Appendices

Statistics on Obesity, Physical Activity and Diet 2019

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This is a National Statistics publication

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority’s regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is NHS Digital’s responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Appendix A: Key sources

Some of the sources referred to in this publication are National Statistics. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. It is a statutory requirement that National Statistics should observe the Code of Practice for Official Statistics. The United Kingdom Statistics Authority (UKSA) assesses all National Statistics for compliance with the Code of Practice.

Some of the statistics included in this publication are not National Statistics and are included here to provide a fuller picture; some of these are Official Statistics, whilst others are neither National Statistics or Official Statistics. Those which are Official Statistics should still conform to the Code of Practice for Official Statistics, although this is not a statutory requirement.

Those that are neither National Statistics or Official Statistics may not conform to the Code of Practice for Official Statistics. Unless otherwise stated, all sources contained within this publication are considered robust.

1. Sources used in this report

1.1 The Active Lives Survey

Sport England

The Active Lives Survey (ALS) published by Sport England provides information on participation in sport and recreation. It was conducted for the first time in 2015/16 and replaces the Active People Survey. The survey classifies activity level into active, fairly active and inactive based on the number of minutes of moderate intensity equivalent (MIE) physical activity.

The Active Lives Survey publication is an Official Statistic.

https://www.sportengland.org/research/active-lives-survey/

1.2 Family Food

Department for Environment, Food and Rural Affairs (DEFRA)

Family Food is an annual publication which provides detailed statistical information on purchased quantities, expenditure and nutrient intakes derived from both household and eating out food and drink. Data is collected for a sample of households in the United Kingdom using self-reported diaries of all purchases, including food eaten out, over a two-week period. Where possible, quantities are recorded in the diaries but otherwise estimated. Energy and nutrient intakes are calculated using standard nutrient composition data for each of some 500 types of food. Current estimates are based on data collected in the ‘Family Food Module of the Living Costs and Food Survey’.

The Family Food publication is a National Statistic.

1.3 Health at a Glance

Organisation for Economic Cooperation and Development (OECD)

Health at a Glance presents a set of key indicators of health status, determinants of health, health care resources and activities, quality of care, health expenditure and financing in OECD countries.

http://www.oecd.org/health/health-systems/health-at-a-glance.htm

1.4 Health Survey for England

NHS Digital

The Health Survey for England series was designed to monitor trends in the nation’s health, to estimate the proportion of people in England who have specified health conditions, and to estimate the prevalence of certain risk factors and combinations of risk factors associated with these conditions. The surveys provide regular information that cannot be obtained from other sources on a range of aspects concerning the public’s health and many of the factors that affect health.

Each survey in the series includes core questions and measurements (such as blood pressure, height and weight, and analysis of blood and saliva samples), as well as modules of questions on topics that vary from year to year.

The Health Survey for England has been carried out since 1993.

The Health Survey for England is a National Statistic.


1.5 Hospital Episode Statistics (HES)

NHS Digital

Hospital Episode Statistics (HES) processes over 125 million admitted patient, outpatient and accident and emergency records each year.

HES is a data warehouse containing details of all admissions, outpatient appointments and A&E attendances at NHS hospitals in England. This data is collected during a patient's time at hospital and is submitted to allow hospitals to be paid for the care they deliver. HES data is designed to enable secondary use, that is use for non-clinical purposes, of this administrative data.

It is a records-based system that covers all NHS trusts in England, including acute hospitals, primary care trusts and mental health trusts. HES information is stored as a large collection of separate records, one for each period of care, in a secure data warehouse.

A detailed record is collected for each 'episode' of admitted patient care delivered in England, either by NHS hospitals or delivered in the independent sector but commissioned by the NHS.
Admitted patient care data is available for every financial year from 1989-90 onwards. HES data is now collected monthly.


### 1.6 National Child Measurement Programme

**NHS Digital**

Established in 2005/06, the National Child Measurement Programme (NCMP) for England records height and weight measurements of children in state-maintained schools in reception (aged 4–5 years) and year 6 (aged 10–11 years). However, 2006/07 is the first year that the data were considered an acceptable quality although obesity prevalence for year 6 children between 2006/07 and 2008/09 is felt to be an underestimate due to low participation. The programme provides robust data for the child excess weight indicators in the Public health Outcomes Framework, and is a key element of the Government’s approach to tackling child obesity.

Public Health England (PHE) has responsibility for national oversight of the programme, and on its behalf, the central collation and analysis of the NCMP data is coordinated by NHS Digital. Local Authorities have a statutory responsibility to deliver the National Child Measurement Programme.


