



North Macedonia



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/north-macedonia-126/>.

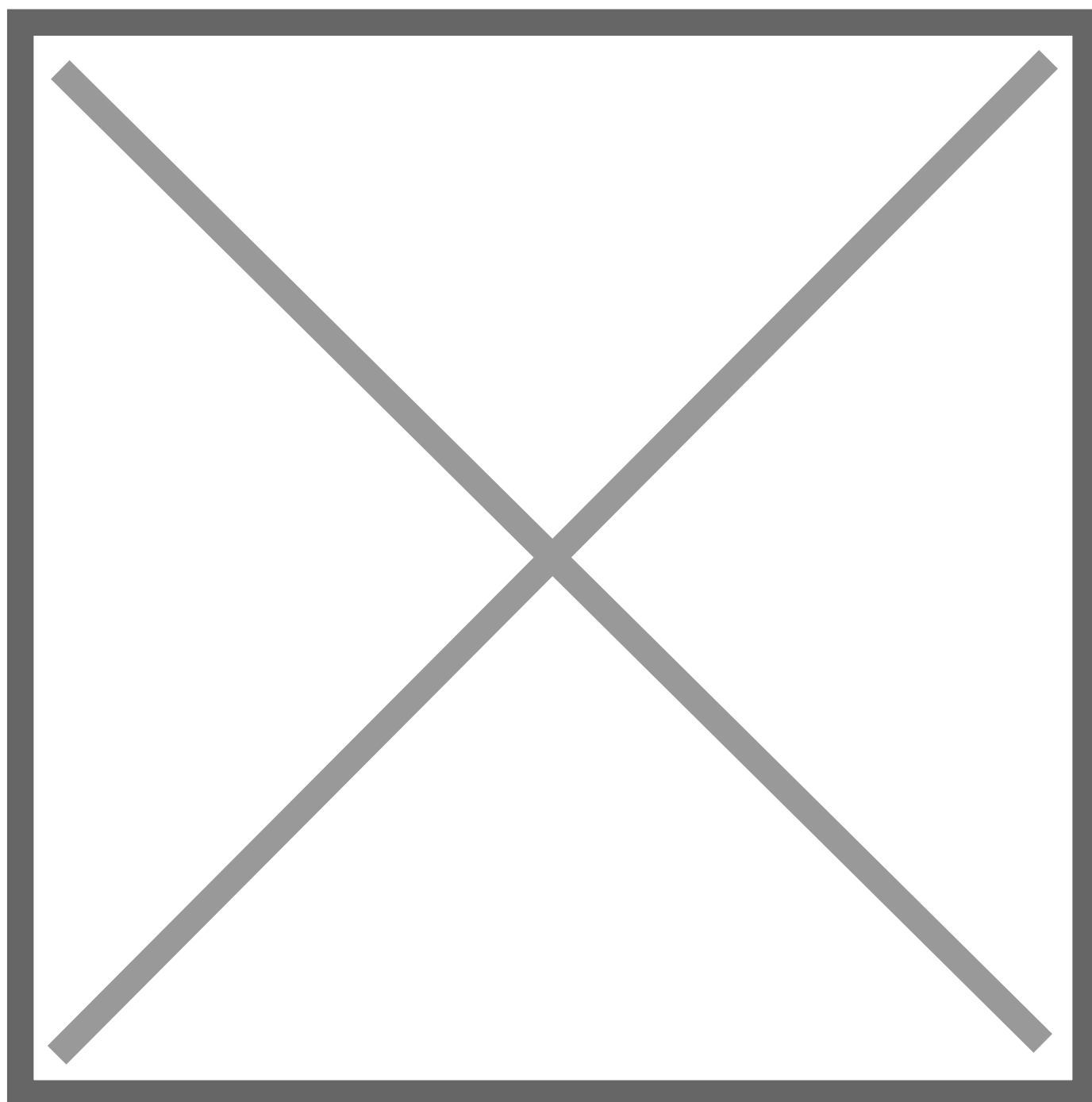
Contents	Page
Obesity prevalence	3
Trend: % Children (aged 7) living with overweight or obesity, 2009-2022 (COSI)	5
Overweight/obesity by age	7
Overweight/obesity by socio-economic group	8
Double burden of underweight & overweight	10
Insufficient physical activity	11
Prevalence of at least daily carbonated soft drink consumption	13
Prevalence of less than daily fruit consumption	15
Prevalence of less than daily vegetable consumption	17
Mental health - depression disorders	19
Mental health - anxiety disorders	22

National obesity risk *7/10 This is a composite “obesity risk” score (out of 10, the highest risk) based on obesity prevalence, rate of increase, likelihood of meeting the 2025 target, treatment indicator and childhood stunting levels. **Childhood obesity risk *7/11** This is a “risk score” for each country’s likelihood of having or acquiring a major childhood obesity problem during the 2020s, taking account of current prevalence levels and risk for future obesity (based on stunting among infants, maternal obesity, maternal smoking, and breastfeeding rates).

* Based on estimated data. For more information see Publications

Obesity prevalence

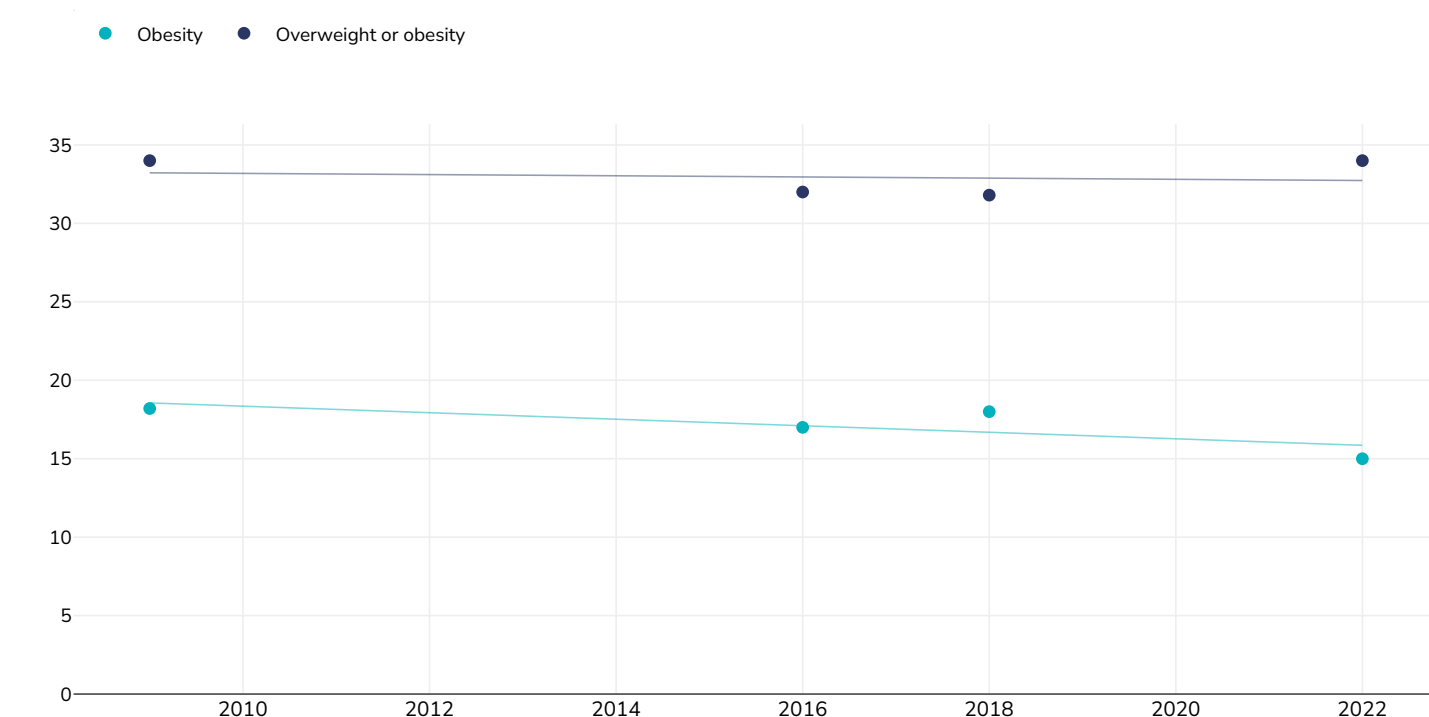
Children, 2022-2024



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 (aged 7) living with overweight or obesity, 2009-2022 (COSI)

Boys



Survey type: Measured

References: 2009: Wijnhoven, T.M., van Raaij, J.M., Spinelli, A. et al. WHO European Childhood Obesity Surveillance Initiative: body mass index and level of overweight among 6-9-year-old children from school year 2007/2008 to school year 2009/2010. BMC Public Health 14, 806 (2014). <https://doi.org/10.1186/1471-2458-14-806>

2016: COSI 2016. <https://apps.who.int/iris/bitstream/handle/10665/341189/WHO-EURO-2021-2495-42251-58349-eng.pdf> (Accessed 20.07.21)

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.

