



Bulgaria



Country report card - children

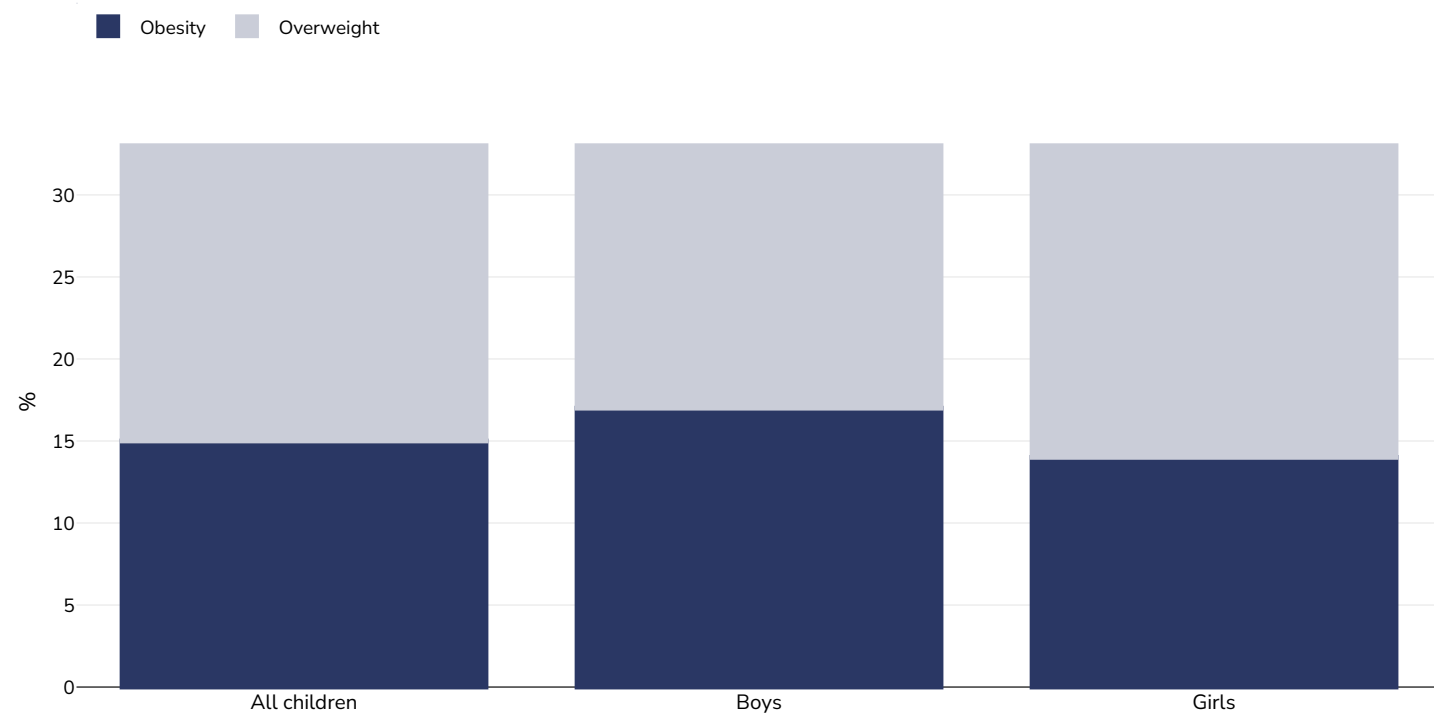
This report card contains the latest data available on the Global Obesity Observatory on overweight and obesity for children, including adolescents (aged 5 to 18 years). Where available, data on common and relevant obesity drivers and comorbidities are also presented.

View the latest version of this report on the Global Obesity Observatory at <https://data.worldobesity.org/country/bulgaria-31/>.

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Obesity prevalence

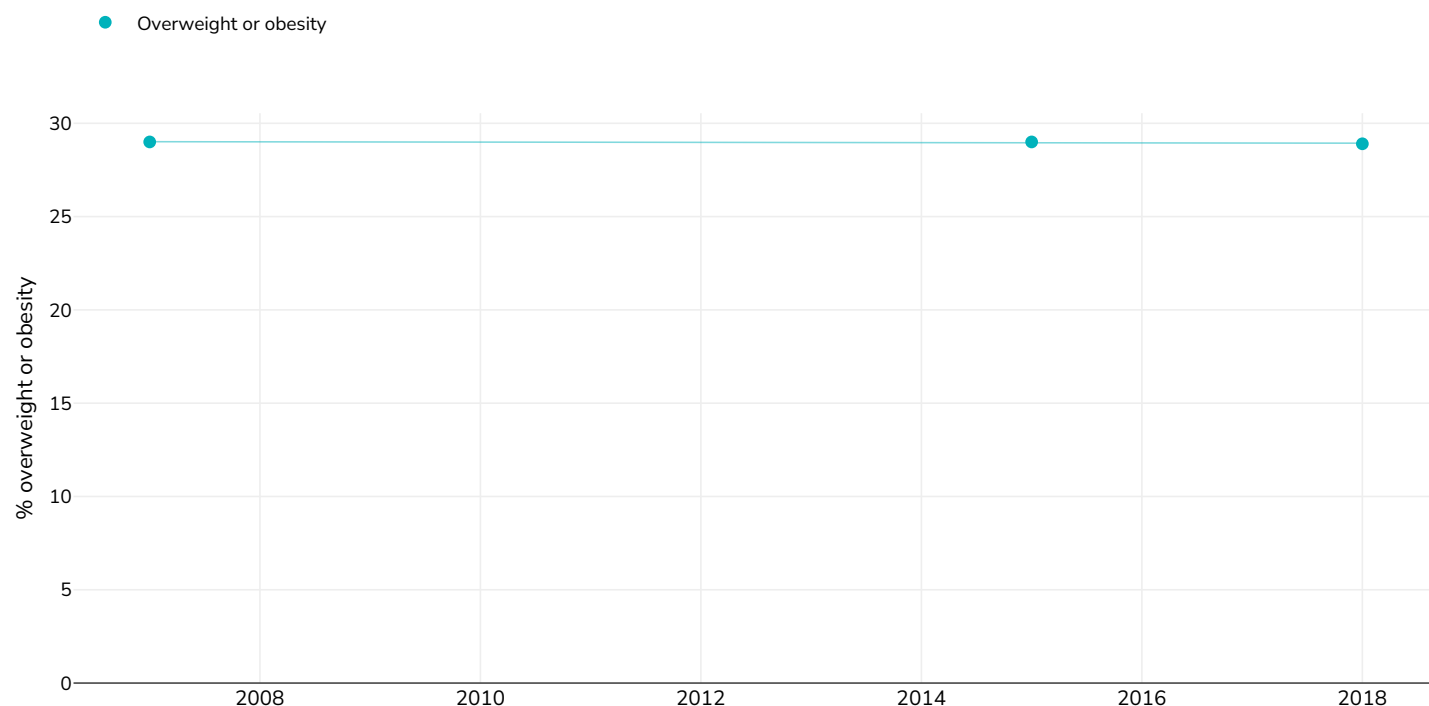
Children, 2022-2024



Survey type:	Measured
Age:	7
Area covered:	National
References:	WHO European Childhood Obesity Surveillance Initiative (COSI): A brief review of results from round 6 of COSI (2022-2024). Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO.
Cutoffs:	WHO 2007

% Children living with overweight or obesity, 2007-2020

Girls



Survey type:

Measured

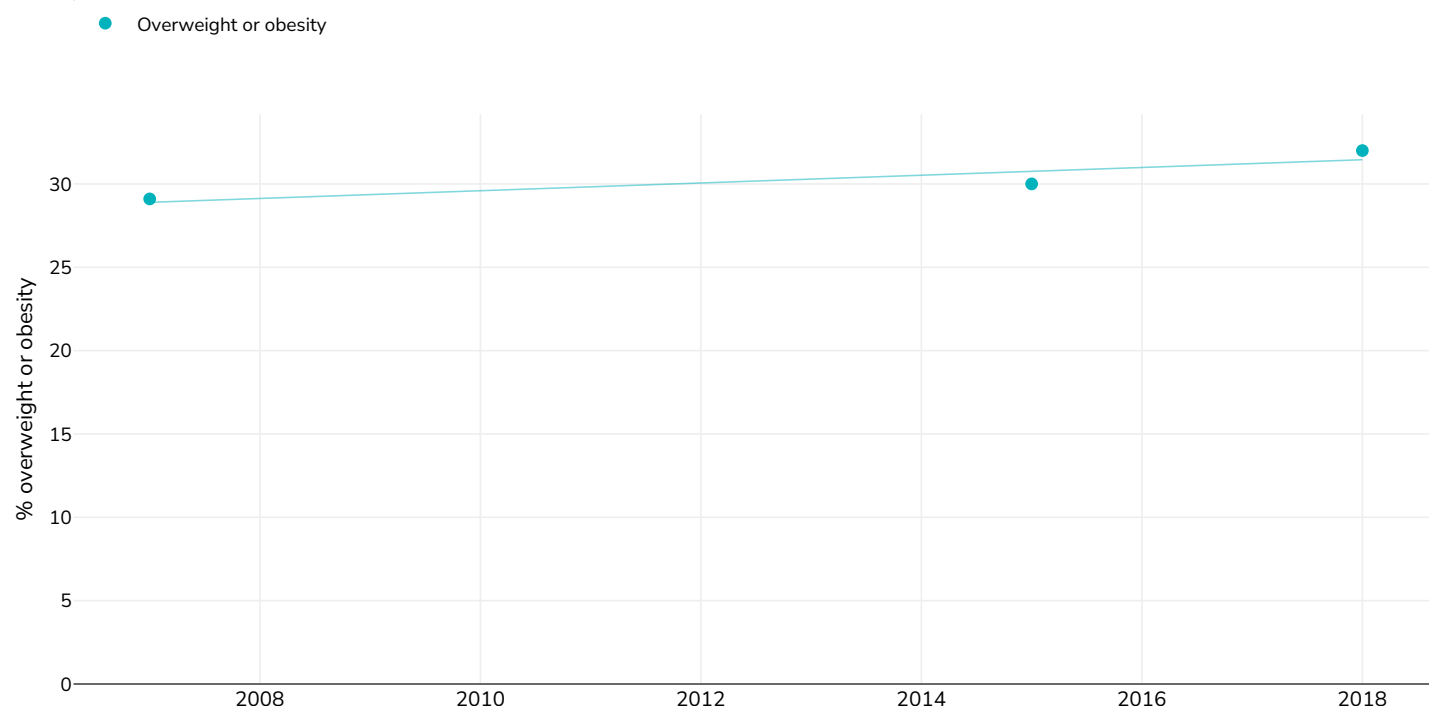
References:

- 2007: Lissner L, Wijnhoven TMA, Mehlig K, et al. Socioeconomic inequalities in childhood overweight: heterogeneity across five countries in the WHO European Childhood Obesity Surveillance Initiative (COSI-2008). *International Journal of Obesity* (2005). 2016;40(5):796-802. doi:10.1038/ijo.2016.12.
- 2015: WHO European Childhood Obesity Surveillance Initiative (COSI) Report on the fourth round of data collection, 2015–2017 (2021). Available at: <https://www.euro.who.int/en/health-topics/disease-prevention/nutrition/activities/who-european-childhood-obesity-surveillance-initiative-cosi/cosi-publications/who-european-childhood-obesity-surveillance-initiative-cosi-report-on-the-fourth-round-of-data-collection,-20152017-2021>. Accessed 19.05.21.
- 2018: Report on the fifth round of data collection, 2018–2020: WHO European Childhood Obesity Surveillance Initiative (COSI). Copenhagen: WHO Regional Office for Europe; 2022. Licence: CC BY-NC-SA 3.0 IGO.