### 1.7 National Diet Nutrition Survey: Public Health England


### 1.8 National Travel Survey

**Department for Transport**

The National Travel Survey is a household survey of personal travel by residents of England travelling within Great Britain. This is a long-term survey that began in 1988, with data collected annually in two ways: from an interview with household members, and from trip diaries which respondents keep for 7-day period. All trips, stages and distance statistics are based on the trip diary. In 2016, around 7,000 households and 18,000 individuals took part.

Data from the National Travel Survey feeds into the report ‘Walking and cycling statistics, England’ also produced by the Department for Transport. This presents information on walking and cycling in England. [https://www.gov.uk/government/collections/walking-and-cycling-statistics#history](https://www.gov.uk/government/collections/walking-and-cycling-statistics#history)
The National Travel Survey is a National Statistic.

1.9 Prescription Data
NHS Digital

The prescription data included in this report combines GP prescriptions data, taken from Prescribing Analysis and Cost Tool (PACT), and hospital prescriptions data, taken from Prescription Cost Analysis (PCA) system. Prescriptions are written on a prescription form known as FP10 and each single item on the form is counted as a prescription item. Net Ingredient Cost (NIC) is the basic cost of a drug. It does not take account of discounts, dispensing costs, fees or prescription charges income.

PCA data are national statistics.
https://digital.nhs.uk/data-and-information/areas-of-interest/prescribing

2. Other resources related to obesity, physical activity and diet

Annual Reports of the Chief Medical Officer
These reports provide an important record of the nation’s health and the major challenges faced by government in tackling the main health problems. The latest reports are available in the links below:

Chief Medical Officer’s annual report 2014: Women’s health

Chief Medical Officer’s annual report 2015: Health of the baby boomer generation

Association for the Study of Obesity
The Association for the Study of Obesity (ASO) was founded in 1967 and is the UK’s foremost charitable organisation dedicated to the understanding and treatment of obesity.
http://www.aso.org.uk

The Child Measurement Programme (CMP) for Wales contains findings of the programme of child measurements carried out with children attending reception class in schools in Wales.
http://www.wales.nhs.uk/sitesplus/888/page/67795
Food Standards Agency

The Food Standards Agency is an independent government department responsible for food safety and hygiene across the UK. They work with businesses to help them produce safe food, and with local authorities to enforce food safety regulations.

http://www.food.gov.uk/

Monitor of Engagement with the Natural Environment: Natural England

Provides trend data for how people use the natural environment in England.


National Institute for Health and Clinical Excellence (NICE)

The NICE website includes some information and clinical guidelines on the prevention, identification, assessment and management of overweight and obesity in adults and children.

http://www.nice.org.uk/CG43

National Obesity Forum

The National Obesity Forum (NOF) was established by medical practitioners in May 2000 to raise awareness of the growing health impact that being overweight or obese was having on patients and the NHS.

http://www.nationalobesityforum.org.uk/

PE and Sport Survey: Department for Education

The survey covers research into the proportion of pupils doing 2 hours of curriculum PE in partnership schools, and those exercising for at least 3 hours a week.


Public Health England

Public Health England make physical activity data from a variety of sources available on their Physical Activity profiles.

https://fingertips.phe.org.uk/profile/physical-activity

The Public Health England Obesity website (formerly the National Obesity Observatory) provides a single point of contact for wide-ranging authoritative information on data, evaluation, evidence and research related to weight status and its determinants. They work closely with a wide range of organisations and provide support to policy makers and practitioners involved in obesity and related issues.

Scientific Advisory Committee on Nutrition
The Scientific Advisory Committee on Nutrition (SACN) is an advisory committee of independent experts that provides advice to the Food Standards Agency and Department of Health as well as other government agencies and departments. Its remit includes matters concerning nutrient content of individual foods, advice on diet and the nutritional status of people.

www.sacn.gov.uk/

The Scottish Health Survey: Scottish Government
The Scottish Health Survey (SHeS) provides a detailed picture of the health of the Scottish population in private households and is designed to make a major contribution to the monitoring of health in Scotland.

http://www.scotland.gov.uk/Topics/Statistics/Browse/Health/scottish-health-survey

This project looked at a sustainable response to obesity can be implemented in the UK over the next 40 years. It gathered scientific evidence from across a wide range of disciplines to inform a strategic view of this issue.


Tackling Obesity in England: National Audit Office (NAO)
NAO research identified wide variation in the way general practices manage overweight and obese patients, and uncertainty about which treatment and referral options were the most effective.


