

## Section 5: health promotion and preventative services

# Obesity



a single version of the truth



## Related briefings in the JSA for Health and Wellbeing

Briefing (and hyperlink)	Section
<a href="#">Obesity</a>	Children and young people
<a href="#">Health eating and physical activity</a>	Children and young people
<a href="#">Diabetes</a>	Burden of ill-health: general health
<a href="#">Cardiovascular disease (CVD)</a>	Burden of ill-health: general health
<a href="#">Health promotion projects</a>	Health promotion and preventative services
<a href="#">Physical activity &amp; healthy eating</a>	Health promotion and preventative services

## Outcome Frameworks summary

The Public Health Outcomes Framework for England, 2013-2016<sup>1</sup> outlines the overarching vision for public health as “to improve and protect the nation’s health and wellbeing, and improve the health of the poorest fastest”. The NHS Outcomes Framework 2014/15<sup>2</sup> set out how the improvement of healthcare outcomes for all will be the primary purpose of the NHS. The following indicators from these frameworks are relevant to this section.

Framework	Reference	Indicator
Public Health	1.16	Utilisation of green space for exercise/health reasons
Public Health	2.11	Diet
Public Health	2.12	Excess weight in adults
Public Health	2.13	Proportion of physically active and inactive adults
Public Health	2.17	Recorded diabetes
Public Health / NHS	4.4 / 1.1	Mortality from cardiovascular diseases

## Edition

Edition	Version no.	Changes/Comments
2012/13	1	N/A
2012/13	2 (not published)	QOF updated (2011/12) NICE guidance PH42 added NOO adult weight factsheet added
2013/14	1	

## Executive summary

Obesity is a major contributor to premature mortality, morbidity and disability, and in Wiltshire, 25.2% of adults are classified as obese, more than in the South West or England. Obesity in adults is expected to continue to rise. Local obesity services include Slimming on Referral, Counterweight, physical activity on referral, health trainers and Health Checks, and these provide local mechanisms of tackling the obesity crisis.

## Why this area is important

Obesity in the UK is increasing and the UK now ranks 6th among thirty-four developed nations for rates of obesity<sup>3</sup>. Obesity is a major contributor to premature mortality, morbidity and disability, in particular to increased rates of cardiovascular disease and diabetes (see the [Cardiovascular disease](#) and [Diabetes](#) section).

The degree of overweight or obesity in adults should be defined as set out in table 1.

**Table 1: Obesity classifications for adults**

Classification	BMI (kg/m <sup>2</sup> )
Healthy weight	18.5-24.9
Overweight	25-29.9
Obese	30 or more

Source: NICE<sup>4</sup>

The disease consequences of being overweight or obese costs the NHS an estimated 5-6% of the total NHS budget<sup>5</sup>. Beyond these costs there are broader impacts on the economy as a whole from e.g. work hours lost, sick benefits, long term disability issues. The personal and social consequences of obesity include:

- An obese person incurs 25% higher health expenditures than a person of normal weight in any given year.
- Obese people earn up to 18% less than non-obese people.
- A severely obese person is likely to die 8-10 years earlier than a person of normal weight.
- Children who have at least one obese parent are 3 to 4 times more likely to be obese.
- A comprehensive prevention strategy would avoid 70,000 deaths annually from chronic diseases in England<sup>6,7</sup>.

In 2011, 2.5% of adults in England were morbidly obese – BMI 40 or above – 1.7% of men and 3.2% of women<sup>8</sup>. In a recent meta-analysis people aged 35-59 years with BMI 40 to 50 were reported to be five times more likely to die from ischaemic heart disease than those with BMI 22.5 to 25<sup>9</sup>. Their risk of dying from other conditions such as stroke, diabetes and some cancers are also significantly higher.

