCES AND NOTES

<sup>1</sup> <http://www.scotland.gov.uk/Publications/2011/10/1138/0>

<sup>2</sup> Jebb, S.A., Rennie, K.L. and Cole, T.J. (2003) *Prevalence of overweight and obesity among young people in Great Britain*. Public Health Nutrition. 7 (3): 461-165

<sup>3</sup> Balakrishnan, R., Webster, P. and Sinclair, D. (2008) *Trends in overweight and obesity among 5-7-year-old White and South Asian children born between 1991 and 1999*. Journal of Public Health. Vol. 30, No.2: 139-144.

<sup>4</sup> Ells, L.J. Lang, R., Shield, J.P.H, Wilkinson, J.R., Lidstone, J.S.M., Coulton, S. and Summerbell, C.D. (2006) *Obesity and disability – a short review*. Obesity Reviews. Vol 7. 6: 341-345.



Cardiovascular Disease  
and Diabetes

Chapter 9

## 9 CARDIOVASCULAR DISEASE AND DIABETES

### SUMMARY

- Men were slightly more likely than women to have a CVD condition or diabetes.
- Prevalence of CVD and diabetes increased with age.
- Chinese people had the lowest prevalence of CVD whilst diabetes prevalence was highest among Pakistani and Indian ethnic groups.
- Muslims, Hindus and those who belonged to no religious group were less likely to have CVD whilst Roman Catholics had higher prevalence.
- Muslims had the highest prevalence of diabetes of all religious groups.
- Disabled respondents were more likely to have CVD or diabetes than those without a disability although the prevalence of diabetes was the same for those with limiting and non-limiting conditions.
- Respondents who identified themselves as lesbian or gay were significantly less likely to have diabetes than the national average.

### 9.1 MEASURES OF CARDIOVASCULAR DISEASE AND DIABETES

Participants were asked whether they had suffered from any of the following conditions: angina, heart attack, stroke, heart murmur, irregular heart rhythm, or 'other heart trouble'. Respondents were also asked whether they had ever been told that they had one of these conditions by a doctor. For the purposes of this analysis, respondents were classified as having a CVD condition only if they reported that the diagnosis was confirmed by a doctor.

Participants were asked whether they suffered from diabetes and, if so, whether they had ever been told they had the condition by a doctor. Only those who reported that the diagnosis was confirmed by a doctor were classified as having diabetes. Women whose diabetes occurred only during pregnancy were excluded from the classification. No distinction was made between type 1 and type 2 diabetes in the interview.

### 9.2 CVD AND DIABETES BY GENDER

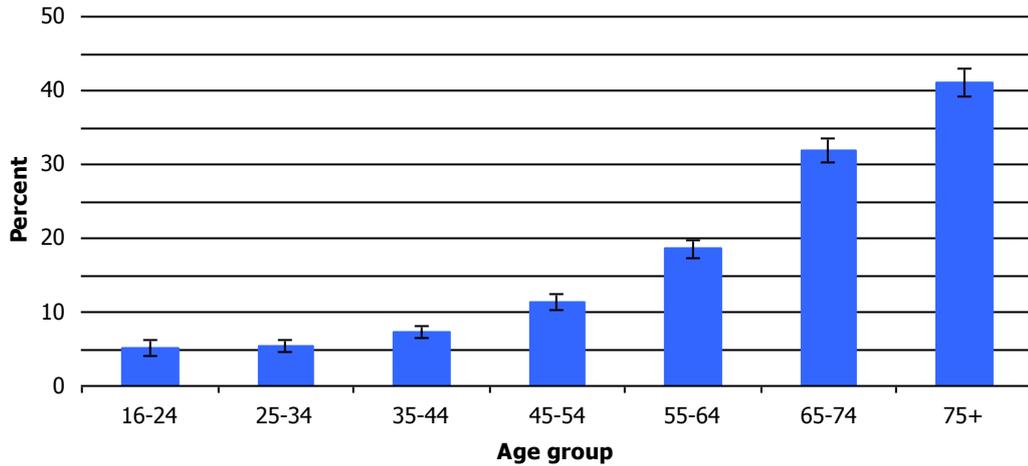
There was a small but significant difference in the prevalence of CVD between men and women with men being more likely to have a CVD condition (16% vs 14%). There were also significantly more men (6%) than women (4%) with doctor-diagnosed diabetes.

### 9.3 CVD AND DIABETES BY AGE

There was a strong association between CVD and age. The likelihood of having a cardiovascular condition increased steadily with age from 5% of 16-24 year olds, to 41% of over 75 year olds.

**Figure 9A**

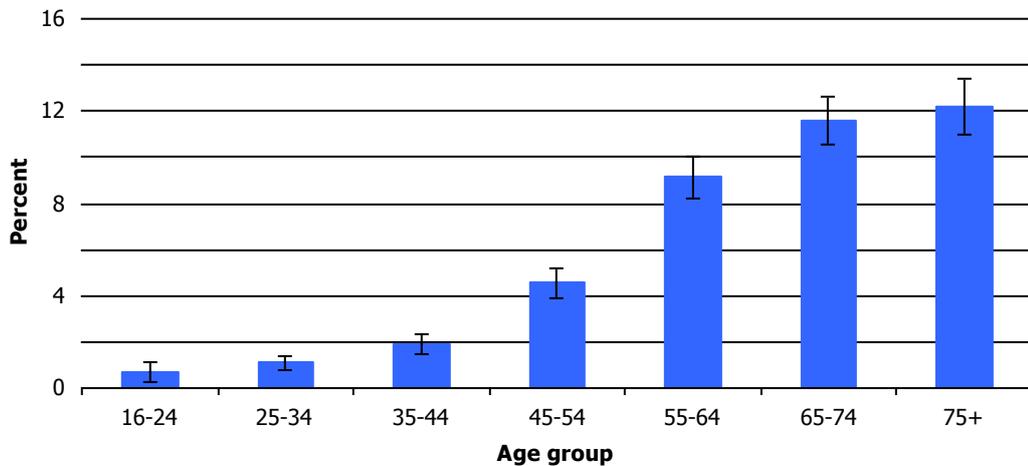
Prevalence of cardiovascular disease (CVD), by age, 2008-2011 combined



The prevalence of diabetes also increased with age. This was more pronounced between the ages of 45-54 and the 65-74 age group, where diabetes prevalence rose from 5% to 12%.

