Overweight or obese population - Measured data (age 15+)

The **Body Mass Index** (BMI) is a single number that evaluates an individual's weight status in relation to height (weight/height\(^2\)) with weight in kilograms and height in meters.

- **Overweight** (but not obese) is defined as a BMI between 25 and 30 kg/m\(^2\) (25 \leq \text{BMI} < 30 \text{ kg/m}^2).
- **Obesity** is defined as a BMI of 30 kg/m\(^2\) or more (BMI \geq 30 \text{ kg/m}^2).
- **Overweight or obese** population is the sum of the population with a BMI over 25 kg/m\(^2\) (BMI \geq 25 kg/m\(^2\)).


**Sources and Methods**

**Australia**

**Sources:**

**Coverage:**

**Methodology:**
- From 2007: Data are based on measured height and weight. Percentages are based on those for whom measurements were taken.

Further care should be exercised in comparing data as they do not represent the same populations: 1980, 1983 and 1989 data are for participants living in State capital cities, with weight and height measured by trained nurses. BMI calculated for all participants except pregnant women.

**Break in time series in 1995** due to a change in coverage and methodology.


**Austria**

Data not available.

**Belgium**

Coverage: Population aged 18-64 years old.

Canada

Source: Statistics Canada, Canadian Health Measures Survey (CHMS) and Canadian Community Health Survey (CCHS).
2004: CCHS Cycle 2.2 - Nutrition, one time focus content, custom tabulations.

Coverage:
- 2015: Data for the population aged 18 years old and over.
- CCHS and CHMS data describe the Canadian household population aged 15 years old and over.

Methodology:
- CHMS collects key information relevant to health in Canada by means of direct physical measurements. The CHMS covers the population 3 to 79 years old living in the ten provinces and the three territories. Excluded from the survey's coverage are: persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalised population and residents of certain remote regions. Altogether these exclusions represent less than 4% of the target population.
- CCHS content is comprised of three components:
  a. Core content is asked of all respondents and remains relatively stable over time;
  b. Theme content is asked of all respondents and varies from year to year;
  c. Optional content is chosen by health regions but is usually coordinated at the provincial level and is carried out each year.
- In 2008, the theme content was “Prevention of Chronic Illnesses” and data collection included measured height and weight.
- The 2005 survey also contained a question on measured height and weight.
- CCHS - Nutrition data for 2004 describe the household population 15 years old and over, living in the ten provinces (not in the Territories), with generally the same exclusions as the two other surveys.

Break in time series in 2015: As a result of the 2015 redesign, the Canadian Community Health Survey (CCHS) has a new collection strategy, a new sample design, and has undergone major content revisions. With all these factors taken together, caution should be taken when comparing data from previous cycles to data released for the 2015 cycle onwards.

Further information: http://www.statcan.gc.ca/.

Chile


Coverage:
- Nationwide.
- In 2006 and 2016-2017, population aged 15 years old and over.
- In 2003, population aged 17 years old and over.

Methodology:
2016-2017: Measurements were taken on a voluntary sample of 4908 adults.
2009: Measurements were taken on a voluntary sample of 4908 adults.
2003: Measurements were taken on a voluntary sample of 3600 adults.

Further information: http://epi.minsal.cl.

Czech Republic
Source: Czech Society for the Study of Obesity. Lifestyle and obesity study.
Coverage: Population aged 18 years old and over.

Denmark

Data not available.

Estonia

Coverage: The age-group 18-74 is used for the 2014 data.
Further information: Data are published in the Health Statistics and Health Research Database available at http://pxweb.tai.ee/pxWeb2015/index_en.html under the category “Health and health behaviour”.

Finland

Source: National Institute for Health and Welfare (THL). The National Health Examination Studies
Coverage: Population aged 30 years or more.

France

Sources: Surveys from the Agence nationale de santé publique:
2006: ENNS, National nutritional health study.
Coverage:
- Metropolitan France (excluding Corsica).
- Adults aged 18 to 74 years old living in private households.
Methodology:
- Measured height and weight data, weighted and adjusted.

