

## **Overweight and Obesity**

Overweight and obesity occur when energy intake from food and drink consumption is greater than energy expenditure through the body's metabolism and physical activity over a prolonged period, resulting in the accumulation of excess body fat. However, there are many complex behavioural and societal factors that combine to contribute to cause this.

Being obese or overweight can increase the risk of developing a range of serious diseases. The risks rise with BMI, and so are greater for obese individuals. Overall, moderate obesity (Body Mass Index (BMI) 30-35 kg/m<sup>2</sup>) was found to reduce life expectancy by an average of three years, while morbid obesity (BMI 40-50 kg/ kg/m<sup>2</sup>) reduces life expectancy by 8-10 years. This 8-10 year loss of life is equivalent to the effects of lifelong smoking.

Promoting physical activity is a priority for Somerset. The estimated annual healthcare costs of diseases related to overweight and obesity are expected to rise from £133.8m in 2007 to £148.4m in 2015 for Somerset.

## **Key Facts for Somerset**

- 66.1% of adult Somerset residents are overweight or obese compared to an England average of 64.6% ([Active People Survey 2012-14](#))
- The Somerset District with the highest rate is Sedgemoor in which 70.8% adults are overweight or obese.
- 20.1% of Somerset reception children and 28.8% of children in year 6 are overweight or obese ([NCMP 2016](#)).
- Based on national predictions for the wider social and economic costs of obesity, we estimate the cost to Somerset in 2015 was £563.92m, including £148.4m for annual healthcare costs alone.

The costs of obesity are not exclusive to health. Obesity has an impact on increased social care costs, increased sickness and absence. Links have been made to pupil attainment and health and wellbeing (Public Health England 2014). Work is underway nationally to calculate these wider social and economic costs.

The page is split into two sections. First we look at obesity amongst children, followed by a section on adults. To go straight to the adults section, please click [here](#).

## **Overweight and obesity amongst Children**

Studies show that children who are overweight or obese have an increased risk of becoming overweight or obese in adulthood.

## **National Child Measurement Programme (2015/16)**

Established in 2005/06, the National Child Measurement Programme (NCMP) for England records height and weight measurements of children in Reception (typically aged 4-5 years) and Year 6 (aged 10-11 years), and enables detailed analysis of prevalence and trends in child overweight and obesity levels. The most recent national data, published in November 2017, continue to show

a clear correlation between deprivation and obesity prevalence for children in each age group. The figures below are based on where the pupils live, not the location of the school.

### Key facts for Somerset:

- In Reception Year (age 4-5 years), 22.3% of Somerset children measured in 2016/17 were either overweight or obese. This percentage was below both South West (23.1%) and England (22.6%) averages.
- In Year 6 (age 10-11 years), 30.3% of Somerset children were overweight or obese, lower than the national average (34.2%) but slightly higher than the regional average (30.1%).

	Underweight	Healthy weight	Overweight	Obese	Participation rate
England 2017	1.0%	76.4%	13.0%	9.6%	
South West 2017	0.5%	76.5%	14.2%	8.8%	
<b>Somerset 2017</b>	<b>0.6%</b>	<b>77.1%</b>	<b>13.6%</b>	<b>8.7%</b>	
Somerset 2016	0.8%	79.1%	11.6%	8.4%	94.1%
Somerset 2015	0.6%	76.2%	14.2%	9.0%	94.7%
Somerset 2014	0.4%	76.1%	14.1%	9.4%	92.4%
Somerset 2013	0.5%	76.3%	14.2%	9.1%	91.8%
Somerset 2012	0.5%	76.1%	14.3%	9.1%	91.3%
Somerset 2011	0.3%	76.3%	14.8%	8.6%	91.0%
<b>Weight Categories, Reception Year, 2011 to 2017</b>					

Source: NCMP, published on the [NHS Digital website](#).

	Underweight	Healthy weight	Overweight	Obese	Participation rate
England 2017	1.3%	64.4%	14.3%	20.0%	
South West 2017	1.0%	68.9%	13.9%	16.2%	
<b>Somerset 2017</b>	<b>0.8%</b>	<b>68.8%</b>	<b>13.9%</b>	<b>16.4%</b>	
Somerset 2016	1.4%	69.8%	13.5%	15.3%	89.8%
Somerset 2015	1.1%	67.5%	14.4%	17.0%	91.4%
Somerset 2014	1.0%	68.1%	14.5%	16.4%	86.9%
Somerset 2013	1.2%	69.5%	13.6%	15.8%	85.4%
Somerset 2012	0.8%	67.3%	14.9%	17.0%	88.0%
Somerset 2011	1.0%	68.5%	14.0%	16.5%	87.9%
<b>Weight Categories, Year 6, 2011 to 2017</b>					

Source: NCMP, published on the [NHS Digital website](#).

