

## 2. NON-MEDICAL DETERMINANTS OF HEALTH

### 2.2. Overweight and obesity among children

Children who are overweight or obese are at greater risk of poor health in adolescence, as well as in adulthood. Among young people, orthopaedic problems and psychosocial problems such as low self-image, depression and impaired quality of life can result from being overweight. Excess weight problems in childhood are associated with an increased risk of being an obese adult, at which point cardiovascular disease, diabetes, certain forms of cancer, osteoarthritis, a reduced quality of life and premature death become health concerns (Lobstein, 2010; Currie et al., 2012).

Obesity and overweight rates rely on individual height and weight data which can either be measured by examination or self-reported. The latter type of data is collected consistently among 15-year-olds through the Health Behaviour in School-aged Children (HBSC) surveys every four years in a number of countries (Currie et al., 2004, 2008, 2012). However, self-reported data tend to under-estimate obesity and overweight.

Overweight (including obesity) rates based on measured height and weight are about 23% for boys and 21% for girls, on average, in OECD countries, although rates are measured in different age groups in different countries (Figure 2.2.1, left panel). Boys tend to carry excess weight more often than girls, with the largest gender differences observed in Slovenia, China and Iceland. In contrast, Turkey and South Africa show larger overweight rates among girls. More than 30% of boys and girls are overweight in Greece, Italy, New Zealand and the United States, and this is also the case for boys in Slovenia.

Self-reported overweight (including obesity) rates are about 18% for boys and 11% for girls on average in OECD countries among the 15-year-olds (Figure 2.2.1, right panel), although this average relates to a different set of countries compared with the average based on measured data. Rates based on self-reports are lower than those based on measured data, except for overweight boys in the United States, Austria, Sweden, Czech Republic, Norway and Turkey, due to age differences. Consistent with measured data, overweight rates based on self-reports are higher among boys than girls. More than 20% of boys are defined as overweight in Greece, Italy, Slovenia, the United States and Canada based on self-reported data, and more than 20% of girls in the United States. Young people who are overweight are more likely to miss eating breakfast, are less physically active, and spend more time watching television (Currie et al., 2012).

Rates of excess weight based on self-reports have increased slightly over the past decade in most OECD countries (Figure 2.2.2). Average of overweight rates (including obesity) across OECD countries increased between 2001-02 and 2009-10 from 13% to 15% in 15-year-olds. The largest

increases during this eight-year period were in the Czech Republic, Estonia, Poland and Slovenia, all greater than 5%. Significant reductions in the proportion of overweight or obese children at age 15 were only observed in Denmark and the United Kingdom between 2001-02 and 2009-10, although non-response rates to questions about self-reported height and weight demand cautious interpretation.

Childhood is an important period for forming healthy behaviours, and the increased focus on obesity at both a national and international level has stimulated the implementation of many community-based initiatives in OECD countries in recent years. Studies show that locally focussed interventions, targeting children up to 12 years of age can be effective in changing behaviours. Schools provide opportunities to ensure that children understand the importance of good nutrition and physical activity, and can benefit from both. Teachers and health professionals are often involved as providers of health and nutrition education, and the most frequent community-based initiatives target professional training, the social or physical environment, and actions for parents (Bemelmans et al., 2011).

