Public attitudes to reducing levels of overweight and obesity in Scotland
## Acknowledgements

We are grateful to Claire Hislop, Laura Martin and Clare Beeston at NHS Health Scotland, as well as colleagues in the Scottish Government, Obesity Action Scotland and Food Standards Scotland for their comments on earlier drafts.

Many thanks to ScotCen’s data manager, programmers, operations staff and interviewers, without whom the survey would not happen. And thanks to all our respondents for giving their time and sharing their opinions with us.
Scotland has one of the highest levels of overweight and obesity among the Organisation for Economic Co-operation and Development (OECD) countries.\(^1\) The percentage of adults in Scotland who are overweight and obese rose from 52% in 1995 to 62% in 2008.\(^2\) By 2016, 65% of adults (aged 16 and over) in Scotland were overweight, including 29% who were obese.

Although the proportion of the Scottish population that is obese has not increased notably since 2008, people who are obese have got heavier in that time.

### The World Health Organization defines overweight and obesity as ‘abnormal or excessive fat accumulation that presents a risk to health’.\(^3\)

### The cost of obesity to health

Obesity increases the likelihood of developing a number of serious health conditions, including type 2 diabetes, heart conditions, stroke\(^4\) and osteoarthritis. Obesity is the UK’s second largest single preventable cause of cancer after smoking.\(^5\) Being obese makes everyday physical activities more difficult and can contribute to fatigue.\(^6\)

### Being obese (having a BMI of 30–35 kg/m\(^2\)) can reduce life expectancy by 2–4 years, and by 8–10 years for those who are heavily obese (having a BMI of 40–50 kg/m\(^2\)).

### The cost of obesity to Scotland

The annual cost of treating conditions associated with being overweight and obese is estimated to range from £363 million to £600 million.\(^6\) The total annual cost to the Scottish economy of overweight and obesity, including labour market-related costs such as lost productivity, is estimated to be between £0.9 billion and £4.6 billion.\(^6\)

### How our environment promotes obesity

Fundamentally, the high levels of overweight and obesity in Scotland are because we eat more calories than we expend.\(^2\) The way we live today – high car use, sedentary jobs, technological advances, inactive pastimes and access to cheap, energy-dense food – makes it easier and the ‘norm’ to consume too much food and expend too little energy.\(^6\)
Our food and physical environment make it easier to consume too much food and expend too little energy – it is ‘obesogenic’.

How can we reduce obesity in Scotland?

There is a growing body of evidence about the interventions and actions likely to have the most impact in reducing obesity. This largely focuses on addressing the obesogenic nature of our environment. Because of the complex causes of the current obesity crisis and the scale of the problem only ‘a systemic, sustained portfolio of initiatives, delivered at scale’ can reduce the burden of obesity.

To reduce obesity in Scotland, three key elements are necessary. We need to:

- tackle our obesogenic environment
- support individuals to make the right choices
- provide treatment options for those who are already overweight or obese.

No government has managed to stabilise or reverse national levels of overweight and obesity, although levels of obesity have fallen in some subpopulations. Reversal of obesity trends will require input from all sectors of society – from governments, retailers, restaurants, employers, media organisations, educators, healthcare providers, communities and manufacturers – to make significant changes to how they operate.

Given the extent of the change necessary, public support for action to reduce obesity will be key because:

- public support influences the political debates which ultimately decide which policies are adopted and which are not
- a high level of public support is likely to result in more effective implementation and sustained outcomes
- public discussion around a subject influences those responsible for implementation, compliance or enforcement of a policy as well as those to whom the policy is directed.
The Scottish Social Attitudes survey: exploring public attitudes to obesity and how to reduce it

The Scottish Social Attitudes (SSA) survey, carried out in 2016, included a module on obesity. This was to explore the level of support for the evidenced-based policies to reduce obesity.

The module explored:

- to what extent the public sees obesity as a problem that requires a solution
  - How well is obesity recognised? (Section 2)
  - Is there awareness of the consequences of overweight and obesity? (Section 3)
  - Does the public recognise there are barriers to maintaining a healthy weight? (Section 4)

- public attitudes to how obesity should be tackled
  - Understanding of the role of diet and physical activity (Section 5)
  - Who is responsible for reducing obesity? (Section 6)
  - Support for action to tackle obesity (Section 7).

The survey also explored how the understanding of obesity and support for action to reduce obesity was related to access to resources and to the respondent’s own weight status.

Obesity and health inequalities in Scotland

Levels of obesity are linked to the circumstances in which people live, specifically, the level of resources (financial, power, knowledge and social) that people have.

Obesity levels are higher for adults and children living in areas of material deprivation compared with those living in less deprived circumstances. The difference in obesity levels between people living in the most and least deprived areas is greatest for women and children. In addition, the difference in obesity levels between children living in the most and least deprived areas has been growing.\(^1\)

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13% of children in Primary 1 living in the most deprived areas are at risk of obesity, compared with only 7% in the least deprived areas.
Methods

The Scottish Social Attitudes survey

ScotCen Social Research has run the Scottish Social Attitudes (SSA) survey annually since 1999. The survey provides a robust and reliable picture of changing public attitudes over time, covering subjects such as attitudes to alcohol, dementia, public services, Scottish independence and discrimination.

