

Overweight and obesity in 6-12 yr-old Swiss children

Project: 307

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Determining the prevalence of overweight in children and adolescents is more difficult than in adults due to a lack of consistent international criteria for classifying children as overweight or obese. Despite this, France, the Netherlands, the U.S., and the U.K. have reported recent increases in the prevalence of overweight among children and adolescents. Although obesity may contribute to morbidity in childhood (for example, as a risk factor for childhood hypertension), its main importance as a public health problem is that it commonly tracks into adulthood.

To estimate of the prevalence of overweight and obesity in Swiss children, we conducted a cross-sectional, 3-stage, probability-proportionate-to-size cluster sampling of 60 primary schools throughout Switzerland, to obtain a representative national sample of 2600 6-12 yr-old schoolchildren (ca. 1 in 240 children at this age in Switzerland). We measured weight and height, and four skinfoldthicknesses: triceps, biceps, subscapular, and suprailiac. Body mass index (BMI) was calculated and used as an indicator of overweight, and compared to recently published references from the "International Obesity Task Force" (IOTF) [Cole et al., 2000].

Table 1 shows the prevalence of overweight and obesity in 6-12 yr-old children in Switzerland. In boys, 16.7% were overweight and 3.7% obese. For girls, 19.1% were overweight and 3.8% obese. There was no significant difference in the prevalence of overweight between boys and girls. There was a good correlation between body fat percentage from the skinfold thicknesses and BMI, suggesting that BMI is a good indicator of not only overweight, but also for increased body fat in this age group.

The data from these studies suggest that the prevalence of overweight in Swiss children, and its attendant health and social consequences, are important public health concerns. Because treatment is often unsuccessful, prevention is the best way of controlling overweight. Health programs in Switzerland that could address these issues include nutrition education and appropriate physical activity targeted to primary and early secondary school children.

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Bibliography

Cole TJ, Bellizzi MC, Flegal KM, Dietz WH (2000): Establishing a standard definition for child overweight and obesity worldwide: international survey. *BMJ* 320:1240-3.

Tabelle 1. Prävalenz von Übergewicht und Adipositas (%), aufgeteilt nach Alter und Geschlecht, bei Schweizer Kindern in 2002, unter Verwendung des BMI als Indikator für den Gewichtsstatus¹

Knaben	(n=1283)
übergewichtig	16,7
adipös	3,8
Mädchen	(n=1320)
übergewichtig	19,1
adipös	3,8

¹BMI-Werte in der Höhe (oder höher) der IOTF BMI-Grenzwerte [Cole et al., 2000].

Figure 1. Correlation between body fat percentage from 4-site skinfold thickness vs. body mass index in 6-12 yr-old Swiss boys (n=1283) in 2002.