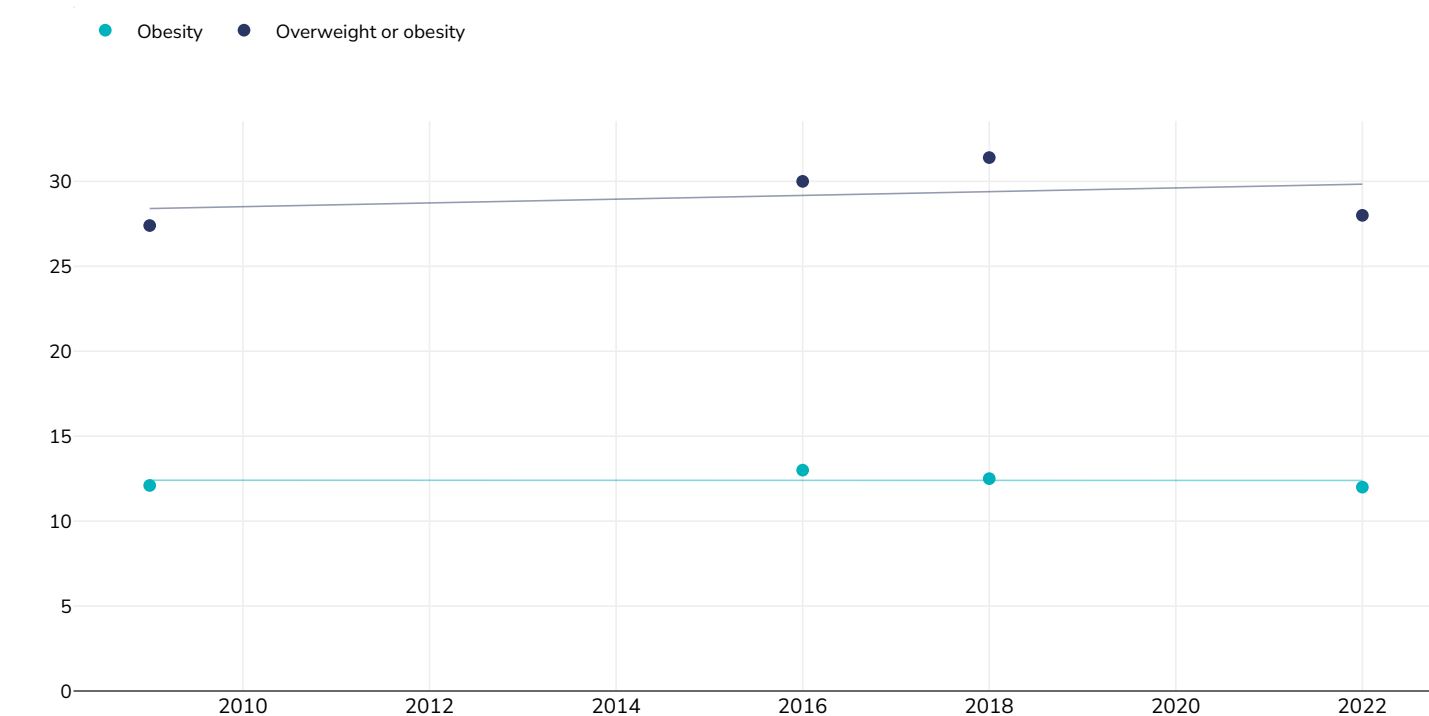
2022: WHO European Childhood Obesity Surveillance Initiative (COSI): A brief review of results from round 6 of COSI (2022-2024). Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO.

Notes: COSI

Definitions: WHO 2007 cutoffs

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.

Girls



Survey type: Measured

References: 2009: Wijnhoven, T.M., van Raaij, J.M., Spinelli, A. et al. WHO European Childhood Obesity Surveillance Initiative: body mass index and level of overweight among 6-9-year-old children from school year 2007/2008 to school year 2009/2010. BMC Public Health 14, 806 (2014). <https://doi.org/10.1186/1471-2458-14-806>

2016: COSI 2016. <https://apps.who.int/iris/bitstream/handle/10665/341189/WHO-EURO-2021-2495-42251-58349-eng.pdf> (Accessed 20.07.21)

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.

2022: 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.

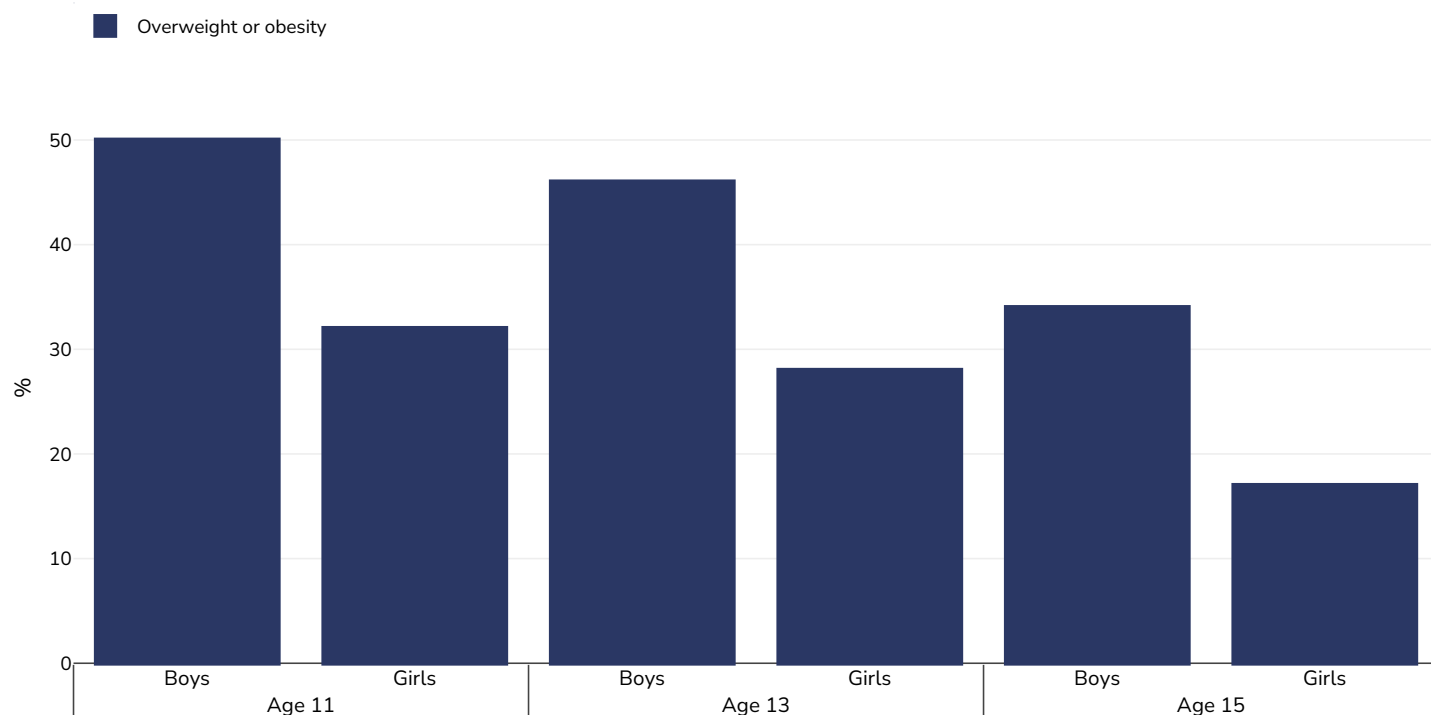
Notes: COSI

Definitions: WHO 2007 cutoffs

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 age

Children, 2021-2022



Survey type: Self-reported

Area covered: See Report

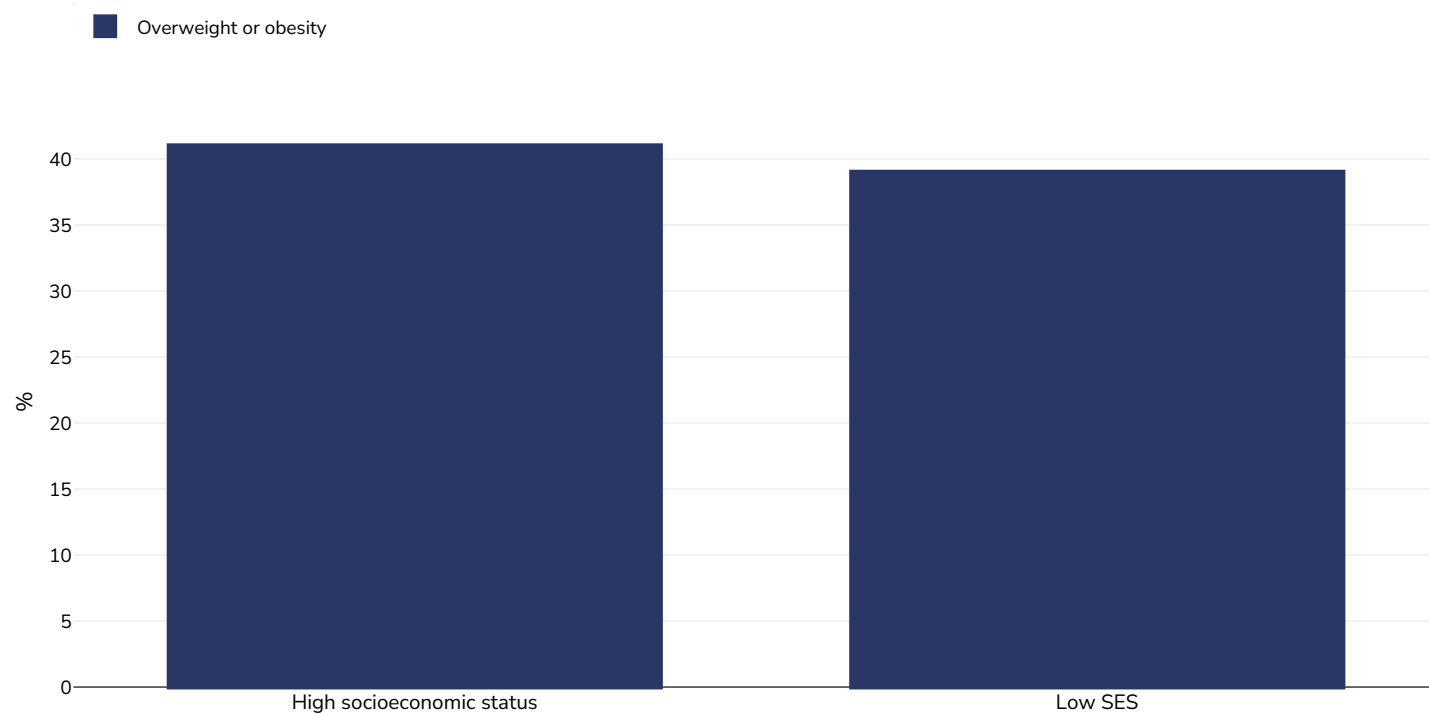
References: Rakić JG, Hamrik Z, Dzielska A, Felder-Puig R, Oja L, Bakalár P et al. A focus on adolescent physical activity, eating behaviours, weight status and body image in Europe, central Asia and Canada. Health Behaviour in School-aged Children (HBSC) international report from the 2021/2022 survey. 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