The obesity module in the 2016 survey included 40 questions which were developed in consultation with colleagues from NHS Health Scotland. None of these questions had been asked in the SSA before; however, a number of questions had been included on, or were derived from, the 2015 British Social Attitudes survey. Some of the questions were tested on members of the general public to ensure understanding by those of different sexes, ages and employment status.

Most of the final questions were asked as part of the face-to-face section of the survey. Questions that were considered to be more sensitive were carried in the self-completion section.

A random sample of 1,237 individuals aged 16 years and older* in Scotland took part in the survey. Recruitment aimed to obtain a sample representative of the Scottish population. In the results, the data are weighted to ensure that the final sample reflected the age and sex profile of the Scottish population. Data collection took place between July 2016 and December 2016. Further technical details about the survey are published in a separate SSA 2016 technical report.

Respondents’ perceptions of their own weight

Respondents identified themselves as ‘very underweight’, ‘a bit underweight’, ‘about the right weight’, ‘a bit overweight’ or ‘very overweight’.

Age and sex

Findings across sex and age groups were also explored.

Ethnicity

The survey did not analyse the findings across different ethnic groups.

* In previous years SSA surveys included respondents aged 18 years of age and older.
Interpreting the findings

All percentages cited in this report are based on the weighted data and are rounded to the nearest whole number.

All differences described in the text (e.g. between men and women or between age groups) are statistically significant at the 95% level or above, unless otherwise specified. This means that the probability of having found a difference of at least this size if there was no actual difference in the population is 5% or less. The term ‘significant’ is used in this report to refer to statistical significance and is not intended to imply substantive importance. Further details of significance testing and analysis are included in the separate technical report.

Body mass index is a common classification of a person’s weight. It is calculated by dividing a person’s weight in kilograms by the square of their height in metres.

- BMI less than 18.5 kg/m² = underweight
- BMI 18.5–24.9 kg/m² = healthy weight
- BMI 25 and 29.9 kg/m² = overweight
- BMI of 30 kg/m² and above = obese.

Income and educational level

The ways in which differing household incomes or educational attainment could be related to attitudes to obesity are multiple and complex.

At its basic understanding, educational level or income may affect how much money people have to purchase products or services, or to participate fully in society.

Levels of income* and educational attainment** can also reflect the broader conditions in which people are born, grow, live and work. These conditions will shape people’s daily life.

For example, there are likely to be psychosocial effects. Is maintaining a healthy weight as important for people with multiple concerns (such as money concerns, unwell family members or housing problems) as for those with fewer concerns? Do some people feel more confident that their broader environment can be changed than others?

There are also likely to be life course effects, where early life experiences and norms shape how people eat and live in adulthood.

The political economy will also shape people’s everyday lives. For example, some people will have more influence, or more perceived influence, and this may affect their attitudes to potential solutions.

* Household income categories: Up to £14,300, over £14,300 and up to £26,000, over £26,000 and up to £44,200, over £44,200
** Education categories: Degree/HE, Higher/A-levels, Standard Gd/GCSE, None
Key findings

Obesity was not well recognised. People generally identified obese people as those who were much more overweight than the medical definition of obesity.

There was also a difference in how obesity in men and women was identified. Men needed to be more overweight than women to be recognised as obese.

In addition, some groups (older respondents and those with lower levels of education) were less likely to recognise obesity.

What this means

Population groups with higher levels of obesity were less able to recognise obesity. Shifting ‘norms’ might be related to how well obesity is recognised.

The term obesity is useful for the research and the medical community. However, because the public’s understanding of what an obese person is does not match the medical definition it is not a useful term for communicating about obesity to the public and alternatives need to be explored.
How well is obesity recognised in others?

Respondents were asked...

Respondents were presented with 10 pictures of men (Image 2.1) and 10 pictures of women (Image 2.2) and were asked:

‘At what point, if at all, do you think the pictures show a man/woman who is very overweight, sometimes referred to by doctors as obese?’

Note: Figure H shows a person who is classified as obese – they have a BMI of just over 32. Figures I and J represented figures with higher BMIs – i.e. are more obese. Figures F and G represent people who are overweight but not obese, figures C, D and E represent people who are a healthy weight and figures A and B represent people who are underweight. The body images were developed by Dr Martin Tovee at Newcastle University.
Results

The first figure that shows someone who is obese is figure H (Images 2.1 and 2.2). Only around one-quarter of respondents (27%) correctly identified figure ‘H’ as the first figure who was obese. This was true for both the images of men and women.

Most respondents incorrectly identified the larger figures (I or J) as the first person who was obese (Tables A1a and A1b in the accompanying appendix document), that is, most respondents only recognise obesity in those who are larger than the medical definition of obesity.