**Figure 9B**

Prevalence of diabetes, by age, 2008-2011 combined



## 9.4 CVD AND DIABETES BY ETHNIC GROUP

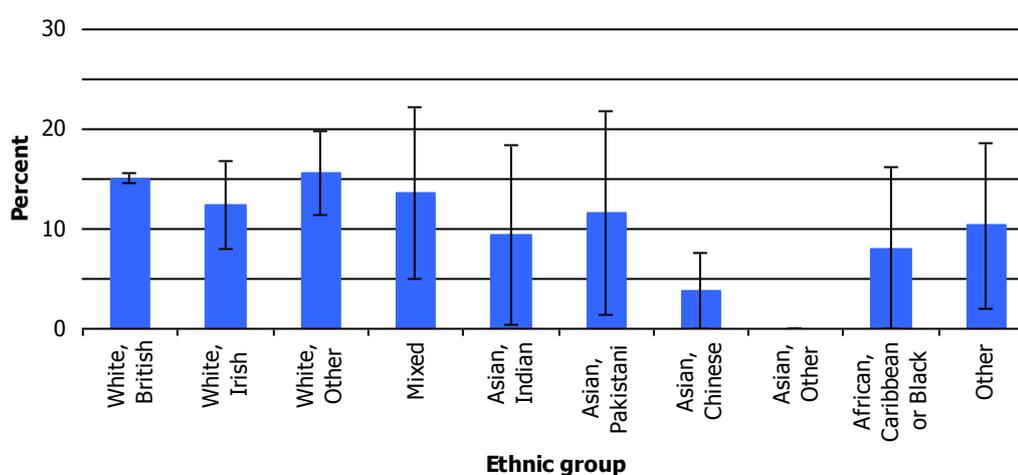
Chinese respondents were the least likely to have a doctor-diagnosed CVD condition (4%), significantly lower than the national average (15%). No Asian Other respondents reported a CVD condition, although this may be due to the relatively small number of people surveyed in this category (103 over the four years).

South Asians have been found to have an increased risk of coronary heart disease compared to European ethnic groups.<sup>1</sup> The Scottish Health Survey data doesn't support this as the prevalence of CVD among Indian and Pakistani respondents was not significantly different from the average. This may be partly due to small sample sizes being unable to identify significant differences.

African and Caribbean ethnic groups were found to have lower risks of heart disease compared to European groups.<sup>1</sup> The Scottish Health Survey data shows that African, Caribbean or Black respondents had a lower than average prevalence of CVD (8%), although this wasn't statistically significant.

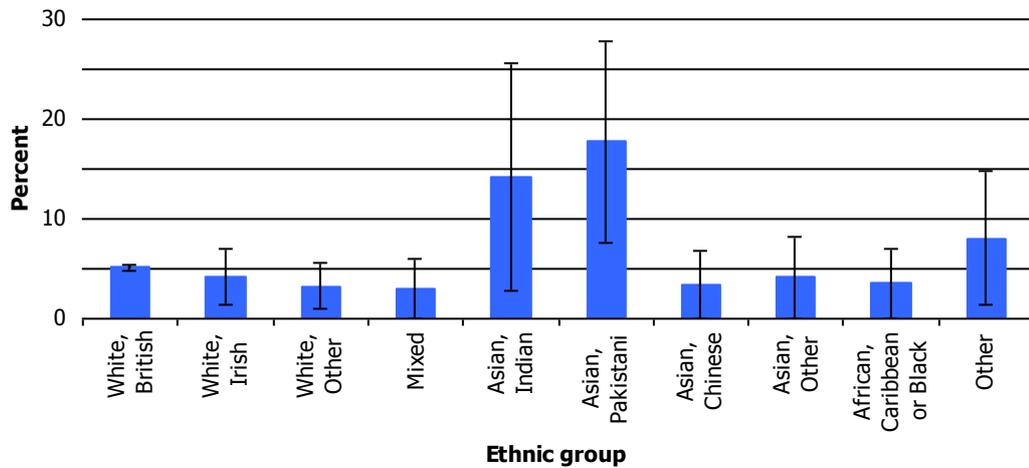
**Figure 9C**

Prevalence of cardiovascular disease (CVD), by ethnic group, 2008-2011 combined



Pakistani (18%) and Indian (14%) respondents had the highest prevalence of diabetes although only the Pakistani figure was significantly higher than the average. The high prevalence of diabetes among south Asians living in the UK was also noted in a report by Diabetes UK.<sup>2</sup> Chinese, Asian Other, Mixed and African, Caribbean or Black ethnic groups all had low levels of diabetes (ranging from 3% to 4%) although none of these were significantly different from the national average.

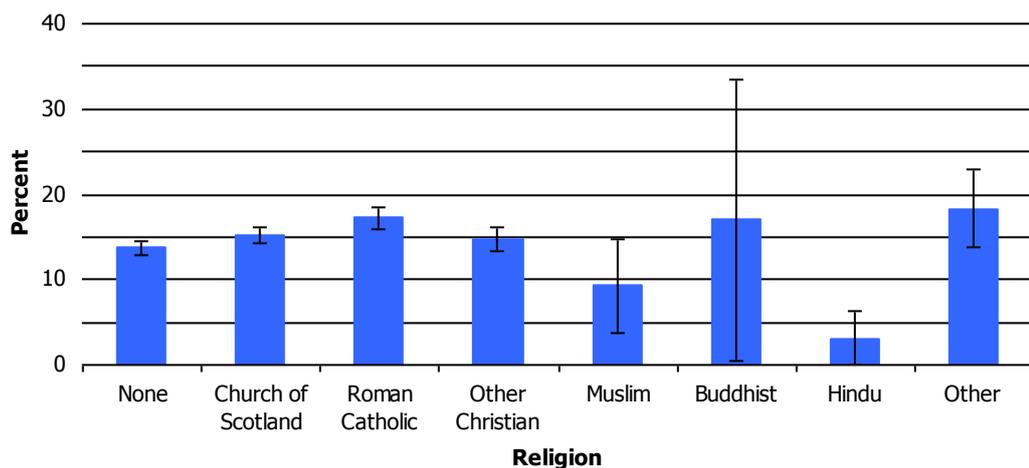
**Figure 9D**  
Prevalence of diabetes, by ethnic group, 2008-2011 combined



### 9.5 CVD AND DIABETES BY RELIGION

Muslims (9%), Hindus (3%) and those who said they belonged to no religion (14%) had significantly lower prevalence of CVD than the national average (15%) whilst Roman Catholics (17%) were significantly more likely to have a CVD condition.

**Figure 9E**  
Prevalence of cardiovascular disease (CVD), by religion, 2008-2011 combined



Muslims respondents had a much higher prevalence of diabetes (18%) than the national average. Diabetes prevalence among those who reported 'Other' religion was also significantly higher than average (8%). Prevalence among those who reported belonging to no religious group was very slightly, but significantly, lower than average.

## 9.6 CVD AND DIABETES BY DISABILITY

As would be expected, there was a significant association between cardiovascular disease and disability. 24% of individuals with a limiting long-term condition had CVD, compared with 14% with a non-limiting condition and 9% with no condition.

