

Joint Strategic Needs Assessment



Excess weight and nutrition

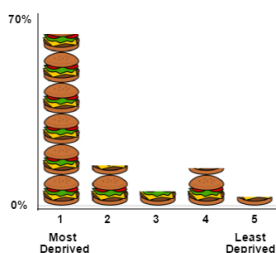
Last updated: June 2016

Isle of Wight summary



One third of 10 to 11 year old children are either overweight or obese

Two thirds of adults are either overweight or obese



Almost two thirds of take aways are located in the most deprived areas of the Isle of Wight

Three in five adults eat five or more portions of fruit and vegetables a day



Public Health foreword

“The obesity epidemic affecting the western world is caused by a multitude of factors in addition to individuals’ choice & behaviours. The Foresight report (2007) describes these causes as a complex web with over 100 personal and external factors contributing to the cause of this complex, societal problem. The effects from obesity have an impact on an individual’s health, local health and social care resources, and the Island’s economy.

The local data presented here helps to highlight the impact on our community. Trends over recent years are not dissimilar to those seen nationally.

For example, the prevalence of excess weight increased from 1993 to 2002 but has since plateaued with approximately 67% of men and 57% of women carrying excess weight. Severe obesity however is increasing with prevalence noted to be higher in women (3.5%) than in men (1.6%).

Local initiatives aim to ensure that healthy choices are easily accessible for all and they include the Family Wellbeing Platform, the Island’s free school meal and the Healthy Start programme.”

Emily Macdonald – Public Health Principal

Tackling obesity

Obesity occurs when energy intake from food and drink consumption is greater than energy expenditure through the body’s metabolism and physical activity over a long period, resulting in excess body fat. ¹

Being overweight or obese can increase the risk of developing a range of serious diseases. The effects of obesity on the body include obvious physical changes due to increased mass of fatty tissue and ‘invisible’ changes such as an increase of fat in blood and an altered response to insulin. ²

There are also indirect effects through lifestyle factors associated with obesity such as poor diet and sedentary lifestyle, which have an independent impact on health. ¹

The rapid rise of obesity in the UK is a major challenge. Analysis by the government’s Foresight report shows that over half of the UK adult population could be obese by 2050. ²

¹ Public Health England – Causes of obesity
http://www.noo.org.uk/NOO_about_obesity/causes

² Tackling obesities: Future choices – project report -
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/287937/07-1184x-tackling-obesities-future-choices-report.pdf

Measurements of excess weight

Body mass index (BMI) is the most widely used approach to measuring excess weight but it is also important to know that it is not a direct measurement of body fat mass or distribution and BMI measures may be skewed by very high muscle mass.

BMI is calculated using the following equation:

$$\frac{\text{Body weight (kg)}}{\text{height (metres)} \times \text{height (metres)}}$$

An adult BMI of between 25 and 29.9 is considered overweight and a BMI of over 30 is classified as obese.³

Defining overweight (or obese) children is a complex process as their height and weight changes over time therefore the calculation for identifying excess weight in children is slightly different to adults.⁴

The percentage of overweight or obese children and adults are jointly described as 'excess weight' in most of the analysis in this document.

3 National Obesity Observatory – Obesity measurement
http://www.noo.org.uk/NOO_about_obesity/measurement

4 A simple guide to defining Body Mass Index in Children.
http://www.noo.org.uk/uploads/doc/vid_11762_classifyingBMIinchild ren.pdf

Economic cost of obesity

Direct costs of obesity to the NHS have risen from £480 million a year in 1998 to £4.2 billion a year in 2007. Estimates of the indirect costs (such as loss of earnings through sick days) range between £2.6 billion and £15.8 billion.⁵

The NHS costs are wider than those attributable to primary and secondary healthcare activity; there are also equipment and infrastructure costs. Survey results from 2008 suggested that on average £60,000 was spent on specialist equipment (for example beds, chairs, hoists etc with a larger weight capacity) by each NHS Trust, a figure that had doubled over the last three years. This totalled over £10 million per year if all Trusts in England and Wales were spending the same.⁶

Organisations other than the NHS also have to plan for and accommodate the wider costs of obesity and obesity related disease for example, the increasing cost of social care.

