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Metadata – Overweight and obesity in adults

Description

Overweight prevalence: Proportion of adult persons (\geq 18 years) whose Body Mass Index (BMI) is \geq 25 kg/m².

Obesity prevalence: Proportion of adult persons (\geq 18 years) whose Body Mass Index (BMI) is \geq 30 kg/m².

Rationale

Excessive body weight predisposes to various diseases, particularly cardiovascular diseases, diabetes mellitus type 2, cancers and osteoarthritis. Overweight is a growing public health problem. Many of the risks diminish with weight loss (1,2). Effective interventions exist to prevent and treat overweight and obesity. The indicator is recommended as a health promotion indicator by the OECD and is one of the ECHI indicators (3,4).

Primary Data source

Belgian Health Interview Surveys (HIS) 1997-2001-2004-2008-2013- 2018 for self-reported data

Belgian Health Examination Survey (HES) 2018 for measured data; the sample for the HES is a subsample of the HIS

OECD Health Statistics for the European comparison

Indicator source

For the self-reported indicators: Belgian HIS reports and HISIA 1997-2001-2004-2008-2013-2018 (https://hisia.wiv-isp.be/SitePages/Home.aspx).

For the measured indicators: Belgian HES report 2018 https://his.wiv-isp.be/fr/Documents%20partages/HES FR 2018.pdf (5)

For international comparisons: Eurostat provides comparable data for the countries participating in the EHIS 2014 (to date no more recent years available). The OECD provides data from several national data sources. We used OECD self-reported data in this report.

Periodicity

Every 3-5 years for the HIS

Calculation, technical definitions, and limitations

The Body Mass Index (BMI) is defined as the individual's body weight (in kilograms) divided by the square of their height (in meters).

In the HIS, weight and height are self-reported and derived from the questions:

- BMI01: How tall are you? (cm) and
- BMI02: How much do you weigh without clothes and shoes? (kg).

If a woman was pregnant at the time of the interview, her weight before the pregnancy was asked.

Self-reported data can suffer from inaccuracy of the measures. They can also be subject to some bias: overweight people tend to underestimate their weight and overestimate their height, leading to an underestimation of the overweight prevalence. However, it is likely that the bias remains quite stable over time, allowing for time trends monitoring.

In the HES, the height (without shoes) and weight (with light clothes and without shoes) were measured by a trained nurse in the home of the participants. When heavy clothes were reported by the nurse, a correction was applied following the recommendations of Whigham et al. (6), i.e. minus 0.8 kg for women and 1.2kg for men.

The indicators were defined as:

- Overweight: the percentage of people aged 18 years or older reporting measures of height and weight resulting in a BMI ≥ 25
- Obesity: the percentage of people aged 18 years or older reporting measures of height and weight resulting in a BMI ≥ 30

These percentages were weighted according to the survey design of the HIS or the HES.

International

Availability: Yes. EHIS 2014 provides data for 17 countries. OECD provides data comparability from several national data sources, for self-reported and measured indicators.

> Comparability: OECD data come from different national data sources which can hamper comparability. The lack of age-standardization in international data can hamper the comparability for these indicators because overweight and obesity are increasing with age (except in the oldest age groups).

Metadata – Overweight and obesity in adolescents

Description

Proportion of teenagers aged between 11 and 18 years old whose Body Mass Index (BMI) is higher than the specific cut-offs for overweight and obesity link to their respective age.

Rationale

Overweight and obese children and teenagers suffer from both short-term and longterm health consequences. Overweight and obese children are more likely to stay obese into adulthood and more likely to develop noncommunicable diseases (NCDs) like diabetes and cardiovascular diseases at a younger age. Childhood obesity is also associated with a higher chance of premature death and disability in adulthood. But in addition to increased future risks, obese children experience breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular disease, insulin resistance, and psychological effects. Overweight and obesity, as well as their related diseases, are largely preventable. Prevention of childhood obesity, therefore, needs high priority (7.8).

Primary Data source

Health behavior in school-aged children (HBSC) surveys 2006, 2010, 2014, 2018. Two separated HBSC surveys are conducted in Belgium:

- HBSC in the French community (conducted by the Université libre de Bruxelles)
- HBSC in the Flemish community (conducted by the University of Ghent)

Indicator source

HBSC French community 2018 HBSC Flemish community 2018

WHO international reports on the HBSC 2006, 2010, 2014

Periodicity

Every 4 years

Calculation, technical definitions. and limitations

The Body Mass Index (BMI) is defined as the individual's body weight (in kilograms) divided by the square of their height (in meters). During childhood and adolescence, the ratio between weight and height varies with sex and age, so the cut-off values that determine the nutritional status of those aged 0-18 years are gender- and age-specific. We use in this report, the cut-offs recommended by the International Obesity Task Force (IOTF) (9).

The indicators were defined as:

- Overweight: the percentage of teenagers aged between 11 and 18 years reporting measures of height and weight resulting in a BMI higher than the age and sex-specific cut-off for overweight
- Obesity: the percentage of teenagers aged between 11 and 18 years reporting measures of height and weight resulting in a BMI higher than the age and sex-specific cut-off for obesity

For national figures, an unweighted average of the results in the French and Flemish community was done.

Several limitations are to be mentioned. Height and weight are self-reported by the teenagers. The validity of surveys estimating excess weight in teenagers has not been studied. Height and weight in teenagers change quickly and maybe these self-reported measures are not up to date.

International comparability

Availability: Yes, the HBSC is realized across 50 countries and regions.

Comparability: The HBSC international standard questionnaire enables the collection of common data across participating countries. These data allow crossnational comparisons. However, for indicators of overweight and obesity in teenagers, attention should be put on the use of a common set of cut-offs for comparison.

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