Overweight and obesity among children

Childhood obesity has become one of the most serious public health challenges of the 21st century. Obesity can affect a child's physical health, through cardiovascular, endocrine, or pulmonary diseases, and psycho-social health, through the development of poor self-esteem, eating disorders, and depression (Inchley et al., 2016). Obesity can also affect educational attainment (Cohen et al., 2013). Furthermore, childhood obesity is a strong predictor of adult obesity, which has health and economic consequences (WHO, 2016).

Overweight (including obesity) based on measured rather than self-reported height and weight ranges from 15% in Norway to 45% in Chile (Figure 4.17). Across the OECD, the average is 25%, with 26% of overweight boys, and 24% of overweight girls, although rates are based on different age groups. Prevalence of overweight is higher in girls than in boys in Ireland, Mexico, New Zealand, Portugal, Sweden, Switzerland, Turkey and the United Kingdom (England), as well as South Africa. Gender gaps are largest in Denmark, Greece, Korea, Poland, Sweden, as well as South Africa (larger than 8 points).

Over 20% of 15-year-olds self-report overweight in Canada, Greece and the United States, while prevalence drops under 10% in Denmark (Figure 4.18). The highest rates occur for girls in Canada, Greece, Iceland and the United States (15% or over), and in boys in Canada, Greece, Israel, Italy, Slovenia and the United States (over 20%). Rates are lowest in girls in Poland and Norway, as well as Lithuania and the Russian Federation (6-7%), and in boys in Denmark, the Netherlands, France as well as Lithuania (10-14%). Self-reported overweight is higher in boys than in girls in all countries, and the overall OECD average is 16% (19% in boys, 12% in girls). Gender gaps are large overall, but are highest in Canada, Estonia, Greece, Italy, Norway, Poland and the Russian Federation (10-15 points). The gaps remain very small in Denmark, the Netherlands, and Portugal (1-3 points).

Self-reported overweight in 15-year-olds has increased in most OECD countries in the past decade (Figure 4.19). Overall across the OECD, overweight increased by 28%, from 12% in 2001-02 to 16% in 2013-14. The strongest increases occurred in the Czech Republic, Israel, Latvia, Poland, the Slovak Republic and Sweden, where overweight rose by more than 50%, as well as Estonia and Lithuania and the Russian Federation, where they more than doubled. Overweight has dropped since 2001-02 in Denmark, as well as for boys in Iceland and Spain, and girls in Norway and the United Kingdom (England).

Increasingly obesogenic environments have contributed to the rise in overweight and obesity in children. Several OECD countries have implemented policies aimed at tightening regulation of advertisements of unhealthy foods and beverages, specifically targeted toward children and young adults to prevent obesity (OECD, 2017). Children have been found to respond well to school programmes (Veugelers and Fitzgerald, 2005), but a systemic approach encompassing a broad spectrum of factors leading to obesity and including communities, families and individuals is necessary to effectively halt the epidemic and decrease prevalence (Inchley et al., 2016).

Definition and comparability

Estimates of overweight and obesity are based on body mass index (BMI) calculations using either measured or child self-reported height and weight, the latter possibly under-estimating obesity and overweight. Overweight and obese children are those whose BMI is above a set of age- and sex-specific cut-off points (Cole et al., 2000).

Measured data are gathered by the World Obesity Federation (WOF, former IASO) from different national studies. The estimates are based on national surveys of measured height and weight among children at various ages. Caution is therefore needed in comparing rates across countries. Definitions of overweight and obesity among children may sometimes vary among countries, although whenever possible the IOTF BMI cut-off points are used.

Self-reported data are from the Health Behaviour in School-aged Children (HBSC) surveys undertaken between 2001-02 and 2013-14. Data are drawn from school-based samples of 1 500 in each age group (11-, 13- and 15-year-olds) in most countries. Self-reported height and weight are subject to under-reporting, missing data and error, and require cautious interpretation.