The Taking Part Survey: Department for Culture, Media and Sport
The Taking Part survey provides reliable national estimates of adult and child engagement with sport, libraries, the arts, heritage and museums and galleries.

https://www.gov.uk/government/collections/sat--2

World Health Organisation
The WHO BMI database provides both national and sub-national adult underweight, overweight and obesity prevalence rates by country, year of survey and gender.

http://apps.who.int/bmi/

The Welsh Health Survey: Welsh Government
The Welsh Health Survey (WHS) provides information about the health and health-related lifestyles of people living in Wales.
World Obesity Federation

World Obesity Federation represents professional members of the scientific, medical and research communities from over 50 regional and national obesity associations. Through their membership they create a global community of organisations dedicated to solving the problems of obesity. They aim to lead and drive global efforts to reduce, prevent and treat obesity.

http://www.worldobesity.org/
Appendix B: Technical notes

These notes help to explain some of the measurements used and presented in this report.

1. Obesity

1.1 Adults Body Mass Index (BMI)

Overweight and obesity among adults is measured in the Health Survey for England (HSE) using Body Mass Index (BMI). The BMI is calculated by dividing weight in kilograms, by the square of the height in metres (kg/m²).

\[
BMI = \frac{\text{Weight (kg)}}{\text{Height}^2 (m^2)}
\]

Adults are classified into the following BMI groups:

<table>
<thead>
<tr>
<th>BMI range (kg/m²)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18.5</td>
<td>Underweight</td>
</tr>
<tr>
<td>18.5 to less than 25</td>
<td>Normal</td>
</tr>
<tr>
<td>25 to less than 30</td>
<td>Overweight</td>
</tr>
<tr>
<td>30 and over</td>
<td>Obese</td>
</tr>
<tr>
<td>40 and over</td>
<td>Morbidly obese</td>
</tr>
<tr>
<td>25 and over</td>
<td>Overweight including obese</td>
</tr>
</tbody>
</table>

1.2 National Institute for Health and Clinical Excellence (NICE) guidance

NICE guidance suggests that the measurement of waist circumference should be used for people with a BMI less than 35kg/m² to assess health risks (as shown in the table below). For adults with a BMI of 35kg/m² or more, risks are assumed to be very high with any waist circumference.

Assessing risk from overweight and obesity

<table>
<thead>
<tr>
<th>BMI classification</th>
<th>Waist circumference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Normal weight (18.5 to less than 25kg/m²)</td>
<td>No increased risk</td>
</tr>
<tr>
<td>Overweight (25 to less than 30kg/m²)</td>
<td>No increased risk</td>
</tr>
<tr>
<td>Obesity I (30 to less than 35kg/m²)</td>
<td>Increased risk</td>
</tr>
<tr>
<td>Obesity II (35 to less than 40kg/m²)</td>
<td>Very high risk</td>
</tr>
<tr>
<td>Obesity III (40kg/m² or more)</td>
<td>Very high risk</td>
</tr>
</tbody>
</table>
For men, low waist circumference is defined as less than 94cm, high as 94-102cm and very high as greater than 102cm. For women, low waist circumference is less than 80cm, high as 80-88cm and very high as greater than 88cm.

Further information on the NICE guidelines: [http://www.nice.org.uk/guidance/CG43](http://www.nice.org.uk/guidance/CG43)

### 1.3 Children - UK National BMI percentile classification

Due to differences in growth rates among boys and girls at each age, it is not possible to apply a universal formula in calculating obesity and overweight prevalence in children. Each sex and age group therefore needs its own level of classification for obesity. The British 1990 growth reference (UK90) percentiles are therefore used which gives a BMI threshold for each age above which a child is considered overweight or obese; those children whose BMI is above the 85th percentile are classified as overweight and those children whose BMI is above the 95th percentile are classified as obese. The percentiles are given for each sex and age. According to this method, 15% and 5% of children in 1990 had a BMI above this level and were thus classified as overweight/obese. Increases over 15% and 5% in the proportion of children who exceed the reference 85th/95th percentiles over time indicate an upward trend in the prevalence of overweight and obesity. Unless otherwise specified figures relating to the prevalence of childhood obesity in this report are determined by this method.

### 2. Health Outcomes

#### 2.1 Hospital Episode Statistics

The report presents four measures for the number of obesity related hospital admissions:

1. Admissions directly attributable to obesity: NHS hospital finished admission episodes with a primary diagnosis of obesity (code E66).
2. Admissions where obesity was a factor: NHS hospital finished admission episodes with a primary or secondary diagnosis of obesity (code E66).
3. Obesity admissions for bariatric surgery: NHS hospital finished consultant episodes with a primary diagnosis of obesity (code E66), and a primary or secondary procedure for bariatric surgery (the full list of bariatric surgery procedure codes used is shown in section 2.2).
4. Obesity admissions for primary bariatric surgery: As per measure 3 but excluding episodes where the only bariatric surgery procedure(s) were maintenance, revisional, or removal procedures.