Germany

Sources:
2012: Robert Koch-Institute (RKI), German Health Interview and Examination Survey for Adults (DEGS1); Bundesgesundheitsblatt 2013 56:786-794, Übergewicht und Adipositas in Deutschland - Ergebnisse der Studie zur Gesundheit Erwachsener in Deutschland (DEGS1).
Methodology for 2012 data:
- The “German Health Interview and Examination Survey for Adults” (DEGS1) is part of the health monitoring of the Robert Koch-Institute (RKI) and is designed as a combined cross-sectional and longitudinal survey. The aim of the study is to repeatedly provide nationally representative data on the health status of the adult general population (18-79 years) in Germany.
- In order to perform both cross-sectional and longitudinal analyses, a mixed study design was implemented. Therefore, a sample of participants was randomly chosen from local population registries and then supplemented by former participants of the “German National Health Interview and Examination Survey 1998” (BGS98) – a previous nationwide cross-sectional study conducted by the RKI.
- In total 8,152 adults took part in the study. Among them were 4,193 participants who had been invited for the first time as well as 3,959 participants who had already taken part in BGS98.
- A nonresponse analysis and a comparison of several indicators of the study with official statistics show a high representativeness of this net random sample for the German resident population.
- The interview and examination programme comprised standardised interviews, such as a medical interview conducted by a physician and an interview on pharmaceutical drug use, as well as self-administered questionnaires on health and nutritional issues. Further, physical examinations were performed (anthropometry, blood pressure, pulse, and thyroid gland volume) and blood and urine were analysed.

- Participants of DEGS1 were measured and weighed in a standardised way. Using the Body Mass Index, calculated from body height and weight [BMI = weight (kg)/height squared (m2)], overweight (BMI ≥25 kg/m2) and obesity (BMI ≥30 kg/m2) were defined.

- DEGS1 was carried out by the RKI from November 2008 through December 2011.

Methodology for 1998 data:
- The German National Health Interview and Examination Survey 1998 (BGS98) was part of the health monitoring of the Robert Koch-Institute (RKI). The aim of the survey was to collect data on the health and health determinants of the adult general population (18-79 years) in Germany on a regular basis.

- The health data were collected in all federal states using uniform characteristics. BGS98 was thus the first nationwide representative survey on the health status of Germany's adult population.

- The BGS98, collected data required to describe health status, morbidity trends and regional differences, including information on diseases and risk factors, health-related modes of behaviour living conditions and the extent to which people use medical services.

- In total 7,124 adults were interviewed and medically examined. Among them were 4,705 participants in 80 sample points of former federal republic of Germany and 2,419 participants in 40 sample points of the new lander. Representativeness of the collapsed sample for the German general population was ensured by the use of weighting procedures.

- BGS98 derived its health data from personal interviews and physical examinations, questionnaires and medical or laboratory examinations forms (blood, serum, urine partly).

- The BGS98 was carried out by the Robert Koch-Institute from 1997 to 1999.

- BGS98 continued in the German Health Interview and Examination Survey for Adults (DEGS1).

Further information:

Greece

Data not available.

Hungary

Sources: National Institute of Pharmacy and Nutrition (OGYÉI, in Hungarian).

Coverage:
2014: Population aged 18 years old and over.
2009: Population aged 18 years old and over.
1988: Population aged 15 years old and over.

Methodology:
2014:
- The OTÁP 2014 survey was carried out by the National Institute for Food and Nutrition Science on a subsample of the European Health Interview Survey (EHIS).
- The sampling followed the steps of the EHIS i.e. a two-stage stratified sampling design.
- The OTÁP2014 survey was based on three-day dietary records as well as anthropometric measurements of weight, height and waist circumference. Interviews and measurements took place in the interviewees’ home; standard and validated SECA instruments were used for the measurements.
- The sampling design and the subsequent weighting ensured that the group of the OTÁP2014 participants is representative of the Hungarian adult population (18 years old and over) by age and gender.

2009:
- The OTÁP 2009 survey was performed by the National Institute for Food and Nutrition Science on a subsample of the European Health Interview Survey (EHIS).
The sampling followed the steps of the EHIS i.e. a two-stage stratified sampling design.

The OTÁP 2009 survey was based on three-day dietary records as well as anthropometric measurements of weight, height and waist circumference. Interviews and measurements took place in the interviewees’ home; standard and validated SECA instruments were used for the measurements.

The sampling design and the subsequent weighting ensured that the group of the OTÁP2009 participants is representative of the Hungarian adult population by age and gender.


Further information:

Ireland

Data not available.

Ireland

From 2015: Annual Healthy Ireland Survey, commissioned by the Department of Health as part of the Healthy Ireland initiative. The questions used were standard EHIS questions.

2007: SLÁN (Survey of Lifestyle, Attitudes and Nutrition), commissioned by the Health Promotion Unit of the Department of Health and Children and carried out at the Centre for Health Promotion Studies, National University of Ireland, Galway.

