

## 4. RISK FACTORS FOR HEALTH

### Overweight and obesity among children

Childhood overweight rates, including pre-obesity and obesity, have been growing worldwide. Environmental factors, lifestyle preferences, genetic makeup and culture all can cause children to be overweight. Obese children are at greater risk of developing hypertension and metabolic disorders. Psychologically, obesity can lead to poor self-esteem, eating disorders and depression. Further, obesity may act as a barrier for participating in educational and recreational activities. Childhood obesity is particularly concerning as it is a strong predictor of obesity in adulthood, which is linked to diabetes, heart disease and certain types of cancer (Bösch et al., 2018[1]; OECD, 2019[2]).

Almost one-third (31%) of children aged 5-9 years living in OECD countries are overweight (Figure 4.14). In the United States, Italy, New Zealand and Greece this figure exceeds 40%. Conversely, in Japan, Estonia, Lithuania, Switzerland and Latvia, rates are below 25%. The proportion of overweight boys exceeds that of girls in 38 of the 43 OECD and partner countries examined. Countries with the greatest disparity between genders are China, Korea, Poland, the Czech Republic and the Slovak Republic (above a 10 percentage point difference). The gap between boys and girls is small in Portugal and the United Kingdom (less than 1 percentage point).

The rate of overweight children increased from 20.5% to 31.4% across 35 OECD countries between 1990 and 2016 (Figure 4.15). Only in Belgium did this rate fall, albeit marginally. Growth was greatest in Hungary, Poland, Turkey, Slovenia and the Slovak Republic whose rates increased by more than 100%. At the other end of the spectrum, Sweden, Israel, Iceland, Japan and Denmark recorded growth rates at or below 25%. Similar trends were found in non-OECD countries. Growth in these countries was typically higher, which reflects their relatively low starting value. For example, the proportion of overweight and obese children in Indonesia, South Africa and India grew by over 600%; however, their starting values were just 2.4%, 2.3%, and 1%, respectively.

Childhood obesity is a complex issue and its causes are multi-faceted. Consequently, the response has been to implement a suite of complementary policies involving government, community leaders, schools, health professionals and industry. Commonly used policies to alter individual behaviours or the obesogenic environment include tightened regulation of advertising of unhealthy foods and drinks targeted at children; improved access to parks and playgrounds; food reformulation policies; and price interventions to promote a healthy lifestyle (OECD, 2019[2]).

#### Definition and comparability

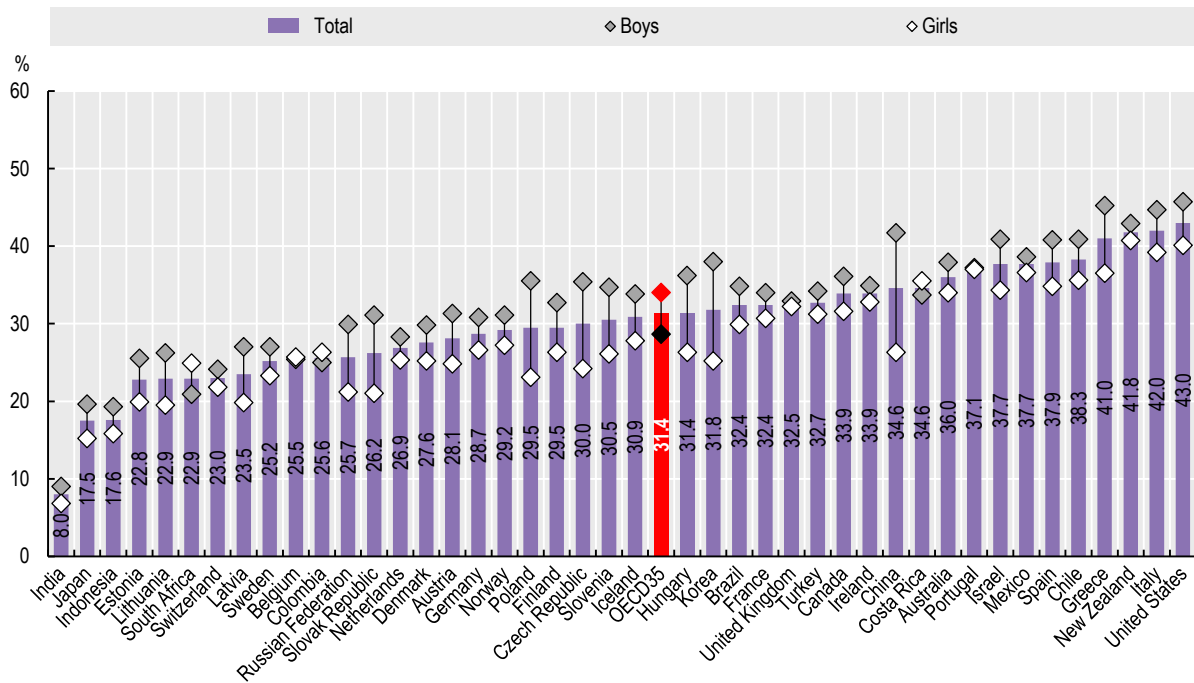
Childhood overweight and obesity rates were calculated using body mass index (BMI). BMI is calculated by dividing weight in kilograms by height in metres squared.