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.

Boys



Survey type:

Measured

References:

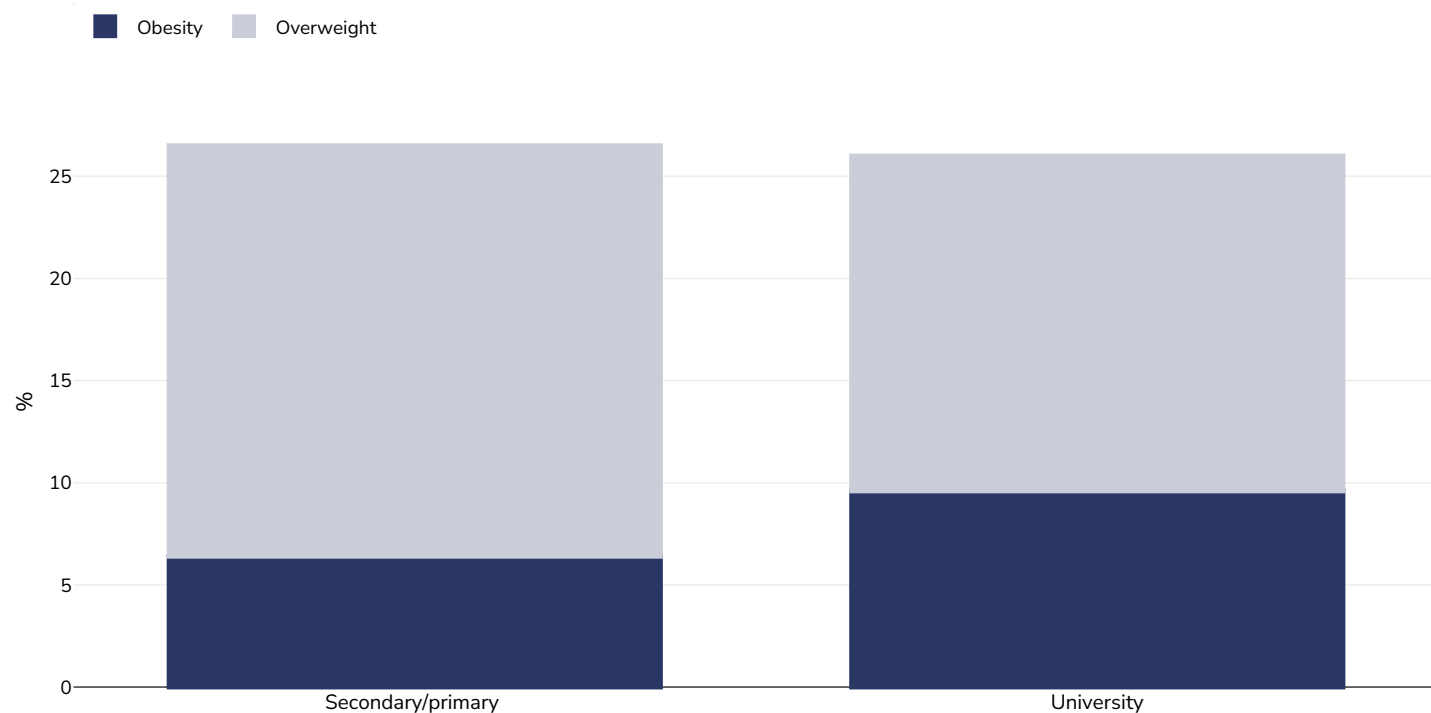
- 2007: Lissner L, Wijnhoven TMA, Mehlig K, et al. Socioeconomic inequalities in childhood overweight: heterogeneity across five countries in the WHO European Childhood Obesity Surveillance Initiative (COSI-2008). *International Journal of Obesity* (2005). 2016;40(5):796-802. doi:10.1038/ijo.2016.12.
- 2015: WHO European Childhood Obesity Surveillance Initiative (COSI) Report on the fourth round of data collection, 2015–2017 (2021). Available at: <https://www.euro.who.int/en/health-topics/disease-prevention/nutrition/activities/who-european-childhood-obesity-surveillance-initiative-cosi/cosi-publications/who-european-childhood-obesity-surveillance-initiative-cosi-report-on-the-fourth-round-of-data-collection,-20152017-2021>. Accessed 19.05.21.
- 2018: Report on the fifth round of data collection, 2018–2020: WHO European Childhood Obesity Surveillance Initiative (COSI). Copenhagen: WHO Regional Office for Europe; 2022. Licence: CC BY-NC-SA 3.0 IGO.

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.

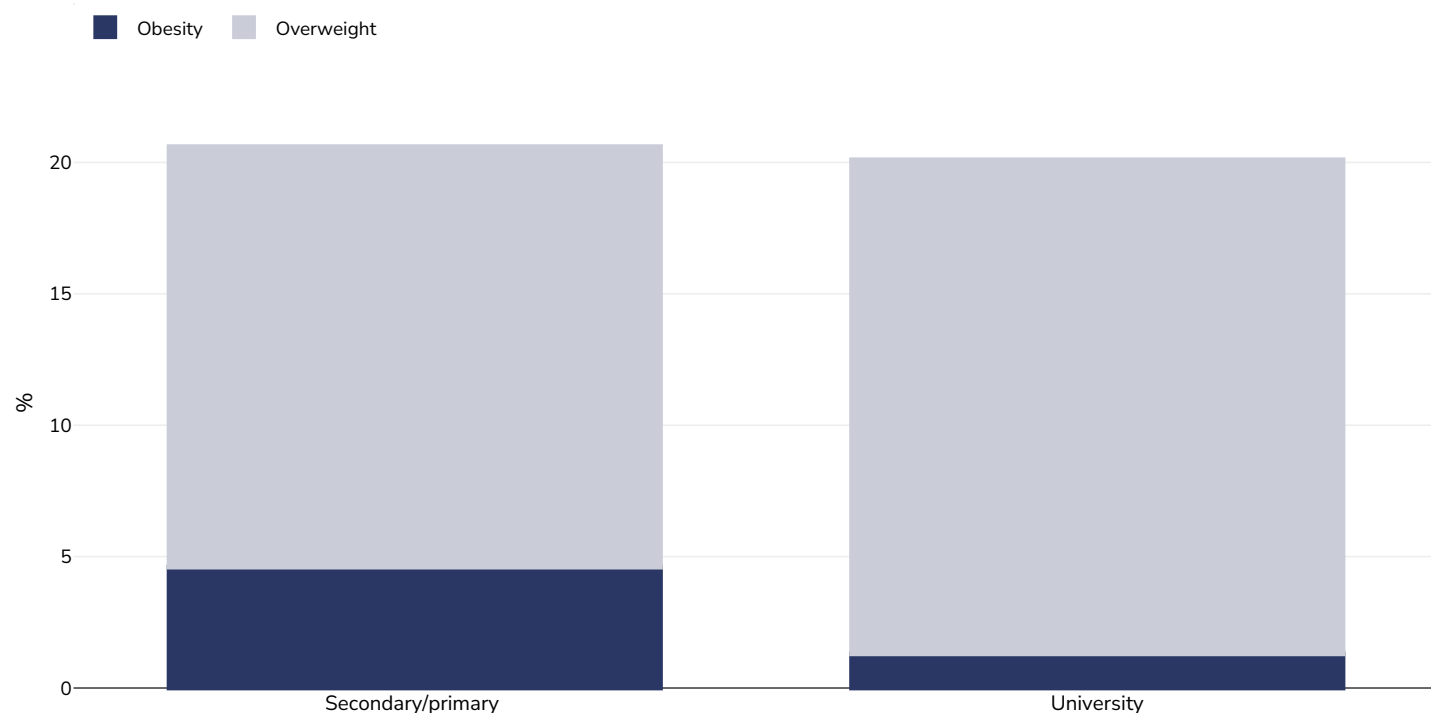
Overweight/obesity by education

Boys, 2012-2014



Survey type:	Measured
Age:	8-15
Sample size:	881
Area covered:	Smolyan region
References:	Mladenova S, Andreenko E. Influence of socio-economic and demographic factors, feeding and physical activity on nutritional status of 8-15-year-old Bulgarian children and adolescents: preliminary results. Nutr Hosp. 2015;32(6):2559-2569.
Notes:	Prevalence of obesity and overweight by Father's level of Education. IOTF cut-off points used.
Cutoffs:	IOTF