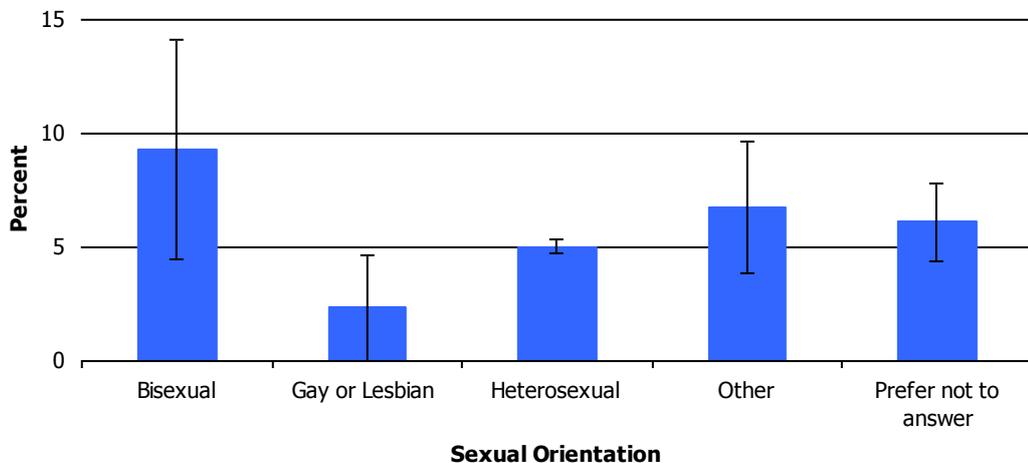
Respondents with any kind of long-term condition were significantly more likely to be diabetic, although there was no difference in diabetes prevalence between those with a limiting and non-limiting condition (both 9%).

## 9.7 CVD AND DIABETES BY SEXUAL ORIENTATION

There was no association between sexual orientation and prevalence of CVD conditions. Respondents who self-identified as gay or lesbian had a significantly lower prevalence of diabetes (2%) than the national average (5%).

**Figure 9F**

Prevalence of diabetes, by sexual orientation, 2008-2011 combined

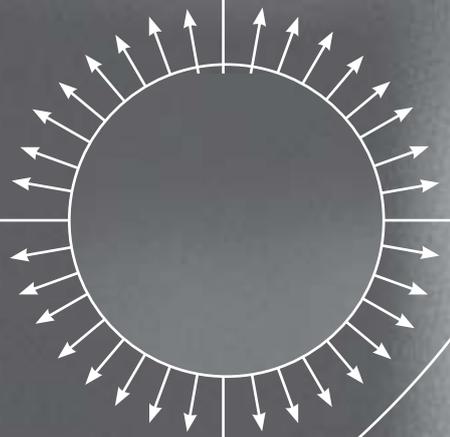


## REFERENCES AND NOTES

<sup>1</sup> Chaturvedi, N.(2003) *Ethnic differences in Cardiovascular Heart Disease*. Heart. 89: 681-686

<sup>2</sup> Khunti, K., Kumar, S. & Brodie, J. (2009) *Diabetes UK and South Asian Health Foundation recommendations on diabetes research priorities for British South Asians*.  
<http://www.diabetes.org.uk/Professionals/Publications-reports-and-resources/Reports-statistics-and-case-studies/Reports/Diabetes-UK-and-South-Asian-Health-Foundation-recommendations-on-diabetes-research-priorities-for-British-South-Asians/>

# Appendix I



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**Table 2.1 Proportion of adults who assessed their health as very good or good (age-standardised<sup>1</sup>), by equality group**

Equality Group	Aged 16 and over			2008-2011 combined	
	Very Good / Good Health	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
	%	%	%		
<b>Sex</b>					
Male	77	76	78	12516	13763
Female	75	74	76	16254	15003
<b>Age</b>					
16-24	89	88	91	2553	4011
25-34	87	85	88	3701	4410
35-44	82	81	83	4825	4993
45-54	75	74	77	5233	5177
55-64	68	67	70	5063	4414
65-74	64	62	65	4207	3197
75+	53	51	55	3188	2567
<b>Sexual Orientation</b>					
Bisexual	68	61	76	231	238
Gay or Lesbian	76	69	83	195	201
Heterosexual	77	76	77	24011	24194
Other	66	59	73	266	253
Prefer not to answer	65	60	71	733	642
<b>Disability</b>					
Limiting LI	39	37	40	8599	7685
Non-limiting LI	81	80	83	4556	4413
No LI	92	92	93	15611	16667
<b>Religion</b>					
None	75	74	76	11211	11768
Church of Scotland	78	77	79	10047	9306
Roman Catholic	72	71	74	3845	4277
Other Christian	77	75	79	2791	2453
Muslim	70	62	78	220	281
Buddhist	70	53	86	63	65
Hindu	92	81	100	59	70
Other <sup>2</sup>	67	62	73	418	389
<b>Ethnic Group</b>					
White, British	75	75	76	26957	26705
White, Irish	74	67	81	198	224
White, Other	81	77	85	781	814
Mixed	82	73	92	88	104
Asian, Indian	78	66	91	109	148
Asian, Pakistani	66	55	77	141	188
Asian, Chinese	91	82	100	74	82
Asian, Other	83	72	95	103	105
African, Caribbean or Black	79	68	91	117	134
Other	74	61	87	109	122
<b>All Adults</b>	<b>76</b>	<b>75</b>	<b>76</b>	<b>28770</b>	<b>28767</b>

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 2.2 WEMWBS mean score (age-standardised<sup>1</sup>), by equality group**

Equality Group	Mean Score	Lower Confidence Limit	Upper Confidence Limit	2008-2011 combined	
				Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
<b>Sex</b>					
Male	50.1	49.9	50.3	11276	12438
Female	49.7	49.5	49.8	14784	13621
<b>Age</b>					
16-24	50.3	50.0	50.7	2344	3653
25-34	50.2	49.9	50.5	3432	4074
35-44	49.7	49.4	49.9	4472	4611
45-54	49.1	48.8	49.4	4852	4787
55-64	49.9	49.6	50.2	4657	4051
65-74	51.1	50.8	51.4	3753	2840
75+	49.0	48.6	49.4	2550	2042
<b>Sexual Orientation</b>					
Bisexual	47.9	46.0	49.7	227	236
Gay or Lesbian	48.8	47.5	50.2	193	199
Heterosexual	50.0	49.9	50.2	23538	23744
Other	47.0	45.4	48.6	262	249
Prefer not to answer	47.3	46.2	48.5	677	589
<b>Disability</b>					
Limiting LI	45.8	45.4	46.1	7564	6774
Non-limiting LI	50.6	50.3	50.9	4193	4059
No LI	51.5	51.3	51.7	14299	15224
<b>Religion</b>					
None	49.6	49.4	49.8	10338	10837
Church of Scotland	50.1	49.8	50.3	9043	8390
Roman Catholic	49.4	49.1	49.8	3415	3810
Other Christian	50.9	50.5	51.3	2565	2258
Muslim	51.3	49.1	53.5	177	224
Buddhist	51.7	49.4	54.0	57	59
Hindu	53.2	49.7	56.7	58	68
Other <sup>2</sup>	49.3	48.0	50.6	380	355
<b>Ethnic Group</b>					
White, British	49.8	49.6	49.9	24535	24305
White, Irish	50.6	49.0	52.3	182	208
White, Other	51.2	50.1	52.2	683	724
Mixed	50.9	48.8	53.1	84	101
Asian, Indian	51.7	48.2	55.2	103	142
Asian, Pakistani	50.9	48.9	52.8	106	142
Asian, Chinese	52.3	49.6	55.0	63	64
Asian, Other	53.5	51.9	55.1	89	92
African, Caribbean or Black	53.7	50.7	56.7	100	113
Other	51.6	49.0	54.1	100	113
<b>All Adults</b>	49.9	49.7	50.0	26060	26058