Coverage:
From 2015: Data refer to adults aged 15 years and over.
2007: Data refer to adults aged 18 years old and older.

Methodology:
From 2015: In addition to completing the main survey questionnaire, individuals interviewed in the Health Ireland Survey 2015 were asked to undertake a physical measurement module. Within this module interviewers measured and recorded the respondent’s height, weight and waist circumference. A total of 6,142 respondents (81%) participated in this module.

Up to 2007: Published in the National Health and Lifestyle Surveys, SLÁN was first undertaken in 1998 and repeated in 2002 and 2007. The 2007 study involved face-to-face interviews with 10364 adults (62% response rate) along with a sub-study on body size of 967 younger adults (18-44 years old) and a more detailed physical examination of approximately 1250 adults over 45 years old.

Further information:

Israel

Sources:
2015: Central Bureau of Statistics and the Israel Center for Disease Control (ICDC) - The Israeli National Health and Nutrition Survey (MABAT).
1999: The Israel Center for Disease Control (ICDC) and the Ministry of Health, Department of Food and Nutrition Services; The First Israeli National Health and Nutrition (MABAT).

Coverage:

Deviations from the definition:
2015: Data based on national survey of residents aged 18+ years old.
1999: Data based on national survey of residents aged 25-64 years old.

Methodology:
2015: Survey conducted through face-to-face interviews in 2014-2015. There were two different samples, for ages 18-64 and for ages 65+. The Population Register was the sampling frame, excluding institutional population and
Residents living outside of localities. There were 2956 respondents aged 18-64 and 1039 aged 65+. Measured BMI was calculated for all the respondents from the two samples, each respondent with its suitable weight. The survey included detailed health and nutrition questionnaires and anthropometric measurements, including weight and height.

1999: Survey conducted through face-to-face interviews in 1999-2000, on a population sample of 3246 residents (non-institutionalised civilians). The survey includes questionnaire (demographic, health, nutrition, health behaviors, food frequency) and anthropometric measurements.


Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Italy

Data not available.

Japan

Coverage: Data refer to the population aged 20 years old and over.
Methodology: The survey uses a stratified random sampling method from 475 unit areas, and it surveyed 107454 households in 2016. The survey actually measures the height and weight of people at examination sites. In 2016, 26354 persons were checked (around 23000 for those over 20 years old). To be precise, the survey rule allows self-reporting, but it is unusual.


Korea

Sources:
Methodology:
- The sample size of the 7th National Health and Examination Nutrition Survey (2016-2018) is 4,416 families each year. It excludes the institutional dwelling units (e.g. dormitories, social welfare institutions, prisons, military camps, etc.) and foreigners.
- The National Health and Examination Nutrition Survey had been conducted every three years until 2005, and has become an annual survey in 2007.
- Data are measured in mobile health examination centers.


Latvia

Source: Centre for Disease Prevention and Control of Latvia, Health Behaviour Survey among Latvian Adult Population.
Deviation from the definition: Data for 1998-2014 are for the age group 15-64 years old, data for 2016 are for the age group 15-74 years old.

Luxembourg

Source: Service de médecine au travail multisectoriel (STM).
Methodology:
- Administrative data concerning the resident working population aged 15 to 65 years old. Data are taken by the
work-doctor at the time of the recruiting examination or of a medical check-up following a prolonged sick leave for disease or accident. Pregnant women were removed from the file. Only one observation (the most recent) was retained per year and per person.

- General Inspectorate of Social Security (IGSS) data (sex, age and activity sector) were used to measure the sample representation. The variable distributions being significantly different between the studied sample and the working population, some adjustments have been made.
- Note: The sample is, however, not completely representative of the resident working population. The reasons are as follows:
  - Some sectors are not represented in the sample, particularly health, public and railroad sectors.
  - The professional statute of the individual is, with sex and age, one of the three variables to be considered. However, information on this variable is not available. In addition, the working resident population is not representative of the resident population as a whole.
  
  **Break in time series in 2009:** Changes in the classification of the activity sector.

**Further information:** [http://www.stm.lu/](http://www.stm.lu/).

**Mexico**

**Sources:**

**Coverage:** Data refer to the population aged 20 years old and over.

**Methodology:**
- In 2006, results were from 48000 households. Data included 32 states. The survey is representative at the national and state level.
- In 2005, results are from 22000 households. Data include only 15 states.

**Netherlands**

Data are not available.