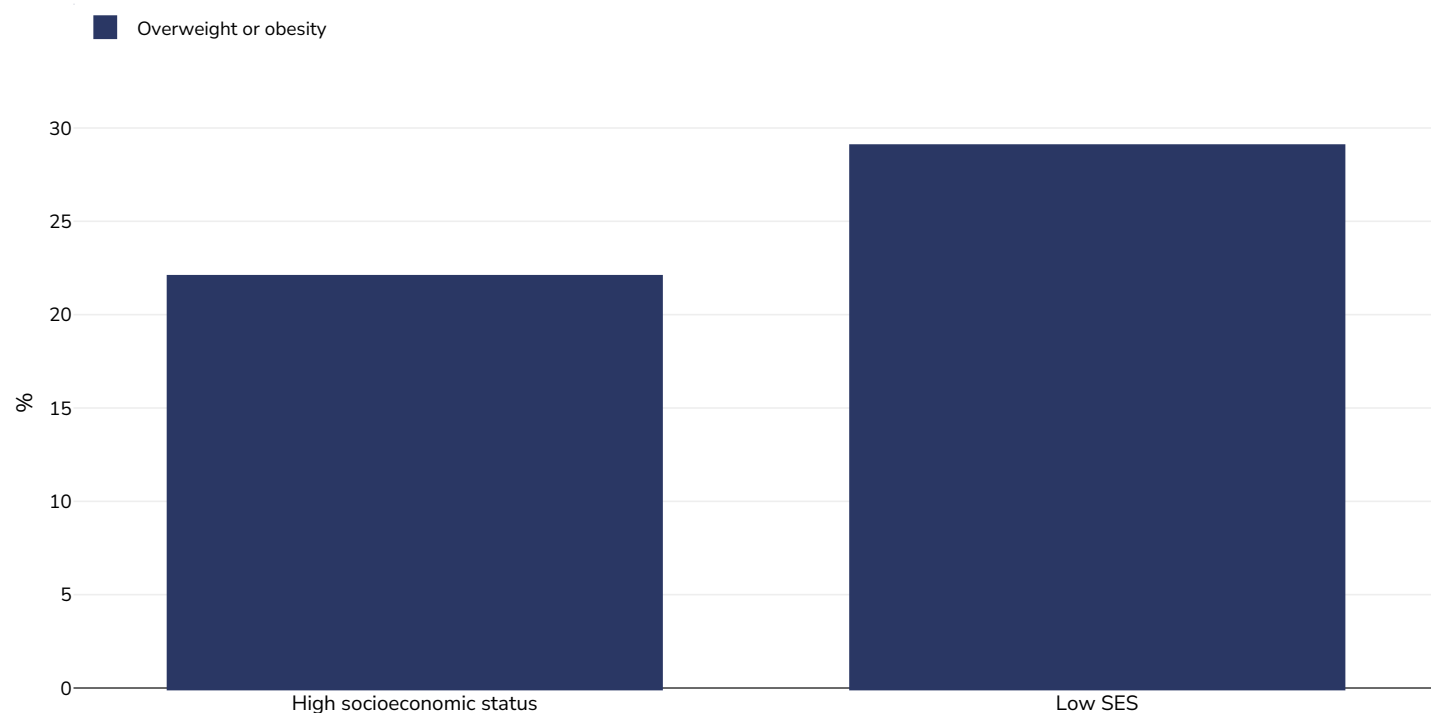
Overweight/obesity by socio-economic group