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 2.3 Proportion of adults who scored 4 or more on the GHQ-12 questionnaire (age-standardised<sup>1</sup>), by equality group**

Equality Group	Aged 16 and over			2008-2011 combined	
	GHQ-12 4+	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
	%	%	%		
<b>Sex</b>					
Male	12	12	13	11330	12498
Female	17	16	18	14885	13719
<b>Age</b>					
16-24	15	13	17	2350	3670
25-34	15	13	16	3437	4080
35-44	16	14	17	4505	4652
45-54	18	17	19	4861	4803
55-64	14	13	15	4661	4049
65-74	10	9	12	3791	2869
75+	14	12	15	2610	2095
<b>Sexual Orientation</b>					
Bisexual	23	16	29	228	235
Gay or Lesbian	16	10	21	192	199
Heterosexual	15	14	15	23626	23844
Other	19	12	25	260	248
Prefer not to answer	15	11	20	699	615
<b>Disability</b>					
Limiting LI	30	29	32	7608	6814
Non-limiting LI	11	10	13	4214	4083
No LI	9	9	10	14389	15317
<b>Religion</b>					
None	15	14	16	10394	10911
Church of Scotland	14	13	15	9122	8454
Roman Catholic	17	16	19	3424	3818
Other Christian	14	12	16	2574	2267
Muslim	23	14	32	176	224
Buddhist	12	3	22	55	58
Hindu	7	0	13	56	67
Other <sup>2</sup>	18	14	23	386	359
<b>Ethnic Group</b>					
White, British	15	14	15	24674	24449
White, Irish	17	11	24	183	209
White, Other	15	10	20	692	728
Mixed	13	5	21	85	102
Asian, Indian	14	7	21	103	142
Asian, Pakistani	23	10	36	110	147
Asian, Chinese	10	3	17	63	64
Asian, Other	10	4	16	90	93
African, Caribbean or Black	18	9	27	101	116
Other	25	14	36	98	112
<b>All Adults</b>	15	14	15	26215	26217

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 3.1 Proportion of adults with 20 or more natural teeth (age-standardised<sup>1</sup>), by equality group**

Equality Group	Aged 16 and over			2008-2011 combined	
	20 or more natural teeth	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
	%	%	%		
<b>Sex</b>					
Male	73	72	74	12486	13724
Female	71	70	72	16209	14960
<b>Age</b>					
16-24	99	98	99	2542	3990
25-34	96	95	97	3694	4401
35-44	89	88	90	4814	4979
45-54	77	76	79	5217	5161
55-64	55	53	56	5051	4405
65-74	35	33	36	4197	3190
75+	19	18	21	3180	2559
<b>Sexual Orientation</b>					
Bisexual	72	64	79	231	238
Gay or Lesbian	78	68	87	195	201
Heterosexual	73	72	73	24004	24188
Other	60	52	68	265	252
Prefer not to answer	61	56	67	733	642
<b>Disability</b>					
Limiting LI	65	64	67	8580	7669
Non-limiting LI	73	71	74	4545	4401
No LI	75	74	76	15566	16612
<b>Religion</b>					
None	73	71	74	11206	11765
Church of Scotland	71	70	72	10044	9305
Roman Catholic	69	67	70	3842	4274
Other Christian	76	74	78	2792	2453
Muslim	95	90	99	220	281
Buddhist	89	76	100	63	65
Hindu	93	85	100	59	70
Other <sup>2</sup>	73	67	79	417	387
<b>Ethnic Group</b>					
White, British	71	71	72	26947	26697
White, Irish	71	64	78	198	224
White, Other	78	73	83	780	814
Mixed	86	76	95	88	104
Asian, Indian	93	88	99	109	148
Asian, Pakistani	86	74	98	141	188
Asian, Chinese	88	76	100	74	82
Asian, Other	78	63	94	103	105
African, Caribbean or Black	87	75	99	117	134
Other	76	63	90	109	122
<b>All Adults</b>	<b>72</b>	<b>71</b>	<b>73</b>	<b>28695</b>	<b>28684</b>

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 3.2 Experience of Toothache in the last month (age-standardised<sup>1</sup>), by equality group**

Equality Group	2008-2011 combined				
	Experienced toothache	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
	%	%	%		
<b>Sex</b>					
Male	13	13	14	10920	12475
Female	13	13	14	13797	13029
<b>Age</b>					
16-24	18	17	20	2538	3989
25-34	16	15	18	3673	4376
35-44	14	13	16	4739	4910
45-54	13	12	15	4945	4920
55-64	11	10	12	4286	3784
65-74	9	8	10	2909	2222
75+	7	6	9	1627	1305
<b>Sexual Orientation</b>					
Bisexual	17	11	24	197	213
Gay or Lesbian	15	9	22	188	195
Heterosexual	14	13	14	21233	21972
Other	15	7	22	210	209
Prefer not to answer	12	8	16	500	463
<b>Disability</b>					
Limiting LI	19	18	21	6431	5942
Non-limiting LI	14	13	16	3892	3890
No LI	11	11	12	14389	15669
<b>Religion</b>					
None	14	13	14	10312	11061
Church of Scotland	13	12	14	7934	7619
Roman Catholic	13	12	14	3282	3763
Other Christian	15	13	17	2426	2209
Muslim	18	11	24	217	278
Buddhist	18	7	29	63	65
Hindu	13	3	23	59	70
Other <sup>2</sup>	17	12	22	377	357
<b>Ethnic Group</b>					
White, British	13	13	14	23054	23596
White, Irish	8	4	12	158	185
White, Other	16	12	20	754	789
Mixed	8	2	14	86	102
Asian, Indian	14	7	22	108	147
Asian, Pakistani	24	14	34	137	174
Asian, Chinese	14	3	25	74	82
Asian, Other	14	6	23	101	103
African, Caribbean or Black	16	4	28	114	124
Other	11	5	18	103	112
<b>All Adults</b>	13	13	14	24717	25505

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 4.1 Prevalence of hazardous and harmful drinking (age-standardised<sup>1</sup>), by equality group**