Aside from a reduced risk of premature mortality, the health benefits of a 10% loss in bodyweight to an obese or overweight adult include:

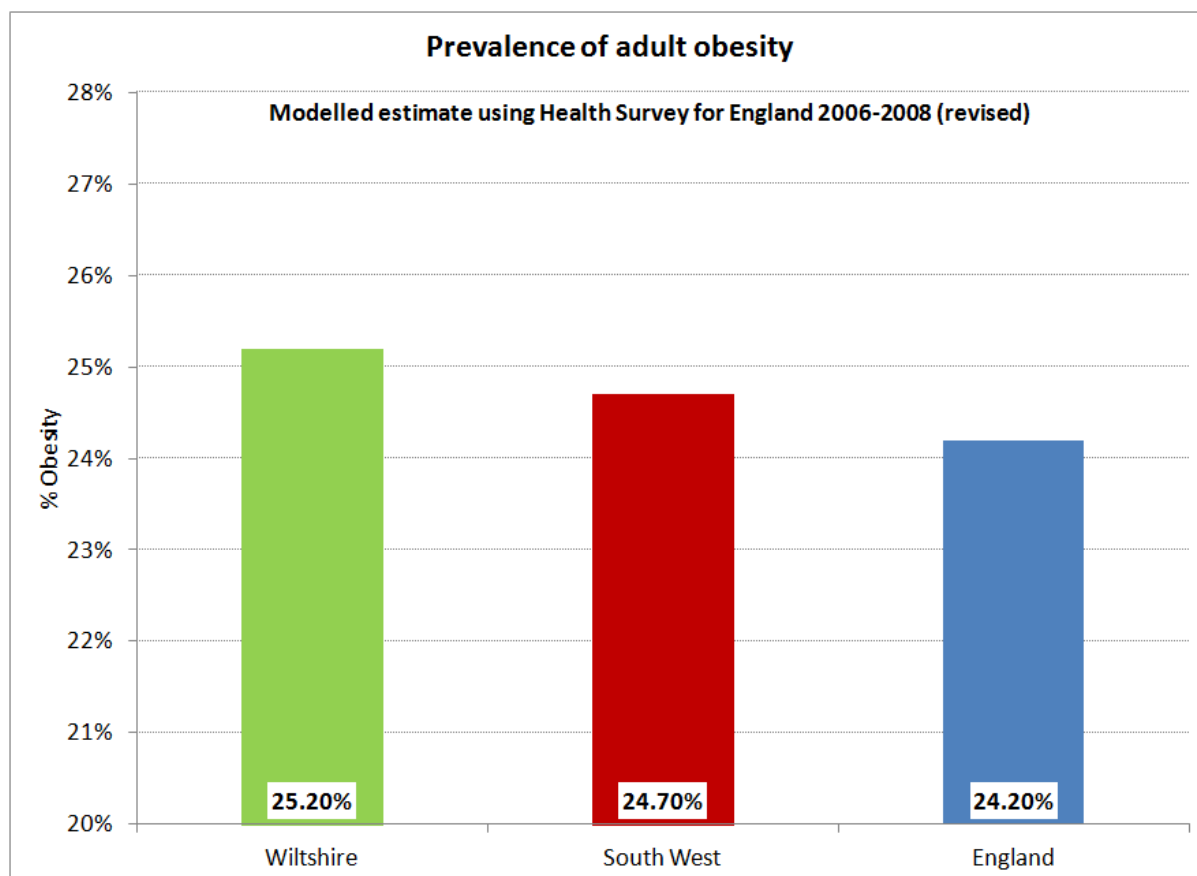
- Up to 50% fall in fasting blood glucose
- Over 50% reduction in risk of developing diabetes
- 10% fall in total cholesterol
- 15% reduction in low-density lipoprotein (LDL) cholesterol
- 30% fall in triglycerides
- 8% increase in high-density lipoprotein (HDL) cholesterol
- 10 mmHg fall in diastolic blood pressure
- Psychological: enhanced self-esteem; confidence<sup>10</sup>

## What are the needs of the population?

### Prevalence

According to modelled estimates, adult obesity prevalence is 25.2% in Wiltshire. As Figure 1 shows, this is higher than the estimated prevalence in both the South West (24.7%) and England (24.2%). Analysis of trends and future projections has suggested that obesity prevalence could continue to rise and by 2020, 30% of men and 28% of women may well be obese<sup>11</sup>.

Figure1:



However, 2012/13 data from the GP registered population indicates that only 9.6% of the adult population in Wiltshire are obese<sup>12</sup>. Comparing this figure with the modelled prevalence of 25.2% suggests that around 38% of the estimated obese population are in contact with GP services (and are thus included on the obesity register). GPs

are therefore in a highly advantageous position to offer weight management programmes to many obese people in Wiltshire.