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

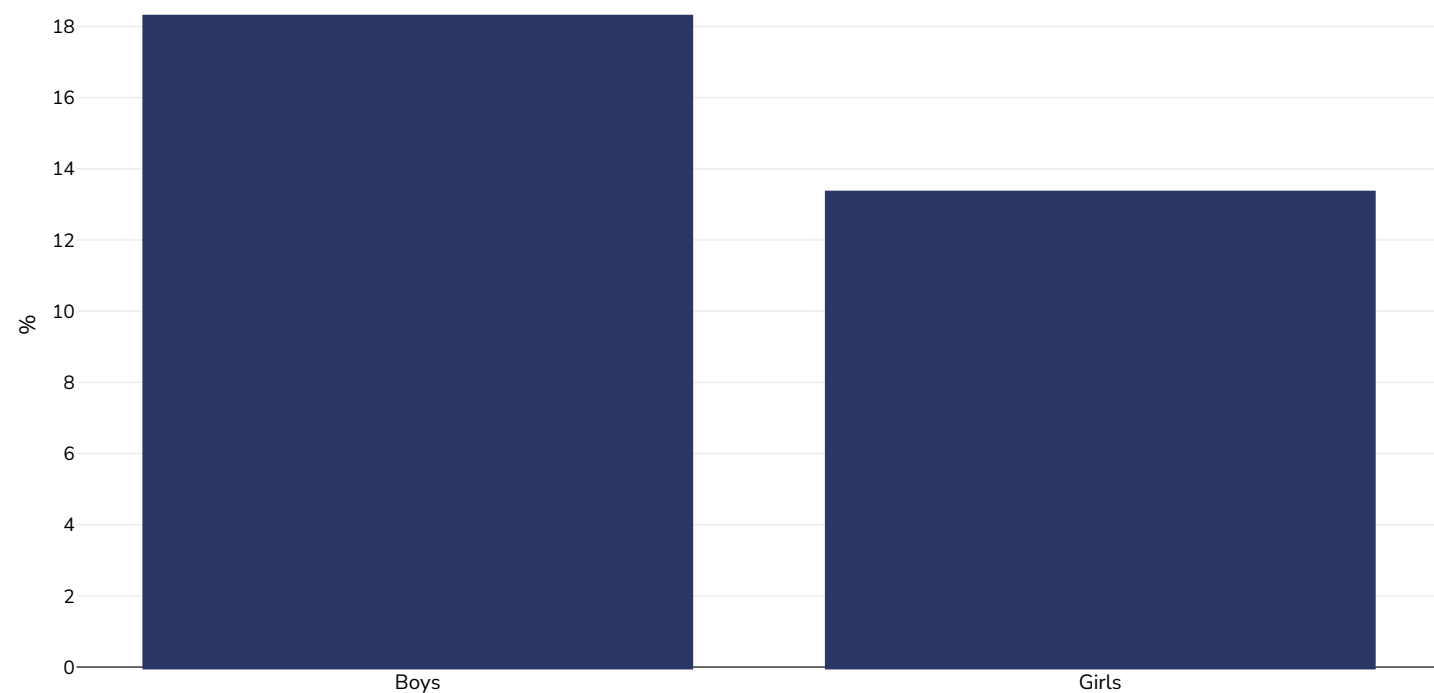
Girls, 2021-2022



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

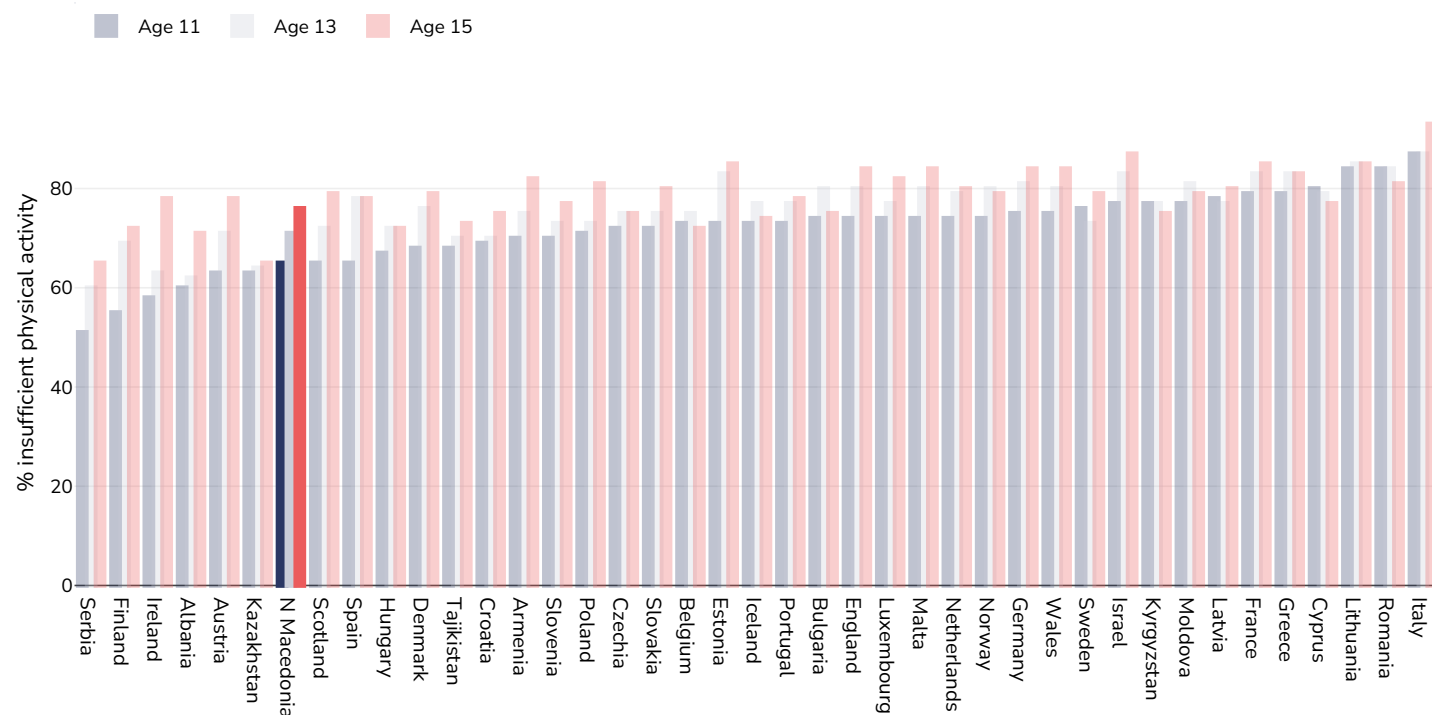
Children, 2022



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

Boys, 2022



Survey type: Self-reported

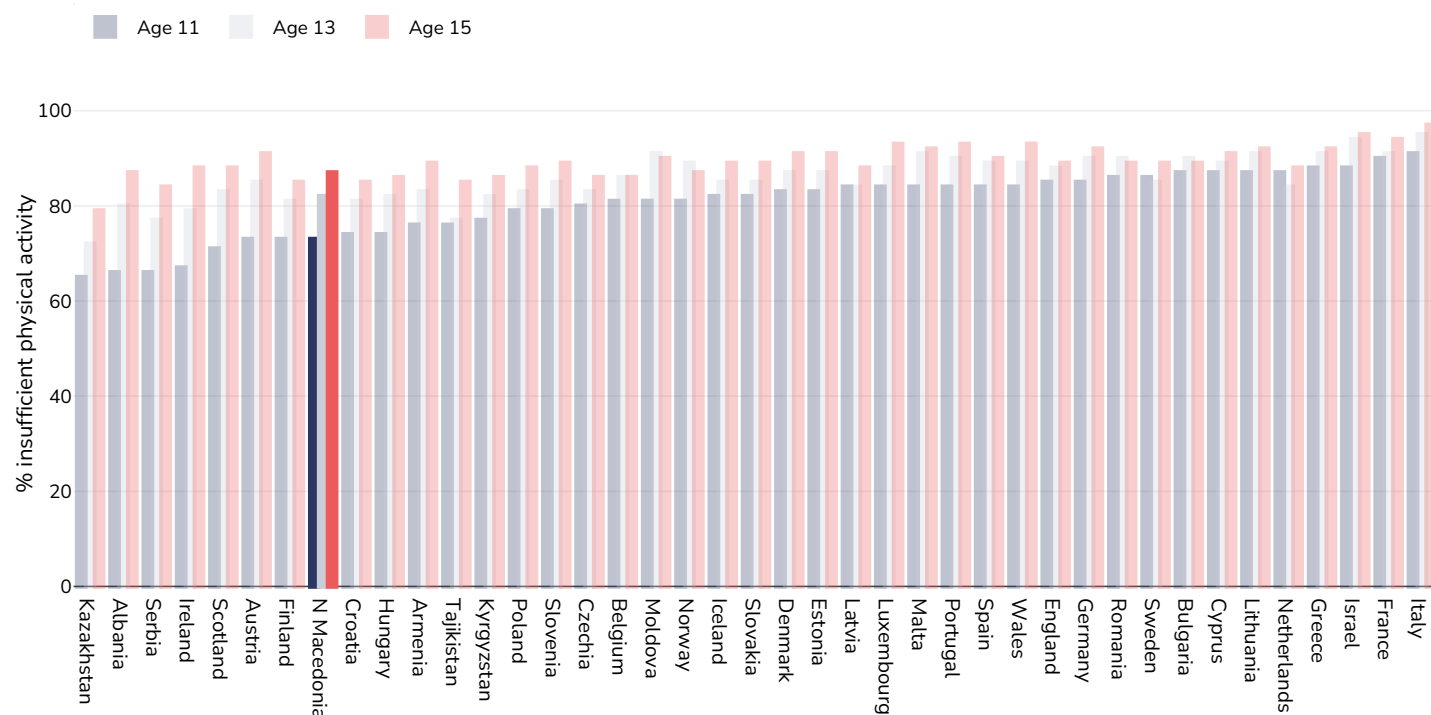
Area covered: National

References: Rakic 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 international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO. Health Behaviour in School-aged Children study (2023), Data browser (findings from the 2021/22 international HBSC survey): <https://data-browser.hbsc.org>.

Notes: Young people were asked to report the number of days over the past week during which they were physically active for a total of at least 60 minutes. The question was introduced by text defining moderate-to-vigorous physical activity (MVPA) as any activity that increases the heart rate and makes the person get out of breath some of the time, with examples provided. Findings presented on the Observatory show the proportions who report less than 60 minutes of MVPA daily. NB. National except Belgium (Flemish speaking region only)

Definitions: % reporting less than 60 minutes of MVPA daily

Girls, 2022



Survey type: Self-reported

Area covered: National

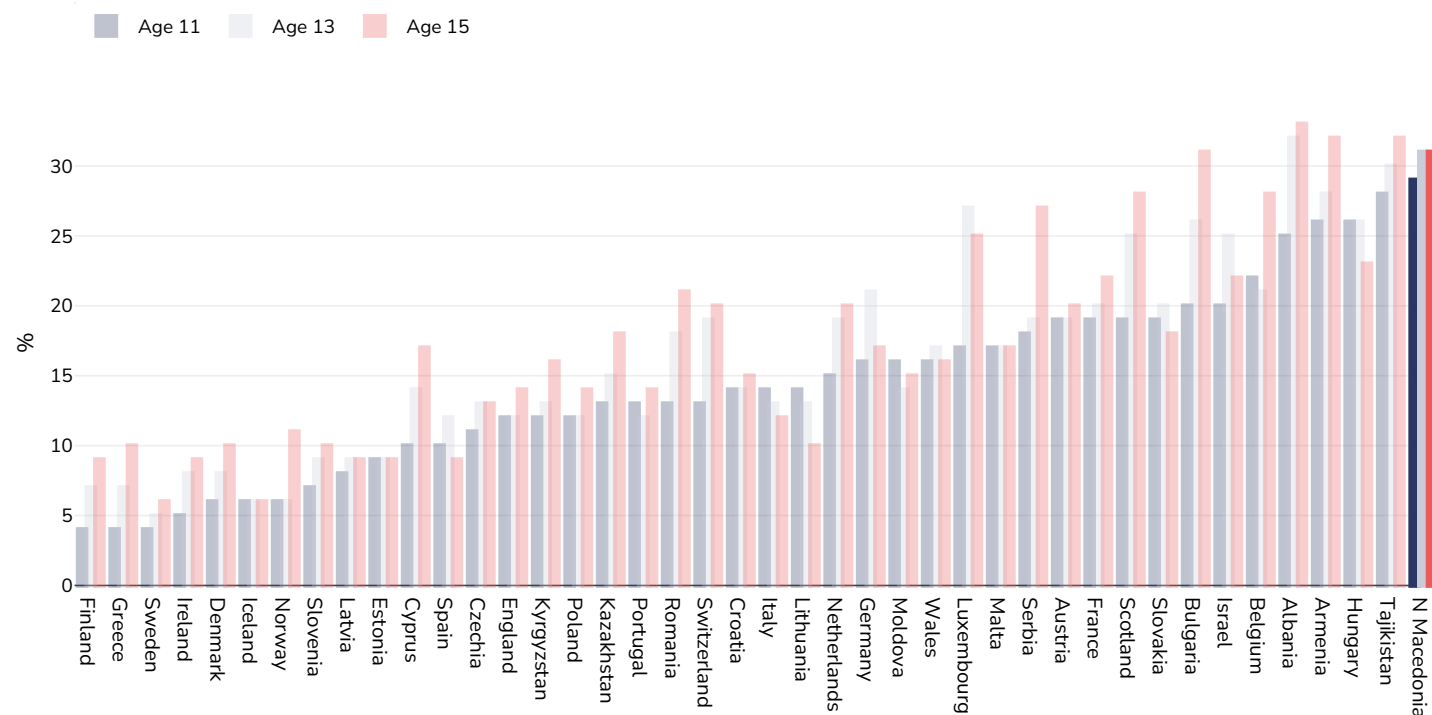
References: Rakic JG, Hamrik Z, Dzielska A, Felder-Puig R, Oja L, Bakalár P et al. A focus on adolescent physical activity, eating behaviours, weight status and body image in Europe, central Asia and Canada. Health Behaviour in School-aged Children international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO. Health Behaviour in School-aged Children study (2023), Data browser (findings from the 2021/22 international HBSC survey): <https://data-browser.hbsc.org>.