## Local data

Public Health England also publishes [obesity data](#) at electoral ward and MSOA levels, based on the NCMP in the period 2011/12-2013/14. In Somerset, the electoral wards with the highest proportions of obese children aged 4-5 were Williton (17%), Chard Avishayes (16%), Shepton West (15%), Bridgwater Eastover and Langport & Huish (each 14%). The lowest prevalence rate was found in Bishops Lydeard (3%).

For Year 6 (ages 10-11), the wards with the highest figures are Dulverton & District and Yeovil East (each 26%), Frome Park and Bridgwater Dunwear (each 25%). Areas with the lowest proportions of obese children in this age group were Comeytrowe (6%) and North Curry & Stoke St Gregory (9%).

Widening the definition to include overweight children, more than two-fifths of 10-11 year-olds in Dulverton & District, Bridgwater Dunwear, Street North and Yeovil Central fell into this category.

Please note that wards with fewer than five children measured as obese are not included.

## **Desire to Lose Weight**

The 2016 [Somerset Children and Young People Survey](#) of school and college children in Years 4, 6, 8, 10 and 12 included questions on healthy eating and diet. When asked specifically about their weight:-

- Two in three (66%) of girls in school sixth form or FE college said they would like to lose weight. In contrast, just 34% of boys said this.
- 53% of secondary school age girls (Years 8 and 10) said they would like to lose weight. As with the older age group, this is almost twice the proportion (28%) of boys.
- At primary school age, the difference between the sexes is much smaller: 31% of girls and 26% of boys would like to lose weight.
- The proportion of girls happy with their weight declines from 64% in Year 4 to just 30% at Further Education age.
- Pupils from single-parent families and secondary pupils who are young carers are relatively likely to want to lose weight.

## **Excess weight and Obesity amongst adults**

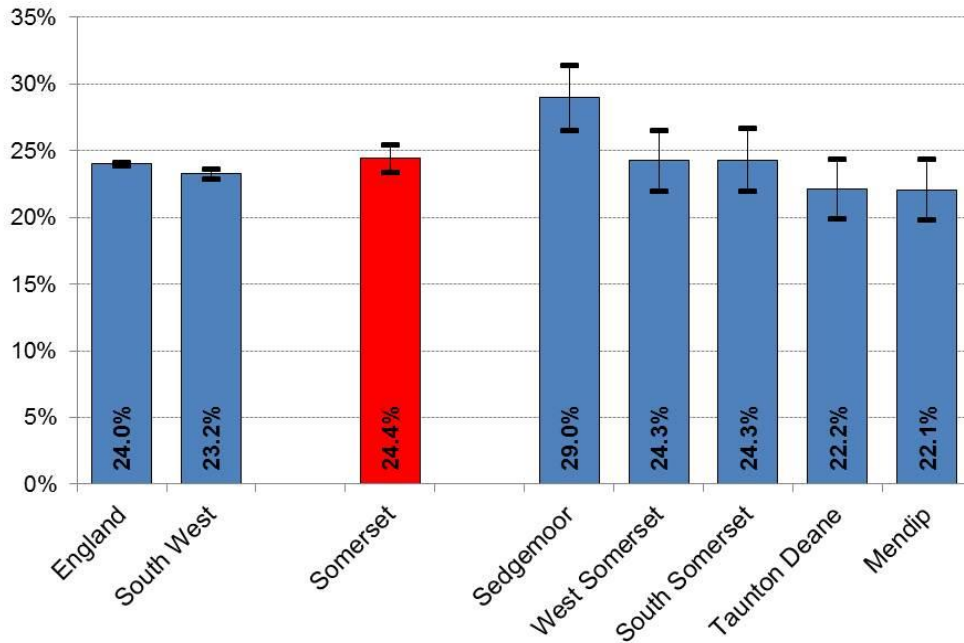
Questions on self-reported height and weight were added to the Sport England Active People Survey (APS) in January 2012 to provide data for monitoring excess weight. [Public Health England](#) released figures in January 2016, based on results in 2012-14. Note that results from the APS have been adjusted to account for variations between measured and self-reported height and weight as calculated from Health Survey for England data.