5 Tackling obesity: Future choices – project report -
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/287937/07-1184x-tackling-obesity-future-choices-report.pdf

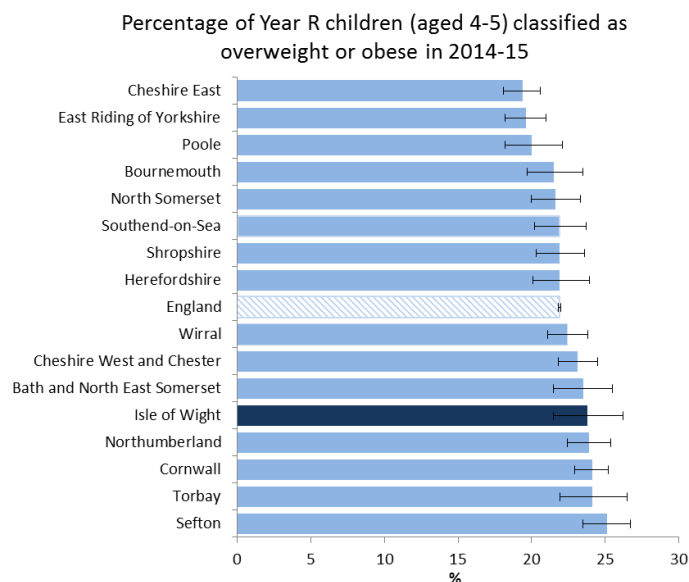
6 The National Obesity Observatory – the economic burden of obesity
http://www.noo.org.uk/uploads/doc/vid_8202_Burden_of_obesity_181010_MG.pdf

Excess weight in children

Childhood obesity and its associated risks are of a global concern, with the World Health Organisation classifying it as 'one of the most serious public health challenges of the 21st Century.

National Child Measurement Programme (NCMP) findings for 2014/15 shows that the percentage of Reception year children (aged 4-5) recorded as having excess weight on the Isle of Wight (23.8%) is higher (worse) than the national average (21.9%) however there is no statistically significant difference between the figures.

The horizontal bar chart below shows the percentage of children with excess weight in Year R on the Isle of Wight compared to statistical neighbours and England.

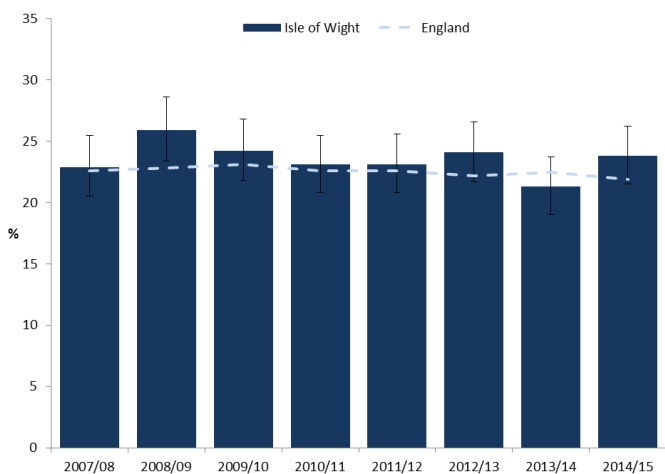


1. Number of children in Reception (aged 4-5 years) classified as overweight or obese in the academic year. Children are classified as overweight (including obese) if their BMI is on or above the 85th centile of the British 1990 growth reference (UK90) according to age and sex.
 Data Source: National Child Measurement Programme

NCMP trend data from 2007/08 to 2014/15 suggest that the prevalence of Reception year children with excess weight has flat lined both locally and nationally.

The time trend below shows the prevalence of children with excess weight in Year R both locally and nationally.