The number of admissions is a count of the records meeting the required criteria for the measure.

A finished admission episode (FAE) is the first period of in-patient care under one consultant within one healthcare provider. A finished consultant episode (FCE) is a continuous period of admitted patient care under one consultant within one healthcare provider.

Please note that admissions do not represent the number of in-patients, as a person may have more than one admission within the year.

The primary diagnosis is the first of up to 20 diagnosis fields in the Hospital Episode Statistics (HES) dataset and provides the main reason why the patient was in hospital. The
secondary diagnosis is one of up to 19 secondary diagnosis fields that show other diagnoses relevant to the episode of care.

HES data are classified using the International Classification of Diseases (ICD). The tenth revision of this classification is currently in use (ICD-10)\(^1\). Details of ICD-10 codes used for each of the three measures are included in the excel table footnotes.

These measures do not include outpatient data. Outpatient data is not used as the quality of diagnosis codes are not sufficient to be sure the activity carried out was related to obesity.

Data only includes admissions for residents of England, and for persons with no fixed abode.

**Age-standardised rates**

Rates per population for hospital admissions have been directly age-standardised using the European standard populations. This involves adjusting the number of admissions to account for variations in age profiles between areas. Changes in the values of an age-standardised rate should not be affected by any changes in the distribution of an area’s population by age.

The European Age Standardised Rate

\[
\text{European Age Standardised Rate} = \frac{\text{Sum of } (a_i \times e_i) \text{ for all age groups } (i)}{100,000}
\]

Where:

- \(a_i\) = age specific rate per 100,000
- \(e_i\) = age specific European standard population

**2.2 Hospital Episode Statistics - Coding for Bariatric Surgery used in tables 3.1 to 3.5**

The term “bariatric surgery” is often used to define a group of procedures that can be performed to facilitate weight loss although these procedures can be performed for conditions other than weight loss. It includes stomach stapling, gastric bypasses, sleeve gastrectomy and gastric band maintenance. Using Hospital Episode Statistics (HES) data held at NHS Digital, the number of FCEs for bariatric surgery has been determined where the primary diagnosis was obesity (ICD-10 code E66) and the main or secondary procedure was for bariatric surgery, based on the OPCS code for the relevant time periods. This data includes removals and/or maintenance following an initial procedure, so the counting of the same patient is more likely (where removal and/or maintenance occurred during a later episode of care).

Also presented are admissions for ‘primary bariatric surgery’. This excludes those episodes where the only bariatric surgery procedure(s) related to removals and/or maintenance. In this data, patients are likely to only be counted once, for the initial bariatric surgery procedure.

Since 2012/13 the OPCS codes included in the bariatric surgery definition have been aligned with the methodology used for NHS Healthcare Resource Groups (HRGs). The new HRGs were created as a result of work between the National Casemix Office at NHS Digital, the British Obesity and Metabolic Surgery Society (BOMSS) and the Chapter F Digestive

\(^1\) [http://apps.who.int/classifications/icd10/browse/2016/en](http://apps.who.int/classifications/icd10/browse/2016/en)
System Expert Working Group (EWG). Details of that change can be found in the methodological change notice below:


Latest data are based on the tenth revision of the International Classification of Diseases (ICD-10). The FCE data for bariatric surgery are based on the Office for Population, Censuses and Surveys: Classification of Intervention and Procedures, 4th Revision (OPCS-4) codes.

