

Overweight and obesity - BMI statistics

Statistics Explained

*Data presented in this article refer to year 2014.
A third wave of the European health interview survey (the source of these data) is foreseen in 2019.
Planned article update: December 2021.*

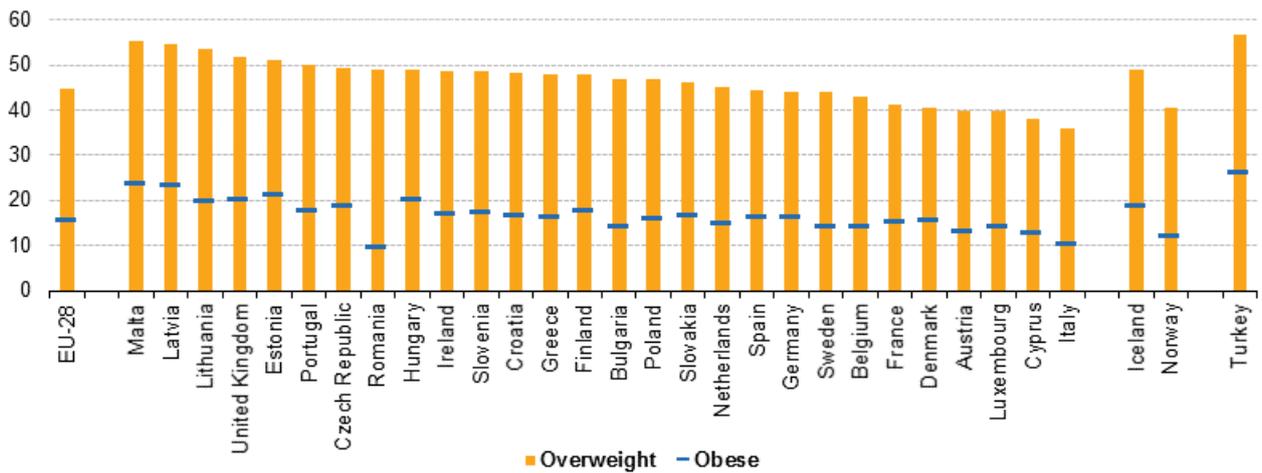
This article presents statistics on the proportion of **overweight** or **obese** population in the **European Union (EU)**. Weight problems and **obesity** are increasing at a rapid rate in most of the **EU Member States**, with estimates of 51.6 % of the EU's population (18 and over) overweight in 2014.

Obesity is a serious public health problem, as it significantly increases the risk of chronic diseases such as cardiovascular disease, type-2 diabetes, hypertension, coronary heart diseases and certain cancers. For specific individuals, obesity may further be linked to a wide range of psychological problems. For society as a whole, it has substantial direct and indirect costs that put a considerable strain on **healthcare** and social resources.

This article is one of a set of statistical articles concerning **health determinants** in the EU which forms part of an online publication on **health statistics**.