Percentage of Year R children (aged 4-5) classified as overweight or obese

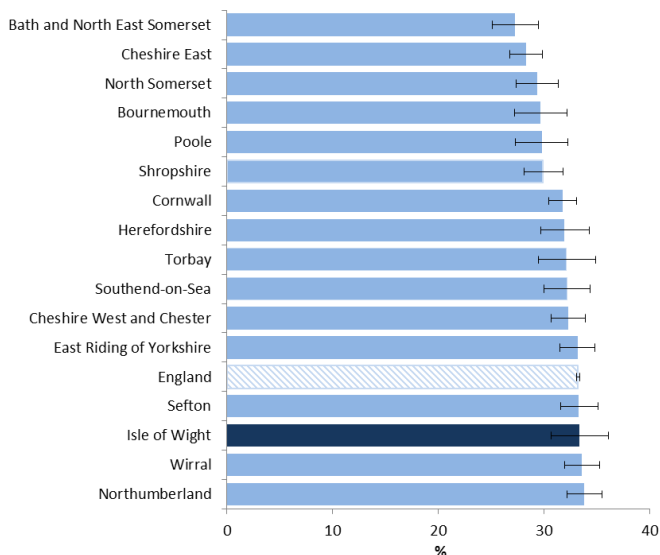


Data Source: National Child Measurement Programme

NCMP data for 2014/15 shows the percentage of Isle of Wight children with excess weight in Year 6 (aged 10-11) is 33.4%, similar to the national average (33.2%).

The horizontal bar chart below shows the percentage of Isle of Wight children with excess weight in Year 6 compared to statistical neighbours and England.

Percentage of Year 6 children (aged 10-11) classified as overweight or obese in 2014-15



1. Number of children in Year 6 (aged 10-11 years) classified as overweight or obese in the National Child Measurement Programme (NCMP) attending participating state maintained schools in England as a proportion of all children measured.

Data Source: National Child Measurement Programme

NCMP trend data from 2007/08 to 2014/15 suggest that the prevalence of year 6 children with excess weight has flat lined both locally and nationally.

The time trend below shows the percentage of children with excess weight in Year 6 both locally and nationally.

Percentage of Year 6 children (aged 10-11) classified as overweight or obese



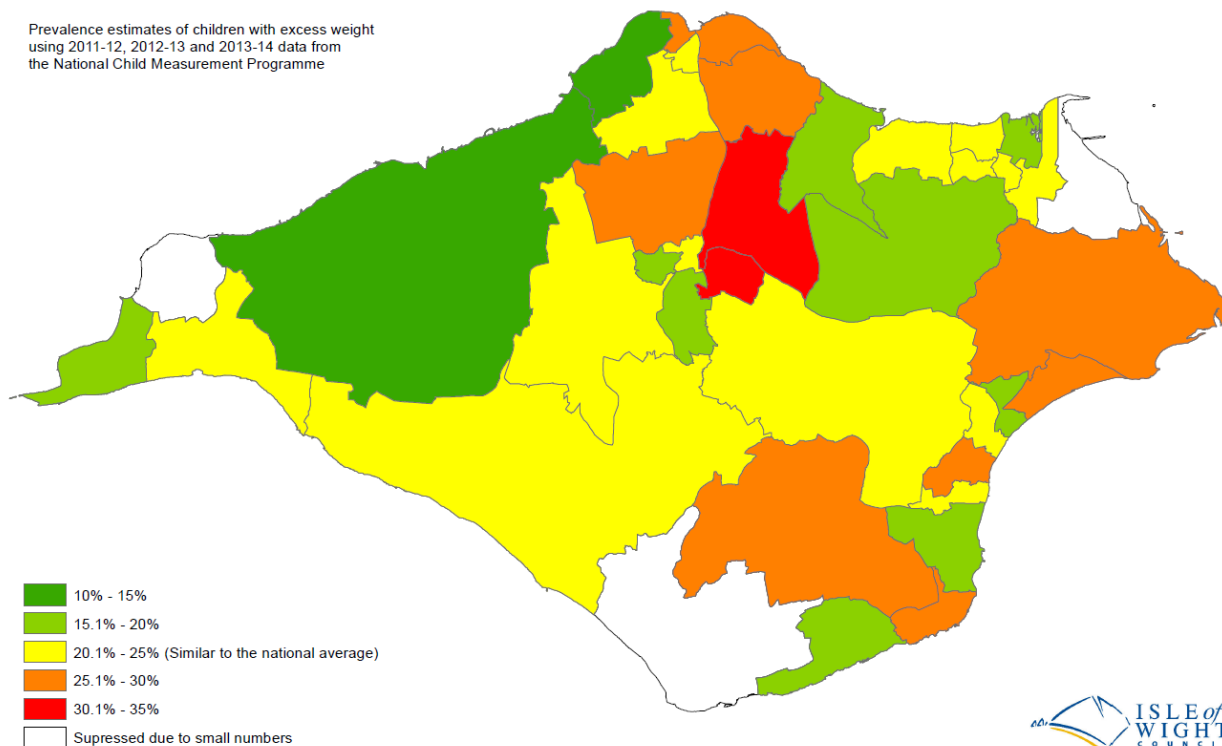
Data Source: National Child Measurement Programme