Equality Group	2008-2011 combined				
	Hazardous/ harmful drinker	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
	%	%	%		
<b>Sex</b>					
Male	27	26	28	12375	13527
Female	19	18	20	16108	14812
<b>Age</b>					
16-24	30	27	32	2372	3685
25-34	23	22	25	3683	4393
35-44	23	22	25	4805	4971
45-54	26	24	27	5209	5150
55-64	23	22	24	5046	4399
65-74	18	17	20	4193	3187
75+	10	8	11	3175	2555
<b>Sexual Orientation</b>					
Bisexual	29	21	37	229	237
Gay or Lesbian	34	25	43	194	199
Heterosexual	23	23	24	23851	23951
Other	17	11	23	265	252
Prefer not to answer	14	10	19	732	641
<b>Disability</b>					
Limiting LI	19	17	20	8546	7627
Non-limiting LI	24	22	26	4521	4363
No LI	24	23	25	15410	16345
<b>Religion</b>					
None	26	25	27	11069	11548
Church of Scotland	23	21	24	10013	9258
Roman Catholic	22	20	23	3810	4212
Other Christian	19	17	21	2772	2432
Muslim	5	0	13	215	270
Buddhist	10	2	17	63	65
Hindu	6	0	13	59	70
Other <sup>2</sup>	18	13	23	415	384
<b>Ethnic Group</b>					
White, British	24	23	24	26735	26363
White, Irish	28	20	36	198	224
White, Other	21	17	25	774	806
Mixed	30	16	43	87	103
Asian, Indian	21	9	33	109	148
Asian, Pakistani	3	0	5	138	179
Asian, Chinese	4	0	9	74	82
Asian, Other	4	0	8	102	103
African, Caribbean or Black	7	1	12	115	130
Other	17	6	28	107	118
<b>All Adults</b>	23	22	24	28483	28339

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 4.2 Proportion drinking above the recommended daily units of alcohol on heaviest drinking day in the past week (age-standardised<sup>1</sup>), by equality group**

Equality Group	Aged 16 and over			2008-2011 combined	
	Above 3/4 units	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
	%	%	%		
<b>Sex</b>					
Male	43	42	44	12353	13472
Female	34	34	35	16082	14748
<b>Age</b>					
16-24	45	42	47	2309	3550
25-34	47	44	49	3685	4392
35-44	45	44	47	4809	4976
45-54	46	44	47	5211	5156
55-64	37	35	38	5047	4400
65-74	24	23	26	4195	3188
75+	9	8	10	3179	2559
<b>Sexual Orientation</b>					
Bisexual	49	40	57	227	234
Gay or Lesbian	50	40	59	195	201
Heterosexual	39	38	40	23811	23842
Other	32	23	41	264	251
Prefer not to answer	26	21	32	732	642
<b>Disability</b>					
Limiting LI	31	30	33	8547	7621
Non-limiting LI	41	39	43	4522	4352
No LI	41	40	42	15361	16244
<b>Religion</b>					
None	41	40	43	11057	11516
Church of Scotland	39	37	40	9996	9216
Roman Catholic	40	38	42	3796	4184
Other Christian	32	30	35	2775	2423
Muslim	2	0	3	216	271
Buddhist	16	5	28	63	65
Hindu	14	5	23	59	70
Other <sup>2</sup>	25	20	30	416	386
<b>Ethnic Group</b>					
White, British	40	39	41	26694	26247
White, Irish	41	33	50	198	224
White, Other	27	23	31	776	810
Mixed	37	24	50	86	102
Asian, Indian	23	11	35	109	148
Asian, Pakistani	4	1	8	138	179
Asian, Chinese	4	0	8	74	82
Asian, Other	7	2	12	103	105
African, Caribbean or Black	19	8	29	115	130
Other	14	5	22	109	122
<b>All Adults</b>	<b>39</b>	<b>38</b>	<b>39</b>	<b>28435</b>	<b>28220</b>

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 5.1 Prevalence of smoking (age-standardised<sup>1</sup>), by equality group**

Equality Group	Aged 16 and over			2008-2011 combined	
	Current smoker	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
	%	%	%		
<b>Sex</b>					
Male	26	25	27	12449	13637
Female	24	23	25	16180	14904
<b>Age</b>					
16-24	27	25	30	2457	3830
25-34	31	29	33	3696	4404
35-44	29	27	30	4817	4982
45-54	27	26	29	5220	5164
55-64	24	23	25	5057	4409
65-74	16	15	18	4200	3192
75+	10	9	11	3182	2562
<b>Sexual Orientation</b>					
Bisexual	27	20	35	230	236
Gay or Lesbian	28	21	36	195	201
Heterosexual	24	23	25	23984	24139
Other	36	27	44	265	252
Prefer not to answer	33	27	39	733	642
<b>Disability</b>					
Limiting LI	34	33	36	8582	7668
Non-limiting LI	23	21	25	4537	4389
No LI	22	21	23	15505	16481
<b>Religion</b>					
None	28	27	29	11159	11676
Church of Scotland	21	20	22	10038	9289
Roman Catholic	28	27	30	3832	4243
Other Christian	16	15	18	2788	2450
Muslim	16	10	23	215	269
Buddhist	19	6	31	63	65
Hindu	21	5	36	59	70
Other <sup>2</sup>	19	14	23	417	387
<b>Ethnic Group</b>					
White, British	25	24	26	26884	26564
White, Irish	23	16	30	198	224
White, Other	24	19	28	780	814
Mixed	24	13	34	86	102
Asian, Indian	19	9	29	109	148
Asian, Pakistani	13	7	20	137	177
Asian, Chinese	11	0	25	74	82
Asian, Other	9	1	16	103	105
African, Caribbean or Black	17	6	29	115	130
Other	22	14	30	109	122
<b>All Adults</b>	25	24	26	28629	28540

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 5.2 Mean number of cigarettes per day (age-standardised<sup>1</sup>), by equality group**