The table on the next page shows the current list of OPCS codes used.
<table>
<thead>
<tr>
<th>OPCS Code</th>
<th>Description</th>
<th>All bariatric surgery</th>
<th>Primary bariatric surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>G011</td>
<td>Oesophagogastrectomy and anastomosis of oesophagus to stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G012</td>
<td>Oesophagogastrectomy and anastomosis of oesophagus to transposed jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G013</td>
<td>Oesophagogastrectomy and anastomosis of oesophagus to jejunum NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G018</td>
<td>Other specified excision of oesophagus and stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G019</td>
<td>Unspecified excision of oesophagus and stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G021</td>
<td>Total oesophagectomy and anastomosis of pharynx to stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G022</td>
<td>Total oesophagectomy and interposition of microvascularly attached jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G023</td>
<td>Total oesophagectomy and interposition of jejunum NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G024</td>
<td>Total oesophagectomy and interposition of microvascularly attached colon</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G025</td>
<td>Total oesophagectomy and interposition of colon NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G028</td>
<td>Other specified total excision of oesophagus</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G029</td>
<td>Unspecified total excision of oesophagus</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G031</td>
<td>Partial oesophagectomy and end to end anastomosis of oesophagus</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G032</td>
<td>Partial oesophagectomy and interposition of microvascularly attached jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G033</td>
<td>Partial oesophagectomy and anastomosis of oesophagus to transposed jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G034</td>
<td>Partial oesophagectomy and anastomosis of oesophagus to jejunum NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G035</td>
<td>Partial oesophagectomy and interposition of microvascularly attached colon</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G036</td>
<td>Partial oesophagectomy and interposition of colon NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G038</td>
<td>Other specified partial excision of oesophagus</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G039</td>
<td>Unspecified partial excision of oesophagus</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G271</td>
<td>Total gastrectomy and excision of surrounding tissue</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G272</td>
<td>Total gastrectomy and anastomosis of oesophagus to duodenum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G273</td>
<td>Total gastrectomy and interposition of jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G274</td>
<td>Total gastrectomy and anastomosis of oesophagus to transposed jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G275</td>
<td>Total gastrectomy and anastomosis of oesophagus to jejunum NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G278</td>
<td>Other specified total excision of stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G279</td>
<td>Unspecified total excision of stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G281</td>
<td>Partial gastrectomy and anastomosis of stomach to duodenum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G282</td>
<td>Partial gastrectomy and anastomosis of stomach to transposed jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G283</td>
<td>Partial gastrectomy and anastomosis of stomach to jejunum NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G284</td>
<td>Sleeve gastrectomy and duodenal switch</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G285</td>
<td>Sleeve gastrectomy NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G288</td>
<td>Other specified partial excision of stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G289</td>
<td>Unspecified partial excision of stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G301</td>
<td>Gastroplasty NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G302</td>
<td>Partitioning of stomach NEC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G303</td>
<td>Partitioning of stomach using band</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G304</td>
<td>Partitioning of stomach using staples</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G305</td>
<td>Maintenance of gastric band</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>G308</td>
<td>Other specified plastic operations on stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G309</td>
<td>Unspecified plastic operations on stomach</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G311</td>
<td>Bypass of stomach by anastomosis of oesophagus to duodenum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G312</td>
<td>Bypass of stomach by anastomosis of stomach to duodenum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G315</td>
<td>Closure of connection of stomach to duodenum</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>G316</td>
<td>Attention to connection of stomach to duodenum</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>G321</td>
<td>Bypass of stomach by anastomosis of stomach to transposed jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G322</td>
<td>Revision of anastomosis of stomach to transposed jejunum</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>G323</td>
<td>Conversion to anastomosis of stomach to transposed jejunum</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>G324</td>
<td>Closure of connection of stomach to transposed jejunum</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>G325</td>
<td>Attention to connection of stomach to transposed jejunum</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>G328</td>
<td>Other specified connection of stomach to transposed jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
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<td>G329</td>
<td>Unspecified connection of stomach to transposed jejunum</td>
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</tr>
<tr>
<td>G331</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>G332</td>
<td>Revision of anastomosis of stomach to jejunum NEC</td>
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<td>No</td>
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<tr>
<td>G338</td>
<td>Other specified other connection of stomach to jejunum</td>
<td>Yes</td>
<td>Yes</td>
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<td>G387</td>
<td>Removal of gastric band</td>
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<td>G491</td>
<td>Gastroduodenectomy</td>
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<td>Yes</td>
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<td>G492</td>
<td>Total excision of duodenum</td>
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<tr>
<td>G493</td>
<td>Partial excision of duodenum</td>
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<tr>
<td>G498</td>
<td>Other specified excision of duodenum</td>
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<td>Yes</td>
</tr>
<tr>
<td>G499</td>
<td>Unspecified excision of duodenum</td>
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<td>Yes</td>
</tr>
<tr>
<td>G511</td>
<td>Bypass of duodenum by anastomosis of stomach to jejunum</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G513</td>
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<td>Yes</td>
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<tr>
<td>G716</td>
<td>Duodenal switch</td>
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<td>G717</td>
<td>Reversal of duodenal switch</td>
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Appendix C: Government policy, targets and outcome indicators

This appendix covers government policy, targets and outcome indicators related to obesity, physical activity or diet. These are particularly relevant when looking at time series data elsewhere in the report.

1. Obesity

1.1 Childhood obesity plan

The Government launched its new Childhood Obesity Plan in August 2016. The plan aims to significantly reduce England’s rate of childhood obesity within the next 10 years. Key measures include a sugar reduction programme, including a soft drinks industry levy, helping children to enjoy an hour of physical activity every day and a healthy rating scheme for primary schools.


