



## The Silent Pandemic: Obesity

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Obesity was first recognized as a disease in 1948, when the World Health Organization (WHO) included it in its International Classification of Diseases. Traditionally, its diagnosis has been based on the body mass index (BMI). In the case of children and adolescents (CHI), growth charts recommended by the WHO have been used, considering age, sex, weight, and height. However, the definition of obesity has recently undergone significant changes. It is proposed that a BMI  $\geq 30$  kg/m<sup>2</sup> should not be the sole diagnostic criterion, in order to avoid classifying all people with a high BMI as “sick,” reduce social stigma, and thus protect mental health. At the same time, this approach allows for the early identification of children and adolescents at risk of developing severe obesity, which facilitates timely and targeted interventions and optimizes equity in the allocation of health resources [1].

Childhood obesity is now a public health crisis affecting millions of people worldwide. It has become a particularly acute pandemic in Chile. Recent data estimate that by 2025, approximately 83% of the adult population in Chile would have a BMI  $\geq 25$  kg/m<sup>2</sup> [3], which is equivalent to four out of every five people. In addition, in 2023, approximately 50% of children and adolescents in the country were overweight or obese [2]. These figures are alarming, especially considering that global studies indicate that Chile is among the 15 countries with the highest rate of childhood obesity worldwide [4], and this upward trend has persisted in recent decades.

The problem of childhood obesity in Chile has a heterogeneous geographic distribution, with higher prevalence in the southern regions compared to the northern and central regions of the country [2]. These differences also occur within a single region, a phenomenon aggravated by a marked socioeconomic gradient in the distribution of obesity. For example, in the Metropolitan Region, municipalities with high levels of social vulnerability, such as Cerro Navia and La Pintana, exhibit higher prevalence of obesity than municipalities with a higher socioeconomic status [5]. This reality highlights the urgent need to design and implement nutritional intervention strategies that consider both local specificities and socioeconomic gaps, moving away from models exclusively focused on individual responsibility and taking into account the structural determinants that condition these behaviors [5].

Obesity is not only caused by poor eating habits or lack of physical activity. Genetic, socioeconomic, and environmental factors play a decisive role [5]. In the context of modern life, one of the elements that has gained relevance is intense exposure to screens from an early age. Various studies show that this factor could increase the risk of obesity by promoting advertising of unhealthy foods, encouraging involuntary intake while viewing content, displacing the time allocated to physical activity, reinforcing sedentary behaviors, and shortening sleep hours [4]. In addition, the high level of socioeconomic inequality in Chile limits access to healthy foods and reduces the availability of safe spaces for physical activity [5,6].

Childhood obesity is associated with early metabolic and cardiovascular disorders, such as insulin resistance, high blood pressure, and dyslipidemia [7]. Furthermore, an increased risk of developing oncological and chronic diseases at early ages has been reported [6]. It is estimated that approximately 80% of obese adolescents maintain this condition into adulthood, which significantly increases morbidity and negatively impacts quality of life [8].

Evidence supports the need for interventions targeting early childhood and childhood to prevent progression to adolescence and adulthood [1]. Early identification of unhealthy eating habits and unfavorable family environments leads to more effective prevention [2]. These strategies should include:

- The promotion of healthy eating in the school community.
- The regulation of advertising for ultra-processed foods aimed at minors.
- The promotion of recreational and physical activity spaces, especially in low-resource areas.
- An interdisciplinary approach, bringing together nutritionists, psychologists, and physical educators, among other professionals.

An approach based exclusively on individual responsibility, promoting exercise and nutritional education, has shown limited results [8]. Structural change is required that incorporates the relationship between obesity and social inequality, simultaneously addressing environmental, economic, and cultural factors [5,6]. Some measures, such as the Food Labeling Law, which requires front-of-package labeling and restricts advertising of products high in sugar, fat, or sodium, represent progress, although they are not sufficient to fully contain the complexity of the obesogenic environment [8].

Obesity constitutes a true silent pandemic, understood as a chronic and systemic disease characterized by alterations in the function of tissues, organs, or the individual as a whole, caused by excessive adiposity [1]. The most worrying aspect of this scenario is the pressure that will fall on health systems, which will hardly be able to care for the large number of people affected by chronic diseases related to obesity, given the limitations of human and financial resources. Furthermore, the population pyramid will be altered: the young workforce could be reduced, while the proportion of older adults with chronic and oncological pathologies would increase at increasingly earlier ages. It would be ideal if this reality were nothing more than an “exaggeration of volume” in the

style of Fernando Botero’s artistic work (Illustration 1); however, obesity is not art nor merely an aesthetic problem; current trends indicate that it is a real and complex health crisis that will demand comprehensive and sustainable policies.

Will the few healthy young people be able to help the sick population that our lifestyle is creating?



**Figure 1:** Botero sculpture “Woman Smoking”.

## Bibliography

1. Rubino F, *et al.* “Definition and diagnostic criteria of clinical obesity: A Consensus Statement from the Lancet Commission”. *Lancet Diabetes Endocrinology* 13.3 (2025): 221-262.
2. JUNAEB. “Informe Mapa Nutricional 2023. Santiago (Chile): JUNAEB (2024).
3. World Obesity Federation. *World Obesity Atlas 2025*. London: World Obesity Federation (2025).
4. Zhang X, *et al.* “Global Prevalence of Overweight and Obesity in Children and Adolescents: A Systematic Review and Meta-Analysis”. *JAMA Pediatric* 178.8 (2024): 800-813.
5. Thomas-Lange J. “Sobrepeso y obesidad en Chile: Consideraciones para su abordaje en un contexto de inequidad social”. *Revista Chilena de Nutrición* 50.4 (2023): 457-463.
6. Sepúlveda-Peñaloza A, *et al.* “Geographical disparities in obesity prevalence: small-area analysis of the Chilean National Health Surveys”. *BMC Public Health* 22.1 (2022): 1443.

7. Kain J., *et al.* "Childhood obesity risk index (IROBIC) for small administrative areas in Chile". *Nutrición Hospitalaria* 40.6 (2023): 1144-1151.
8. Rivadeneira-Valenzuela J., *et al.* "Estilos parentales, sobrepeso y obesidad infantil: Estudio transversal en población infantil chilena". *Revista Chilena de Nutrición* 48.1 (2021): 18-30.