Equality Group	Number of cigarettes	Lower Confidence Limit	Upper Confidence Limit	2008-2011 combined	
				Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
	%	%	%		
<b>Sex</b>					
Male	15.2	14.8	15.6	2947	3344
Female	13.3	13.0	13.5	3820	3542
<b>Age</b>					
16-24	10.3	9.7	10.9	739	1006
25-34	11.9	11.3	12.5	1142	1332
35-44	14.8	14.3	15.3	1350	1404
45-54	16.9	16.3	17.4	1395	1358
55-64	16.2	15.7	16.8	1172	1021
65-74	15.4	14.7	16.1	671	510
75+	12.6	11.6	13.5	298	257
<b>Sexual Orientation</b>					
Bisexual	14.5	12.0	17.0	62	66
Gay or Lesbian	17.8	14.6	21.0	59	55
Heterosexual	14.2	13.9	14.4	5638	5790
Other	14.3	12.3	16.2	78	76
Prefer not to answer	14.3	13.1	15.6	178	160
<b>Disability</b>					
Limiting LI	15.2	14.7	15.6	2344	2173
Non-limiting LI	14.2	13.5	14.9	919	929
No LI	13.7	13.4	14.1	3504	3784
<b>Religion</b>					
None	14.7	14.3	15.1	3258	3390
Church of Scotland	14.2	13.6	14.7	1846	1762
Roman Catholic	14.1	13.5	14.7	1096	1188
Other Christian	13.5	12.5	14.5	425	379
Muslim	[8.6]	[5.6]	[11.7]	35	33
Buddhist	*	*	*	12	7
Hindu	*	*	*	10	15
Other <sup>2</sup>	11.6	9.6	13.6	69	67
<b>Ethnic Group</b>					
White, British	14.4	14.1	14.6	6384	6427
White, Irish	[12.5]	[9.2]	[15.8]	51	51
White, Other	12.1	10.0	14.2	205	215
Mixed	*	*	*	20	21
Asian, Indian	*	*	*	23	24
Asian, Pakistani	*	*	*	22	25
Asian, Chinese	*	*	*	5	3
Asian, Other	*	*	*	8	6
African, Caribbean or Black	*	*	*	14	15
Other	*	*	*	24	22
<b>All Adults</b>	14.2	14.0	14.5	6767	6886

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 5.3 Mean age started smoking (age-standardised<sup>1</sup>), by equality group**

Equality Group	Aged 16 and over			2008-2011 combined	
	Mean age	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
	%	%	%		
<b>Sex</b>					
Male	17.2	16.9	17.6	6542	6661
Female	17.8	17.5	18.0	7415	6570
<b>Age</b>					
16-24	17.1	15.9	18.2	781	1063
25-34	17.0	16.5	17.5	1732	1981
35-44	17.0	16.7	17.3	2254	2306
45-54	17.3	17.0	17.6	2562	2507
55-64	17.3	17.1	17.6	2705	2350
65-74	18.0	17.8	18.3	2331	1756
75+	19.5	19.0	20.0	1592	1268
<b>Sexual Orientation</b>					
Bisexual	15.9	14.8	16.9	107	103
Gay or Lesbian	18.1	15.7	20.6	102	91
Heterosexual	17.5	17.3	17.8	11604	11077
Other	16.2	15.5	17.0	145	135
Prefer not to answer	17.5	16.6	18.5	396	335
<b>Disability</b>					
Limiting LI	17.5	16.8	18.2	5078	4458
Non-limiting LI	17.4	16.9	17.9	2176	2040
No LI	17.6	17.4	17.9	6702	6732
<b>Religion</b>					
None	17.3	17.0	17.6	5774	5650
Church of Scotland	17.4	17.0	17.7	4728	4222
Roman Catholic	17.4	17.1	17.7	2023	2124
Other Christian	18.8	16.6	21.0	1149	943
Muslim	[18.7]	[16.7]	[20.7]	46	60
Buddhist	*	*	*	20	12
Hindu	*	*	*	12	17
Other <sup>2</sup>	17.0	15.8	18.2	174	154
<b>Ethnic Group</b>					
White, British	17.4	17.2	17.7	13267	12471
White, Irish	17.9	16.9	18.8	103	109
White, Other	19.3	18.3	20.4	375	389
Mixed	[16.8]	[15.7]	[18.0]	37	39
Asian, Indian	[18.4]	[15.9]	[21.0]	31	40
Asian, Pakistani	[17.0]	[16.0]	[18.1]	33	41
Asian, Chinese	*	*	*	9	6
Asian, Other	*	*	*	24	22
African, Caribbean or Black	*	*	*	18	17
Other	[17.0]	[15.5]	[18.5]	42	47
<b>All Adults</b>	17.5	17.3	17.7	13957	13231

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 6.1 Consumption of 5 or more portions of fruit and vegetables per day (age-standardised<sup>1</sup>), by equality group**

Equality Group	Aged 16 and over			2008-2011 combined	
	5 a day	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
	%	%	%		
<b>Sex</b>					
Male	21	20	21	12510	13756
Female	24	23	24	16250	15001
<b>Age</b>					
16-24	16	14	18	2551	4006
25-34	23	21	25	3701	4410
35-44	21	20	23	4825	4993
45-54	23	22	25	5231	5176
55-64	25	24	27	5060	4412
65-74	25	23	26	4205	3196
75+	21	19	22	3187	2567
<b>Sexual Orientation</b>					
Bisexual	23	16	30	231	238
Gay or Lesbian	28	18	38	195	201
Heterosexual	23	22	23	24014	24198
Other	15	9	21	266	253
Prefer not to answer	15	11	19	733	642
<b>Disability</b>					
Limiting LI	19	18	21	8594	7683
Non-limiting LI	22	21	24	4554	4411
No LI	23	22	24	15606	16659
<b>Religion</b>					
None	22	21	23	11210	11767
Church of Scotland	21	20	22	10049	9309
Roman Catholic	20	19	22	3846	4278
Other Christian	26	24	29	2793	2455
Muslim	49	37	60	220	281
Buddhist	63	50	77	63	65
Hindu	44	27	61	59	70
Other <sup>2</sup>	28	23	33	418	389
<b>Ethnic Group</b>					
White, British	21	20	22	26961	26710
White, Irish	29	21	36	198	224
White, Other	40	35	45	781	814
Mixed	24	14	35	88	104
Asian, Indian	30	17	43	109	148
Asian, Pakistani	48	35	62	141	188
Asian, Chinese	49	31	66	74	82
Asian, Other	51	38	64	103	105
African, Caribbean or Black	28	15	41	117	134
Other	46	32	59	109	122
<b>All Adults</b>	22	21	23	28760	28757

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 6.2 Mean daily portions of fruit and vegetables (age-standardised<sup>1</sup>), by equality group**

