

Obesity and thinness prevalence trends in Spanish schoolchildren: are they two convergent epidemics?

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Abstract

BACKGROUND: The objective of this study was to analyse the secular trends in body composition variables and weight status among Spanish schoolchildren from 1992 to 2017, and to examine the persistence in the same weight status category from 2013 to 2017 of the birth cohort in 2007-08. **METHODS:** The data for the prevalence/trend analysis were taken from cross-sectional analyses conducted in 1992 (n = 308), 1996 (n = 307), 1998 (n = 275), 2004 (n = 1119), 2010 (n = 912), 2013 (n = 352) and 2017 (n = 275) using similar procedure methods among schoolchildren (aged 4-6 y and 8-11 years) from 22 public schools in the province of Cuenca, Spain. The data for the longitudinal analysis were obtained from cross-sectional analyses of measurements gathered in 2013 and 2017 in the same cohort of children (n = 275) born in 2007 and 2008. Weight, height, body fat percentage (by electronic bioimpedance) and waist circumference were measured by trained personnel. Weight status was defined according to the BMI cut-offs proposed by the International obesity task force (IOTF) criteria. **RESULTS:** In schoolchildren, the overall prevalence of thinness increased from 5.9% in 1992 to 14.5% in 2017, $P < 0.001$. Whereas, the overall prevalence of obesity/overweight remained relatively steady between the same time period (from 25.2% to 26.9%), $P = 0.599$. In relation to the longitudinal analyses, we observed that 70.9% of schoolchildren in 2017 remained in the same weight status category as in 2013. **CONCLUSIONS:** The child obesity epidemic in Spain has remained relatively stable over the last two decades. However, the prevalence of thinness shows a worrying upward trend.