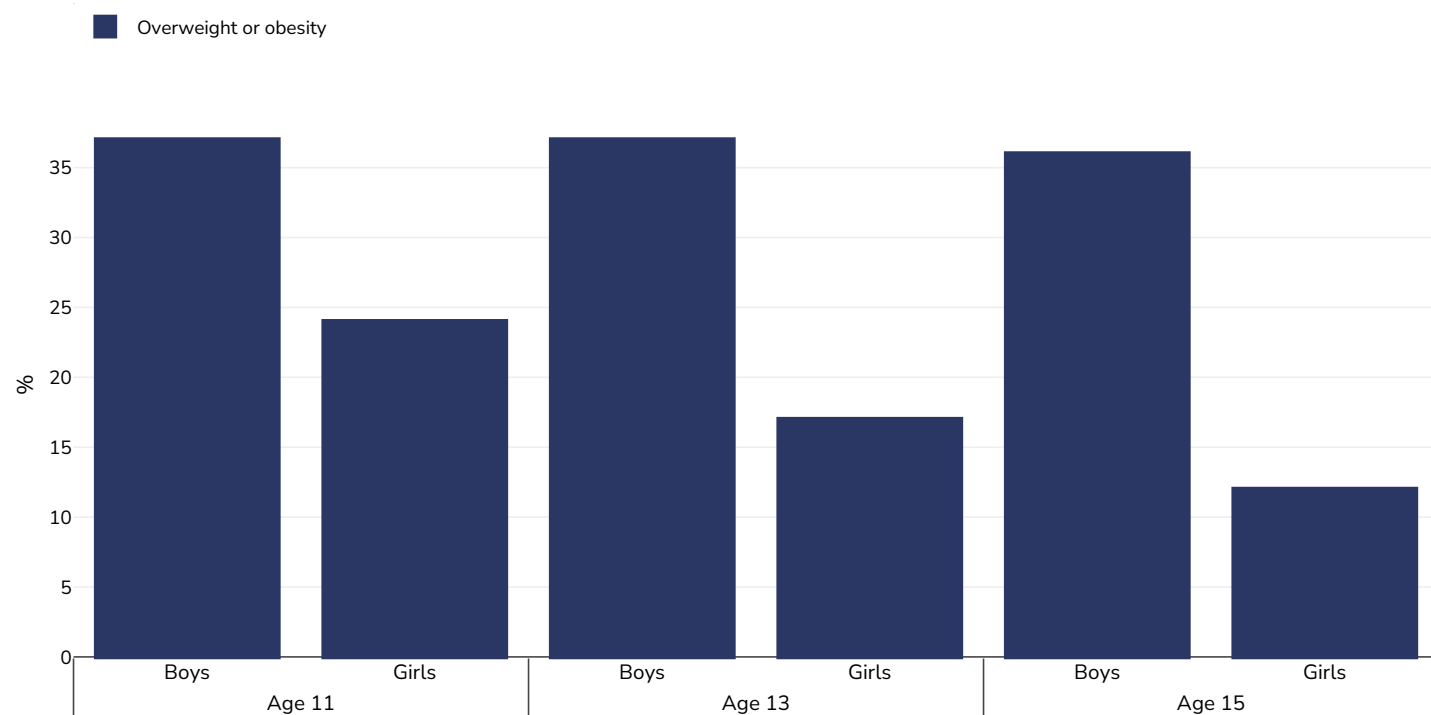
Girls, 2012-2014



Survey type:	Measured
Age:	8-15
Sample size:	881
Area covered:	Smolyan region
References:	Mladenova S, Andreenko E. Influence of socio-economic and demographic factors, feeding and physical activity on nutritional status of 8-15-year-old Bulgarian children and adolescents: preliminary results. Nutr Hosp. 2015;32(6):2559-2569.
Notes:	Prevalence of obesity and overweight by Father's level of Education. IOTF cut-off points used.
Cutoffs:	IOTF

Overweight/obesity by age

Children, 2021-2022



Survey type: Self-reported

Area covered: See Report

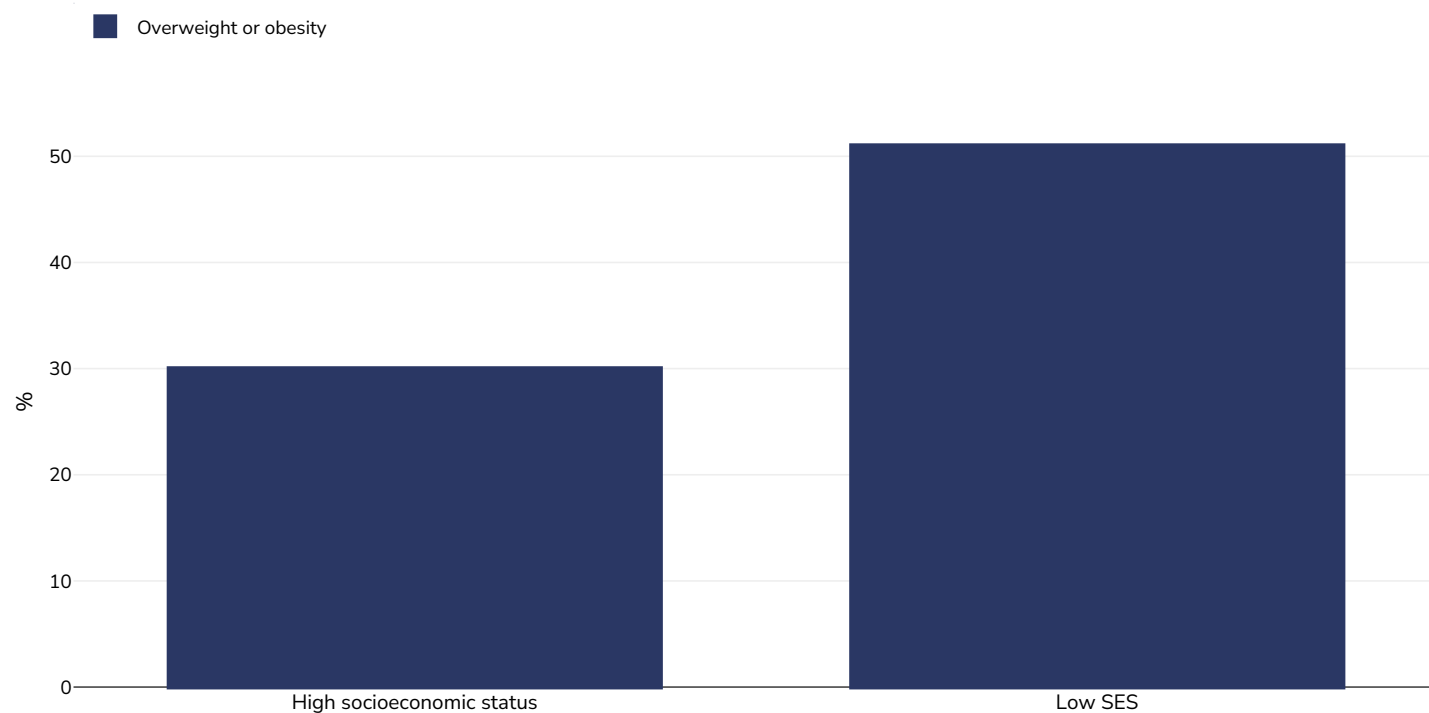
References: Rakić JG, Hamrik Z, Dzielska A, Felder-Puig R, Oja L, Bakalár P et al. A focus on adolescent physical activity, eating behaviours, weight status and body image in Europe, central Asia and Canada. Health Behaviour in School-aged Children (HBSC) international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. 'Any translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition'

Notes: HBSC aims to survey approximately 1500 pupils per age group in each country or region (totaling around 4500)

Cutoffs: +2SD

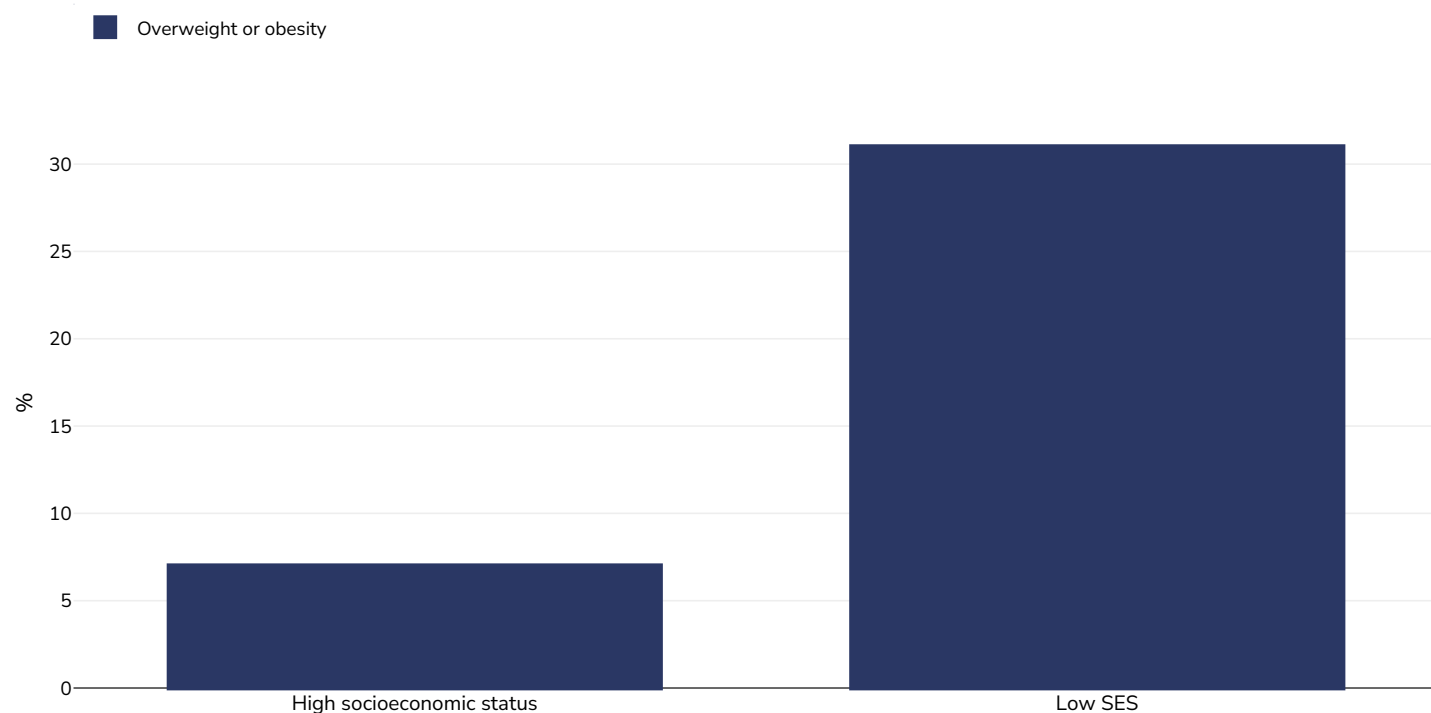
Overweight/obesity by socio-economic group