The Government published the second chapter of the Childhood Obesity plan in June 2018, setting out the ambition to halve childhood obesity and significantly reduce the gap in obesity between children from the most and least deprived areas by 2030.


1.2 Sugar reduction

Eating too much sugar can lead to weight gain, which increases the risk of heart disease, type 2 diabetes, stroke and some cancers. It is also a cause of tooth decay. The sugar reduction programmes aims to take out 20 per cent of sugar in products by 2020, including a 5 per cent reduction in year one. Alongside this, the soft drinks industry levy has been designed to encourage producers to reformulate their overall product mixes by: reducing added sugar content, moving consumer choices towards low sugar and sugar-free brands, and reducing the portion sizes for high sugar drinks.

1.3 Change4Life

Change4Life is the Government’s social marketing programme supporting the ambition to halt the rise in childhood obesity. Change4Life aims to inspire a social movement through which government, the NHS, local authorities, businesses, charities, schools, families and community leaders can all play a part in changing behaviour to help improve children’s diets and activity levels

Further information is available at:
www.nhs.uk/change4life

1.4 One You

Public Health England’s One You social marketing campaign, launched in March 2016, aims to inform, energise and engage millions to make changes to improve their health by eating well, moving more, quitting smoking and drinking less. One You provides tools and
on-going support to help people reappraise their health and make and sustain changes. The campaign is supported by an extensive range of commercial and public sector partners so adults will encounter One You on their high streets and local services, in pharmacies and GP surgeries.

Further information is available at www.nhs.uk/oneyou

1.5 National Child Measurement Programme

The National Child Measurement Programme (NCMP) is a mandatory public health function of local authorities. The programme provides robust data on the weight status, including obesity and underweight prevalence, of over a million children in reception year and year 6 each year. This is around 95 per cent of those eligible. The data enable local areas to plan services to tackle child obesity and monitor progress. In most local authorities, parents also receive feedback on their child’s weight status along with the offer of further advice and support on achieving a healthy weight for their child. https://www.gov.uk/government/collections/national-child-measurement-programme

1.6 NHS Health Checks

The NHS Health Check programme aims to improve the health and wellbeing of over 15 million adults in England aged 40-74 years through earlier awareness, assessment, and management of the major risks factors and conditions driving premature death, disability and health inequalities in England.

In doing so it will help to prevent heart disease, stroke, diabetes and kidney disease, and raise awareness of dementia both across the population and within high risk and vulnerable groups. The benefits of the programme are likely to be extensive, as the same risks assessed during the check contribute to several cancers, lung disease, and certain types of dementia.

Further information is available at: http://www.nhs.uk/Conditions/nhs-health-check/Pages/NHS-Health-Check.aspx

1.7 NHS Diabetes Prevention Programme

According to Public Health England there are currently 5 million people in England at high risk of developing Type 2 diabetes. If current trends persist, one in three people will be obese by 2034 and one in ten will develop Type 2 diabetes. However, evidence shows that many cases of Type 2 diabetes are preventable.

The Healthier You: NHS Diabetes Prevention Programme (NHS DPP), a joint commitment from NHS England, Public Health England and Diabetes UK, will identify those at high risk and refer them onto an evidence-based behaviour change programme to help reduce their risk. It will be the first at scale national diabetes prevention programme in the world.

Further information is available at: https://www.england.nhs.uk/ourwork/qual-clin-lead/diabetes-prevention/
2. Physical activity

2.1 ‘Sporting Future’ strategy

‘Sporting Future: A New Strategy for an Active Nation’ was published in December 2015 and set out a new government vision for sport concentrating on five key outcomes – physical wellbeing, mental wellbeing, individual development, social and community development and economic development.

The government has now published its second annual progress report on the sport strategy, which highlights important achievements such as the new Active Lives survey which will help to develop a fuller understanding of how people engage with sport and physical activity. It also sets out how Sport England is meeting its new responsibility for children’s engagement in sport and physical activity from the age of five.

Sport England’s own strategy Towards an Active Nation highlights Sport England’s new approach, including investing over £194 million into projects focused on improving children’s capability and enjoyment and tripling its current investment in tackling inactivity to around £250 million.

Further information can be found at:

2.2 Physical Activity Guidelines

In 2011, the UK Chief Medical Officers published Start Active, Stay Active, which is a UK-wide consensus on the amount and type of physical activity we should all aim to do at each stage of our lives. The guidelines include recommendations for very young children (aged under-5), children and young people (5-18 years), adults (19-64 years) and older adults (65 years and over). It also includes specific guidelines on muscle strengthening and minimising sedentary behaviour.