Projections for Wiltshire based on the Health Survey for England (2005) estimate the number of obese people over 65 years will increase by 22% between 2012 and 2020<sup>13</sup>. In real terms these figures suggest there are currently over 23,500 obese people aged over 65 in Wiltshire, and in 2020 there will be over 28,700.

### **Hospital admissions**

In Wiltshire, in 2011/12, 123 people were admitted to hospital because of obesity (ICD10: E66)<sup>14</sup>. This equates to 26 people per 100,000 population which is higher than the England rate of 22 per 100,000 population and the South West rate of 15 per 100,000. England data shows that hospital admissions for obesity increased by 1.4% from 2010/11 to 2011/12, to reach 11,736. However, admissions have risen over 10 times from 1,054 in 2001/02<sup>15</sup>.

Over 2012/13, 138 patients were referred for Bariatric surgery in Wiltshire. NICE Obesity Guideline CG43 estimates that a bariatric surgery target/baseline should be 0.01% of the population. For Wiltshire this equates to 48 patients having bariatric surgery based on 2012 population estimates. This is very far from the potential number of morbidly obese people (with a BMI of 40 kg/m<sup>2</sup> or more) in Wiltshire (probably at least 5,000 based on a prevalence of 2.5% of the adult population)<sup>16</sup>.