Notes: Young people were asked to report the number of days over the past week during which they were physically active for a total of at least 60 minutes. The question was introduced by text defining moderate-to-vigorous physical activity (MVPA) as any activity that increases the heart rate and makes the person get out of breath some of the time, with examples provided. Findings presented on the Observatory show the proportions who report less than 60 minutes of MVPA daily. NB. National except Belgium (Flemish speaking region only)

Definitions: % reporting less than 60 minutes of MVPA daily

Prevalence of at least daily carbonated soft drink consumption

Boys, 2021-2022



Area covered:

National

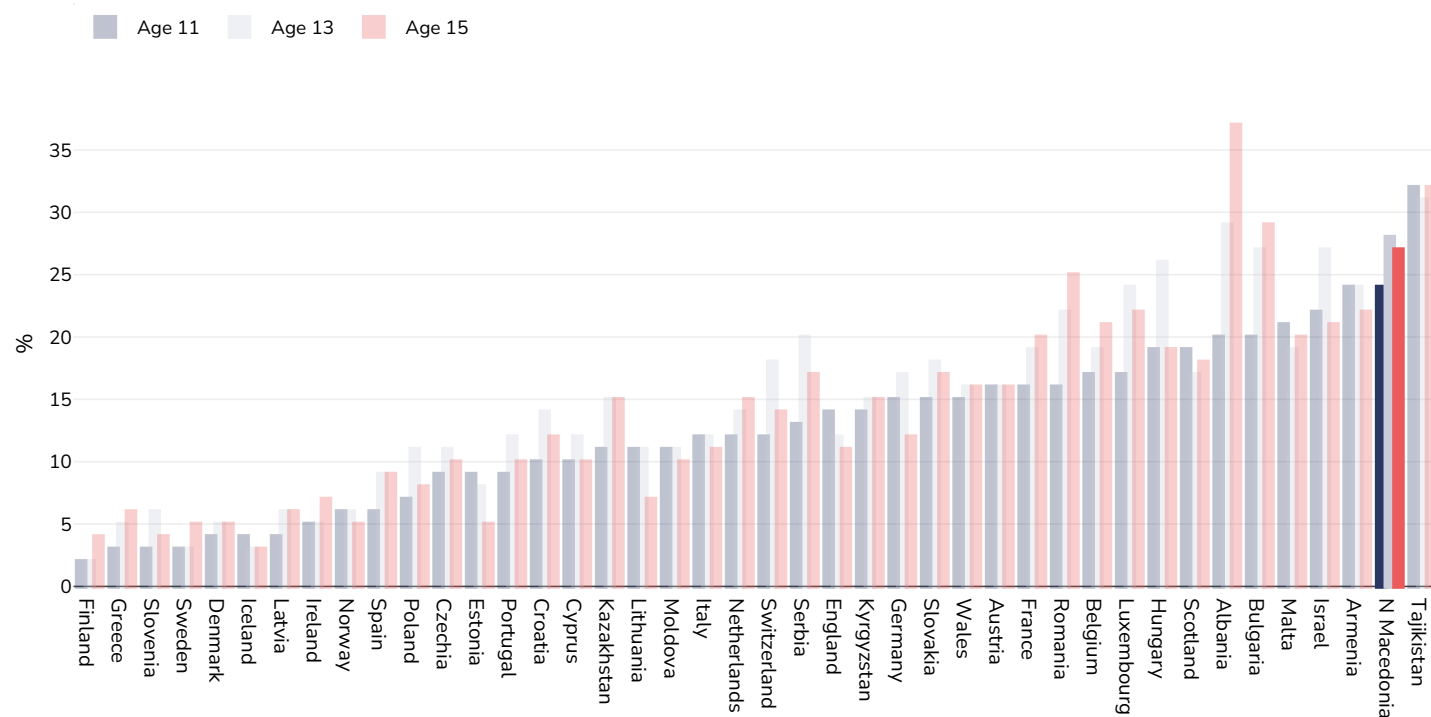
References:

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

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):

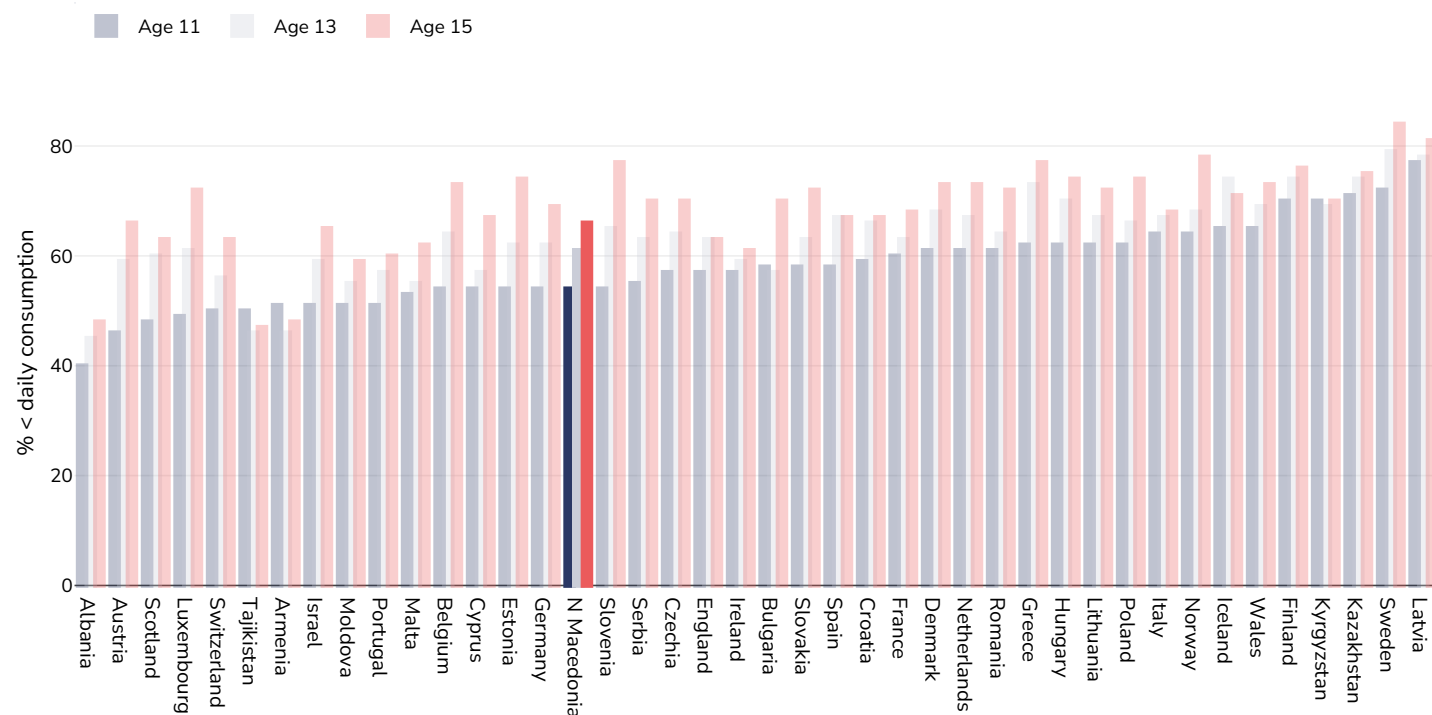
<https://data-browser.hbsc.org>

Definitions:

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

Prevalence of less than daily fruit consumption

Boys, 2021-2022



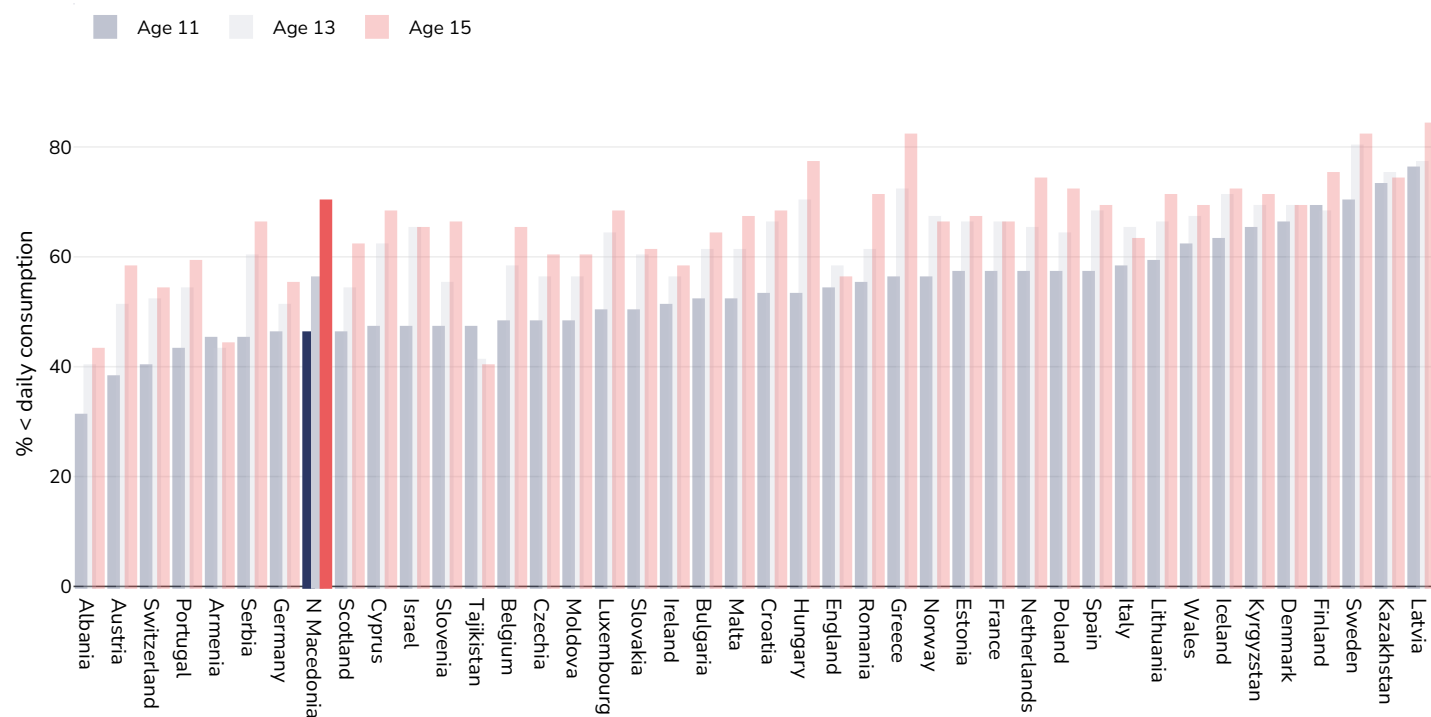
Survey type: Self-reported

Area covered: National

References: Rakic 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 international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO

Definitions: Proportion who reported eating fruit less than daily

Girls, 2021-2022



Survey type: Self-reported

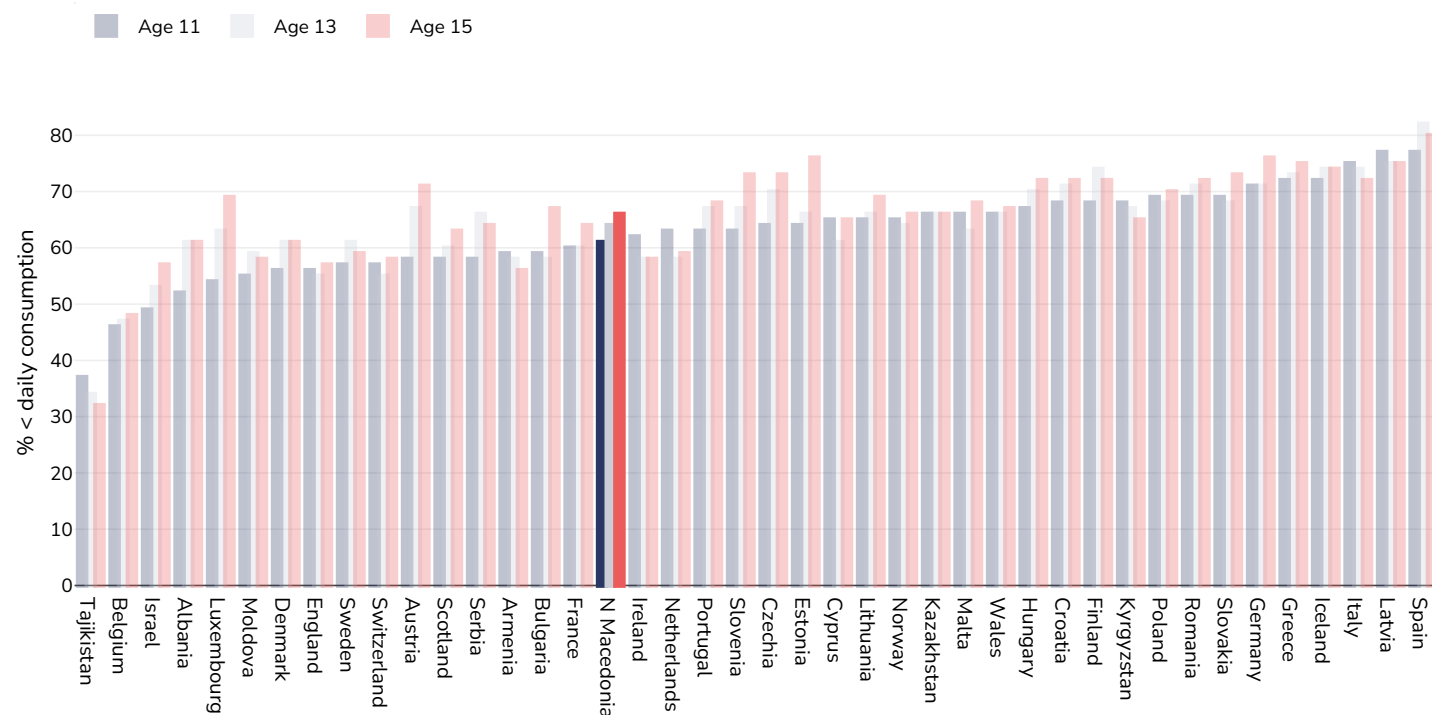
Area covered: National

References: Rakic 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 international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO

Definitions: Proportion who reported eating fruit less than daily

Prevalence of less than daily vegetable consumption

Boys, 2021-2022



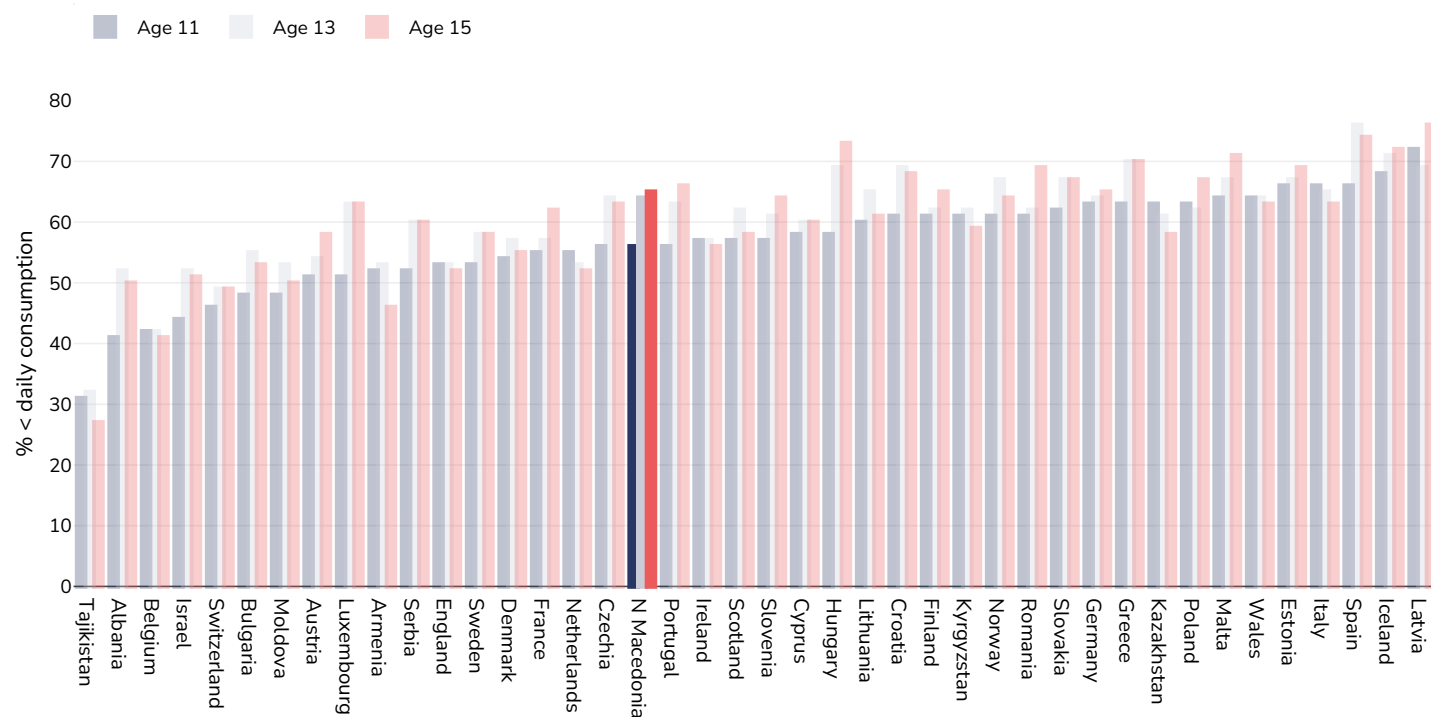
Survey type: Self-reported

Area covered: National

References: Rakic 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 international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO

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

Girls, 2021-2022



Survey type: Self-reported

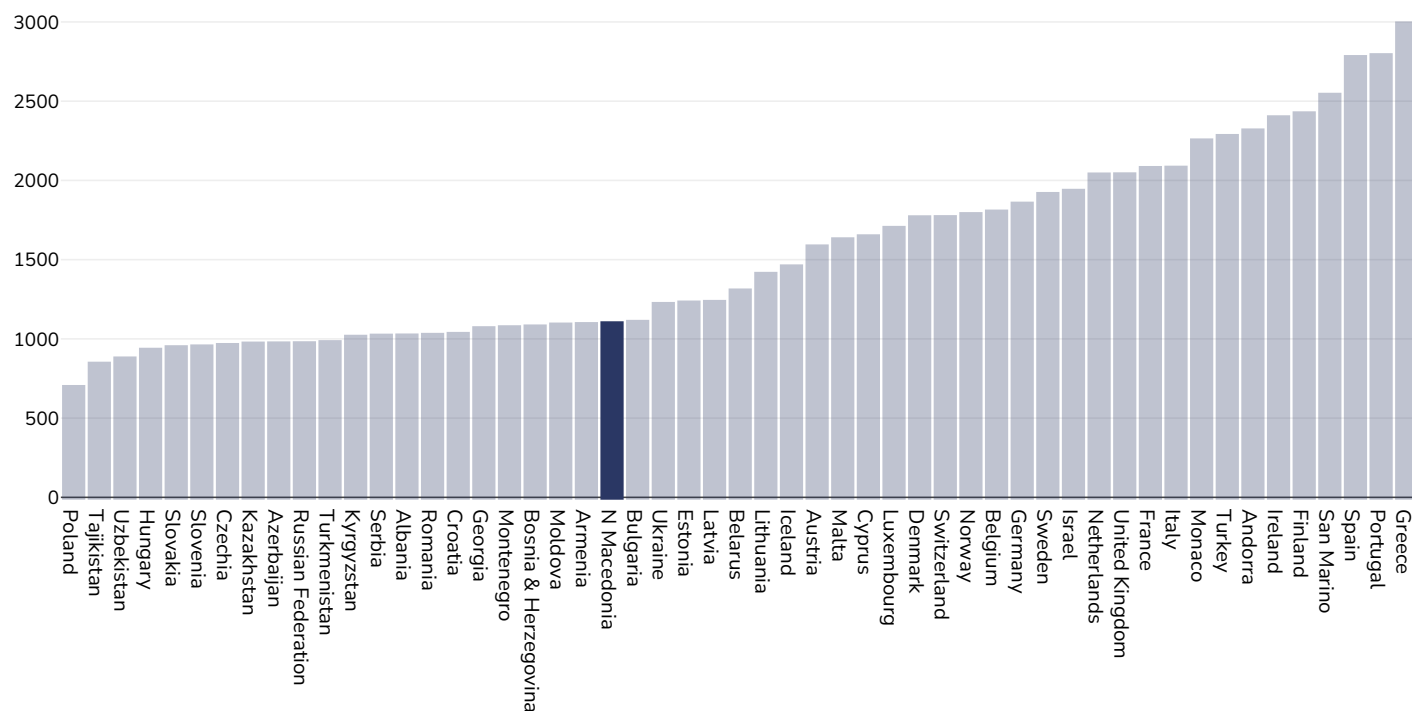
Area covered: National

References: Rakic 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 international report from the 2021/2022 survey. Volume 4. Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO

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

Mental health - depression disorders

Children, 2021



Area covered:

National

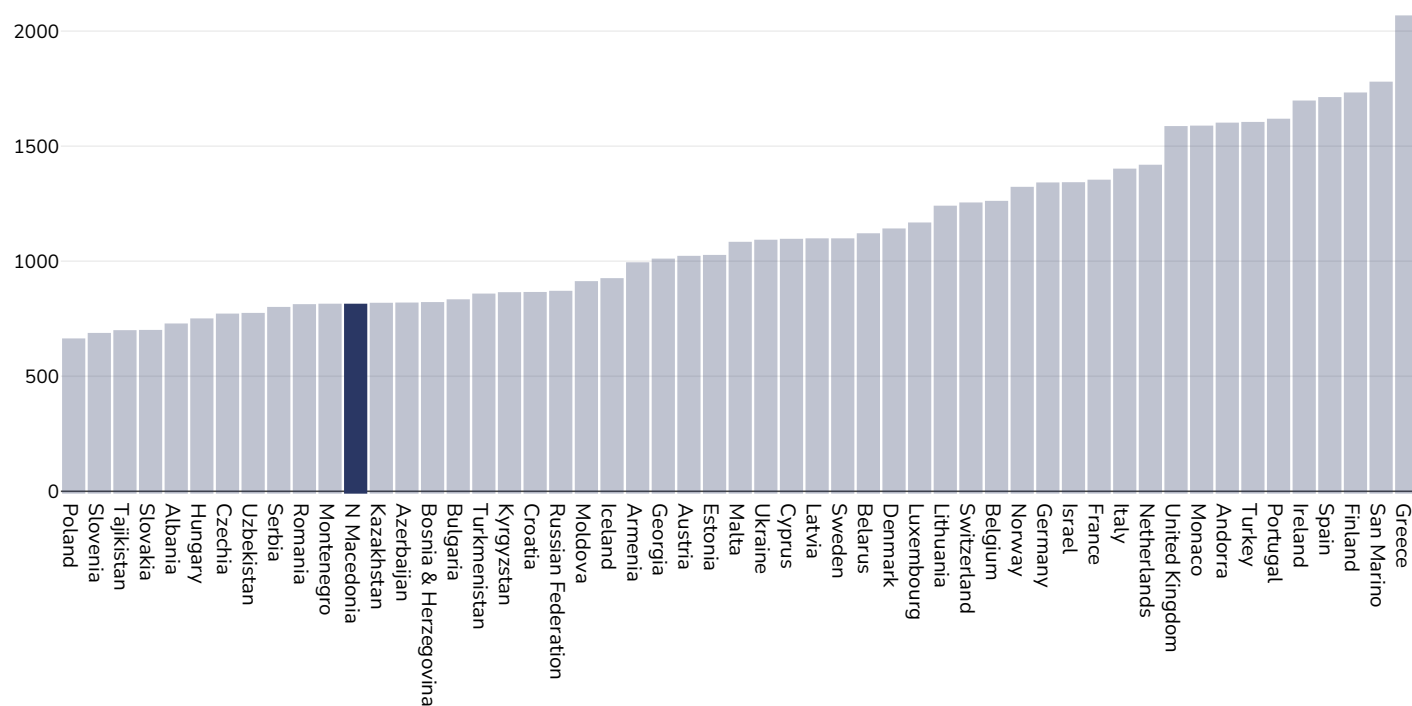
References:

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

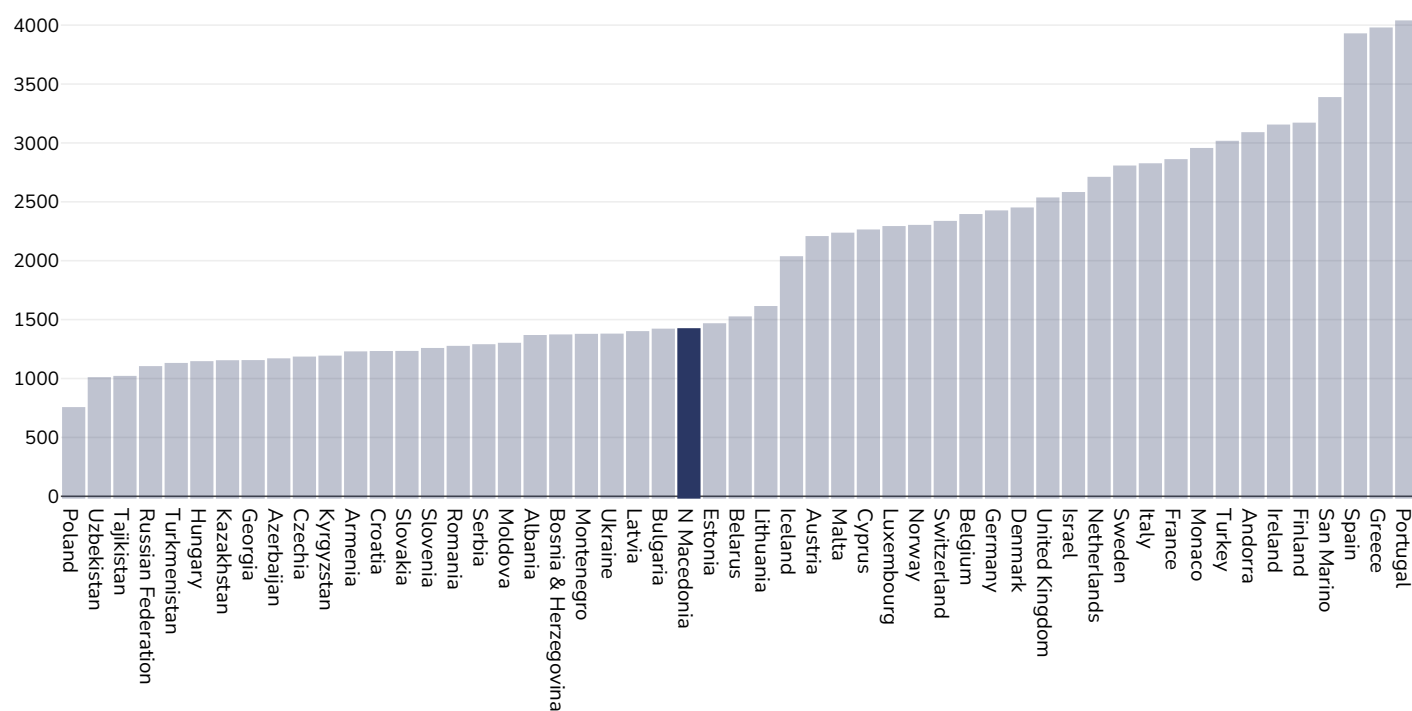
References:

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:

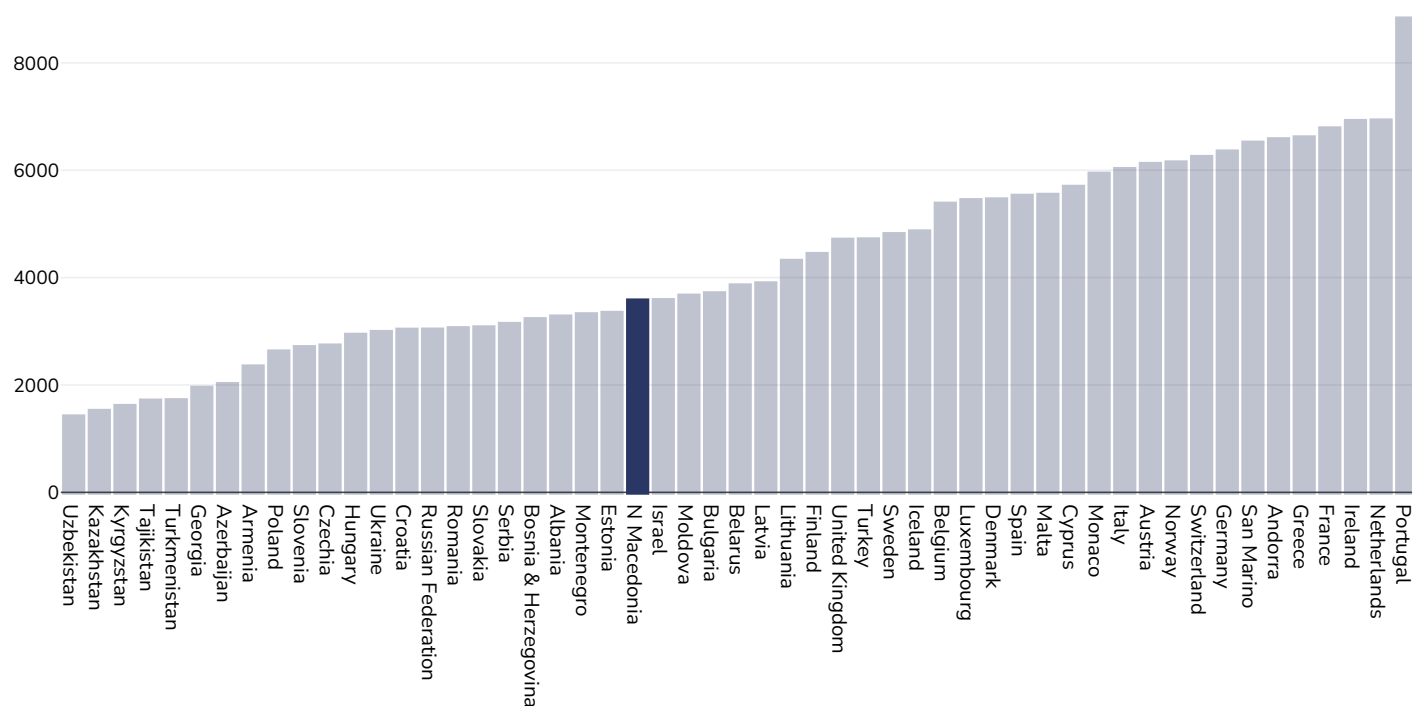
Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2021. Seattle, WA: IHME, University of Washington, 2023. Available from <http://vizhub.healthdata.org/gbd-compare>. (Last accessed 23.04.25)

Definitions:

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

Mental health - anxiety disorders

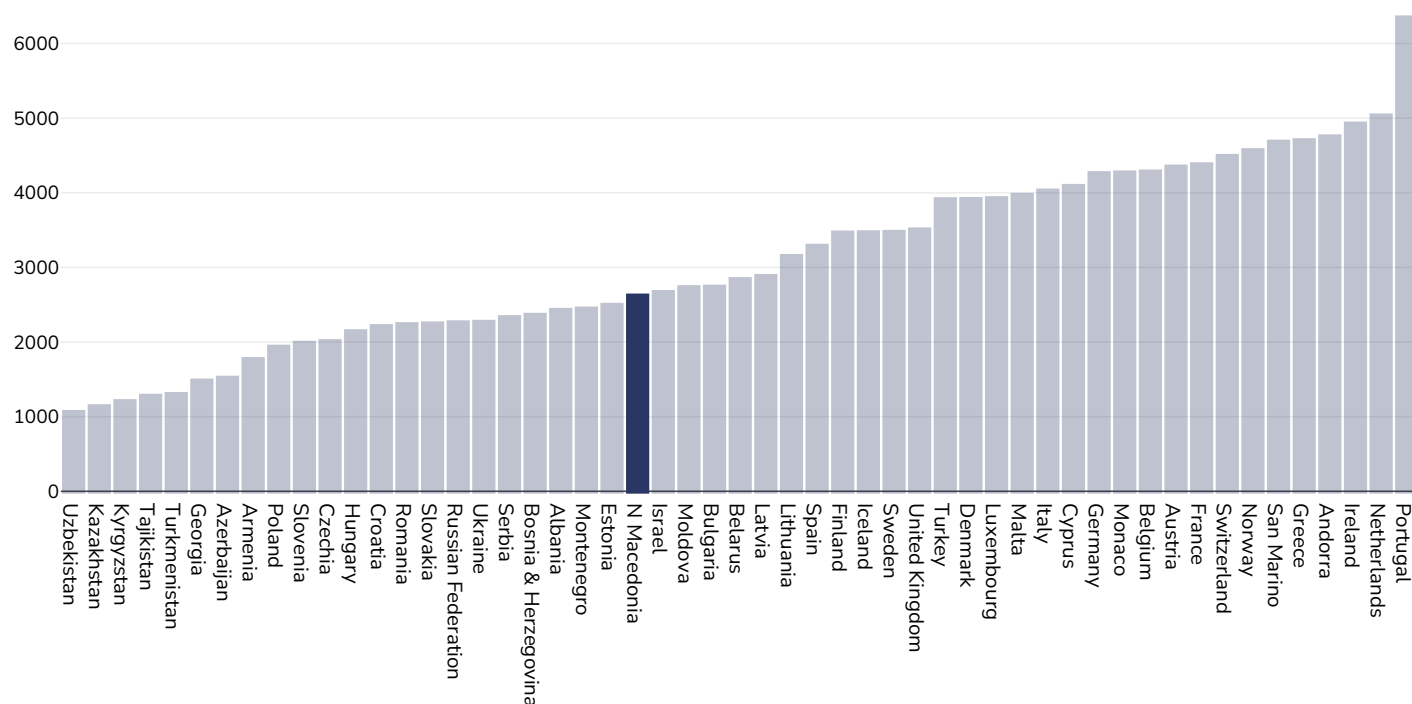
Children, 2021



References:

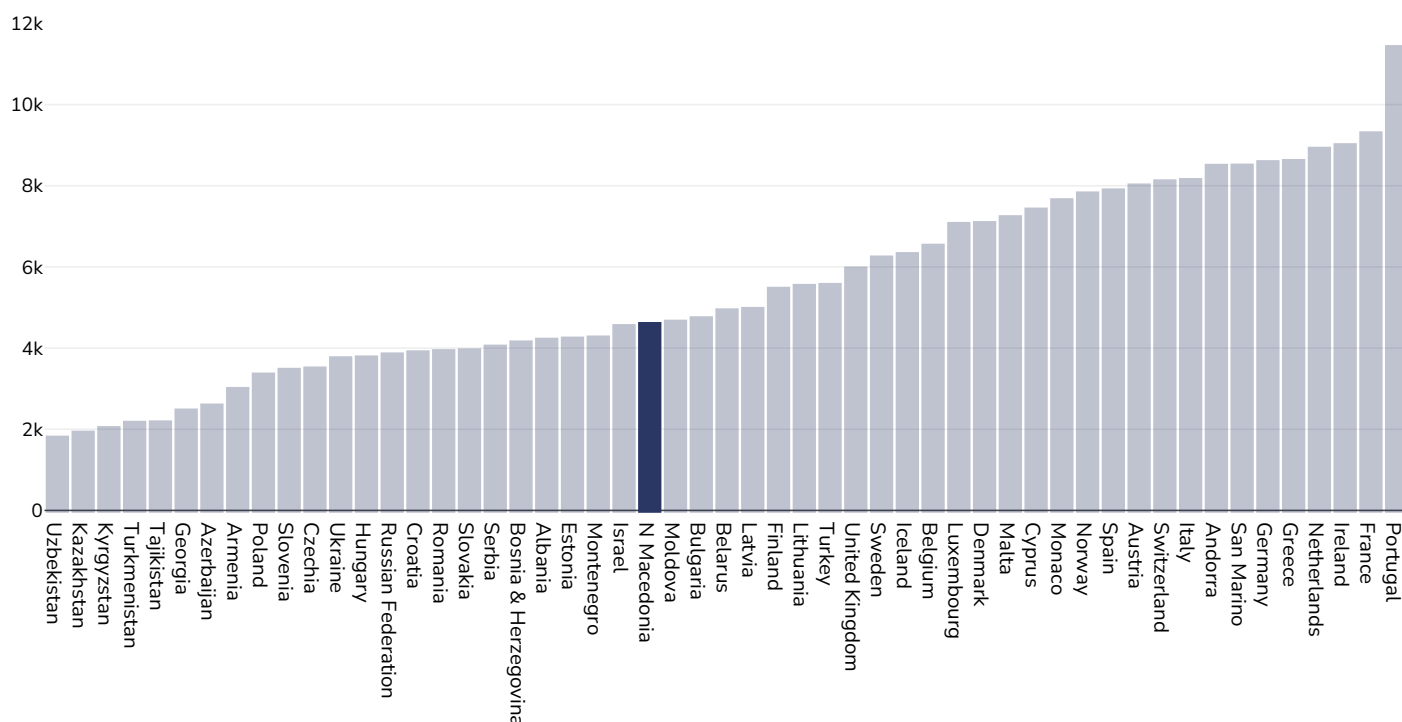
Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Global Burden of Disease (GBD) Study 2021. Seattle, WA: IHME, University of Washington, 2023. Available from <http://vizhub.healthdata.org/gbd-compare>. (Last accessed 23.04.25)

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)

PDF created on October 31, 2025