There was a difference in how respondents perceived obesity in men and women. The male figure needed to be more overweight than the female figure to be recognised as obese (see Table A1a and A1b in the accompanying appendix document).

The following groups less accurately recognised obesity in both men and women:*

- women
- older people
- those with no formal qualifications
- those in the lowest income group.

Perception of own weight

Respondents were asked ...

Respondents were presented with 10 pictures of men (Image 2.1) and 10 pictures of women (Image 2.2) and were asked:

’I’d like to ask you how you see your own body shape. Please look at this show card again and tell me which of these pictures comes closest to what you think of as your own body shape’ [referred to below as ‘figures’]

‘Which of the following best describes how you think of yourself at the moment?’

Possible responses were: ‘very underweight’, ‘a bit underweight’, ‘about the right weight’, ‘a bit overweight’ or ‘very overweight’ [referred to below as ‘description’].

Respondents were also asked to report their own height and weight, from which a BMI was calculated [referred to below as BMI].

Like the Scottish Health Survey (a nationally representative survey carried out every year), the population included in the Scottish Social Attitudes (SSA) survey is representative of the Scottish population. This means that the proportion of those surveyed in the SSA and the Scottish Health Survey who are underweight, a healthy weight and overweight are likely to be similar. In the SSA 2016, respondents were asked to report about their own weight in three different ways (see above). In the Scottish Health Survey the height and weight of the respondents were measured – this is considered more accurate than measurements or descriptions self-reported by the respondent.

* These groups were significantly more likely to incorrectly identify the largest figure (Figure J) as the first obese figure.
Results

All three measurements of the respondent’s own weight status in the SSA are self-reported and they all show different results (Figure 2.1). Fewer men or women described themselves as ‘very overweight’ or gave a height and weight that put them in the obese category than would be expected given the sample is representative of the national population (i.e. compared with the Scottish Health Survey). However, the proportion identifying themselves as figures H, I or J (i.e. the figures that represent obese individuals) was more similar to that expected for this population. This suggests that people in the obese category do recognise their own body shape but do not describe this as being very overweight. See Table A1c in the accompanying appendix document.

**Underweight:** BMI under 18.5 kg/m$^2$, Figures A and B (Images 2.1 and 2.2), self-described as ‘very underweight’ or ‘a bit underweight’.

**Healthy weight:** BMI of 18.5 kg/m$^2$ to less than 25 kg/m$^2$; Figures C to E (Images 2.1 and 2.2); self-described as ‘about right’.

**Overweight:** BMI of 25 kg/m$^2$ to less than 30 kg/m$^2$; Figures F and G (Images 2.1 and 2.2); self-described as ‘a bit overweight’.

**Obese:** BMI of 30 kg/m$^2$ and over; Figures H to J (Images 2.1 and 2.2); self-described as ‘very overweight’.

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**Figure 2.1:** Three measures of self-reported weight status from the SSA 2016 compared with the Scottish Health Survey 2015 BMI measurement (%).

- SSA Module (BMI)
- SSA Module (description)*
- SSA Module (figures)
- Scottish Health Survey

![Graph showing BMI distributions for men and women comparing SSA data with Scottish Health Survey data.](image-url)
Are the consequences of excess weight recognised?

What this means
The health impacts of the current levels of overweight and obesity in Scotland are likely to be underestimated by the population. This may impact on individuals’ motivation to address their own weight issues and also on support for action to address the high levels of obesity in Scotland.

Key findings
It was recognised that the current high level of obesity harms Scotland, although most respondents thought the harm caused by people smoking or drinking alcohol was greater.

There was a relatively low level of concern about being a bit overweight, however, the harms of being obese were well recognised.
Is obesity recognised as a problem for Scotland?

The three main health risks facing Scotland and other European countries are excess alcohol consumption, overweight and obesity, and tobacco use.16

The risks to health from being obese or overweight are comparable, if not greater, than that from alcohol and tobacco use15 and the costs of overweight and obesity to the NHS are higher than for alcohol or tobacco use.16

Results

Most respondents recognised that the current levels of obesity and overweight are harmful to Scotland, but alcohol consumption and smoking were still considered to be more harmful to Scotland than obesity.

When asked what harms Scotland either ‘a great deal’ or ‘quite a lot’:

- 69% said obesity
- 76% said smoking
- 85% said alcohol

Those with a higher level of educational qualifications were more likely to consider that the current levels of obesity and overweight harm Scotland (Table A2a in the accompanying appendix document).
### Concerns about being overweight

**Respondents were asked ...**

How much do you agree or disagree with the following statement?

* There is no reason to worry about being a bit overweight.

### Results

There was a relatively low level of concern about being overweight.* Only a minority (39%) disagreed with the statement that ‘there is no reason to worry about being a bit overweight’.

Women were more concerned about being overweight than men. There was little notable variation in the level of concern about being overweight across other population groups (Table A3 in the accompanying appendix document).