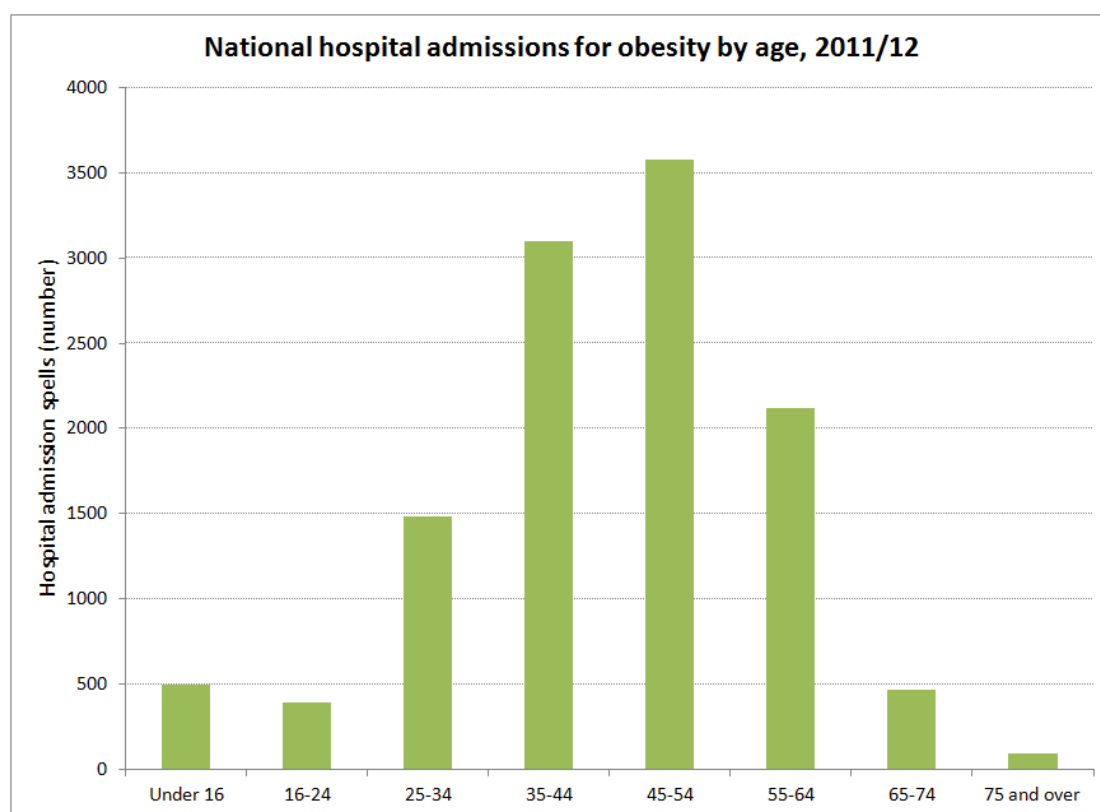
### **Mortality**

Obesity itself is not typically recorded as a cause of death, as it is the consequences of being obese which are the cause of death. This makes estimating the effect of obesity on mortality difficult<sup>17</sup>. Best estimates suggest that currently over 6% of deaths may be attributed to obesity<sup>18</sup>. However, this statistic is based on data from 1998, so its accuracy and usefulness is questionable due to the changes in mortality and obesity prevalence that have occurred since then. Regardless the evidence is clear that obesity contributes substantially to excess and early mortality in Wiltshire and nationally.

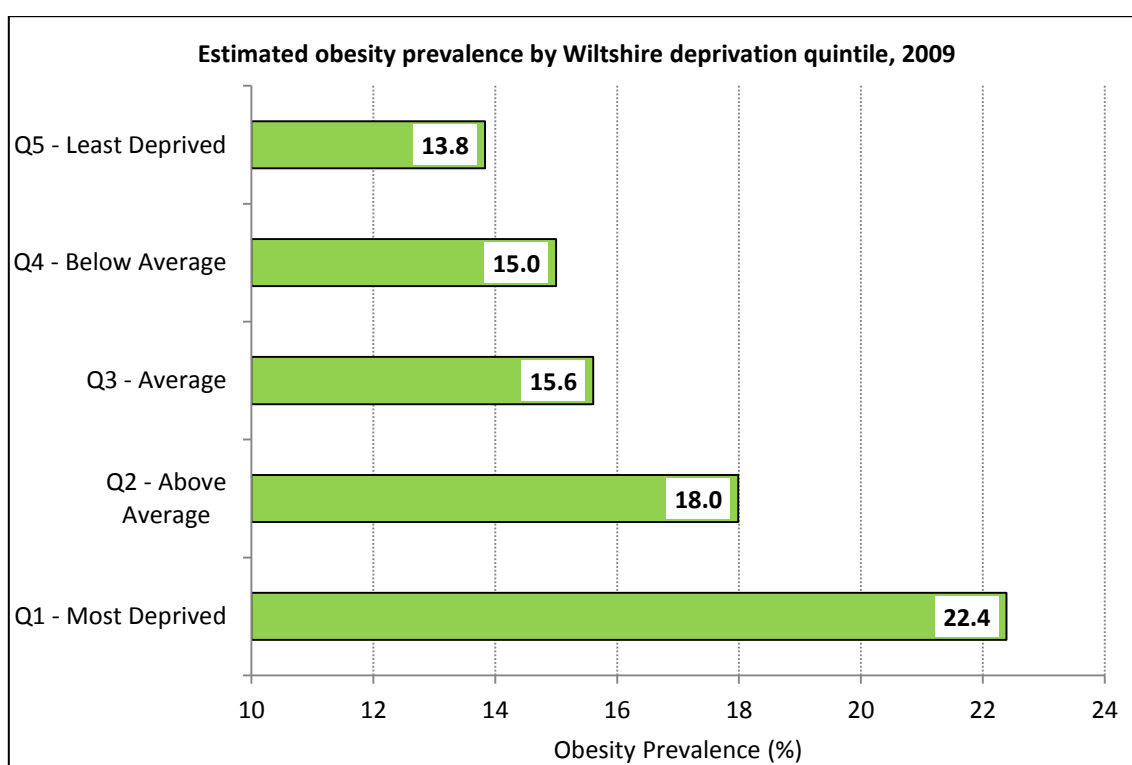
### **Population at risk**

Nationally, females are three times as likely as males to be admitted to hospital with a primary diagnosis of obesity (32 per 100,000 population compared to 11 per 100,000 population)<sup>19</sup>. Additionally, it has been reported that poorly educated women are 2 to 3 times more likely to be overweight than those with high levels of education, but almost no disparities are found for men.

Nationally, hospital admissions peak in people aged 45-54 (Figure 2), and around 30% of admissions are in this age group.