Childhood obesity is strongly associated to health inequalities such as income deprivation and social class. NCMP ward level estimates for three years of pooled data (2011/12 to 2013/14) show that these health inequalities exist locally.

The lowest prevalence of Reception year children with excess weight recorded was in Cowes West and Gurnard (12%) and by contrast the highest prevalence rate is Newport East (31.8%).

Prevalence of children with excess weight in Reception year (aged 4-5) by ward

Prevalence estimates of children with excess weight using 2011-12, 2012-13 and 2013-14 data from the National Child Measurement Programme



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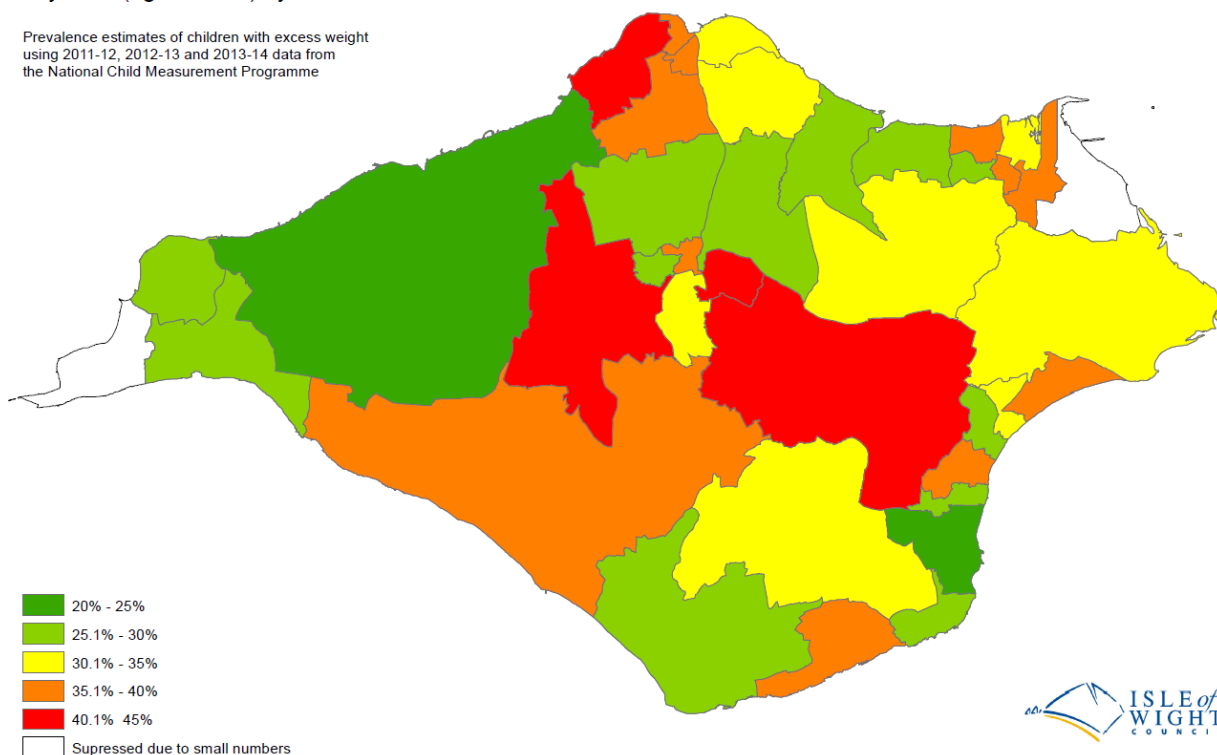
Produced by Isle of Wight Council Public Health Information Team