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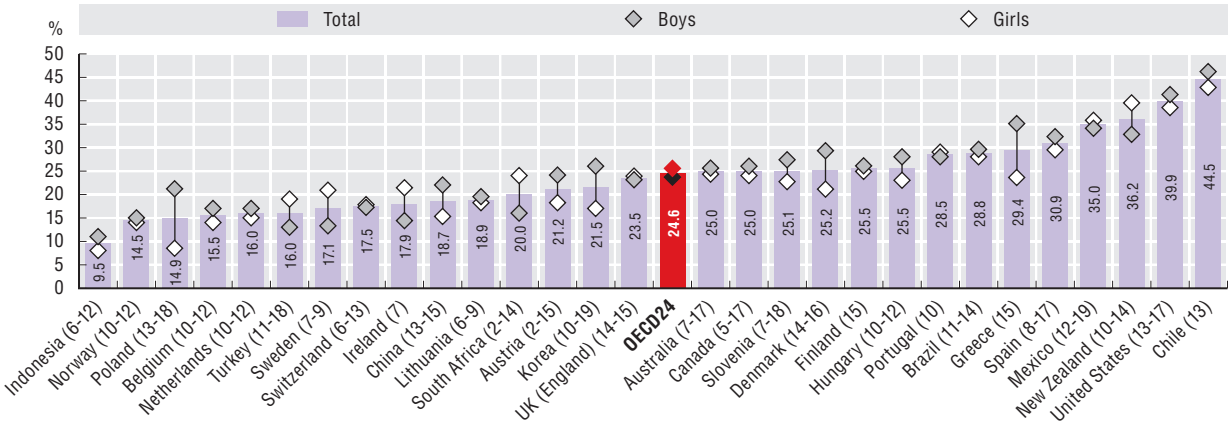
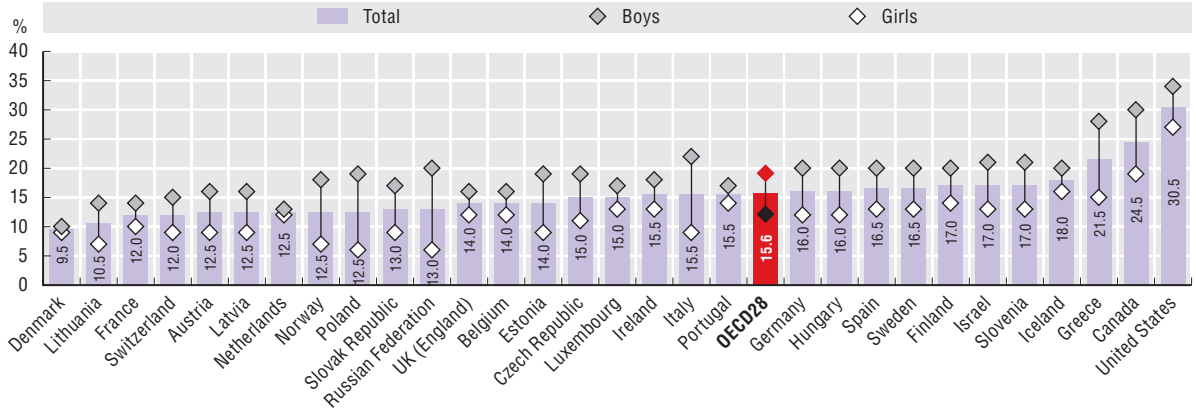
4.17. Measured overweight (including obesity) among children at various ages, 2010 (or nearest year)



Note: The numbers in parentheses refer to the age of the children surveyed in each country.
Source: International Association for the Study of Obesity (2013); World Obesity Federation (2016, 2017); JUNAEB (2016) for Chile; THL National Institute for Health and Welfare for Finland.

StatLink http://dx.doi.org/10.1787/888933603013

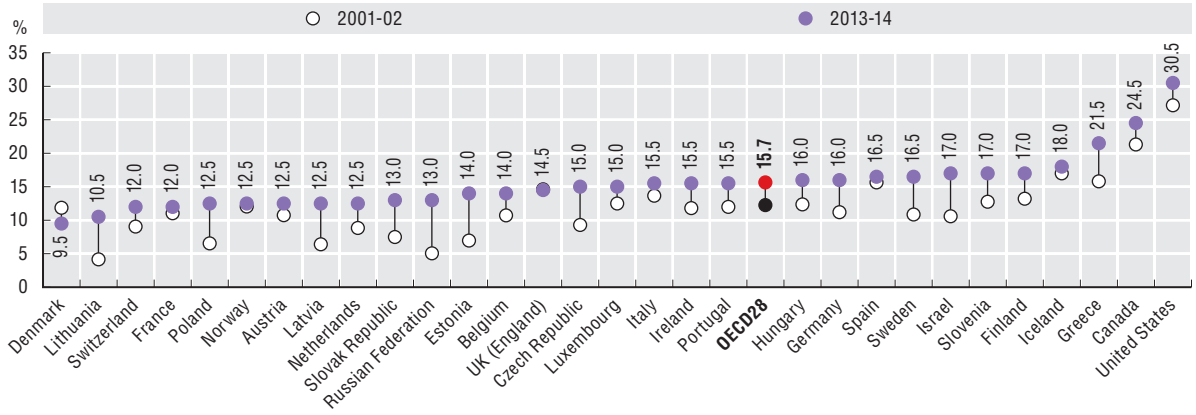
4.18. Self-reported overweight (including obesity) among 15-year-olds, 2013-14



Note: International Obesity Task Force cut-offs. Rates for the United States refer to survey year 2009-10 rather than 2013-14.
Source: Inchley et al. (2016).

StatLink http://dx.doi.org/10.1787/888933603032

4.19. Change in self-reported overweight (including obesity) among 15-year-olds, 2001-02 and 2013-14



Note: International Obesity Task Force cut-offs. Rates for the second data point for the United States refer to survey year 2009-10 rather than 2013-14. Rates for the first data point for Iceland, Luxembourg and the Slovak Republic refer to survey year 2005-06 rather than 2001-02.
Source: Currie et al. (2004); Inchley et al. (2016).

StatLink http://dx.doi.org/10.1787/888933603051