**Figure 2:**

In addition, the prevalence of obesity is higher in the more deprived areas of Wiltshire. Based on 2009 data it was estimated that obesity was over 8% higher in the most deprived population quintile compared to the least deprived (Figure 3).

**Figure 3:**

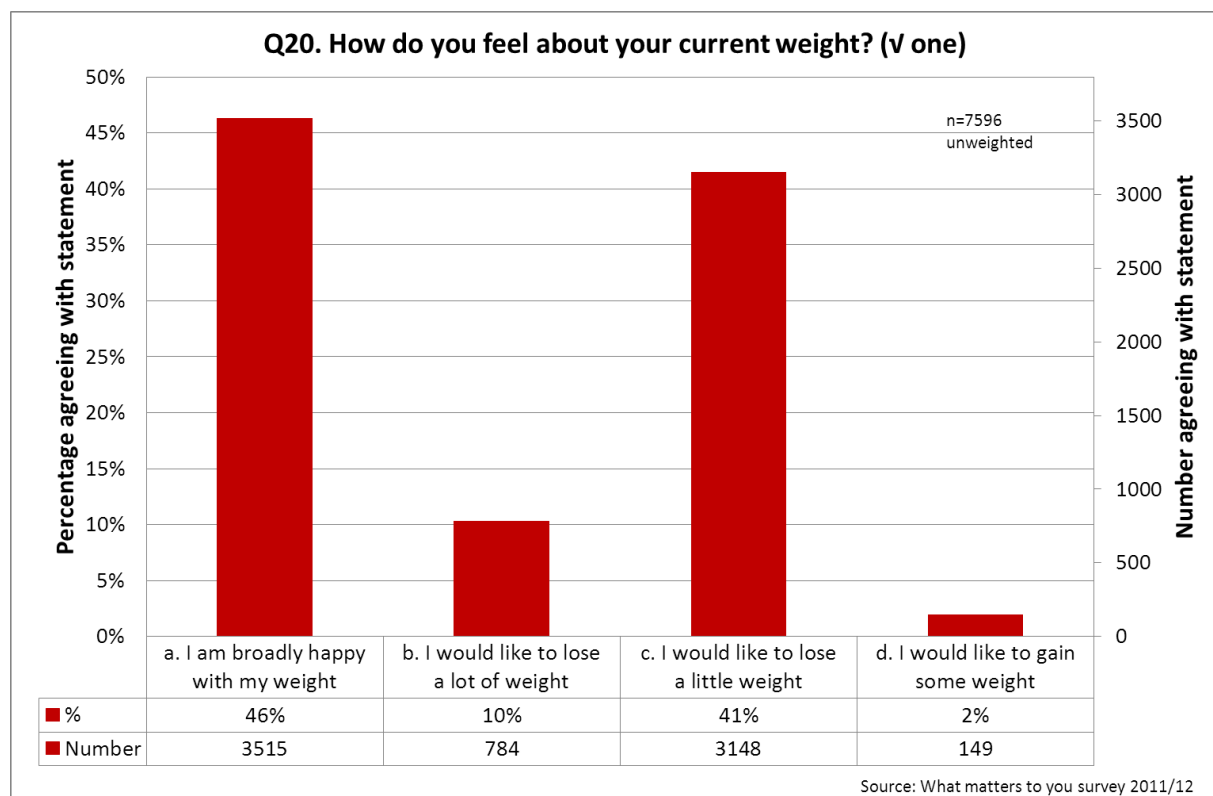
## What do service users / the public think?

The 'What Matters to You' Survey was carried out in December 2011 asking Wiltshire residents to comment on a range of topics that affect life where they live. The survey asked questions about residents' local neighbourhoods, their lifestyle and health, council spending and the natural environment.

Of particular interest was the question 'How do you feel about your current weight?'