Those who identified themselves as overweight** were at least as aware of the consequences of being overweight as the rest of the population (Table A3 in the accompanying appendix document). In total, 41% of those who identified themselves as overweight disagreed with the statement, a similar proportion (37%) to those who identified themselves as ‘about the right weight’.

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### Are the health harms of being obese well understood?

**Respondents were asked ...**

Which, if any, do you think a person is more likely to get if they are very overweight, sometimes referred to by doctors as ‘obese’?

Options given were: heart disease, high blood pressure, diabetes, stroke, depression, arthritis, shingles, some cancers, infertility, liver disease and asthma. All but shingles are associated with obesity.

### Results

Awareness of the health risks of obesity was high (Table 3.1):

- 26% identified between nine and 11 health risks of obesity correctly and a further 43% gave between six and eight correct answers.
- Most correctly identified the cardiovascular conditions such as heart disease and high blood pressure. Diabetes (type 2)*** was also well recognised as a risk of being obese.
- Infertility, liver disease and asthma were less recognised as risks of being obese.

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* This question specifically asked about being ‘a bit overweight’ to distinguish between the respondents’ concerns about obesity versus being overweight.

** Responding ‘a bit overweight’ or ‘very overweight’ to the question: Which of the following best describes how you think of yourself at the moment?

*** Questions referred to Diabetes rather than Diabetes Type 2 because pre-testing identified that inclusion of ‘Type 2’ caused confusion. If asked, the interviewer clarified the question referred to type 2 diabetes.
### Table 3.1: Awareness of health conditions that obese people are more likely to get

<table>
<thead>
<tr>
<th>Health condition</th>
<th>% identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>91</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>90</td>
</tr>
<tr>
<td>Diabetes</td>
<td>88</td>
</tr>
<tr>
<td>Stroke</td>
<td>65</td>
</tr>
<tr>
<td>Depression</td>
<td>60</td>
</tr>
<tr>
<td>Arthritis</td>
<td>57</td>
</tr>
<tr>
<td>Some cancers</td>
<td>43</td>
</tr>
<tr>
<td>Infertility</td>
<td>36</td>
</tr>
<tr>
<td>Liver disease</td>
<td>33</td>
</tr>
<tr>
<td>Asthma</td>
<td>29</td>
</tr>
<tr>
<td>Shingles*</td>
<td>8</td>
</tr>
</tbody>
</table>

* All but shingles are associated with obesity. Base: all respondents (1,237).

Men, those with lower levels of education, people aged 65 and over and those in the lowest income group were all more likely to only be able to identify between zero and five risk factors (Table A4 in the accompanying appendix document).

Those who identified themselves as overweight were as aware of the conditions associated with obesity as the rest of the population.
Barriers to maintaining a healthy weight

Most people felt that cheap fast food was too easily available.

Cost and lack of time were considered barriers to both getting a healthy diet and getting enough physical activity by some, but not the majority, of people.

However, there was a large variation in the views between groups on whether cost was a barrier in achieving a healthy weight. For those with less financial resources, the cost of a healthy diet and (to a lesser degree) cost of getting enough physical activity was reported to be a barrier.

What this means

The range of opinions on the role of cost and time as a barrier to achieving a healthy weight will reflect different personal circumstances across the population. A range of interventions will be necessary to support the whole population to make health-promoting choices.
Results

Availability of ‘cheap fast food’

The vast majority of people agreed that ‘cheap fast food is too easily available’ (91%; Table A6a in the accompanying appendix document).

Lack of time

There was less agreement on whether or not time was a factor in being able to make healthy meals or be physically active (Table 4.1).

- A slightly higher percentage agreed that ‘most people lack the time to make healthy meals’ than disagreed.
- A smaller percentage agreed that ‘finding time to be physically active is difficult for most people’ compared with those who disagreed.

Table 4.1: Barriers to a healthy weight

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree (%)</th>
<th>Neither agree nor disagree (%)</th>
<th>Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Most people lack the time to make healthy meals’</td>
<td>46</td>
<td>11</td>
<td>43</td>
</tr>
<tr>
<td>‘Finding time to be physically active is difficult for most people’</td>
<td>39</td>
<td>16</td>
<td>44</td>
</tr>
<tr>
<td>‘Healthy food is too expensive for most people’</td>
<td>40</td>
<td>14</td>
<td>46</td>
</tr>
<tr>
<td>‘Getting enough physical activity is too expensive for most people’</td>
<td>16</td>
<td>7</td>
<td>76</td>
</tr>
</tbody>
</table>

Base: all respondents (1,237)
Different population groups had different opinions on the importance of lack of time as a barrier to making healthy choices. Those in the lower household income groups, those living in the most deprived areas and women were more likely to agree that ‘Most people lack the time to make healthy meals’ (Table A6b in the accompanying appendix document).

Cost of healthy choices

Cost was not considered a barrier by the majority of respondents to achieving a healthy diet or getting enough physical activity (Table 4.1):

- More people disagreed that ‘healthy food is too expensive for most people’ than agreed.