**New Zealand**

**Sources:**

**Methodology:**
- Height and weight were measured during the interview to determine BMI.
- Interviews are carried out from July to June (following year), collecting information on 13598 individuals aged 15 years old and over in 2016-17 through face to face interviews (see the indicator for perceived health status for further details).
- The 2008-2009 Adult Nutrition Survey was carried out from October 2008 to October 2009, collecting information on 4721 adults.
- The 2006-2007 survey was carried out from October 2006 to November 2007, collecting information on 12488 adults aged 15 years old and over.
- In 2002-2003, approximately 13000 people were surveyed.

**Norway**

Data not available.

**Poland**

Data not available.

**Portugal**

**Source:** INSEF survey. Ministry of Health, National Health Institute - Doutor Ricardo Jorge. 2015 data.

**Coverage:** The target population of this cross-sectional, observational, epidemiological study consisted of all individuals aged between 25 and 74 years old, residents in mainland Portugal or in the Autonomous Regions of Azores and Madeira.

**Further information:** [http://repositorio.insa.pt/bitstream/10400.18/4115/3/1_INSEF_rel%C3%A7%C3%A3o_estado-de-saude.pdf](http://repositorio.insa.pt/bitstream/10400.18/4115/3/1_INSEF_rel%C3%A7%C3%A3o_estado-de-saude.pdf)

**Slovak Republic**

**Sources:**
- 2008: Public Health Institute, CINDI (Countrywide Integrated Non-communicable Disease Intervention Program), supervised by the WHO.

**Coverage:** For 2008, data refer to the population aged 15-64 years old.

**Methodology:**
- 2008: Volunteers were gathered from the evidence of the population.
- 2004 and 2005: Data are from voluntary public outpatient programme (i.e. preventive and consulting programme with no fees which includes some examinations: e.g. search for biological parameters, blood pressure measuring, measuring of waist-line, hip-size and height, calculation of BMI index, etc). All provided data were measured by researchers from Public Health Offices of the Slovak Republic. Data cover population from all regions of the Slovak Republic.
- In 2004, there were 12353 persons examined for the first time (4338 men and 8015 women). In 2005, there were 11240 persons examined for the first time (3772 men and 7468 women). In 2007, there were 15948 persons examined (5383 men and 10565 women) in that voluntary public outpatient programme.

**Further information:** [http://www.uvzsr.sk/](http://www.uvzsr.sk/)

**Slovenia**

Data not available from NIJZ databases.

**Spain**

Data not available.

**Sweden**

Data not available.

**Switzerland**

Data not available.
Turkey

Sources:

Methodology:
2017 data: Data were collected between April and September 2017. The target population for this study was the population aged 15 and over. The sample size was 8664 people. For sample design, the WHO STEPwise approach was used.
2011 data: The population registered to a family physician (FP) comprises approximately 3500 individuals.

United Kingdom

Sources:
1980: Office of Population Censuses and Surveys (OPCS, now ONS) report ‘The Heights and Weights of Adults in Great Britain’.

Coverage:
- Data are for adults aged 16 years old and over. For 1980 data, the survey only covered the population aged 16 to 64 years old.

Methodology:
- Data based on actual measurement of weight and height.
- Total percentage of population (persons) calculated by applying Health Survey for England male/female percentages to the England male/female populations and summing both as proportion of total England population.
- Data from 1991 up to and including 2002 are unweighted; from 2003 onwards data have been weighted for non-response.


United States

Coverage: Nationally representative sample of the U.S. civilian non-institutionalised population aged 20 to 74 years old.

Methodology:
- The NHANES program includes a series of cross-sectional nationally representative health examination surveys beginning in 1960. Each cross-sectional survey provides a national estimate for the US population at the time of the survey, enabling examination of trends over time. All samples were selected using complex, stratified, multistage probability cluster sampling designs.
- The results are presented for the middle year (or last year if only two years) of the survey period.
- Estimates were weighted to represent the U.S. civilian non-institutionalised population for each time period. Age-adjusted estimates are standardised by the direct method to the projected 2000 U.S. Census population using age groups 20-39, 40-59, and 60-74 years. Pregnant females are excluded from estimates.

Further information:

NON-OECD ECONOMIES

Brazil

Coverage: The National Health Survey PNS 2013 refers to people aged 18 or older.

China

Data not available.

Colombia


India

Data not available.

Indonesia

Data not available.

Lithuania

Data not available.

Russian Federation


Note: This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

South Africa

Data not available.

http://www.oecd.org/health/health-data.htm