The results to this question, together with demographic breakdowns, and analysis of responses to this question in the context of the rest of this survey and what we know about the local population, are presented below. For the full report see the ['What Matters to You: Healthy Lifestyles Report'](#)

**Figure 4:**



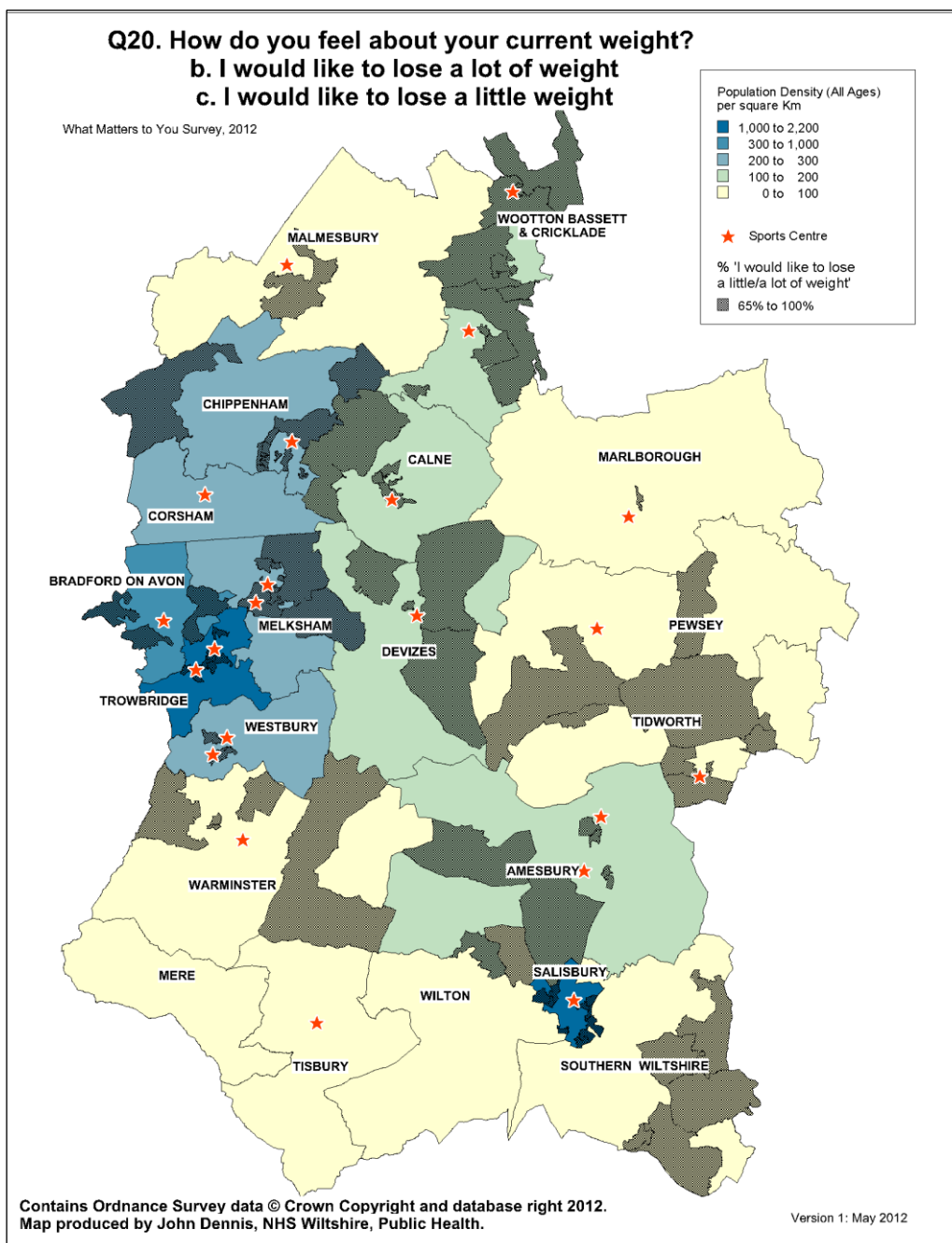
Just over half of respondents wanted to lose some weight; 41% wanted to lose a little and 10% a lot. 13% of women wanted to lose a lot of weight compared to 7% of men but similar (42% and 41%) percentages wanted to lose a little weight. 2% of men and women wanted to gain some weight. Results for individual Community Areas were broadly in line with the overall Wiltshire results in most cases.

There was a strong correlation between general physical health (Q22a) and people's feelings about their weight. 65% of those who were in very good health were broadly happy with their weight compared to only 26% in very bad health. 31% of those who were in very bad health wanted to lose a lot of weight compared to only 3% of those in very good health.