Using the same period of pooled data for Year 6 the lowest prevalence rate of children with excess weight is West Wight (20.6%) and the highest is again in Newport East (43.1%).

Prevalence of children with excess weight in year 6 (aged 10-11) by ward

Prevalence estimates of children with excess weight using 2011-12, 2012-13 and 2013-14 data from the National Child Measurement Programme



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Produced by Isle of Wight Council Public Health Information Team



Despite significant attention to the medical impacts of obesity, often ignored are the negative outcomes that obese children experience as a result of stigma, bias and discrimination.

The 2015 Children and Young People’s Survey developed by the Isle of Wight Public Health Team on behalf of the Children’s Trust captured many aspects of local children’s lifestyles including questions about bullying and body satisfaction.

Over 1,400 pupils were surveyed from Year 6 (Primary), Year 8 and Year 10 (Secondary) and responded to the question “Do you think you have been picked on or bullied about any of the following?” with an option of “your size and weight”.⁸

Results from the survey indicate that one in ten of Year 6 pupils (11.5%) and around one in five Year 8 and Year 10 pupils (22.5% and 19.3% respectively) had been bullied because of their weight. In summary this meant that almost one in five Isle of Wight pupils (17.2%) have received weight-based victimisation.

Given the high rates of childhood obesity, both school-level and policy-level remedies should address weight-based bullying on a broad level to improve the quality of life for young people on the Isle of Wight.⁹

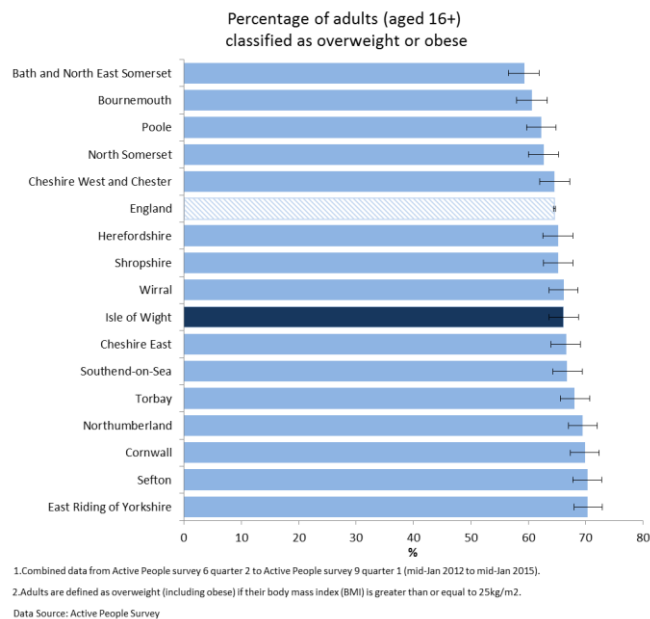
8 **Isle of Wight Children and Young People Survey (2015)**
<https://www.iwight.com/azservices/documents/2552-Children-and-young-peoples-survey-2015-final.pdf>

9 **Cross national perspectives about weight based bullying in youth: nature, extent and remedies**, Puhl. R et al (2015)
<http://onlinelibrary.wiley.com/doi/10.1111/ijpo.12051/full>

Excess weight in adults

Three years of pooled data from Sport England’s Active People Survey (2012-15) suggest that two thirds (66.2%) of Isle of Wight adults have excess weight which is similar to the national average (64.6%).