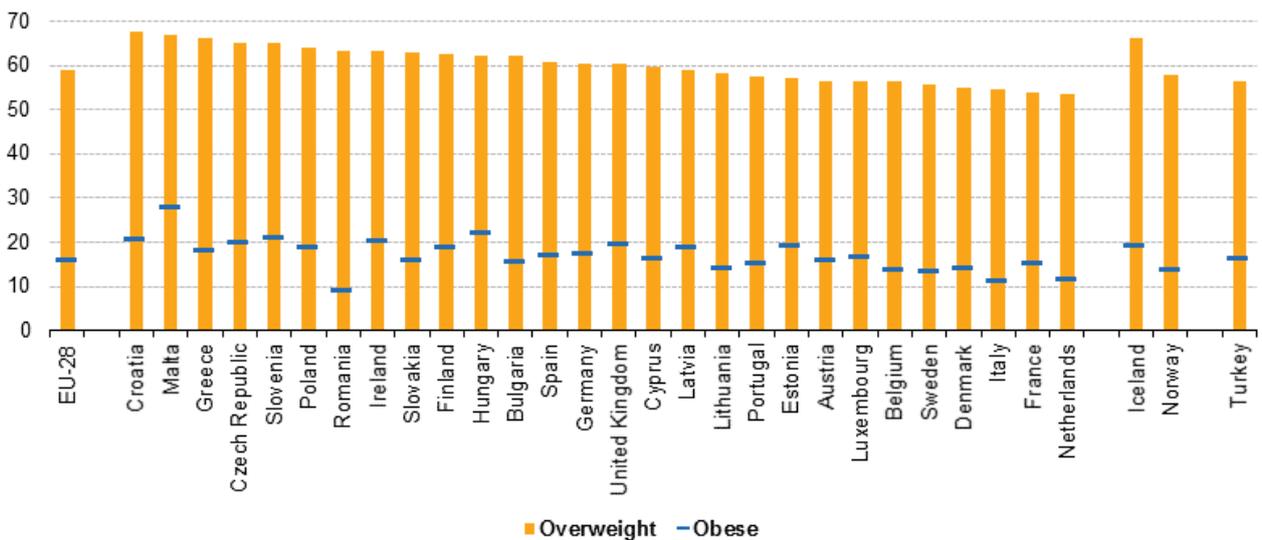
Obesity in the EU: gender differences

The data in this article are from the second round of the **European health interview survey (EHIS)** which was conducted between 2013 and 2015 and which covered persons aged 15 and over. These data indicate that substantial inequalities exist in the EU concerning the proportion of adults who are overweight or obese in terms of region, gender and socio-economic background.



Note: population aged 18 and over.

Figure 1: Proportion of overweight and of obese women, 2014(%)Source: Eurostat (hlth_ehis_bm1e)



Note: population aged 18 and over.

Figure 2: Proportion of overweight and of obese men, 2014(%)Source: Eurostat (hlth_ehis_bm1e)

In the EU-28 the proportion of adults (aged 18 years and over) who were considered to be overweight varied in 2014 between 36.1 % in Italy and 55.2 % in Malta for women and between 53.6 % in the Netherlands and 67.5 % in Croatia for men (see Table 1).

Between Romania and Malta there was an 19.0 pp difference in the proportion of obese men and a 14.2 pp difference in the proportion of obese women

For the population 18 years and over, the lowest proportions of women considered to be obese in 2014 were observed in Romania (9.7 %), Italy (10.3 %), Cyprus (12.9 %) and Austria (13.4 %), and of men in Romania (9.1 %), Italy (11.3 %), Netherlands (11.6 %) and Sweden (13.6 %).

The highest proportions of women who were obese were recorded in Malta (23.9 %), Latvia (23.3 %), Estonia (21.5 %) and the United Kingdom (20.4 %), and of men in Malta (28.1 %), Hungary (22.0 %), Slovenia

(21.0 %) and Croatia (20.7 %) (see Figures 1 and 2).

There was no systematic difference between the sexes as regards the share of obese women and men in 2014. In 16 EU Member States for which data are available, a higher proportion of men (compared with women) were obese, with Malta (4.2 [percentage points - pp](#)) and Croatia (3.9 pp) presenting the highest differences. By contrast, a higher proportion of women were obese in 11 Member States with Lithuania (5.8 pp) and Latvia (4.5 pp) presenting the largest differences. In France the share of obese men and women were the same, and in Belgium the difference in the obese population was below 0.3 pp higher for women compared to men.

A higher proportion of men (than women) were pre-obese in each of the EU Member States

There was a much clearer picture as regards the differences between the sexes in relation to the share of the male and female populations that were considered to be pre-obese¹. In 2014, across all EU Member States, the proportion of pre-obese men was consistently higher than the proportion of pre-obese women, as was also the case in Iceland, Norway and Turkey. The difference between the sexes ranged from 7.4 pp in Malta to 18.4 pp in Cyprus.

Obesity by age group

The share of the population that was overweight generally increased with age

Table 1 presents an analysis, by age group, of the proportion of the population who were overweight in 2014. There was a marked increase in the proportion of population who was overweight as it became older. The age group '18 to 24' presented the lowest shares of overweight population, while the '65 to 74' had the highest shares. Exceptions to this pattern were found in Luxembourg where the age group '75 years or over' presented the highest share; the United Kingdom (as well as Norway and Turkey) where the percentage of overweight was highest in the '45 to 64' age group; and also Sweden where the '45 to 64' and '65 to 74' had the highest shares (both 59.5 %).

¹Pre-obese consists of a person with a BMI greater or equal to 25 and less than 30.