Boys, 2021-2022



Survey type:	Self-reported
Age:	11-15
References:	Rakić JG, Hamrik Z, Dzielska A, Felder-Puig R, Oja L, Bakalár P et al. A focus on adolescent physical activity, eating behaviours, weight status and body image in Europe, central Asia and Canada. Health Behaviour in School-aged Children (HBSC) international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. 'Any translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition'
Notes:	Family affluence scaleHBSC aims to survey approximately 1500 pupils per age group in each country or region (totaling around 4500)
Cutoffs:	+2SD

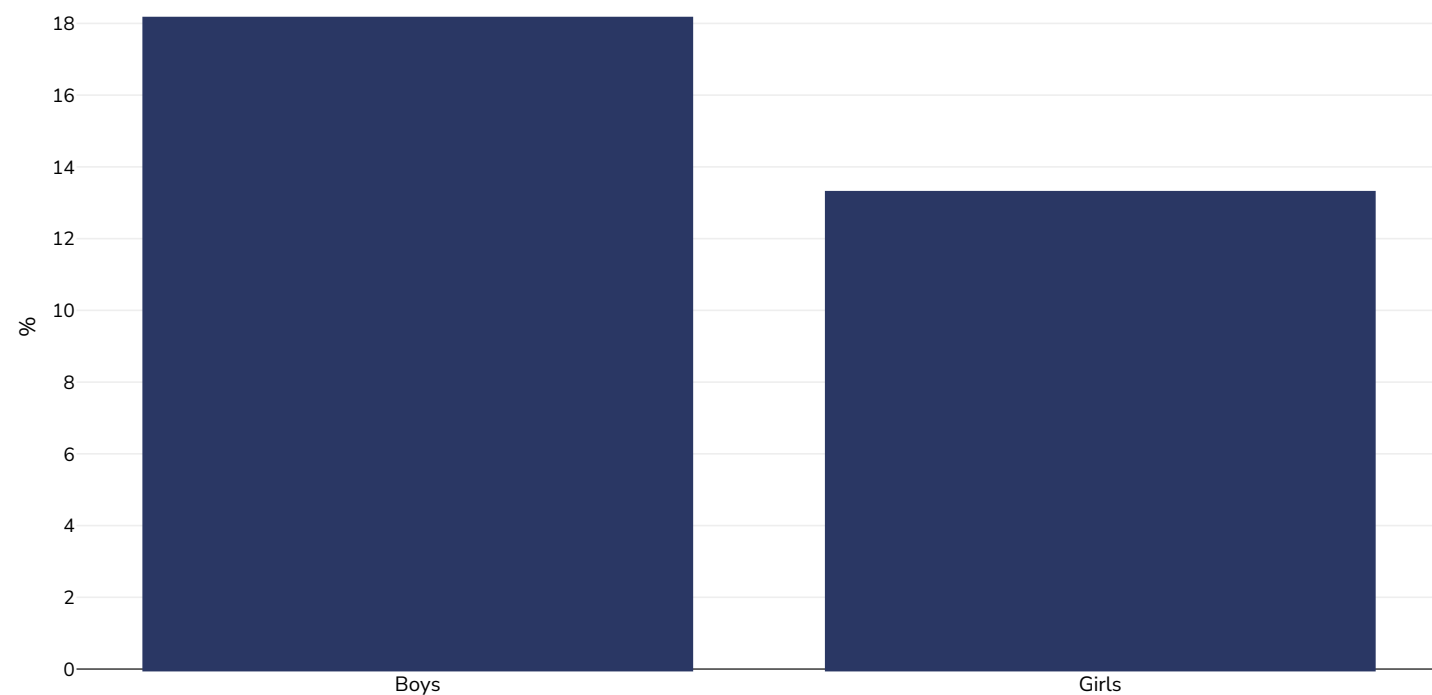
Girls, 2021-2022



Survey type:	Self-reported
Age:	11-15
References:	Rakić JG, Hamrik Z, Dzielska A, Felder-Puig R, Oja L, Bakalár P et al. A focus on adolescent physical activity, eating behaviours, weight status and body image in Europe, central Asia and Canada. Health Behaviour in School-aged Children (HBSC) international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. 'Any translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition'
Notes:	Family affluence scaleHBSC aims to survey approximately 1500 pupils per age group in each country or region (totaling around 4500)
Cutoffs:	+2SD

Double burden of underweight & overweight

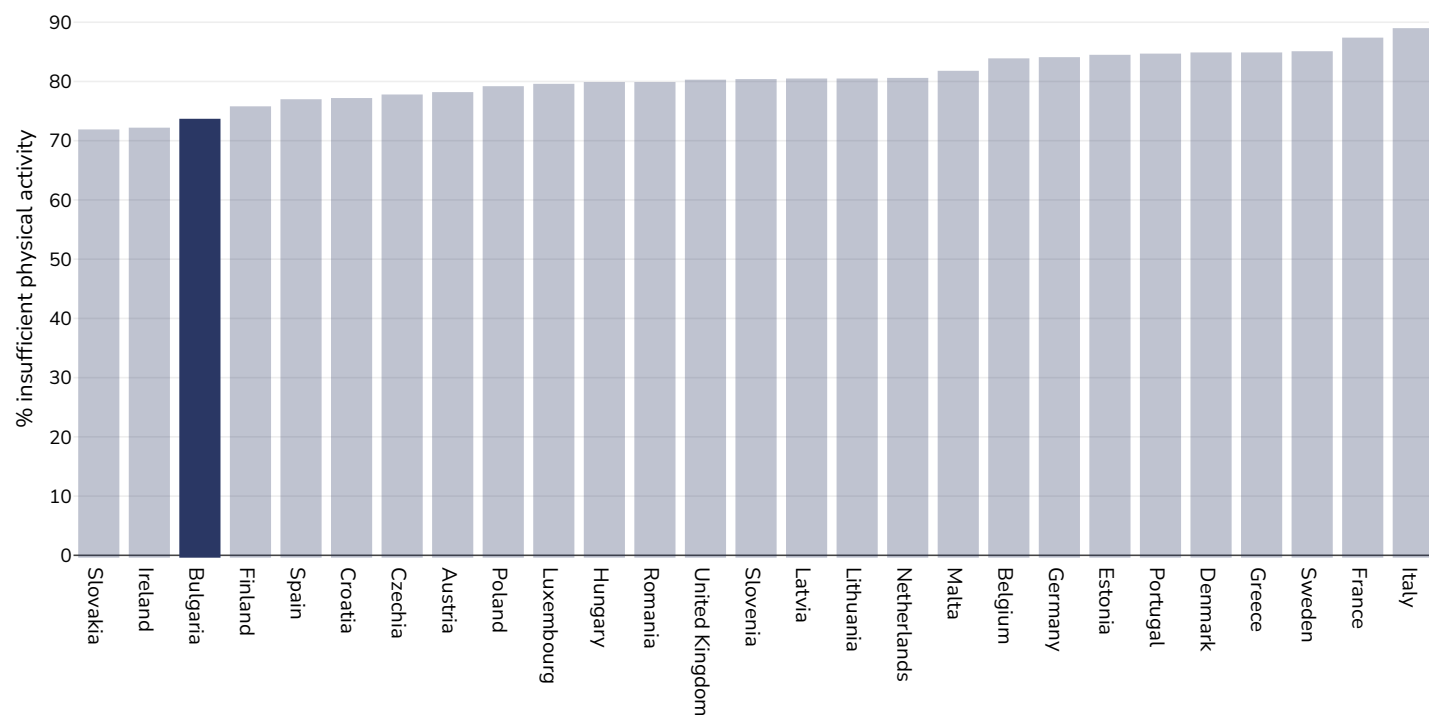
Children, 2022



Survey type:	Measured
Age:	5-19
References:	NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in underweight and obesity from 1990 to 2022: a pooled analysis of 3663 population representative studies with 222 million children, adolescents, and adults. Lancet 2024; published online Feb 29. https://doi.org/10.1016/S0140-6736(23)02750-2 .
Notes:	Age standardised estimates
Definitions:	Combined prevalence of BMI < -2SD and BMI > 2SD (double burden of thinness and obesity)
Cutoffs:	BMI < -2SD and BMI > 2SD

Insufficient physical activity

Children, 2016



Survey type: Self-reported

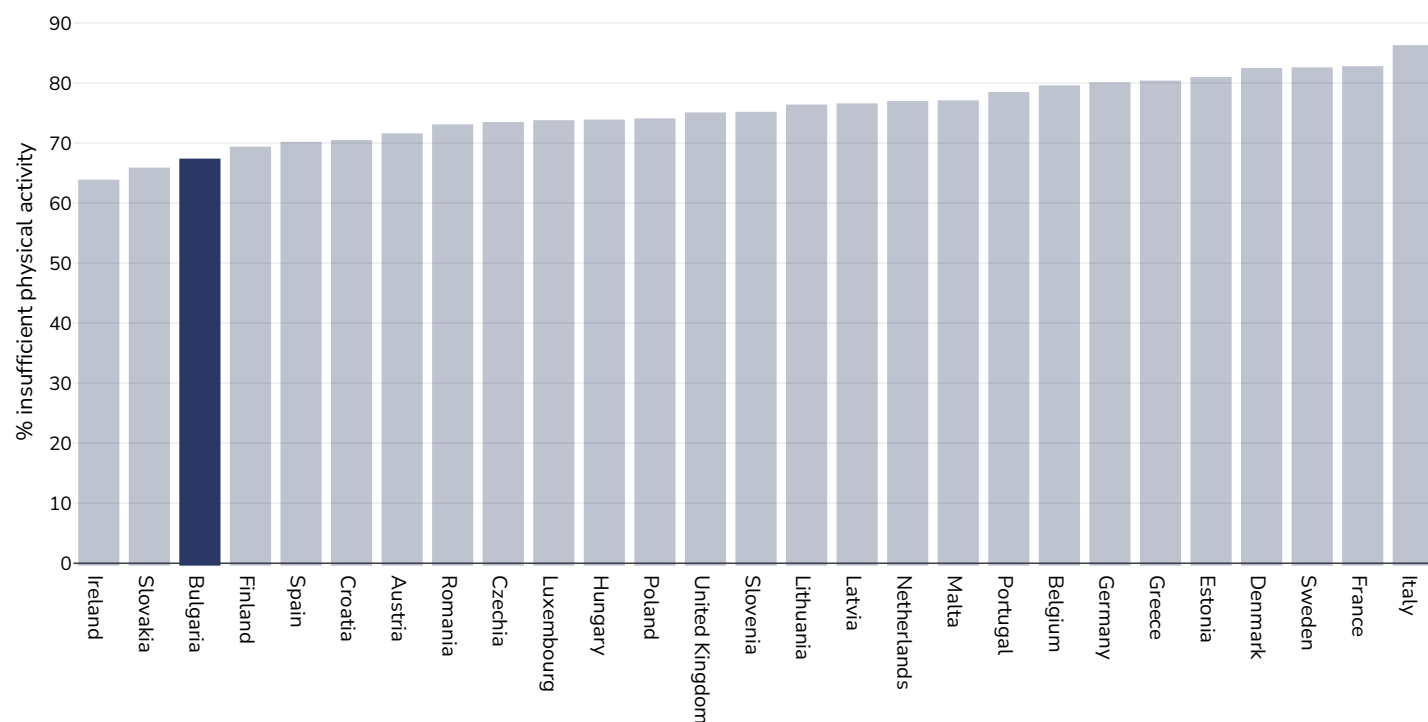
Age: 11-17

References: Global Health Observatory data repository, World Health Organisation, <https://apps.who.int/gho/data/node.main.A893ADO?lang=en> (last accessed 16.03.21)

Notes: % of school going adolescents not meeting WHO recommendations on Physical Activity for Health, i.e. doing less than 60 minutes of moderate- to vigorous-intensity physical activity daily.