For further information:

2.3 Children and Young People in Schools

As announced in the 2016 budget, revenue generated from the ‘soft drinks levy’ will be used to double the PE and sports premium for primary schools from £160m a year to £320m from September 2017, and to increase the funding for breakfast clubs. Department for Education have also announced a new £415m Healthy Pupils Capital Fund for 2018/19 to be funded through the soft drinks industry levy to provide new facilities to support sports, after-school clubs and activities to promote healthy eating. Government will also continue to invest in the School Games which provides competitive sporting opportunities for children across the country.
2.4 Everybody Active, Every Day

In October 2014, Public Health England published a national physical activity framework, Everybody Active, Every Day, following a nine-month coproduction process with other 1,000 national and local stakeholders and with full ministerial involvement. This framework presented an evidence-based approach to increase levels of physical activity and reduce physical inactivity in local communities based on international evidence of what works to increase population level physical activity.


2.5 Cycling and Walking Investment Strategy

Active travel, such as cycling and walking, has a crucial role to play in improving public health. Walking and cycling are some of the easiest ways for people to build physical activity into their daily lives. The Government’s Infrastructure Act 2015 made a commitment to supporting cycling and walking over the long term by requiring Department for Transport to put a strategy in place which sets out the financial resources the Government will make available towards meeting the objectives.

The Cycling and Walking Investment strategy (CWIS) was published in 2017: https://www.gov.uk/government/publications/cycling-and-walking-investment-strategy

3. Diet

3.1 Eatwell Guide

The Eatwell Guide, launched in March 2016 replaces the eatwell plate and reflects Government dietary recommendations, including those recently updated on sugar, fibre and starchy carbohydrates from the Scientific Advisory Committee on Nutrition (SACN) report on Carbohydrates and Health in 2015.

The Eatwell Guide shows the revised proportions of the food groups that should be consumed to help us achieve a healthy balanced diet:

- Eat at least 5 portions of a variety of fruit and vegetables every day.
- Base meals on potatoes, bread, rice, pasta or other starchy carbohydrates; choosing wholegrain versions where possible.
- Have some dairy or dairy alternatives (such as soya drinks); choosing lower fat and lower sugar options.
- Eat some beans, pulses, fish, eggs, meat and other proteins (including 2 portions of fish every week, one of which should be oily).
- Choose unsaturated oils and spreads and eat in small amounts.
- Drink 6-8 cups/glasses of fluid a day.
- If consuming foods and drinks high in fat, salt or sugar, have these less often and in small amounts.

Further information is available at: www.gov.uk/government/publications/the-eatwell-guide
### 3.2 5-a-day programme

Current recommendations are that everyone should eat at least 5 portions of a variety of fruit and vegetables each day, to reduce the risks of chronic illnesses such as heart disease, stroke and some cancers. The 5-a-day programme aims to increase fruit and vegetable consumption by:

- Raising awareness of the health benefits through targeted communications.
- Improving access to fruit and vegetables.
- Working with national, regional and local organisations.

Advice on the consumption of fruit juice and smoothies within the 5 A Day messaging has changed to reflect new, lower recommendations for sugar. It is now recommended to limit consumption of fruit juice and smoothies together to a total of 150mls (one portion) per day and to consume with meals to reduce the risk of tooth decay.

For further information: [http://www.nhs.uk/LiveWell/5ADAY/Pages/5ADAYhome.aspx](http://www.nhs.uk/LiveWell/5ADAY/Pages/5ADAYhome.aspx)

### 3.3 Government Buying Standards for Food and Catering Services (GBSF)

GBSF provide mandatory standards and best practice criteria including aspects of diet/nutrition, sustainability and animal welfare. They form part of the toolkit associated with the Department for Environment, Food and Rural Affairs’ Plan for Public Procurement and are included within the NHS Contract and school food standards.

Public Health England have published guidance on healthier and more sustainable catering and supporting tools to directly support those who must, or have chosen to, meet GBSF and are actively promoting and supporting delivery.

For further information:


### 4. Monitoring and guidelines

#### 4.1 Public Health Outcomes Framework

Launched in January 2012, the Public Health Outcomes Framework is comprised of a number of key indicators against which Public Health delivery partners can focus action to improve population health. The framework acts as a stimulus to encourage public health delivery partners to make significant improvements in services and share best practice more widely. The intention is that the introduction of benchmarking (through the indicator measures) will support better public health outcomes – this is consistent with evidence that the introduction of indicator measures can have an influence on achieving successful
Health Outcomes - and will have a direct effect on protecting and improving the nation’s health.

The Public Health Outcomes Framework Indicators help to provide robust data on diet, body weight and physical activity. This enables local authorities to make decisions about where to target population level interventions to address these issues.