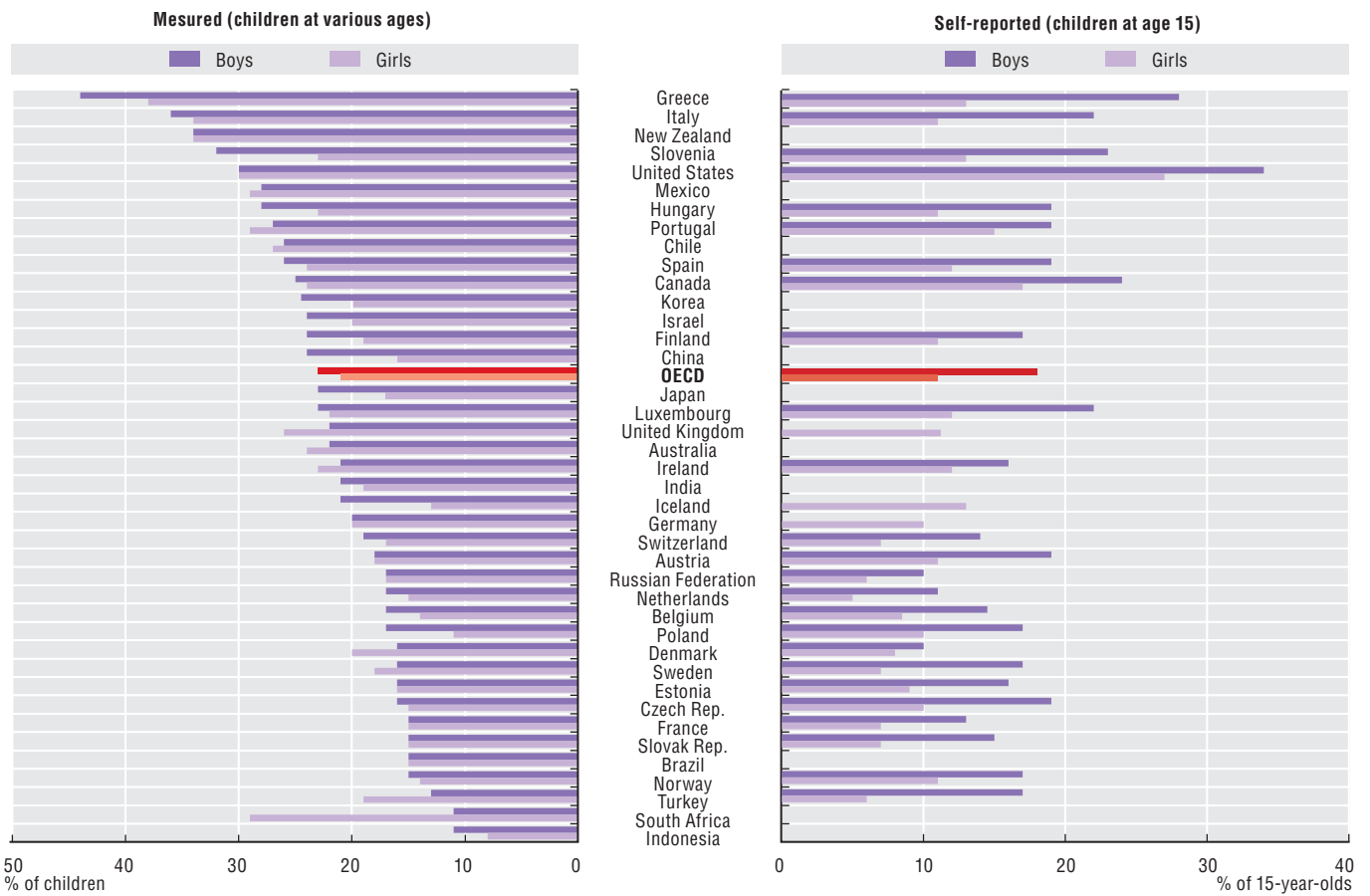
#### Definition and comparability

Estimates of overweight and obesity are based on body mass index (BMI) calculations using either measured or child self-reported height and weight. Overweight and obese children are those whose BMI is above a set of age- and sex-specific cut-off points (Cole et al., 2000). Data presented here use the International Obesity Task Force (IOTF) BMI cut-off points.

Measured data are gathered by the International Association for the Study of Obesity (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 2009-10. 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.

2.2.1. Overweight (including obesity) among children, 2010 (or latest year)

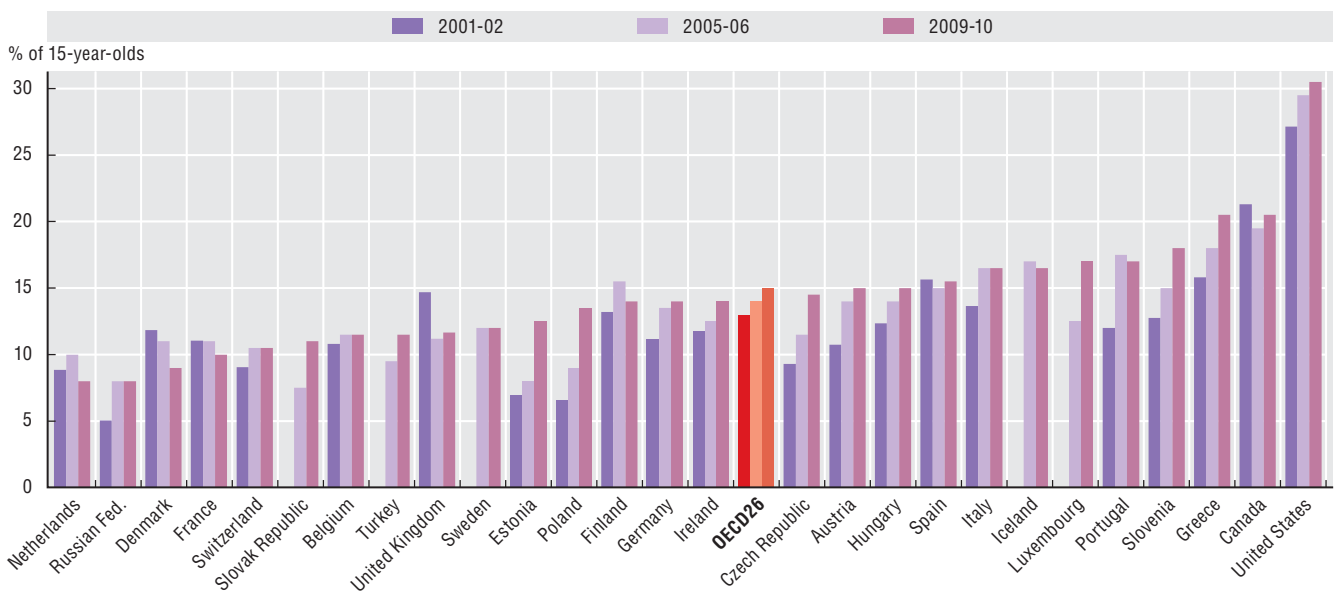


Note: Measured data for United Kingdom refer to England.

Source: International Association for the Study of Obesity, 2013; Bös et al. (2004) for Luxembourg; and KNHANES for Korea (measured data). Currie et al. (2012) (self-reported data).

StatLink <http://dx.doi.org/10.1787/888932916477>

2.2.2. Change in self-reported overweight among 15-year-olds, 2001-02, 2005-06 and 2009-10



Source: Currie et al. (2004); Currie et al. (2008); Currie et al. (2012).

StatLink <http://dx.doi.org/10.1787/888932916496>



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