Equality Group	2008-2011 combined				
	Mean portions	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
	%	%	%		
<b>Sex</b>					
Male	3.1	3.0	3.2	12510	13756
Female	3.4	3.3	3.4	16250	15001
<b>Age</b>					
16-24	2.7	2.5	2.8	2551	4006
25-34	3.3	3.2	3.4	3701	4410
35-44	3.2	3.1	3.3	4825	4993
45-54	3.3	3.2	3.4	5231	5176
55-64	3.5	3.4	3.6	5060	4412
65-74	3.4	3.4	3.5	4205	3196
75+	3.3	3.2	3.4	3187	2567
<b>Sexual Orientation</b>					
Bisexual	3.6	2.8	4.3	231	238
Gay or Lesbian	3.7	3.2	4.2	195	201
Heterosexual	3.3	3.2	3.3	24014	24198
Other	2.7	2.3	3.0	266	253
Prefer not to answer	2.7	2.5	2.9	733	642
<b>Disability</b>					
Limiting LI	3.0	2.9	3.0	8594	7683
Non-limiting LI	3.3	3.2	3.4	4554	4411
No LI	3.4	3.3	3.4	15606	16659
<b>Religion</b>					
None	3.2	3.1	3.3	11210	11767
Church of Scotland	3.1	3.0	3.2	10049	9309
Roman Catholic	3.1	3.0	3.2	3846	4278
Other Christian	3.6	3.5	3.8	2793	2455
Muslim	5.1	4.3	5.9	220	281
Buddhist	6.8	5.5	8.0	63	65
Hindu	4.5	3.6	5.4	59	70
Other <sup>2</sup>	3.7	3.3	4.0	418	389
<b>Ethnic Group</b>					
White, British	3.2	3.1	3.2	26961	26710
White, Irish	3.6	3.1	4.0	198	224
White, Other	4.6	4.2	5.0	781	814
Mixed	3.6	2.9	4.4	88	104
Asian, Indian	3.8	3.2	4.4	109	148
Asian, Pakistani	4.8	4.0	5.5	141	188
Asian, Chinese	5.2	4.1	6.4	74	82
Asian, Other	5.0	4.3	5.6	103	105
African, Caribbean or Black	3.7	3.0	4.3	117	134
Other	5.0	4.1	5.9	109	122
<b>All Adults</b>	<b>3.2</b>	<b>3.2</b>	<b>3.3</b>	<b>28760</b>	<b>28757</b>

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 7.1 Proportion of adults meeting physical activity recommendations (age-standardised<sup>1</sup>), by equality group**

<i>Aged 16 and over</i>			<i>2008-2011 combined</i>		
<b>Equality Group</b>	<b>Meets activity levels</b>	<b>Lower Confidence Limit</b>	<b>Upper Confidence Limit</b>	<b>Unweighted Bases</b>	<b>Weighted Bases</b>
	%	%	%		
<b>Sex</b>					
Male	45	44	46	12502	13754
Female	33	32	34	16229	14983
<b>Age</b>					
16-24	51	49	53	2550	4007
25-34	51	49	53	3698	4408
35-44	47	45	49	4822	4990
45-54	42	40	43	5225	5171
55-64	32	31	34	5057	4410
65-74	20	18	21	4203	3195
75+	8	7	9	3176	2558
<b>Sexual Orientation</b>					
Bisexual	40	32	48	231	238
Gay or Lesbian	42	32	51	195	201
Heterosexual	39	38	40	23997	24187
Other	29	22	37	266	253
Prefer not to answer	33	27	39	733	642
<b>Disability</b>					
Limiting LI	26	24	27	8586	7677
Non-limiting LI	41	39	43	4549	4407
No LI	44	43	45	15591	16651
<b>Religion</b>					
None	40	39	42	11198	11759
Church of Scotland	37	35	38	10039	9300
Roman Catholic	38	36	40	3843	4275
Other Christian	38	36	40	2792	2454
Muslim	29	21	38	219	280
Buddhist	43	26	60	62	64
Hindu	37	20	54	59	70
Other <sup>2</sup>	35	30	41	417	387
<b>Ethnic Group</b>					
White, British	39	38	39	26936	26691
White, Irish	44	36	52	198	224
White, Other	43	38	48	779	813
Mixed	37	26	48	88	104
Asian, Indian	32	19	44	109	148
Asian, Pakistani	27	17	37	141	188
Asian, Chinese	42	25	59	74	82
Asian, Other	46	32	59	102	105
African, Caribbean or Black	45	29	60	117	134
Other	33	21	45	109	122
<b>All Adults</b>	<b>38</b>	<b>38</b>	<b>39</b>	<b>28731</b>	<b>28737</b>

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 7.2 Proportion of adults participating in sport (age-standardised<sup>1</sup>), by equality group**

Equality Group	2008-2011 combined				
	Participated in last 4 weeks	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
	%	%	%		
<b>Sex</b>					
Male	53	52	55	12510	13756
Female	45	44	46	16251	15002
<b>Age</b>					
16-24	71	69	73	2552	4007
25-34	65	63	67	3700	4409
35-44	56	54	58	4826	4994
45-54	46	45	48	5230	5174
55-64	36	34	38	5059	4411
65-74	33	31	35	4205	3196
75+	19	17	20	3189	2569
<b>Sexual Orientation</b>					
Bisexual	53	44	61	231	238
Gay or Lesbian	51	41	61	195	201
Heterosexual	50	49	51	24014	24197
Other	39	30	48	266	253
Prefer not to answer	39	33	45	733	642
<b>Disability</b>					
Limiting LI	36	34	38	8596	7685
Non-limiting LI	54	53	56	4555	4412
No LI	54	53	55	15605	16658
<b>Religion</b>					
None	49	48	50	11211	11768
Church of Scotland	49	48	51	10049	9309
Roman Catholic	46	44	48	3845	4277
Other Christian	52	49	55	2793	2455
Muslim	39	29	49	219	280
Buddhist	57	40	73	63	65
Hindu	34	18	49	59	70
Other <sup>2</sup>	50	44	55	418	389
<b>Ethnic Group</b>					
White, British	49	48	50	26960	26709
White, Irish	50	41	58	198	224
White, Other	48	43	54	781	814
Mixed	55	43	68	88	104
Asian, Indian	43	30	56	109	148
Asian, Pakistani	30	20	40	141	188
Asian, Chinese	60	42	78	74	82
Asian, Other	46	32	60	103	105
African, Caribbean or Black	46	32	61	117	134
Other	48	35	61	109	122
<b>All Adults</b>	49	48	50	28761	28758

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 8.1 Prevalence of obesity (age-standardised<sup>1</sup>), by equality group**

Equality Group	BMI≥30	Lower Confidence Limit	Upper Confidence Limit	2008-2011 combined	
				Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
	%	%	%		
<b>Sex</b>					
Male	27	26	28	10691	11821
Female	28	27	29	13185	12173
<b>Age</b>					
16-24	13	11	14	2198	3461
25-34	20	18	21	3118	3721
35-44	30	28	32	4119	4277
45-54	31	30	33	4477	4410
55-64	36	34	37	4250	3693
65-74	34	33	36	3502	2649
75+	28	26	30	2212	1784
<b>Sexual Orientation</b>					
Bisexual	34	25	42	201	206
Gay or Lesbian	28	21	36	181	187
Heterosexual	27	26	28	20620	20846
Other	34	26	42	222	212
Prefer not to answer	32	26	38	606	534
<b>Disability</b>					
Limiting LI	34	33	36	6617	5973
Non-limiting LI	30	28	32	3895	3779
No LI	24	23	24	13360	14241
<b>Religion</b>					
None	26	25	27	9527	10072
Church of Scotland	30	28	31	8249	7652
Roman Catholic	28	26	30	3107	3471
Other Christian	28	26	31	2357	2085
Muslim	27	14	41	170	230
Buddhist	15	4	27	53	52
Hindu	15	3	27	51	61
Other <sup>2</sup>	25	19	31	340	318
<b>Ethnic Group</b>					
White, British	28	27	29	22399	22316
White, Irish	28	21	36	164	191
White, Other	24	19	29	678	695
Mixed	30	17	44	74	87
Asian, Indian	24	10	38	92	127
Asian, Pakistani	29	16	42	108	152
Asian, Chinese	4	0	9	62	68
Asian, Other	9	2	16	90	93
African, Caribbean or Black	35	17	53	101	115
Other	28	14	41	91	102
<b>All Adults</b>	27	27	28	23876	23994