### **Key facts for Somerset:**

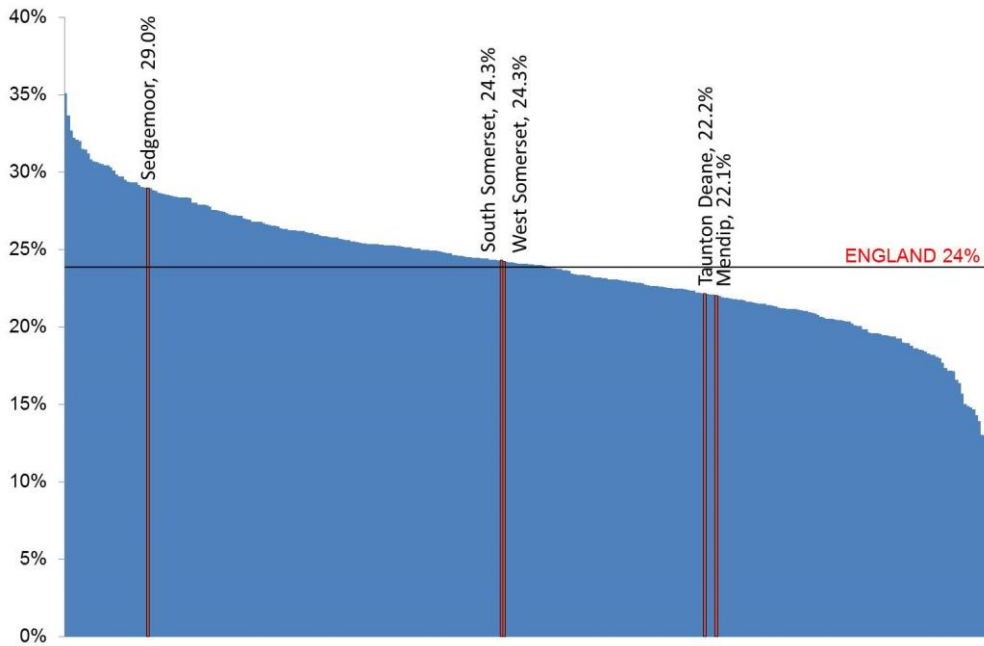
- An estimated 24.4% of Somerset adults are obese, in line with the England average of 24.0%.
- There are an estimated 113,612 obese adults in Somerset, of whom 55,760 are men and 57,852 are women.
- Almost two in three adults (66.1%) in Somerset have excess weight; that is, with a Body Mass Index (BMI) of at least 25kg/m<sup>2</sup>. This is significantly above the England and South West averages of 64.6% and 64.2%, respectively.
- The charts below show there is considerable variation within the county, with Mendip being the lowest and Sedgemoor notably higher than the rest of Somerset on both measures.

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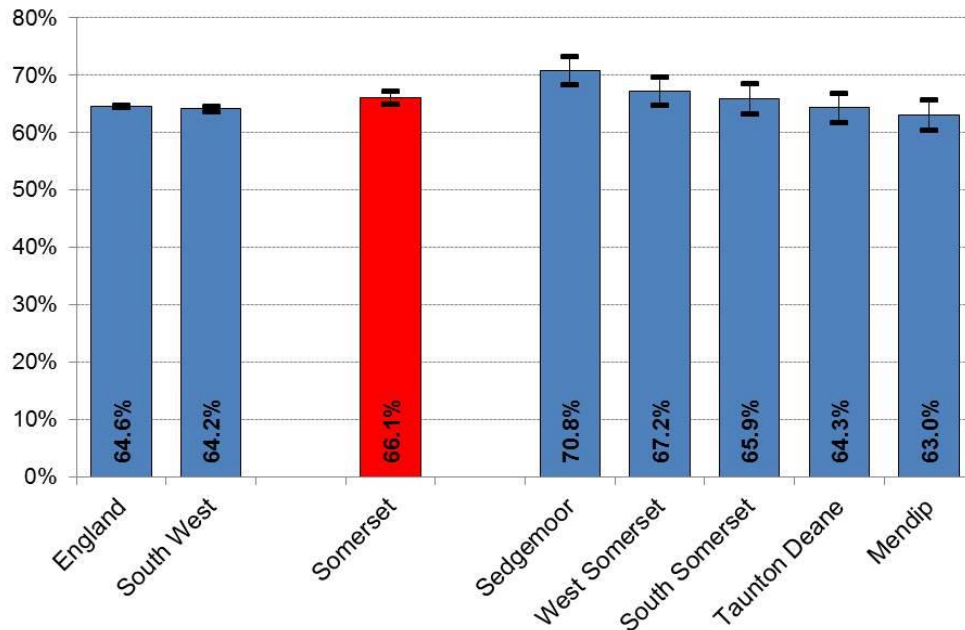
### % Obese Adults - Summary