Figure 5 shows the areas in Wiltshire where greater than 65% of respondents stated they wanted to lose a little, or a lot, of weight. These areas are distributed throughout Wiltshire, with clustering mainly in, but not restricted to, more populous areas. This suggests that in many rural areas attitudes to weight may not be similar to those held in the rest of Wiltshire, and this variation may reflect underlying lifestyle differences.

**Figure 5:**





## What works and what resources are there?

### Current service provision

Obesity resources are available via the Wiltshire Intelligence Network: <http://www.intelligencenetwork.org.uk/health/obesity-resources/>. Lifestyle advice leaflets identify support for healthy eating, weight management and physical activity for 24 GP clusters. Wiltshire Child and Adult Obesity pathways are also available.

Care pathways are supported by a range of interventions to support adults who are overweight and obese, including:

- Active Health – 12 week programme provide through leisure centres.
- Counterweight - weight reduction programme in primary care.
- Slimming on referral – free 12 weeks attendance at local Weight Watchers or Slimming World group.
- Cooking / healthy living courses in children's Centres.
- Walking and cycling groups.
- Free family swimming for 3 months when a child has been found to be obese (in the annual child measurement programme in schools).
- Promoting use of change4Life resources.
- NHS Health Checks.
- Health Trainers working in the community.
- GP in-surgery weight management services.
- Plain Fit – exercise / healthy living programme.
- Obesity medication (prescription) when lifestyle approach alone fails.
- Bariatric surgery for morbid obesity – supported by commissioned 'tier 3' NHS service which carries out pre-assessment and post surgery support.

Details of these and other Wiltshire health promotion programmes and latest statistics can be found in the [health promotion projects topic report](#) of the Health and Wellbeing JSA.

### Guidance and national initiatives and data sources

A national policy document entitled [Healthy Lives, Healthy People: A Call to Action on Obesity in England](#) was published in October 2011 by the Department of Health. The document sets out how the new approach to public health will enable effective action on obesity. The document sets out two ambitions:

- a sustained downward trend in the level of excess weight in children by 2020
- a downward trend in the level of excess weight averaged across all adults by 2020

**Responsibility Deal:** Launched in 2011; aims include: improving the nation's diet and decreasing overall calorie intake through pledges from food manufacturers; increasing participation in sport and physical activity by working with business, the third sector and others.

[NICE: Local government public health briefing](#): Preventing obesity and helping people to manage their weight (May 2013). This briefing summarises NICE's recommendations for local authorities and partner organisations on preventing people becoming overweight and obese and helping them to manage their weight. It is particularly relevant to health and wellbeing boards.

[NICE Obesity Guideline CG43](#) sets out a pathway for tackling obesity. It recommends using behaviour change approaches (diet, physical activity) exhaustively before progressing to obesity medication. The final intervention in the pathway is bariatric surgery.

[NICE Obesity: working with local communities guideline PH42](#) This guidance aims to support effective, sustainable and community-wide action to prevent obesity. It sets out how local communities, with support from local organisations and networks, can achieve this. It focuses on the prevention of overweight and obesity. The recommendations may also help people who are already overweight or obese to lose weight, or to prevent them from gaining further weight.

[NICE PH Guidance 41: Walking and Cycling](#) and [NICE PH Guidance 46: BMI and waist circumference - black, Asian and minority ethnic groups](#)

[Start Active, Stay Active](#): A report on physical activity for health from the four home countries Chief Medical Officers, 2011.

[Physical Activity Factsheets](#) for different age groups.

[The National Obesity Observatory \(NOO\)](#) provides the point of contact for wide-ranging authoritative information on data, evaluation and evidence related to weight status and its determinants. It also produces a twice-annual newsletter with the latest projects, analysis and publications. NOO has also created an [information set](#) specifically designed to guide and support local authorities.

[The NOO presentation 'Examining available data for the adult population'](#) provides information on trends in, and the current situation of, adult obesity in the UK. An [adult weight factsheet](#) is also available to download.

[Change4Life programme](#). It is published as a companion to Healthy Lives, Healthy People: A call to action on obesity in England and describes how the Change4Life social marketing programme will support the achievement of the new national obesity ambitions, as well as promoting other, broader, lifestyle changes.