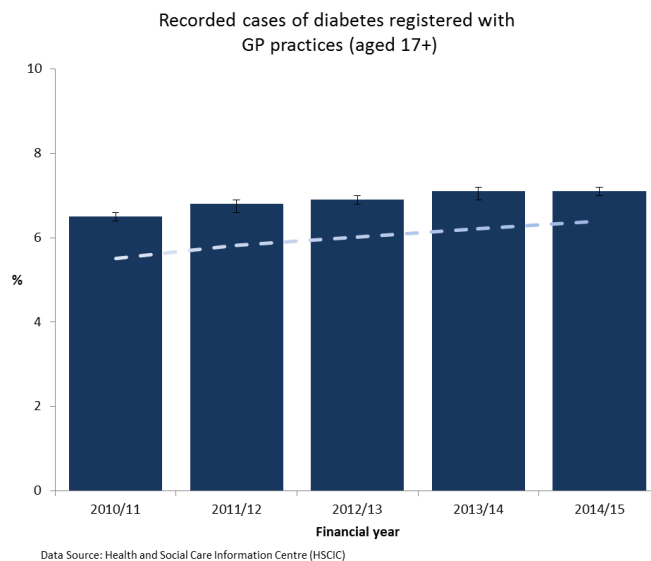
The horizontal bar chart below shows the percentage of adults with excess weight on the Isle of Wight compared to statistical neighbours and England.



Type 2 diabetes accounts for around 90% of all diabetes cases and is partially preventable by lifestyle changes such as increased levels of physical activity, weight loss and healthy eating.

Despite the proportion of Isle of Wight adults with excess weight being similar to the national average the prevalence of recorded diabetes locally has increased from 5.7% in 2010/11 to 6.6% in 2014/15 and remains statistically higher than the national average (6.4%).

The time trend below shows the prevalence of recorded diabetes among adults (aged 17+) locally compared to the national average.



Growing numbers of people are diagnosed with diabetes each year and this is partly due to rising levels of obesity among children and adults but also increased awareness and diagnosis by both patients and doctors.¹⁰

10 Rate of diabetes in the UK reaches record high, new figures show

<http://www.diabetes.co.uk/news/2015/jun/rate-of-diabetes-in-the-uk-reaches-record-high.-new-figures-show-99825977.html>

Maternal Obesity

Approximately half of all women of childbearing age in England are either overweight or obese. Maternal obesity can increase health risks for both mother and child both during and after pregnancy. For mothers this can include gestational diabetes, high blood pressure and depression. Maternal obesity has also been linked to low breastfeeding rates, adverse childhood cardiovascular and respiratory outcomes and childhood obesity.¹⁹

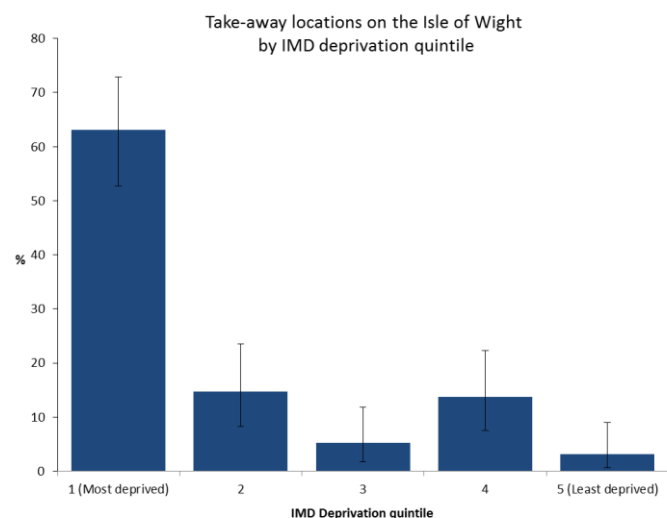
11 The National Obesity Observatory - Maternal obesity