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 8.2 Prevalence of overweight including obesity (age-standardised<sup>1</sup>), by equality group**

Equality Group	2008-2011 combined				
	BMI≥25	Lower Confidence Limit	Upper Confidence Limit	Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
	%	%	%		
<b>Sex</b>					
Male	69	67	70	10691	11821
Female	61	60	62	13185	12173
<b>Age</b>					
16-24	35	33	38	2198	3461
25-34	55	53	57	3118	3721
35-44	69	67	70	4119	4277
45-54	72	70	73	4477	4410
55-64	77	76	79	4250	3693
65-74	76	75	78	3502	2649
75+	70	68	72	2212	1784
<b>Sexual Orientation</b>					
Bisexual	69	61	77	201	206
Gay or Lesbian	67	58	76	181	187
Heterosexual	65	64	66	20620	20846
Other	68	58	78	222	212
Prefer not to answer	68	62	74	606	534
<b>Disability</b>					
Limiting LI	68	66	70	6617	5973
Non-limiting LI	68	66	70	3895	3779
No LI	63	62	64	13360	14241
<b>Religion</b>					
None	64	62	65	9527	10072
Church of Scotland	67	65	68	8249	7652
Roman Catholic	64	62	66	3107	3471
Other Christian	67	64	69	2357	2085
Muslim	57	45	70	170	230
Buddhist	42	25	59	53	52
Hindu	55	36	74	51	61
Other <sup>2</sup>	65	58	72	340	318
<b>Ethnic Group</b>					
White, British	65	64	66	22399	22316
White, Irish	62	54	71	164	191
White, Other	63	58	68	678	695
Mixed	60	48	72	74	87
Asian, Indian	66	52	79	92	127
Asian, Pakistani	71	59	83	108	152
Asian, Chinese	41	22	60	62	68
Asian, Other	45	30	61	90	93
African, Caribbean or Black	63	48	78	101	115
Other	61	48	75	91	102
<b>All Adults</b>	65	64	66	23876	23994

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 9.1 Prevalence of doctor-diagnosed CVD (age-standardised<sup>1</sup>), by equality group**

Equality Group	CVD	Lower Confidence Limit	Upper Confidence Limit	2008-2011 combined	
				Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
	%	%	%		
<b>Sex</b>					
Male	16	15	16	12516	13766
Female	14	14	15	16246	14998
<b>Age</b>					
16-24	5	4	6	2555	4013
25-34	5	5	6	3699	4409
35-44	7	6	8	4828	4996
45-54	11	10	12	5232	5177
55-64	19	17	20	5060	4412
65-74	32	30	34	4203	3195
75+	41	39	43	3185	2564
<b>Sexual Orientation</b>					
Bisexual	19	13	25	231	238
Gay or Lesbian	14	5	24	195	201
Heterosexual	15	14	15	24000	24185
Other	17	12	22	264	251
Prefer not to answer	16	12	20	731	641
<b>Disability</b>					
Limiting LI	24	23	25	8586	7676
Non-limiting LI	14	13	15	4553	4410
No LI	9	8	10	15610	16667
<b>Religion</b>					
None	14	13	15	11203	11759
Church of Scotland	15	14	16	10041	9303
Roman Catholic	17	16	19	3843	4276
Other Christian	15	13	16	2793	2455
Muslim	9	4	15	220	281
Buddhist	17	1	34	63	65
Hindu	3	0	9	59	70
Other <sup>2</sup>	18	14	23	418	389
<b>Ethnic Group</b>					
White, British	15	15	16	26943	26694
White, Irish	12	8	17	198	224
White, Other	16	11	20	781	814
Mixed	14	5	22	88	104
Asian, Indian	9	0	18	109	148
Asian, Pakistani	12	1	22	141	188
Asian, Chinese	4	0	11	74	82
Asian, Other	.	.	.	103	105
African, Caribbean or Black	8	0	19	117	134
Other	10	2	19	109	122
<b>All Adults</b>	15	14	15	28762	28764

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

**Table 9.2 Prevalence of doctor-diagnosed diabetes (age-standardised<sup>1</sup>), by equality group**

Equality Group	Diabetes	Lower Confidence Limit	Upper Confidence Limit	2008-2011 combined	
				Unweighted Bases	Weighted Bases
<i>Aged 16 and over</i>					
	%	%	%		
<b>Sex</b>					
Male	6	6	6	12525	13773
Female	4	4	5	16259	15010
<b>Age</b>					
16-24	1	0	1	2556	4015
25-34	1	1	1	3702	4411
35-44	2	1	2	4829	4997
45-54	5	4	5	5236	5181
55-64	9	8	10	5063	4414
65-74	12	11	13	4207	3197
75+	12	11	13	3191	2570
<b>Sexual Orientation</b>					
Bisexual	9	4	14	231	238
Gay or Lesbian	2	0	5	195	201
Heterosexual	5	5	5	24015	24199
Other	7	4	10	266	253
Prefer not to answer	6	4	8	733	642
<b>Disability</b>					
Limiting LI	9	8	10	8602	7689
Non-limiting LI	9	8	10	4556	4413
No LI	1	1	2	15613	16670
<b>Religion</b>					
None	5	4	5	11211	11768
Church of Scotland	6	5	6	10049	9309
Roman Catholic	5	5	6	3846	4278
Other Christian	5	4	6	2793	2455
Muslim	18	9	27	220	281
Buddhist	4	0	13	63	65
Hindu	2	0	7	59	70
Other <sup>2</sup>	8	5	11	418	389
<b>Ethnic Group</b>					
White, British	5	5	5	26962	26711
White, Irish	4	1	7	198	224
White, Other	3	1	6	781	814
Mixed	3	0	7	88	104
Asian, Indian	14	3	26	109	148
Asian, Pakistani	18	8	28	141	188
Asian, Chinese	3	0	10	74	82
Asian, Other	4	0	9	103	105
African, Caribbean or Black	4	0	8	117	134
Other	8	1	15	109	122
<b>All Adults</b>	5	5	5	28784	28783

<sup>1</sup> Analyses are age-standardised for all equality groups except age.

<sup>2</sup> Other religion includes Sikh, Jewish and Pagan.

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