Definitions: % Adolescents insufficiently active (age standardised estimate)

Boys, 2016



Survey type: Self-reported

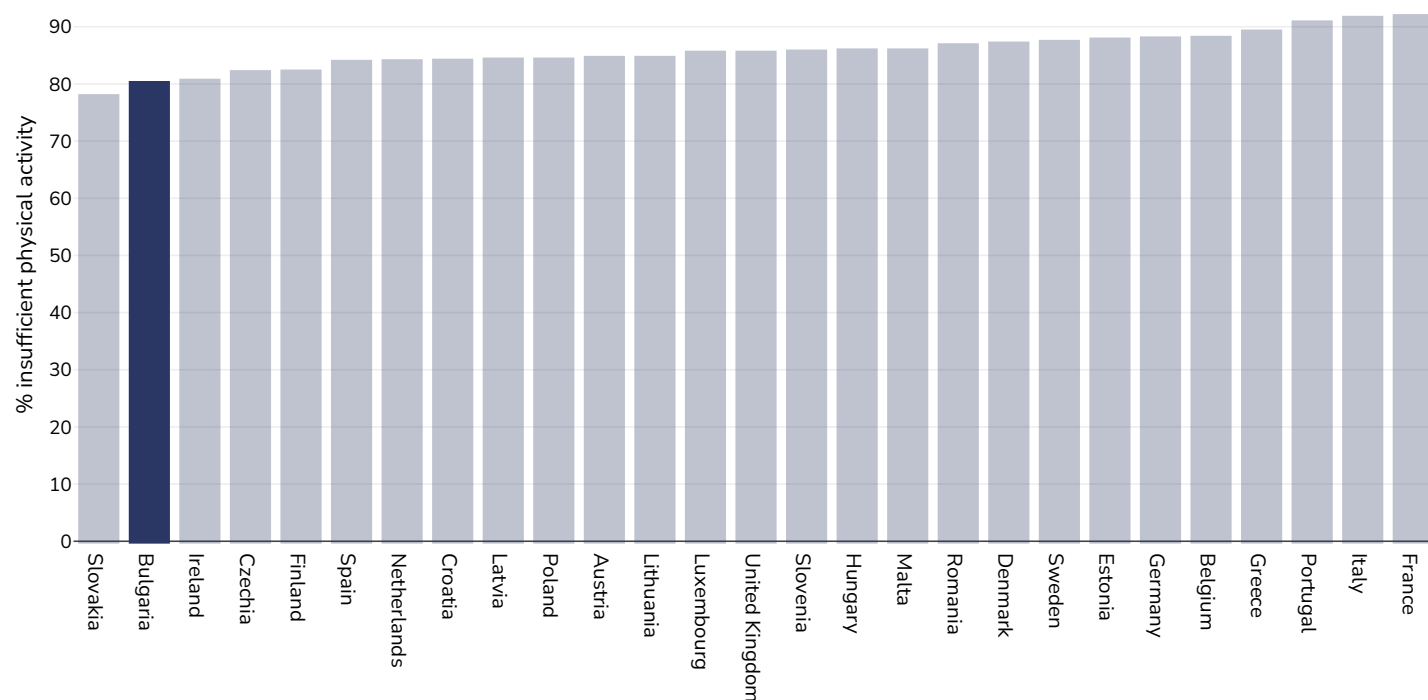
Age: 11-17

References: Global Health Observatory data repository, World Health Organisation, <https://apps.who.int/gho/data/node.main.A893ADO?lang=en> (last accessed 16.03.21)

Notes: % of school going adolescents not meeting WHO recommendations on Physical Activity for Health, i.e. doing less than 60 minutes of moderate- to vigorous-intensity physical activity daily.

Definitions: % Adolescents insufficiently active (age standardised estimate)

Girls, 2016



Survey type: Self-reported

Age: 11-17

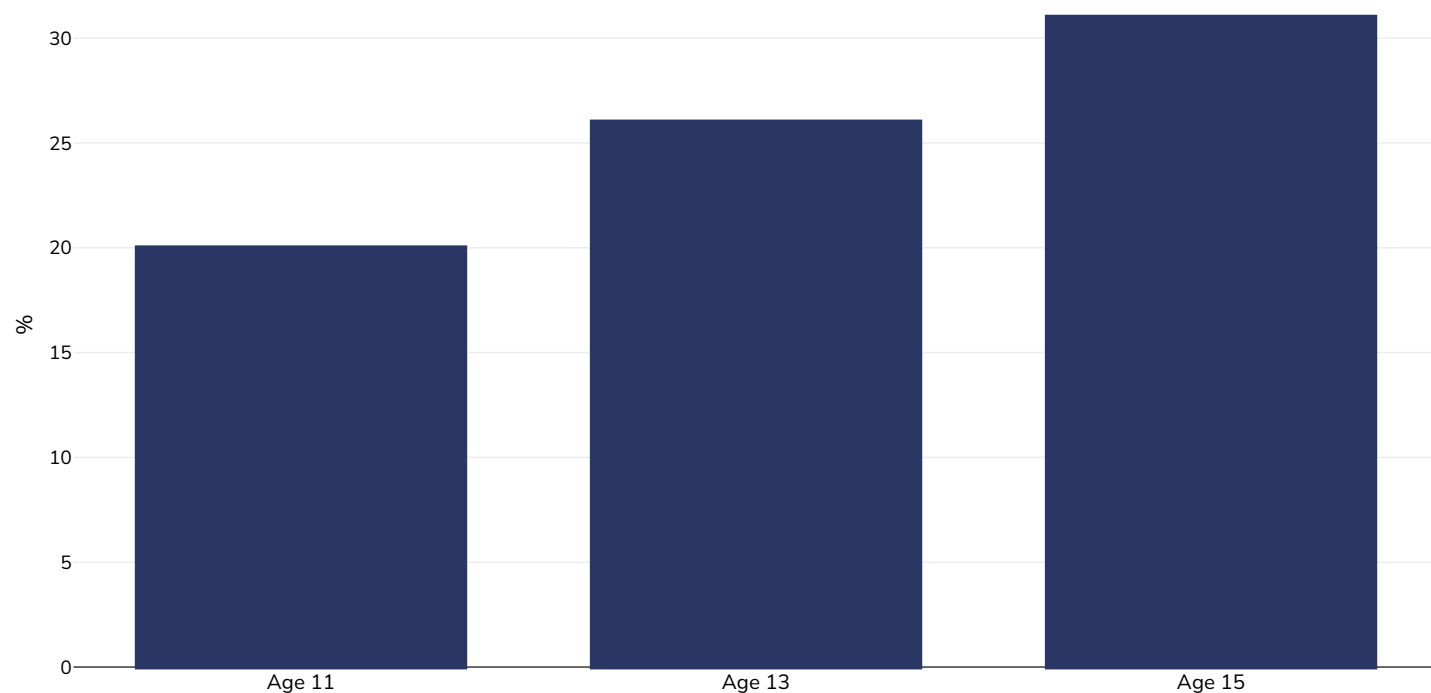
References: Global Health Observatory data repository, World Health Organisation, <https://apps.who.int/gho/data/node.main.A893ADO?lang=en> (last accessed 16.03.21)

Notes: % of school going adolescents not meeting WHO recommendations on Physical Activity for Health, i.e. doing less than 60 minutes of moderate- to vigorous-intensity physical activity daily.

Definitions: % Adolescents insufficiently active (age standardised estimate)

Prevalence of at least daily carbonated soft drink consumption

Boys, 2021-2022



Area covered:

National

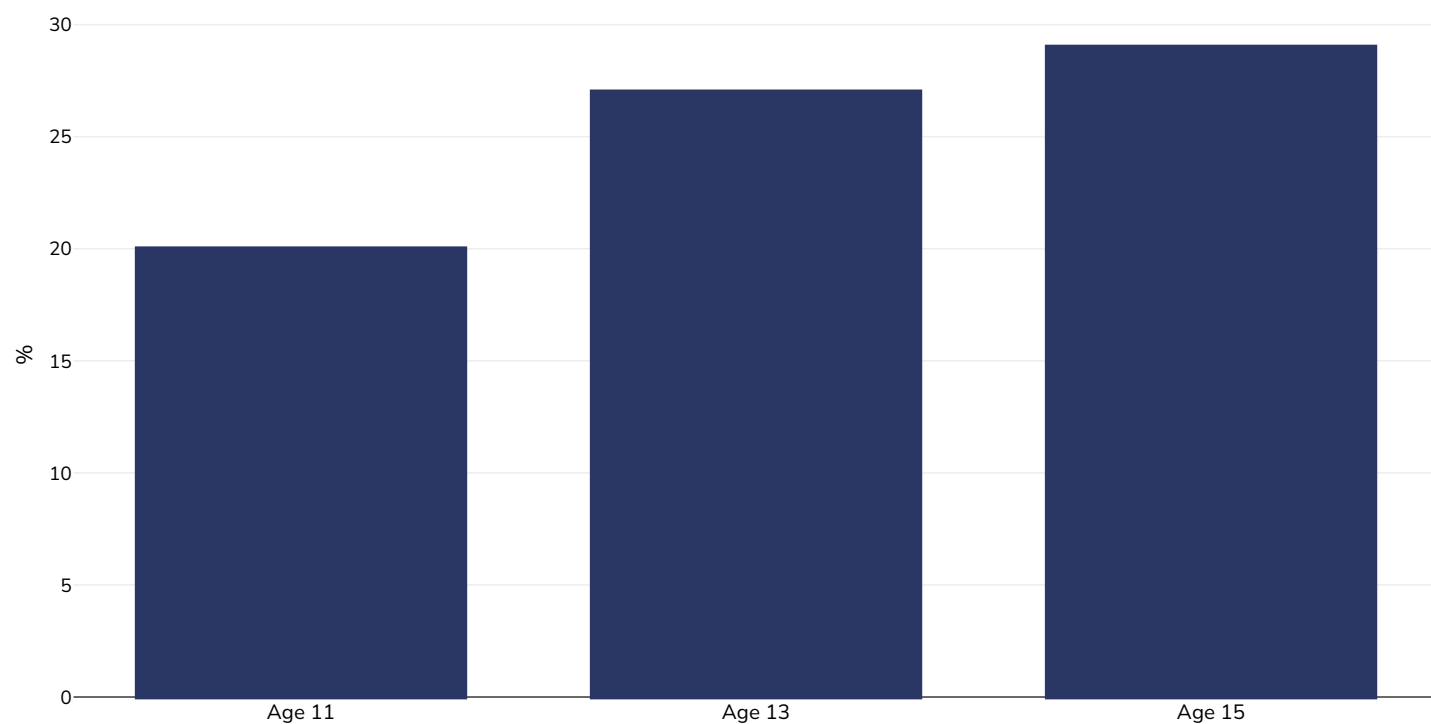
References:

Health Behaviour in School-aged Children study (2023), Data browser (findings from the 2021/22 international HBSC survey): <https://data-browser.hbsc.org..> Health Behaviour in School-aged Children study (2020), Data browser (findings from the 2017/18 international HBSC survey): <https://data-browser.hbsc.org>.

Definitions:

Proportion who reported drinking sugary soft drinks daily (at least once)

Girls, 2021-2022



Area covered:

National

References:

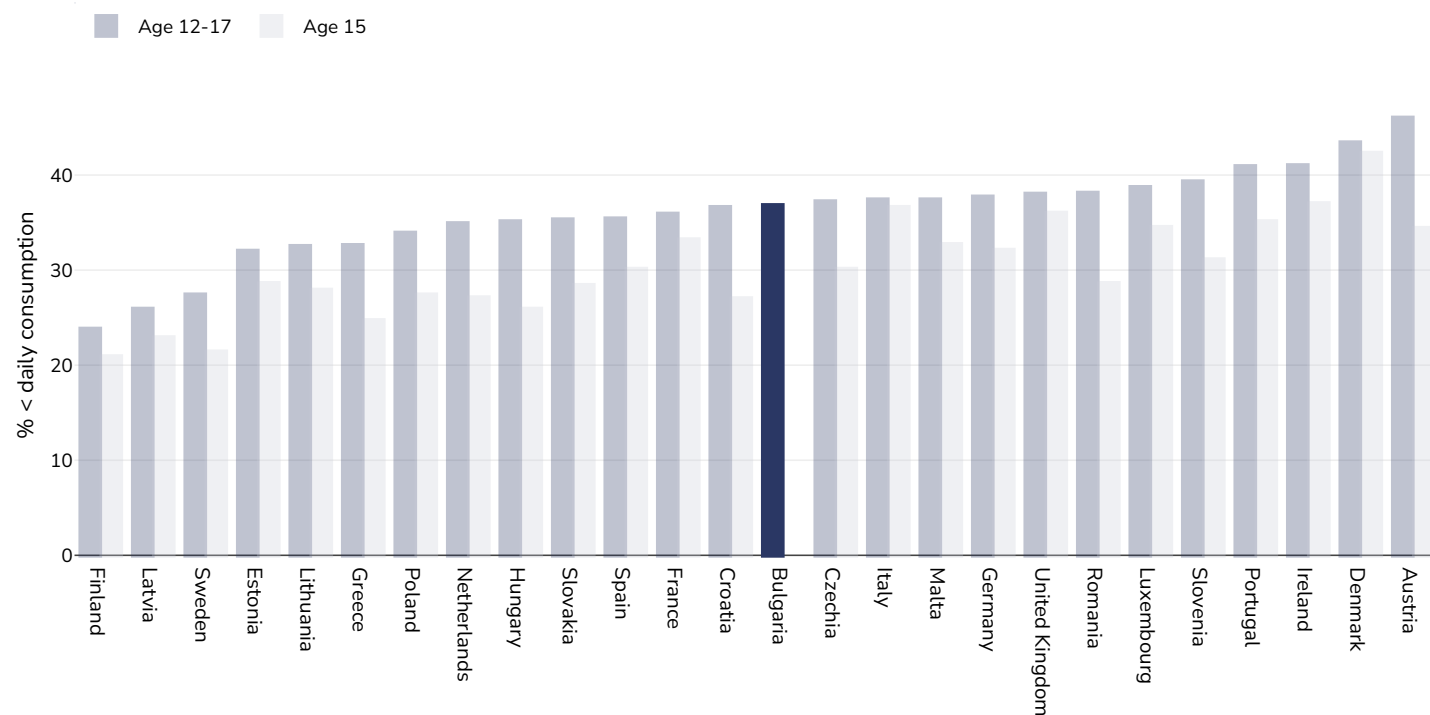
Health Behaviour in School-aged Children study (2023), Data browser (findings from the 2021/22 international HBSC survey): <https://data-browser.hbsc.org..> Health Behaviour in School-aged Children study (2020), Data browser (findings from the 2017/18 international HBSC survey): <https://data-browser.hbsc.org.>

Definitions:

Proportion who reported drinking sugary soft drinks daily (at least once)

Prevalence of less than daily fruit consumption

Children, 2014



Survey type:

Measured

References:

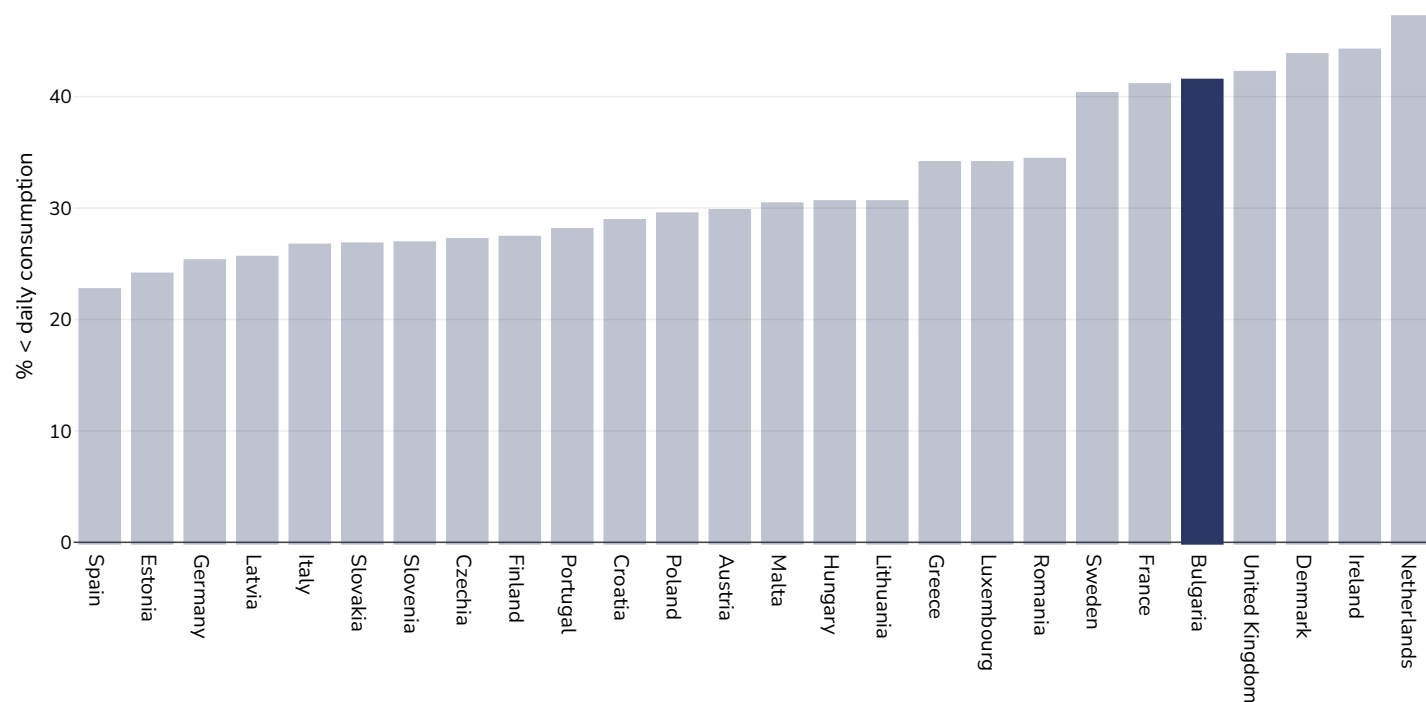
Global School-based Student Health Surveys. Beal et al (2019). Global Patterns of Adolescent Fruit, Vegetable, Carbonated Soft Drink, and Fast-food consumption: A meta-analysis of global school-based student health surveys. Food and Nutrition Bulletin. <https://doi.org/10.1177/0379572119848287>. Sourced from Food Systems Dashboard <http://www.foodsystemsdashboard.org/food-system>

Definitions:

Prevalence of less-than-daily fruit consumption (% less-than-daily fruit consumption)