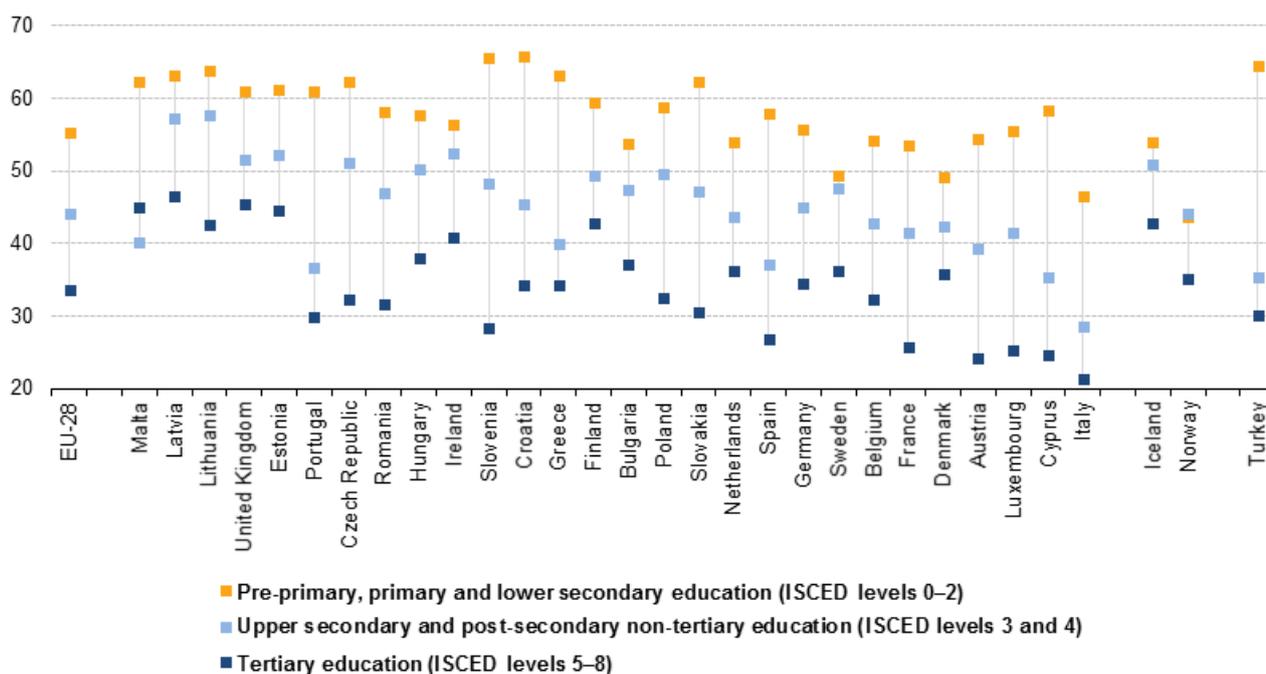
	Males	Females	Total						
	18 years or over	18 years or over	18 to 24	25 to 34	35 to 44	45 to 64	65 to 74	75 years or over	
EU-28	59.1	44.7	51.6	22.8	37.8	48.6	59.6	66.0	58.8
Belgium	56.3	42.9	49.3	20.2	38.9	44.8	56.0	62.1	56.6
Bulgaria	62.2	46.8	54.0	20.8	36.7	49.0	64.5	69.1	56.8
Czech Republic	65.0	49.2	56.8	19.9	35.7	53.2	69.8	76.9	63.6
Denmark	55.1	40.6	47.7	25.4	37.5	49.0	55.5	56.8	48.2
Germany	60.3	44.2	52.1	24.5	37.5	49.3	58.7	66.0	61.0
Estonia	57.1	51.1	53.9	24.8	36.3	50.4	64.5	70.4	64.0
Ireland (*)	63.1	48.5	55.7	36.9	49.7	55.7	62.4	63.0	53.8
Greece	66.3	48.1	56.7	23.9	41.7	53.0	65.4	71.2	65.6
Spain	60.6	44.4	52.4	24.1	38.2	47.3	59.6	71.0	67.4
France	53.8	41.3	47.2	21.7	35.3	42.9	53.5	62.5	56.7
Croatia	67.5	48.3	57.4	22.3	38.1	53.7	69.2	73.1	65.7
Italy	54.6	36.1	44.9	17.9	29.1	38.7	50.1	59.6	55.2
Cyprus	59.8	37.9	48.3	21.4	31.9	43.0	61.6	69.4	65.4
Latvia	58.9	54.6	56.5	22.0	37.4	51.1	67.5	76.0	70.4
Lithuania	58.3	53.4	55.6	19.7	34.7	51.0	68.5	76.5	66.0
Luxembourg	56.4	39.8	48.0	25.2	36.1	47.3	56.1	59.5	60.4
Hungary	62.3	48.9	55.2	19.0	40.0	51.5	67.9	76.1	55.8
Malta (*)	66.8	55.2	61.0	36.0	52.5	62.7	69.0	74.1	65.3
Netherlands	53.6	45.2	49.4	20.6	35.9	49.5	58.1	61.7	54.9
Austria	56.5	39.9	48.0	23.1	36.2	43.6	55.5	65.1	56.0
Poland	64.1	46.7	54.7	19.3	38.7	52.8	66.0	73.2	65.5
Portugal	57.6	50.0	53.6	23.6	35.1	49.9	63.5	69.3	60.2
Romania	63.2	49.0	55.8	21.8	38.6	54.4	69.3	71.2	58.1
Slovenia	65.0	48.5	56.6	28.1	38.5	56.4	66.3	68.5	64.2
Slovakia	63.0	46.1	54.2	19.3	36.4	50.9	68.1	78.7	69.8
Finland	62.4	47.8	54.7	26.1	42.8	52.0	64.0	65.7	57.0
Sweden	55.8	44.1	49.9	25.6	35.0	52.2	59.5	59.5	50.0
United Kingdom	60.2	51.8	55.7	29.0	47.3	56.0	64.0	62.8	52.6
Iceland	66.1	48.9	57.6	33.7	52.9	59.4	65.2	66.8	59.1
Norway	57.8	40.5	49.3	30.6	39.1	51.7	57.6	56.6	48.0
Turkey	56.4	56.7	56.5	22.4	44.2	64.9	75.4	66.2	56.5