A child is considered overweight if their BMI is one standard deviation above the median, according to the World Health Organization child growth standards. A child whose BMI is two standard deviations above the median is classified as obese.

#### References

- [1] Bösch, S. et al. (2018), *Taking Action on Childhood Obesity*, World Health Organization & World Obesity Federation, Geneva, <https://apps.who.int/iris/bitstream/handle/10665/274792/WHO-NMH-PND-ECHO-18.1-eng.pdf?ua=1>.
- [2] OECD (2019), *The Heavy Burden of Obesity: The Economics of Prevention*, Organisation for Economic Cooperation and Development, Paris, <https://doi.org/10.1787/67450d67-en>.
- [3] OECD (2017), *Obesity Update*, OECD, Paris, <https://www.oecd.org/els/health-systems/Obesity-Update-2017.pdf>.

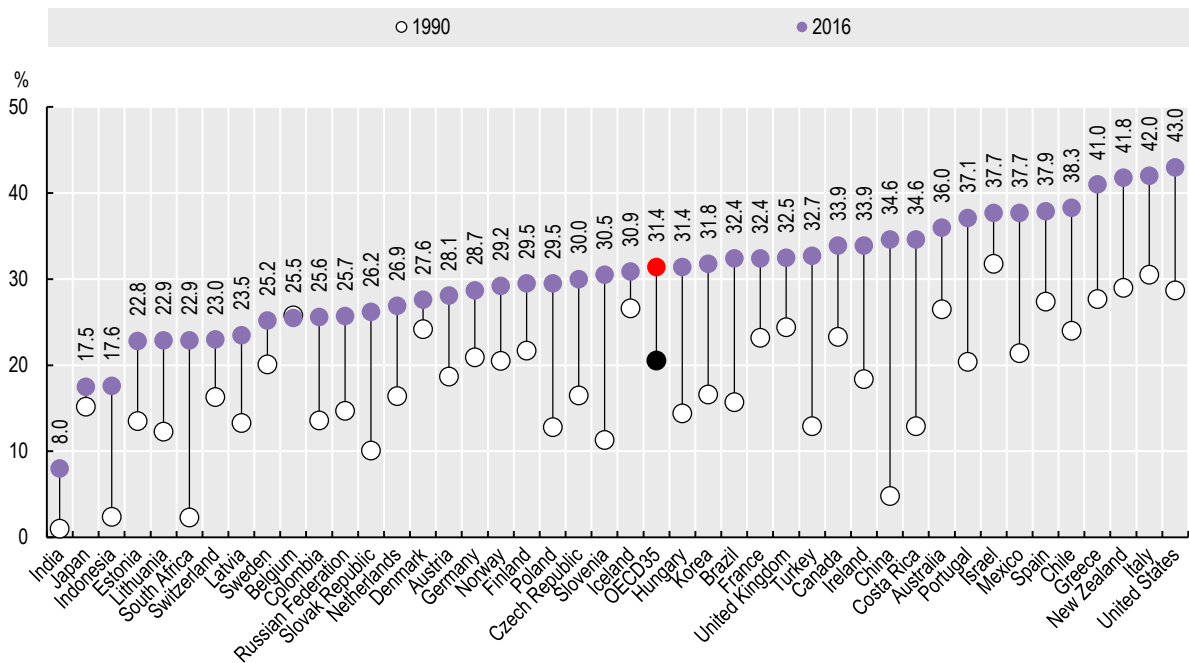
Figure 4.14. Overweight including obesity among 5-9 year olds by sex, 2016



Source: WHO Global Health Observatory.

StatLink <https://doi.org/10.1787/888934015524>

Figure 4.15. Change in overweight including obesity among 5-9 year olds, 1990-2016



Source: WHO Global Health Observatory.

StatLink <https://doi.org/10.1787/888934015543>



**From:**  
**Health at a Glance 2019**  
OECD Indicators

**Access the complete publication at:**  
<https://doi.org/10.1787/4dd50c09-en>

**Please cite this chapter as:**

OECD (2019), "Overweight and obesity among children", in *Health at a Glance 2019: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/010c22fe-en>

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