Prevalence of less than daily vegetable consumption

Children, 2014



Survey type: Measured

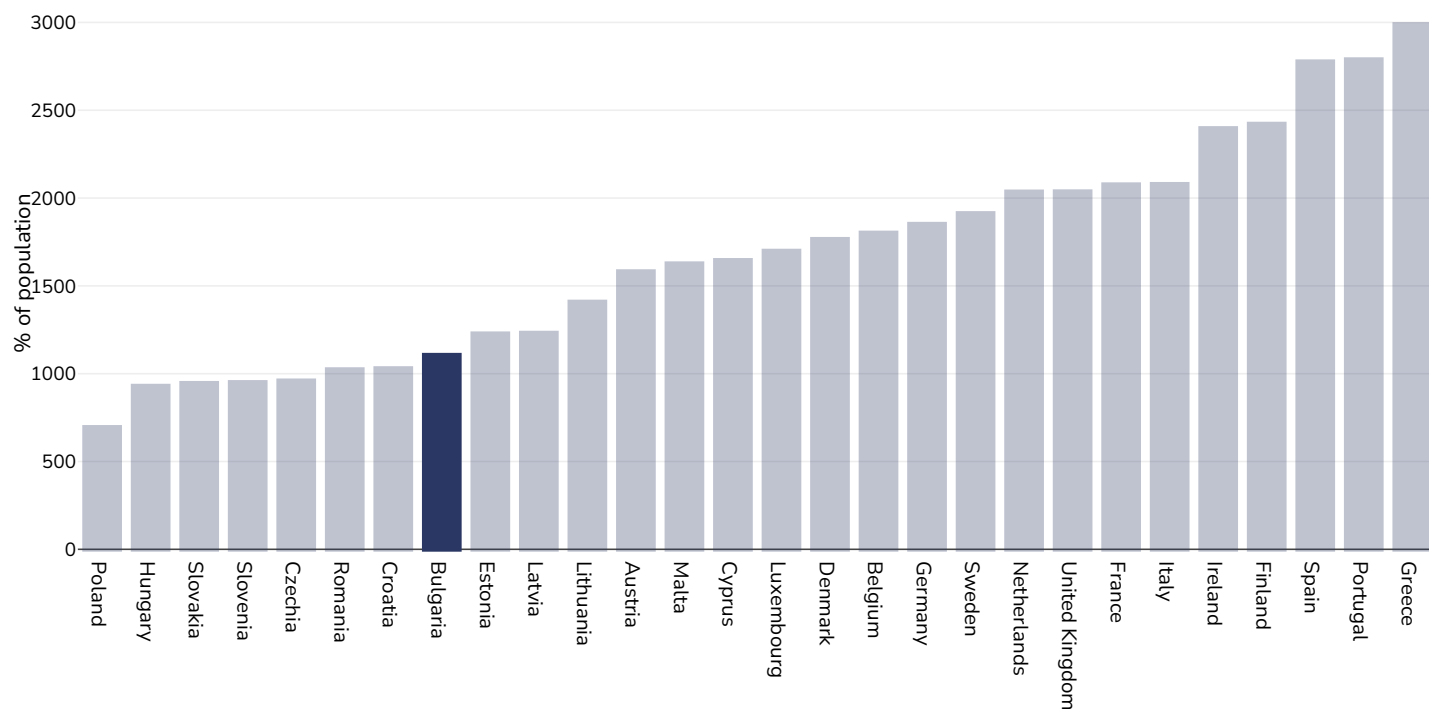
Age: 12-17

References: Beal et al. (2019). Global Patterns of Adolescent Fruit, Vegetable, Carbonated Soft Drink, and Fast-food consumption: A meta-analysis of global school-based student health surveys. Food and Nutrition Bulletin. <https://doi.org/10.1177/0379572119848287> sourced from Food Systems Dashboard <http://www.foodsystemsdashboard.org/food-system>

Definitions: Prevalence of less-than-daily vegetable consumption (% less-than-daily vegetable consumption)

Mental health - depression disorders

Children, 2021



Area covered:

National

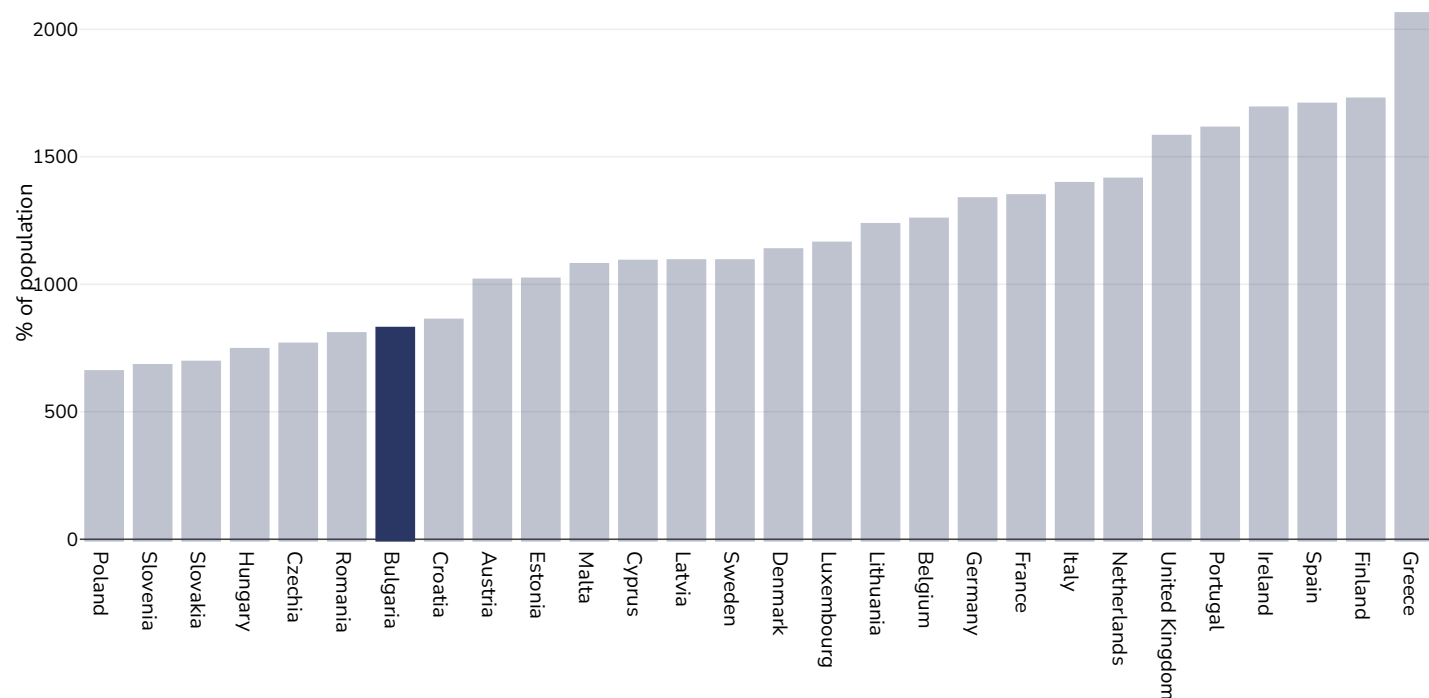
References:

Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2021. Seattle, WA: IHME, University of Washington, 2023. Available from <http://vizhub.healthdata.org/gbd-compare>. (Last accessed 23.04.25)

Definitions:

Number living with depressive disorder per 100,000 population (Under 20 years of age)

Boys, 2021



Area covered:

National

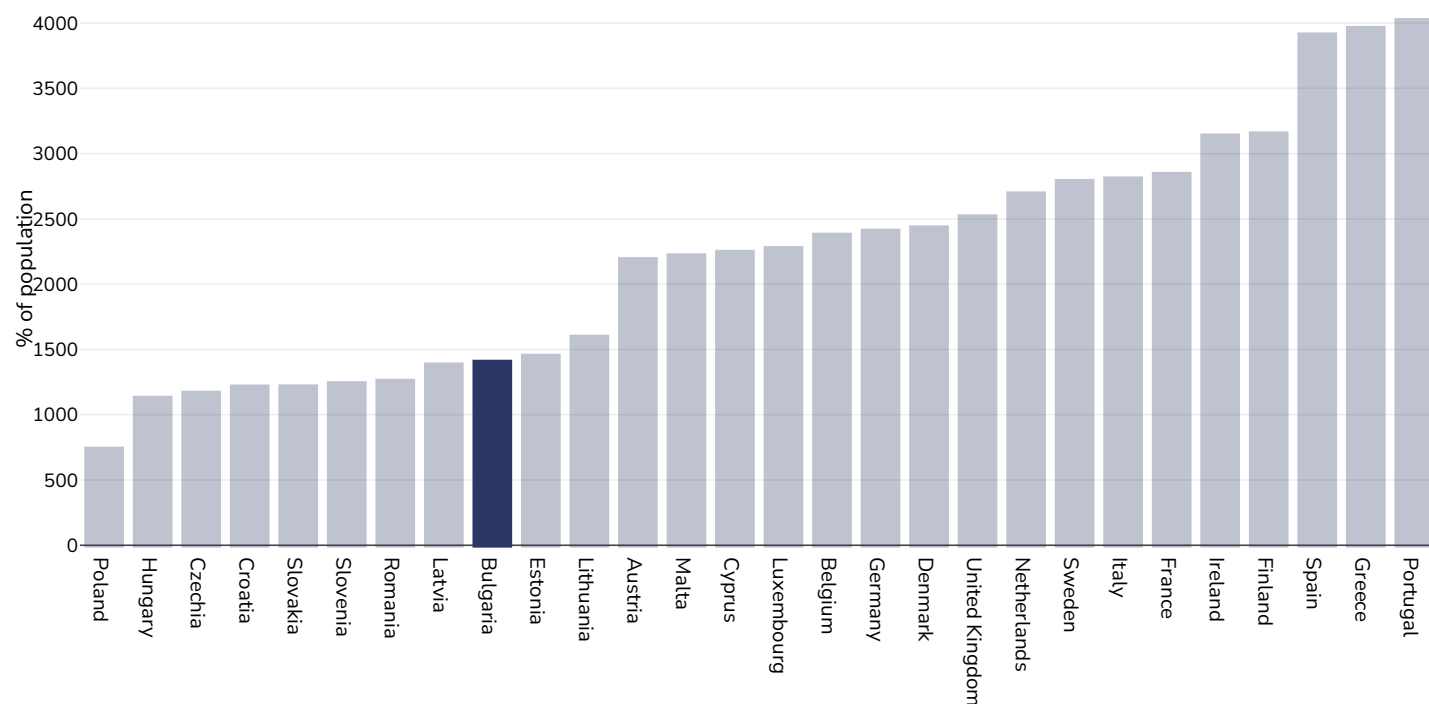
References:

Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2021. Seattle, WA: IHME, University of Washington, 2023. Available from <http://vizhub.healthdata.org/gbd-compare>. (Last accessed 23.04.25)

Definitions:

Number living with depressive disorder per 100,000 population (Under 20 years of age)

Girls, 2021



Area covered:

National

References:

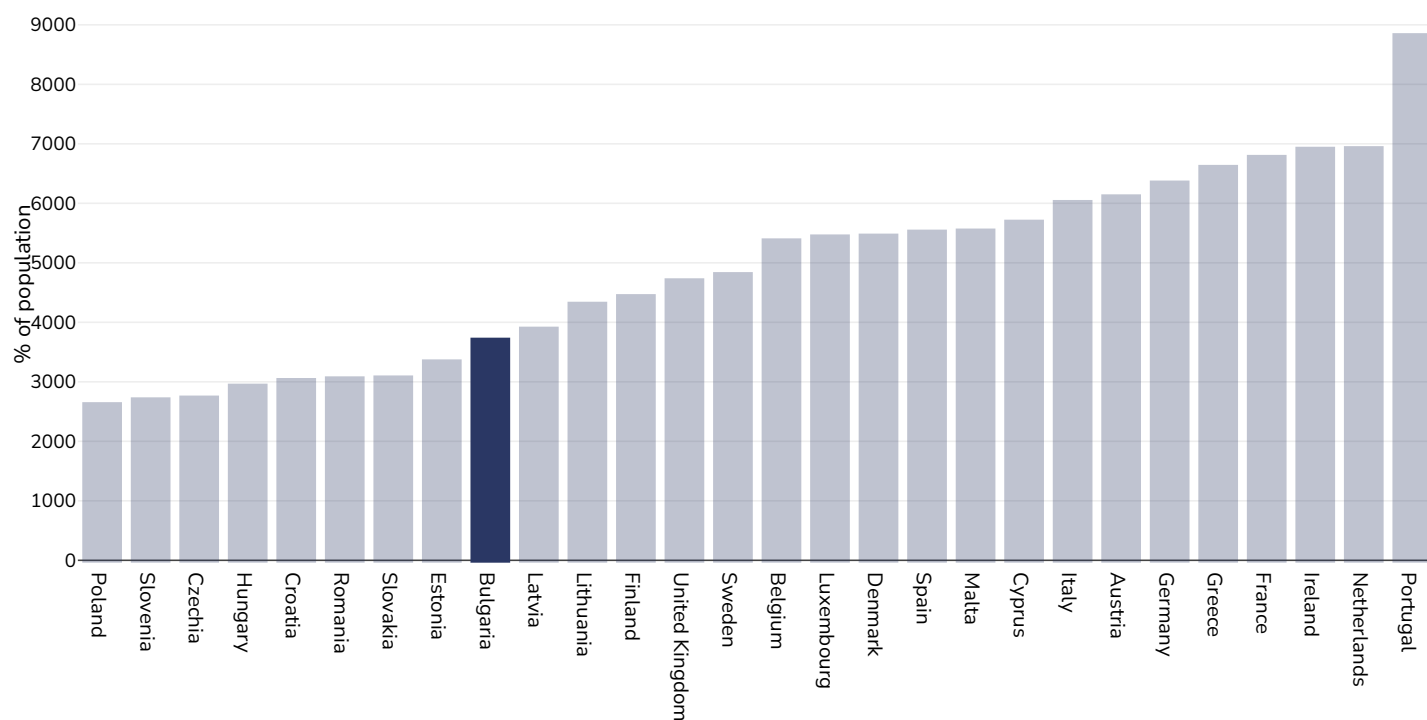
Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2021. Seattle, WA: IHME, University of Washington, 2023. Available from <http://vizhub.healthdata.org/gbd-compare>. (Last accessed 23.04.25)

Definitions:

Number living with depressive disorder per 100,000 population (Under 20 years of age)

Mental health - anxiety disorders

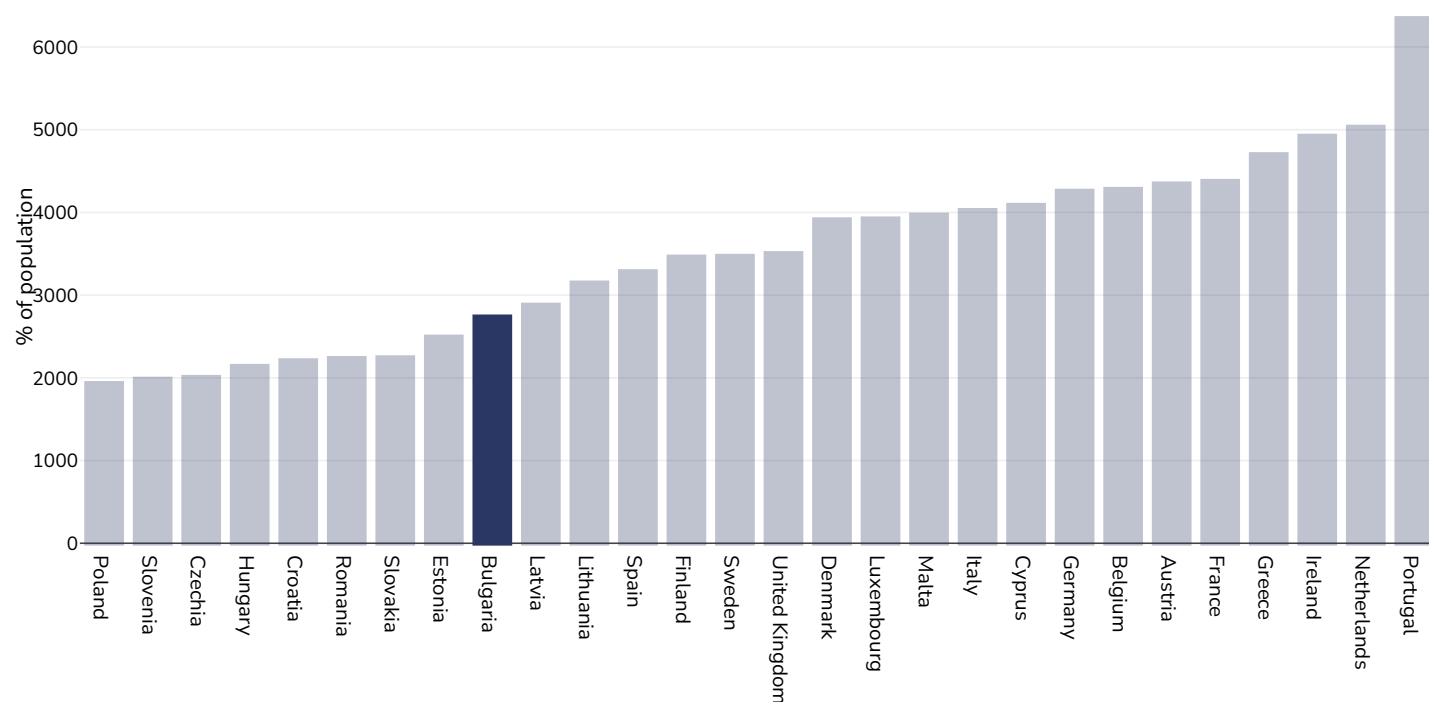
Children, 2021



References:

Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2021. Seattle, WA: IHME, University of Washington, 2023. Available from <http://vizhub.healthdata.org/gbd-compare>. (Last accessed 23.04.25)

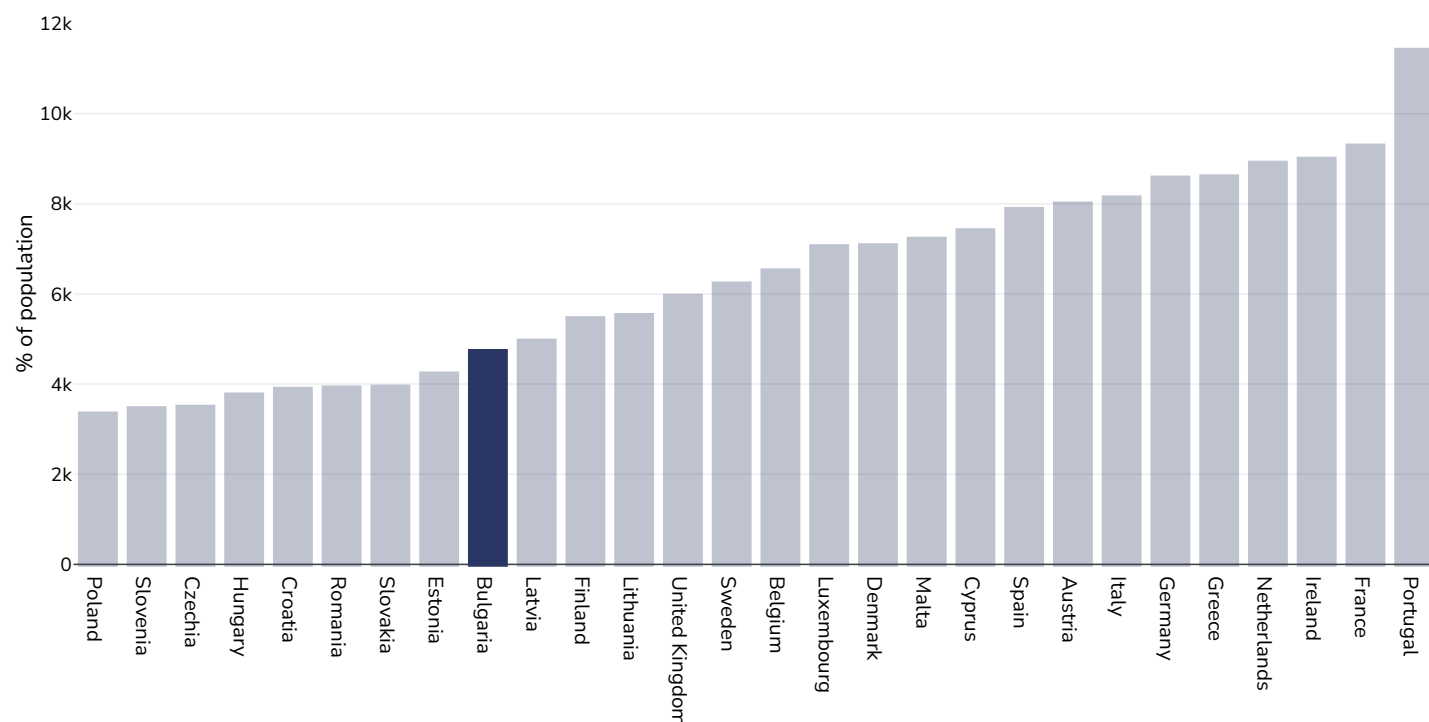
Boys, 2021



References:

Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2021. Seattle, WA: IHME, University of Washington, 2023. Available from <http://vizhub.healthdata.org/gbd-compare>. (Last accessed 23.04.25)

Girls, 2021



References:

Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2021. Seattle, WA: IHME, University of Washington, 2023. Available from <http://vizhub.healthdata.org/gbd-compare>. (Last accessed 23.04.25)

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