Table 1: Share of overweight population by sex and age, 2014(%)Source: Eurostat (hlth_ehis_bm1e)

Education level and obesity

As the education level of women rose, the proportion considered as being overweight or obese fell

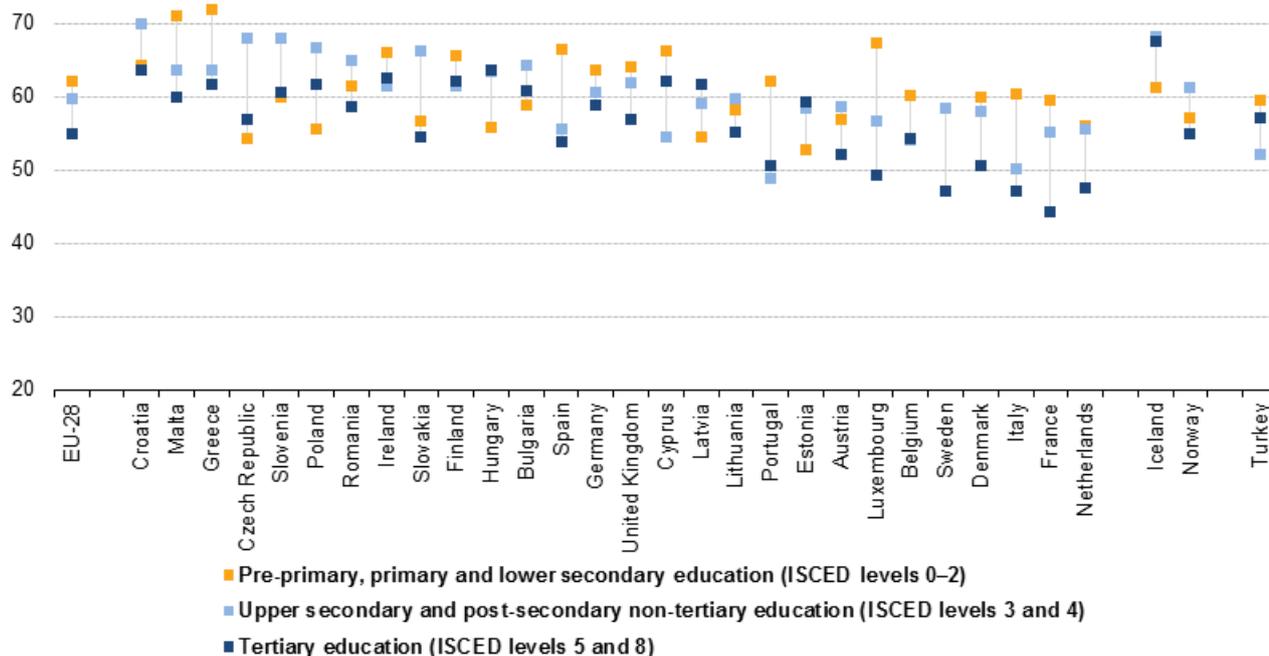
Figures 3 and 4 show the proportion of women and men who were overweight in 2014, according to their [educational attainment level](#). The proportion of women who were overweight was lower among those with higher levels of educational attainment (see Figure 3) and this pattern held all EU Member States with the exception of Malta where the lowest share was among the women within the intermediate level. Indeed, the proportion of women with a [tertiary education](#) who were overweight was at least 30 pp below the corresponding share for women with no more than a lower secondary level of education in Slovenia, Cyprus, Slovakia, Croatia, Portugal, Spain, Luxembourg and Austria, as well as Turkey.