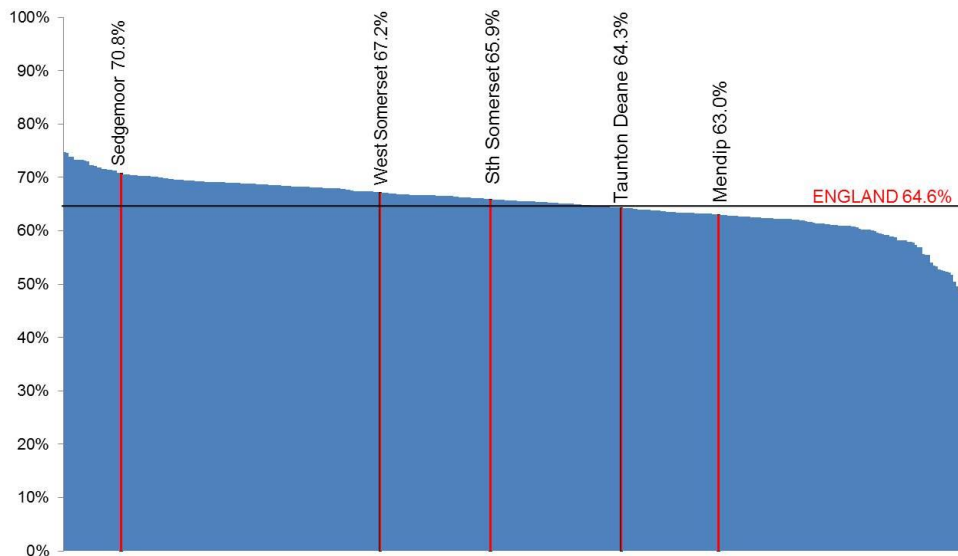
### % Obese Adults - All Unitary Authorities and Districts



## % Adults with Excess Weight - Summary



## % Adults with Excess Weight - All Unitary Authorities and Districts



Source: [Active People Survey](#)

### Hospital Admissions

In 2013/14, there were a total of 67 Finished Admission Episodes (FAEs) in NHS hospitals in Somerset with a primary diagnosis of obesity. There were 68 admissions in 2012/13 and 93 in 2011/12. Admission rates in Somerset are consistently below national averages for both males and females. In the last three years more than three times as many women as men have been admitted to hospital in Somerset with a primary diagnosis of obesity.

To return to the Children section, please [click here](#).

## Current Service Provision

Various physical activity opportunities are commissioned across Somerset. Details are available via the Somerset Activity and Sports Partnership visit [www.sasp.co.uk](http://www.sasp.co.uk)

## Recommendations for Action:-

Distinction between prevention and treatment is important. Once weight is gained it is difficult to reverse and therefore emphasis on prevention should be a priority through lifestyle, physical activity and population level interventions (such as active travel). In the absence of extensive evidence, prevention strategies are more likely to be effective than treatment and more intensive efforts should be targeted at those at particular risk of obesity.

The effectiveness of children's weight management is dependent on a family based approach with parental involvement and tailoring programmes according to local need. Lifestyle and community weight management programmes are first line treatment for those who are already overweight or obese.

The Somerset Health and Wellbeing board endorsed nine recommendations following the review of healthy weight services undertaken in 2014. These were:

1. This is a complex system. Although SCC services must be re-commissioned now, a joint commissioning approach is recommended for the future.
2. We need to do more targeted work with children and families.
3. There should be distinct food, healthy weight and physical activity strategies that have linked outcomes
4. There should be a common recording and reporting framework or system.
5. There should be targeted information for specific populations.
6. Future commissioning should be considered in relation to NICE guidance
7. A strategy for wider workforce development and training should consider healthy weight and physical activity (making every contact count)
8. There should be collaboration on local plans to influence obesogenic environment e.g. transport, housing, licensing.
9. The Health and Wellbeing Board should consider distribution of funding throughout the pathway and where funding should be proportionally allocated.

## Further Information

- Armstrong J, Reilly JJ; Child Health Information Team (2002) Breastfeeding and lowering the risk of childhood obesity, *The Lancet* 8;359(9322):2003-4
- Centre for Maternal and Child Enquiries (2010) [maternal Obesity in the UK: findings from a national project. \[online\]](#).
- Department of Health (2009) [Healthy Child Programme: Pregnancy and the First 5 Years of Life](#).
- Department for Education (2014) [Universal infant free school meals. March 6th 2014](#).
- Department of Health (2011). [Healthy lives, healthy people: a call to action on obesity](#).
- For data on **healthy diet and physical activity**, please [click here](#).
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