http://www.noo.org.uk/NOO_about_obesity/maternal_obesity_2015

Fast food outlets

The modern environment has been referred to as 'obesogenic' or 'obesity causing' which means it is becoming increasingly difficult to maintain a healthy weight. Most people have easy access to cheap, highly palatable and energy-dense food frequently lacking in nutritional value such as fast food. The number of fast food takeaways on the nation's high streets has soared over the past two decades, with most opening in the poorest parts of the country.¹²

Locally there is a relationship between density of fast food outlets and area deprivation. Data provided by the Isle of Wight Council Regulatory Service suggests that almost two thirds (63%) of all take-away food businesses are located in the most deprived areas, with only 3% in the least deprived areas according to IMD 2015.



1. Food businesses categorised as take-aways on Isle of Wight Council planning and regulatory services department database

There are a growing number of local authorities using supplementary planning documents to create exclusion zones (most commonly within 400 metres) to restrict access of new hot food take-aways around Primary and Secondary schools, youth facilities, playing fields and leisure centres.¹³

12 National Obesity Observatory: Lifestyle

http://www.noo.org.uk/NOO_about_obesity/lifestyle

13 Takeaways toolkit

<https://www.london.gov.uk/sites/default/files/takeawaystoolkit.pdf>

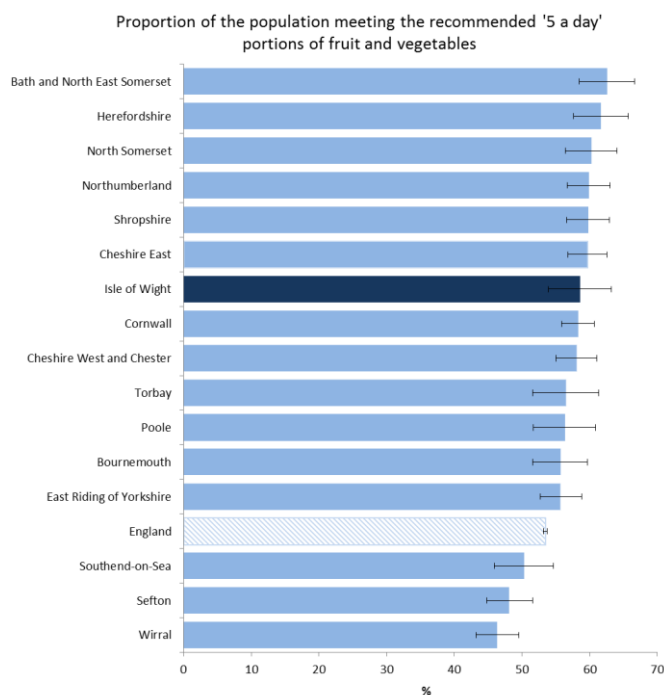
Food and diet

The importance of a healthy diet is outlined in the white paper 'Healthy Lives, Healthy People'.¹⁴

Sport England's Active People Survey records the proportion of the population (aged 16+) who when surveyed, reported that they had eaten 5 or more pieces of fruit and vegetables on the previous day.

Latest figures from 2015 suggest that three in every five (60.8%) Isle of Wight residents eat five or more portions of fruit and vegetables each day which is higher (better) than the national average (52.3%) and there is a statistically significant difference.

The horizontal bar chart below shows the percentage of Isle of Wight adults meeting the recommended five portions of fruit and vegetables each day compared to statistical neighbours and England.



1. Proportion of the population who, when surveyed, reported that they had eaten the recommended 5 portions of fruit and vegetables on the previous day.

Data source: Active People Survey 2014

The average number of portions of fruit (2.60) and vegetables (2.43) consumed daily by Isle of Wight residents in 2015 has fallen from the previous year (2.72 and 2.51 respectively) but remains higher than the national average.