Note: population aged 18 and over. Ranked on the overall proportion of women who were overweight or obese.

Figure 3: Proportion of women who were overweight, by educational level, 2014(%)Source: Eurostat (hlth_ehis_bm1e)

For men, there was no clear cut pattern linking educational attainment levels and obesity (see Figure 4) and the differences in the proportion of men who were overweight according to educational attainment were generally much smaller than for women. In 16 EU Member States, the highest proportion of men who were overweight was recorded among those with no more than a lower secondary level of educational attainment, while there were 3 Member States where the highest proportion of overweight men was recorded among those with a tertiary level of education.



Note: population aged 18 and over. Ranked on the overall proportion of men who were overweight or obese.

Figure 4: Proportion of men who were overweight, by educational level, 2014(%) Source: Eurostat (hlth_ehis_bm1e)

Source data for tables and graphs

- [Overweight and obesity: tables and figures](#)

Data sources

Health status

The European health interview survey (EHIS) is the source of information for this article. It aims to provide harmonised statistics across the EU Member States in relation to the respondents' health status, lifestyle (health determinants) and their use of healthcare services. This source is documented in more detail in this [background article](#) which provides information on the scope of the data, its legal basis, the methodology employed, as well as related concepts and definitions.

The second wave of the EHIS was conducted in all EU Member States during 2013–15 according to [European Commission Regulation 141/2013](#) and its subsequent amendment to take account of the accession of Croatia to the EU ([European Commission Regulation 68/2014](#)). The data presented here are the results for individual EU Member States from this second wave of the survey.

Body mass index

The [body mass index \(BMI\)](#) is a measure of a person's weight relative to their height that links fairly well with body fat. The BMI is accepted as the most useful measure of obesity for adults (those aged 18 years and over) when only weight and height data are available. It is calculated as a person's weight (in kilograms) divided by the square of his or her height (in metres). $BMI = \text{weight (kg)} / \text{height (m}^2\text{)}$

The following subdivision (according to the WHO) is used to classify results for the BMI:

- < 18.50: underweight;
- 18.50 – < 25.00: normal range;
- ≥ 25.00 : overweight;

- ≥ 30.00 : obese.

The analysis of people who are overweight or obese by educational level is based upon the [International standard classification of education \(ISCED\)](#) , 1997 version, and refers to:

- pre-primary, primary and lower secondary education (ISCED levels 0–2);
- upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4);
- tertiary education (ISCED levels 5–8).

The EHIS measures a range of indicators in relation to health determinants aside from the BMI, such as the consumption of fruit and vegetables, tobacco and alcohol, as well physical activity.

Context

According to the [World Health Organisation \(WHO\)](#), Europe had the second highest proportion of overweight or obese people in 2014, behind the Americas. Globally, in 2014, 39 % men and 40 % of women aged 18 or over were overweight. This share rose above 58 % in Europe and the Americas. By contrast, it was considerably lower in Africa and south east Asia.