- Most people disagreed that ‘Getting enough physical activity is too expensive for most people’ – only 16% agreed with the statement.

Those living on a low income and those likely to have less financial resources (young people, those living in a materially deprived area and those with fewer educational qualifications) were more likely to agree that the cost of healthy food was considered a barrier (Table A6d in the accompanying appendix document):

- 50% of those on the lowest household income agreed that ‘healthy food is too expensive’ compared with 34% on the highest household income.

Similarly, for those on a low income, cost was considered more of a barrier to getting enough physical activity than people on higher incomes (Table A6e in the accompanying appendix document):

- 26% in the lowest income group agreed that ‘Getting enough physical activity is too expensive for most people’ compared with only 8% in those with the highest income group.

50% of those on the lowest incomes think that healthy food is too expensive, compared with 34% of those on the highest incomes.
Key findings

There was a good understanding that diet and lack of physical activity were the main causes of being overweight in Scotland.

In some groups (e.g. those with no qualifications or living in low-income households) there was some lack of understanding of the role of inherited factors and low metabolism in becoming overweight.

Although both reduced physical activity and increased calorie consumption are important causes of the recent rise in obesity, increased consumption is currently the largest factor. Over the previous 30 years, energy-dense food has become both more available and cheaper than more nutritious foods such as fruit and vegetables; portion sizes have increased; and the number of fast food outlets has increased.\textsuperscript{17}
Results

There was a good understanding of the role diet and physical activity play in being overweight. Most people agreed that diet and exercise were factors that contributed to obesity (Table 5.1). There was little variation in views between age groups, the sexes, those with differing levels of education or household income.

There was also agreement on the role of diet and lack of physical activity, regardless of how people described themselves in terms of their own weight (Table A5a–c and Table A7 in accompanying appendix document).

Table 5.1: Respondents’ views on the causes of being overweight

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree (%)</th>
<th>Neither agree nor disagree (%)</th>
<th>Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most people who are overweight have put on weight because they eat too much</td>
<td>80</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Most people who are overweight have put on weight because of the type of food they eat</td>
<td>91</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Most people who are overweight have put on weight because they exercise too little</td>
<td>83</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Being overweight is something you inherit from your parents</td>
<td>16</td>
<td>17</td>
<td>66</td>
</tr>
<tr>
<td>Most overweight people put on weight because of low metabolism</td>
<td>20</td>
<td>21</td>
<td>55</td>
</tr>
</tbody>
</table>

Base: all respondents (1,237)
Diet or physical activity?

Most people (85%) felt that both a healthy diet and physical activity are ‘equally important’ in trying to lose weight. A small minority (12%) recognised that it would be more beneficial to prioritise improving diet and only 3% felt that tackling physical inactivity was a priority.

Those with higher educational qualifications were more likely to prioritise diet over physical inactivity (Table A7 in the accompanying appendix document).

Inherited factors and low metabolism

Those already disadvantaged were more likely to see low metabolism and inherited factors as causes of being overweight (Table A5d–e in accompanying appendix document):

- 35% of those with no qualifications agreed that ‘most overweight people have put on weight because of low metabolism’ compared with 11% of those with a degree.
- 24% of those with no qualifications agreed that ‘being overweight is something you inherit from your parents’ compared with 15% of those with a degree.

Viewing obesity as being caused by factors that cannot be changed (e.g. metabolism or inherited factors) may affect the degree to which individuals support measures to address the obesogenic nature of our broader environment.
Who is responsible for reducing obesity?

Most people identified reducing obesity as something that is both an individual and a collective responsibility.

Seeing obesity as only an individual responsibility was associated with:
- being less well informed about the risks of obesity
- lower levels of support for the presented evidence-based action to reduce obesity.

There is a need for a comprehensive and systematic approach to reducing obesity, involving multiple interventions that can be understood by the public.

The evidence suggests that the most effective action to reduce obesity in Scotland will be to address the aspects of our environment that prompt us to eat too much and to move too little. This will require input from all sectors of society – from governments, retailers, manufacturers, restaurants, employers, media organisations, educators, healthcare providers and individuals – to make significant changes to how they live and operate.
Who is responsible for tackling obesity?

Respondents were asked ...

Which, if any, of the people on this card do you think should be responsible for trying to reduce the number of people in Scotland who are very overweight, sometimes referred to by doctors as ‘obese’?

Note: The full list of possible options is given in Table 6.1. Respondents could select more than one option.

Results

Table 6.1: Who is responsible for trying to reduce the number of people in Scotland who are very overweight?