For further information:

4.2 NICE guidance
The National Institute for Health and Care Excellence (NICE) has produced a suite of guidance on tackling obesity.

Further information is available at:
https://www.nice.org.uk/search?q=CG43
Appendix D: Further information

Comments on this report would be welcomed. Any questions concerning any data in this publication, or requests for further information, should be addressed to:

The Contact Centre
NHS Digital
1 Trevelyan Square
Boar Lane
Leeds
West Yorkshire
LS1 6AE
Telephone: 0300 303 5678
Email: enquiries@nhsdigital.nhs.uk

Press enquiries should be made to:
Media Relations Manager:
Telephone: 0300 303 5678
Email: enquiries@nhsdigital.nhs.uk

This report is available at:
http://digital.nhs.uk/pubs/sopad19

Previous reports on Statistics on Obesity, Physical Activity and Diet: England can be found on our website:
Appendix E: How are the statistics used?

Users and uses of the report

From our engagement with customers, we know that there are many users of the Statistics on Obesity, Physical Activity and Diet report. There are also many users of these statistics who we do not know about. We are continually aiming to improve our understanding of who our users are in order to enhance our knowledge on what the uses of these data are via recent consultations and feedback forms available online.

Following last year’s publication, a consultation was implemented to gain feedback on how to make the report more user-friendly and accessible while also producing it in the most cost-effective way. The results of this consultation can be found at the below link.

http://content.digital.nhs.uk/article/6770/Consultation-on-Lifestyles-Compendia-Reports

Below is listed our current understanding of the known users and uses of these statistics. Also included are the methods we use to attempt to engage with the current unknown users.

Department of Health and Social Care (DHSC) - frequently use these statistics to inform policy and planning. The Public Health Outcomes Framework was published in January 2012. The document sets out the desired outcomes for public health and how these will be measured. The framework includes specific indicators for the proportion of physically active and inactive adults, excess weight in children (aged 4-5 years and 10-11 years old) and excess weight in adults. The data signposted to in this report will be used to monitor these indicators.


Media - these data are used to underpin articles in newspapers, journals, etc. For example, the following articles appeared when the 2018 report was published:

BBC
http://www.bbc.co.uk/news/health-43640575

Guardian

Independent

Metro
http://metro.co.uk/2018/04/05/hospital-admissions-obesity-double-four-years-7442217/

The Sun
https://www.thesun.co.uk/news/5973851/map-reveals-obesity-hotspots/

East Anglian Daily Times
Birmingham Live
https://www.birminghammail.co.uk/news/health/hospital-admissions-obesity-west-midlands-14492304

Full Fact
https://fullfact.org/health/are-more-people-going-hospital-obesity-related-illnesses/

Public - all information is accessible for general public use for any particular purpose.

Academia and Researchers - a number of academic papers have cited the Statistics on obesity, physical activity and diet as a source of information in peer reviewed papers.

NHS - A wide range of organisations use the information to monitor and target services to tackle obesity, physical activity and diet recommendations. The aim is to provide a key source of obesity, physical activity and diet information for public health, commissioning and performance management colleagues at a national level.

Public Health Campaign Groups - data are used to inform policy and decision making and to examine trends and behaviours.

Ad-hoc requests – the statistics are used by NHS Digital to answer Parliamentary Questions (PQs), Freedom of Information (FOI) request and ad-hoc queries. Ad-hoc requests are received from health professionals; research companies; public sector organisations, and members of the public, showing the statistics are widely used and not solely within the profession.

Unknown Users

This publication is free to access via the NHS Digital website https://digital.nhs.uk/data-and-information/areas-of-interest/public-health/lifestyles, and consequently the majority of users will access the report without being known to us. Therefore, it is important to put mechanisms in place to try to understand how these additional users are using the statistics and also to gain feedback on how we can make these data more useful to them. On the webpage where the publication appears there is a link on the right-hand side to a feedback form which NHS Digital uses to capture feedback for all its reports. The specific questions asked on the form are:

- How useful did you find the content in this publication?
- How did you find out about this publication?
- What type of organisation do you work for?
- What did you use the report for?
- What information was the most useful?
- Were you happy with the data quality?
- To help us improve our publications, what changes would you like to see (for instance content or timing)?
- Would you like to take part in future consultations on our publications?
Any responses via this form are passed to the team responsible for the report to consider. We also capture information on the number of times the reports are downloaded, although we are unable to capture who the users are from this. Statistics on Obesity, Physical Activity and Diet 2018 generated 2,879 page views and 1,102 unique downloads (for the report and/or associated files) in the 4 weeks after publication.