The number of overweight and obese persons has been growing in recent years and many people find it increasingly difficult to maintain a 'normal' weight in today's largely obesogenic environment. This environment spans from low breastfeeding rates to difficulties in geographically or financially accessing the ingredients of a healthy diet, to a lack of cooking skills, to the abundance and marketing of energy-rich foods, to urban planning choices and lifestyle pressures that often reduce the opportunity for physical activity (both at work or for leisure). While obesity was once considered a problem only for high income countries, there has been a considerable increase in the proportion of people from low- and middle-income countries who are considered to be overweight or obese (in particular in urban areas where people are more prone to a sedentary lifestyle). The malnutrition problem has become more complex as obesity and deficiencies in micronutrients can and do go hand in hand.

Nutrition is the intake of food, considered in relation to the body's dietary needs. Good nutrition — an adequate, well-balanced diet combined with regular physical activity — is a cornerstone for good health. Specific recommendations for a healthy diet include: eating more fruit, vegetables, nuts and grains; cutting down on salt, sugar and fats. Poor nutrition can lead to reduced immunity, increased susceptibility to disease, and impaired physical and mental development. Indeed, across the EU, six of the seven largest risk factors for premature death — blood pressure, cholesterol, weight, inadequate fruit and vegetable intake, physical inactivity, and alcohol abuse — may, at least in part, be linked to how we eat, drink and exercise.

In March 2005, the [European Commission](#) launched a [European platform for action on diet, physical activity and health](#) , which led to more than 300 initiatives designed to promote better nutrition and physical activity in the EU. This was followed in May 2007 by a White paper which provided an integrated approach, involving stakeholders at local, regional, national and European levels concerning a [Strategy for Europe on nutrition, overweight, and obesity-related health issues](#) (COM(2007) 279 final). An [Action Plan on Childhood Obesity](#) was endorsed in 2014 by the members of the High Level Group on Nutrition and Physical Activity (with a reserve by the Netherlands). In the same year, [Council Conclusions on Nutrition and Physical Activity](#) were published.

Other articles

Online publications

- [Health in the European Union – facts and figures](#)
- [Disability statistics](#)

Methodology

- [European health interview survey](#)

General health statistics articles

- [Health statistics introduced](#)
- [Health statistics at regional level](#)
- [The EU in the world — health](#)

Database

- [Health determinants](#) (health_det)

Body mass index (hlth_bmi)

Body mass index (BMI) by sex, age and educational attainment level (%) (hlth_ehis_de1)

Body mass index (BMI) by sex, age and income quintile (%) (hlth_ehis_de2)

- [Disability](#) (health_dsb)

Health problems of disabled people (sources SILC or EHIS) (hlth_dsb_hlth)

Body mass index (BMI) by level of activity limitation, sex and age (hlth_dh050)

- [Quality of life](#) (qol)

Health (qol_hlt)

Drivers - healthy and unhealthy behaviours (qol_hlt_dr)

Body mass index (BMI) by sex, age and educational attainment level (%) (hlth_ehis_de1)

Body mass index (BMI) by sex, age and income quintile (%) (hlth_ehis_de2)

Dedicated section

- [Health](#)
- [Health status and determinants](#)
- [Quality of life](#)

Publications

- [Atlas on mortality in the European Union](#)
- [Between 8 % and 25 % of adults are obese across Member States](#) — News release

Methodology

- [European health interview survey \(EHIS\)](#) (ESMS metadata file — hlth_det_esms); contains link to guidelines, questions and overview of the surveys in the participating countries

Legislation

- [Regulation \(EC\) No 1338/2008 of the European Parliament and of the Council](#) of 16 December 2008 on Community statistics on public health and health and safety at work
- [Summaries of EU Legislation: Statistics on public health/health & safety at work](#)

External links

- [EU Action Plan on Childhood Obesity 2014-2020](#)
- [European Commission — Directorate-General for Health and Food Safety — European Core Health Indicators \(ECHI\) \(ECHI 42 'Body Mass Index'\)](#)
- [European Commission — Directorate-General for Health and Food Safety — Public health — Nutrition and physical activity](#)
- [European Commission — Directorate-General for Health and Food Safety — Public health — Strategy on nutrition, overweight and obesity-related health issues](#)
- [WHO European Childhood Obesity Surveillance Initiative \(COSI\)](#)
- [WHO European Database on Nutrition, Obesity and Physical Activity \(NOPA\)](#)
- [World Health Organisation — Global database on Body Mass Index](#)
- [World Obesity Federation](#)