<table>
<thead>
<tr>
<th>Question</th>
<th>Agreed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals who are very overweight (obese) themselves</td>
<td>85</td>
</tr>
<tr>
<td>Healthcare professionals (e.g. doctors or nurses)</td>
<td>59</td>
</tr>
<tr>
<td>Food and drink manufacturers</td>
<td>58</td>
</tr>
<tr>
<td>Schools</td>
<td>57</td>
</tr>
<tr>
<td>Family and friends of people who are very overweight (obese)</td>
<td>56</td>
</tr>
<tr>
<td>The media</td>
<td>44</td>
</tr>
<tr>
<td>The government</td>
<td>44</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>44</td>
</tr>
<tr>
<td>Gyms or local leisure centres</td>
<td>29</td>
</tr>
<tr>
<td>Companies that help people diet (e.g. WeightWatchers)</td>
<td>25</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
</tr>
</tbody>
</table>

Base: all respondents (1,237)

Most thought ‘individuals who are very overweight (obese) themselves’ were responsible for reducing obesity in Scotland. The next most frequently selected groups were ‘healthcare professionals (e.g. doctors or nurses)’, ‘food and drink manufacturers’, ‘schools’ and ‘family and friends of people who are very overweight (obese)’ (Table 6.1).

The available categories were grouped into those reflecting ‘individual’ responsibility, ‘collective’ action or a combination of the two.
Those who were not as well informed about the health risks of being obese were more likely to hold the view that tackling obesity was a purely individual issue compared with those better informed about the health risks.

- 23% of those who were less informed about the health risks associated with obesity (identifying less than six of the health risks correctly) thought that the responsibility for tackling obesity was a purely individual issue. This compared with 8% for those who were better informed about the health risks (having correctly identified at least nine of the 11 risks) (Table A9 in the accompanying appendix document).

Reducing obesity levels in Scotland was seen largely as both an individual and a collective responsibility (Table 6.2). Most selected at least one individual option and at least one collective option.

Table 6.2: Responsibility for trying to reduce the current level of obesity in Scotland

<table>
<thead>
<tr>
<th>Response</th>
<th>Agreed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected only one or more ‘individual’ option</td>
<td>13</td>
</tr>
<tr>
<td>Selected both one or more ‘individual’ option and one or more ‘collective’ option</td>
<td>82</td>
</tr>
<tr>
<td>Selected only one or more ‘collective’ option</td>
<td>5</td>
</tr>
</tbody>
</table>

Base: all respondents (1,237)

This view was seen fairly consistently across the population, although older people were less likely to see reducing obesity as both an individual and collective responsibility (Table A9 in the accompanying appendix document).
The majority of people supported the presented actions to address the obesogenic nature of our food and physical environment. There was still a sizable minority who did not support some action areas – those who saw reducing obesity more as an individual issue were less likely to support the presented actions.

What this means
Action to address the obesogenic environment, including action that will make energy-dense food relatively more expensive and less widely promoted, is likely to be supported by the majority of people.
Respondents were asked if they would be in favour or against a range of interventions which fell into five different categories:

- taxation
- availability and price
- advertising, sponsorship and packaging
- support for those who are overweight
- manufacturing.

**Taxation**

**Respondents were asked ...**

I’m going to read out some things that some people have suggested might help reduce the number of people in Scotland who are obese or overweight. For each one, say whether you are in favour or against this idea.

- Putting a tax on high-fat foods which would increase their price?
- Putting a tax on sugary foods which would increase their price?
- Putting a tax on sugary fizzy drinks?
- Putting a tax on other kinds of flavoured drinks or milkshakes which are high in added sugar?

High-fat foods were described as ‘foods that are high in added fat including crisps, chocolate, pastries and some ready meals’.

High-sugar foods were described as ‘foods that are high in sugar, which includes some cakes, chocolate bars, sweets and some breakfast cereals’.

If asked, respondents were told sugary drinks do not include fruit juice or milk-based drinks without added sugar.

**Results**

There was good support for interventions involving taxation, with the most support for placing a tax on sugary fizzy drinks and least support for placing a tax on foods. This possibly reflects the discretionary nature of drinks over foods and recent media attention on a ‘tax’ on sugary drinks in the UK ([Table 7.1](#)).
Availability and price

Table 7.1: Being in favour of action aimed at reducing the number of people in Scotland who are obese or overweight

<table>
<thead>
<tr>
<th>Intervention</th>
<th>% in favour</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Taxation</strong></td>
<td></td>
</tr>
<tr>
<td>Tax on sugary fizzy drinks</td>
<td>62</td>
</tr>
<tr>
<td>Tax on other drinks high in sugar</td>
<td>55</td>
</tr>
<tr>
<td>Tax on sugary foods</td>
<td>53</td>
</tr>
<tr>
<td>Tax on high-fat foods</td>
<td>47</td>
</tr>
<tr>
<td><strong>Availability and price</strong></td>
<td></td>
</tr>
<tr>
<td>Shops not allowed to place unhealthy foods next to checkout</td>
<td>66</td>
</tr>
<tr>
<td>Limits on number of fast food outlets</td>
<td>60</td>
</tr>
<tr>
<td>Ban price offers on unhealthy foods</td>
<td>52</td>
</tr>
<tr>
<td><strong>Advertising, sponsorship and packaging</strong></td>
<td></td>
</tr>
<tr>
<td>Ban children’s cartoon characters/sports people on packaging of unhealthy foods and drinks</td>
<td>65</td>
</tr>
<tr>
<td>Ban sponsorship of unhealthy foods and drinks at sports events</td>
<td>63</td>
</tr>
<tr>
<td>Ban adverts for sugary drinks</td>
<td>56</td>
</tr>
<tr>
<td>Ban adverts for unhealthy foods</td>
<td>53</td>
</tr>
<tr>
<td><strong>Support services</strong></td>
<td></td>
</tr>
<tr>
<td>More free weight management courses</td>
<td>86</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td></td>
</tr>
<tr>
<td>Place limits on fat/sugar/salt added to foods/drinks by manufacturers*</td>
<td>82</td>
</tr>
<tr>
<td>Reduce size of unhealthy foods and drinks</td>
<td>57</td>
</tr>
</tbody>
</table>