[National Diet and Nutrition Survey](#) – a rolling survey designed to assess the diet, nutrient intake and nutritional status of the adult population in the UK. 2008/09 to 2009/10 is available.

## Challenges for consideration

- The prevalence of obesity in Wiltshire was estimated at 25.2%. This is higher than either the South West or England estimates.
- All of the evidence suggests obesity prevalence (and associated hospital admissions) is increasing, and will continue to do so into the future.
- The strong associations between obesity and socio-economic status, age and gender which are apparent in Wiltshire.

## Contact information

### Document prepared by:

**Tom Frost**

Public Health Scientist  
Wiltshire Public Health  
Telephone: 01225 716791  
[tom.frost@wiltshire.gov.uk](mailto:tom.frost@wiltshire.gov.uk)

With input from:

**Mike Jones**

Public Health Specialist  
Wiltshire Public Health  
Telephone: 01225 716823  
[Mike.Jones@wiltshire.gov.uk](mailto:Mike.Jones@wiltshire.gov.uk)

and:

John Goodall, Public Health Consultant (Designate), Wiltshire Public Health

### 2012/13 document prepared by:

John Dennis, (former) Public Health Intelligence Specialist, Wiltshire Public Health

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<sup>1</sup> Healthy Lives, Healthy People: Improving outcomes and supporting transparency, Department of Health, January 2012 <https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency>

<sup>2</sup> NHS Outcomes Framework 2014/15, Department of Health, 2013.

<https://www.gov.uk/government/publications/nhs-outcomes-framework-2014-to-2015>

<sup>3</sup> Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en> ; national sources for non-OECD countries. <http://dx.doi.org/10.1787/888932916686>

<sup>4</sup> NICE clinical guideline 43, obesity: guidance on the prevention, identification, assessment and management of overweight and obesity in adults, NICE, December 2006.

<http://www.nice.org.uk/nicemedia/live/11000/30365/30365.pdf>

<sup>5</sup> Healthy Lives, Healthy People: A call to action on obesity in England, Department of Health, 13 October 2011. <http://tinyurl.com/Call-to-Action-Obesity>

<sup>6</sup> Fit not Fat, OECD 2010 [www.oecd.org](http://www.oecd.org)

<sup>7</sup> Social Care and Obesity: a discussion paper, Public Health England & Local Government Association, November 2013. [http://www.local.gov.uk/publications/-/journal\\_content/56/10180/5610298/PUBLICATION](http://www.local.gov.uk/publications/-/journal_content/56/10180/5610298/PUBLICATION)

<sup>8</sup> Health Survey for England, 2011 Adult Trend Tables. <http://www.hscic.gov.uk/catalogue/PUB09302>

<sup>9</sup> Prospective Studies Collaboration. Lancet 2009; 373: 1083-96)

<sup>10</sup> Department of Health, 2002. Prodigy Guidance on Obesity

<sup>11</sup> National Heart Forum, 2010 Obesity Trends for Adults

<sup>12</sup> QOF, 2012/13

<sup>13</sup> Projecting Older People Population Information System: <http://www.poppi.org.uk/> accessed 28/11/13

<sup>14</sup> Statistics on Obesity, Physical Activity and Diet - England, 2013, Health and Social Care Information Centre, 20 February 2013. <http://www.hscic.gov.uk/catalogue/PUB10364>

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<sup>15</sup> Statistics on Obesity, Physical Activity and Diet - England, 2013, Health and Social Care Information Centre, 20 February 2013. <http://www.hscic.gov.uk/catalogue/PUB10364>

<sup>16</sup> Health Survey for England, 2011 Adult Trend Tables. <http://www.hscic.gov.uk/catalogue/PUB09302>

<sup>17</sup> [http://www.noo.org.uk/NOO\\_about\\_obesity/mortality](http://www.noo.org.uk/NOO_about_obesity/mortality)

<sup>18</sup> Tackling Obesity in Britain. National Audit Office (2001)

<sup>19</sup> Statistics on Obesity, Physical Activity and Diet - England, 2013, Health and Social Care Information Centre, 20 February 2013. <http://www.hscic.gov.uk/catalogue/PUB10364>