

Childhood Overweight and Obesity Rates Fall Slightly Overall but Rise Among Disadvantaged Families

A study of more than one million children in Catalonia examines the time trends and socio-demographic factors associated with this health problem

Barcelona, March 20, 2020—. Although the overall **prevalence of overweight and obesity in children and adolescents has fallen slightly** over the past decade, the rates of both conditions have **increased in the most disadvantaged neighbourhoods**. This is the conclusion of a new study based on data from more than **one million children in Catalonia**, which was carried out by the Barcelona Institute for Global Health ([ISGlobal](#)) —a centre supported by “la Caixa”— and the [IDIAPJGol](#) Institute.

Levels of childhood overweight and obesity have plateaued in many middle- and high-income countries over the past decade, but prevalence rates remain high. In Spain, around **41% of children aged 6 to 9 years were overweight and/or obese** in 2015—the second-highest prevalence rate in Europe. In the Catalonia region, childhood overweight and obesity rates are similar to those of Spain as a whole.

The new [study](#), published in *Jama Network Open*, was based on data from 1.1 million children and adolescents in Catalonia **aged 2 to 17 years** with at least one height and weight record in the Information System for Research in Primary Care ([SIDIAP](#)) **between 2006 and 2016**. The children were divided into three age groups: 2-5 years, 6-11 years and 12-17 years. Prevalence rates and time trends for overweight and obesity were calculated and stratified by **socio-demographic characteristics**: age, sex, urban/rural residence, nationality, and the socioeconomic deprivation score of the family’s census tract, as calculated using the MEDEA index.

In general, the findings showed that the **prevalence of overweight and obesity decreased slightly in both sexes and all age groups**. During the ten-year study period, rates of overweight and obesity fell from 40% to 38% in girls aged 6 to 11 years and from 42% to 40% in boys of the same age group. However, prevalence rates rose in the **most deprived urban areas and in children of non-Spanish nationalities**.

In areas with lower socio-economic levels, rates of overweight and/or obesity increased slightly, whereas wealthier areas saw a significant decrease, leading to a wider **inequality gap**. For example, between 2006 and 2016, the **obesity rate in girls aged 6 to 11 years fell by 15.8% in neighbourhoods with the highest socio-economic level** but **increased by 7.3% in the most disadvantaged areas**.

Jeroen de Bont, researcher at ISGlobal and IDIAPJGol and lead author of the study, commented: “The data can be extrapolated to Spain as a whole and they may reflect the **impact of the 2008 economic crisis**, which exacerbated inequality within urban areas and increased the number of vulnerable families, who may be more likely to follow unhealthy nutritional habits.”

Children from North, Central and South America—the vast majority of whom were **Latin American**—had the **highest rates of overweight and/or obesity**. Specifically, 56% of boys and 50% of girls of these nationalities between the ages of 6 and 11 years were overweight and/or obese. Children of **African and Asian nationalities saw the largest increase in overweight or obesity** during the study period.

“With the exception of Latin America, children of non-Spanish nationalities were **less overweight and/or obese at the start of the study**, but their prevalence rates increased over the years until they reached the levels of overweight and/or obesity in Spanish children. This trend was especially pronounced in African and Asian children,” commented de Bont. The children’s “gradual adoption of the Western lifestyle and eating habits” could explain these findings, he added.

Talita Duarte-Salles, researcher at IDIAPJGol and co-coordinator of the study, commented: “**These prevalence rates are alarming, since obesity in childhood and adolescence is associated with health consequences later in life**, including cardiovascular, musculoskeletal and endocrine diseases.”

The study also found that **children between 6 and 7 years of age were the most vulnerable to developing overweight and/or obesity**. “These findings demonstrate the importance of public health promotion programmes at early ages where primary healthcare professionals can play a key role in identifying overweight children during routine visits,” commented Duarte-Salles.

“Specific health initiatives focused on the most vulnerable groups are urgently needed to address the high prevalence of childhood overweight and obesity in Spain and worldwide,” concluded **ISGlobal researcher Martine Vrijheid, co-coordinator of the study**.

Reference

Jeroen de Bont, Yesika Díaz, Maribel Casas, Maria García-Gil, Martine Vrijheid*, Talita Duarte-Salles* (*equal contribution). [Time trends and socio-demographic factors associated with overweight and obesity in children and adolescents in Spain](#). *Jama Network Open*. March 2020. 10.1001/jamanetworkopen.2020.1171.

About ISGlobal

The Barcelona Institute for Global Health, ISGlobal, is the fruit of an innovative alliance between “la Caixa” and academic and government institutions to contribute to the efforts undertaken by the international community to address the challenges in global health. ISGlobal is a consolidated hub of excellence in research that has grown out of work first started in the world of health care by the Hospital Clínic and the Parc de Salut MAR and in the academic sphere by the University of Barcelona and Pompeu Fabra University. The pivotal mechanism of its work model is the transfer of knowledge generated by scientific research to practice, a task undertaken by the institute’s Education and Policy and Global Development departments. ISGlobal has been named a Severo Ochoa Centre of Excellence and is a member of the CERCA programme of the Generalitat de Catalunya.

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