Base: all respondents (1,237)

* This question used an alternative answer scale: ‘definitely should’, ‘probably should’, ‘probably should not’, and ‘definitely should not’. The finding represents the proportion who said either ‘definitely should’ or ‘probably should’.

Results

There was a high level of support for policies aimed at managing the availability and price of foods high in fat, sugar or salt (Table 7.1).

Although there are more fast food outlets in most deprived areas compared with the least deprived areas (Table 7.1, Table A8e in the accompanying appendix document).
Advertising, sponsorship and packaging

Respondents were asked …

How much are you in favour or against the following?

- Banning the use of children’s cartoon characters or sports personalities on packaging for food and drink high in fat, sugar or salt.
- Banning sponsorship of food and drink high in fat, sugar or salt at sporting events.
- Banning adverts for food high in fat, sugar or salt.
- Banning adverts for sugary drinks.

Results

The majority of people were in favour of at least one intervention placing restrictions on advertising, sponsorship and packaging of foods and drinks high in fat, sugar or salt.

A high proportion was in favour of banning the use of children’s cartoon characters on the packaging of food and drink high in fat, sugar or salt, regardless of whether they had children or not (see Table A8h in the accompanying appendix document).

Support services

Respondents were asked …

How much are you in favour or against …

- Providing many more free weight management courses for people who want to lose weight.

Results

Support for more weight management courses was high among all groups, and was similar for those who reported they were overweight and those who reported they were ‘about the right weight’ (Table A8l in the accompanying appendix document).
Views across different population groups

Those who felt that reducing obesity was both an *individual* and a *collective responsibility* (Table 6.2) were more likely to support all presented policies than those who felt that the issue is purely an individual responsibility (Table 8a-n in the accompanying appendix document).

Those who were more concerned about the consequences of being *overweight* were more likely to be in favour of nearly all suggested policies than those less concerned about the consequences of being a bit overweight.

Those who identified themselves as ‘overweight’ were as, or sometimes more, likely to be in favour of all suggested action compared with the rest of the population.

There was no consistent pattern in terms of which *age groups* supported the proposed policies.*

Those living in households with the *lowest income* were generally less supportive of the suggested actions, including both those that could potentially increase the cost of food (e.g. taxation) as well as policies that will not directly affect the price of food (e.g. restrictions on sponsorship).

Those with the highest level of *educational qualifications* were largely more supportive of the suggested actions than those with few qualifications.

Despite only 44% of the population identifying the *government* as responsible for reducing levels of obesity in Scotland (Table 6.1) respondents were broadly in favour of interventions that are implemented by the government (e.g. taxation, restrictions and regulations, Table 7.1). This suggests that respondents do not necessarily recognise ‘government’ action as extending to the policy options presented here.

* All ages were equally in support of taxation, those over 65 years of age were more in favour of banning adverts for unhealthy foods and sugary drinks, banning 2 for 1 offers, banning unhealthy food next to checkouts, banning using cartoons on packaging for children, and were less supportive of providing free weight management courses than younger people.
Summary and recommendations

Findings

- The public understands obesity as an issue that needs addressing.
- There is substantial public support for action to reduce obesity – specifically aspects of our broader environment that make it difficult to maintain a healthy weight.

People in Scotland were aware of the harms of obesity on health and understood current levels of obesity harm Scotland as a whole. However, they were less able to recognise obesity in themselves or others (see Recommendation 3). There was less concern about being overweight.

- The vast majority of respondents (91%) agreed that ‘cheap fast food is too easily available’.
- After support for free weight management courses the greatest support was for the reformulation of prepared food, i.e. reducing the amount of fat, sugar or salt added to food.
- There was also majority support for most of the proposed actions – including taxation on sugary foods and drinks, action to reduce the availability of foods high in fat, sugar or salt, restrictions on advertising and sponsorship, and restrictions on portion size.
- There was less support (47%) for taxation on foods high in fat, suggesting that, currently, the public perceive foods high in fat differently to those high in sugar.
- Those who saw reducing obesity as both an individual and a collective responsibility were more supportive of all presented policies than those who saw obesity as solely the responsibility of the individual.