Central government has recently announced a levy on sugary soft drinks with the aim of reducing the demand for sugary drinks by 1% and combatting childhood obesity by using the tax revenue raised to double the funding on primary school sport.¹⁵

14 **Healthy Lives, Health People'**

<https://www.gov.uk/government/publications/healthy-lives-healthy-people-our-strategy-for-public-health-in-england>

15 **Public Health – 'Sugar reduction: The evidence for action'**

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/470179/Sugar_reduction_The_evidence_for_action.pdf

Obesity prevention initiatives

The 'eatwell' guide provides the national recommendations for a healthy diet. It is recognised however that a guide alone is not going to change food and drink consumption. Individuals, families, communities, the food industry as well as local and central government all have a role to play to ensure our environment is less obesogenic.¹⁶

"We want to ensure that positive lifestyles are facilitated through the places where we live and work. We want to reduce levels of obesity in all ages"

Isle of Wight Health and Wellbeing Strategy 2013-16

Locally we are taking a multi-agency approach to supporting the population in making healthy choices. Local initiatives are underpinned by the 2013-16 Health and Wellbeing Strategy for the Isle of Wight which provides the overall approach to health and planning.¹⁷

The Family Wellbeing Platform provides a holistic approach to improving health and reducing inequalities on the Isle of Wight, with a particular focus on childhood obesity. The objective is to mobilise the wider public health workforce by making the most of every contact to promote healthy messages and initiate and embed change through a combination of conversations, advice, support and/or signposting to other services.

The Isle of Wight Council provides free school meals for all children in reception year, Year 1 and Year 2. Free school meals are also available for means-tested families with children in primary and secondary schools. This provides a nutritious meal

for children during lunchtime which can improve their diet and increase their concentration during lessons. It also has a cash value and has proven to lift thousands of families out of poverty. Over 2,000 pupils were eligible in Spring 2016 (13.4% of all pupils).¹⁸

Healthy Start vouchers are available for means-tested mothers and pregnant women to ensure that lower income families have access to important vitamins for both mothers and babies. Local uptake was reported at 70% of all eligible mothers in 2015.¹⁹

In the voluntary sector Ryde Aspire provide support for a wide range of community groups to cater for the needs of the local people from the recently renovated Holy Trinity Church.²⁰

Interventions based on improved nutrition and increased physical activity can be effective for individuals but shifting the population distribution of obesity will require interventions that target elements of the obesogenic environment, as well as an increased awareness amongst health professionals of the biological factors which make lifestyle changes more difficult for some than others.²¹

Stabilisation of levels of obesity will not be sufficient to meet the government's goal of a sustained downward trend in the level of both children and adults with excess weight by 2020.²²

16 **The 'eatwell guide'**

<https://www.gov.uk/government/publications/the-eatwell-guide>

17 **2013-16 Isle of Wight Health and Wellbeing Strategy**

<https://www.iwight.com/documentlibrary/view/health-wellbeing-strategy-2013-16>

18 **Isle of Wight Council - Free School Meals**

<https://www.iwight.com/council/OtherServices/Free-School-Meals/Key-Stage-1-and-2>

19 **Healthy Start Vitamins - a missed opportunity, McFadden et al (2015)**

<http://bmjopen.bmj.com/content/5/1/e006917.full>

20 **Aspire Ryde**

<http://www.aspireryde.org>

21 **Treating obesity seriously: when recommendations for lifestyle changes confront biological adaptations**, Ochner.C et al (2015), *The Lancet Journal*

[http://www.thelancet.com/journals/landia/article/PIIS2213-8587\(15\)00009-1/fulltext?utm_source=rss&utm_medium=rss](http://www.thelancet.com/journals/landia/article/PIIS2213-8587(15)00009-1/fulltext?utm_source=rss&utm_medium=rss)

22 **Healthy Lives, Healthy People**

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216096/dh_127424