In other surveys in England and the UK, there was similar support for action to tackle obesity. How an issue is framed is important in how the public views and supports related policies. More support for action on the obesogenic environment was seen from those who see obesity as having multiple causes and when obesity solutions are framed in terms of the benefits rather than the harms.

Recommendation 1

Discussion of obesity in Scotland should focus on the solutions, specifically how our broader environment can enable the population to achieve and then maintain a healthy weight.
The survey explored differences in attitudes to overweight and obesity across different population groups (see Section 1 for a description of the different population groups).

There were notable differences in:

- knowledge of the consequences of overweight and obesity
- attitudes to the causes of overweight and obesity
- support for action to reduce overweight and obesity.

Those living on low incomes and those with less education were less aware of the consequences of overweight and obesity and were more likely to see low metabolism as an important cause of overweight and obesity compared with those on higher incomes or with higher levels of education. They were less supportive of the presented actions to reduce overweight and obesity in Scotland.

In general, those on low income or with lower educational attainment are often already disadvantaged (see Section 1, page 7) and also are at greater risk of being overweight or obese.

Given the findings on the knowledge and attitudes to obesity in economically disadvantaged areas, it is important that action to tackle our obesogenic surroundings does not further increase these differences in the level of obesity across Scotland.

Evidence suggests that public support for policies is a factor in how effective a policy is implemented, complied with or enforced. Consider a policy to limit the number of fast food outlets to reduce the availability of foods high in fat, sugar and salt – implementing such a policy would require action on the part of local councillors.

Lower public support for limiting the number of fast food outlets might be expected to affect whether or not local councillors would advocate for such a policy in their area.

Lack of local support might also be expected to have an impact on the effectiveness of national policies. Consider a policy to regulate the display of foods high in fat, sugar or salt at supermarket checkouts where the local population (i.e. those responsible for ensuring compliance and those using the supermarket) isn’t supportive of the action. This policy may be less rigorously enforced.

For action to be effective across Scotland, vulnerable populations may need a more intensive approach – for example, greater attention to compliance and enforcement and more local community involvement and engagement.

**Recommendation 2**

To prevent increasing inequalities in obesity, a more intensive approach may be required to tackle the obesogenic environment in areas with more vulnerable populations.
The SSA 2016 survey showed that most people recognised the health harms of obesity and that the current levels of obesity are damaging to Scotland. However, people tended to identify obesity as much larger than the medical definition of obesity – with the increasing weight of the population, public perception of ‘normal’ weight has shifted. This means that people will tend to identify obese individuals as overweight but not obese. Given that respondents were also much less concerned about being a bit overweight, these findings suggest that the population will generally underestimate the harm caused by the current overweight levels.

Research from other public health fields (e.g. alcohol) suggests that concepts that are not well understood by the public are ineffective tools to promote public health:

- **Definition relevance**: The definition of obesity – based on BMI – is related to the associated levels of health risk and is important in research, medical and planning settings. However, the way people perceive the appropriateness of their weight is more complex. This is related to their body shape, fitness levels, general physical and mental health, and norms in their social groups. BMI, which is unable to accommodate the psychological dimension of health, is unlikely to play an important role in the public understanding of healthy weight.

- **Stigma**: The word ‘obesity’ has derogatory origins (obesus, meaning ‘having eaten until fat’) and unsurprisingly the public generally reacts negatively to the word in treatment settings. People who are obese are subject to stigmatising attitudes. To reduce the stigma there have been attempts to reframe obesity as a disease; however, this risks obesity being seen as a fixed, biological factor.

- **Social desirability** and ‘Othering’: As long as there are the stigmatising and negative responses to the term obesity there is likely to be ‘othering’. This is the process where obesity is seen as something defining others (the obesity commonly depicted in the media), not oneself. This process of ‘othering’ is seen with obesity in this and other studies.

Taken together, the findings from this survey and other work suggest that to effectively communicate about obesity to the public and other stakeholders, it will be necessary to explore more effective and acceptable ways to discuss the issues, for example using reference to achieving and maintaining a healthy weight (goal-oriented) rather than reducing levels of obesity.

**Recommendation 3**

To explore more effective and acceptable ways to discuss the issue of overweight and obesity.
A time for leadership

The majority of the Scottish population does not have a healthy weight. There needs to be a large-scale systemic change to reverse this trend. This will require strong leadership across all sectors of society including governments, retailers, food manufacturers, restaurants, employers, the media, educators, healthcare providers and communities.

Recommendation 4

Strong leadership is required across all sectors of society from governments, retailers, restaurants, employers, the media, educators, healthcare providers and communities.


3 WHO (accessed October 2017)


5 Cancer Research UK, 2016 (accessed October 2017)


9 GemeenteAmsterdam (accessed August 2017)


21 Kwan et al, 2012. Lay perspectives on the biomedical paradigm on ‘obesity’: Theorizing weight, health and happiness. Social Theory & Health, 10 pp. 61-77


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