



Coexistence of Under Nutrition and Over Nutrition in Pakistan

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Received: July 2025 Accepted: July 2025

Pakistan is currently facing a silent but dangerous public health dilemma: the double burden of malnutrition (DBM). This condition refers to the coexistence of undernutrition and overnutrition within the same population, household, or even individual. At the individual level, early-life undernutrition followed by excess caloric intake in adulthood can lead to adverse metabolic outcomes such as central obesity and insulin resistance. Despite growing attention worldwide, this issue remains underexplored and insufficiently addressed in Pakistan.

According to the Pakistan National Nutrition Survey (NNS) 2018 and WHO reports, 40.2% of children under five are stunted, and a significant percentage suffer from wasting and micronutrient deficiencies (1,2). Meanwhile, overweight and obesity rates are rising rapidly, particularly among women and urban adolescents, with over 18% of urban adolescents classified as overweight or obese (3). This paradoxical nutritional shift is a clear indication of a system caught between food insecurity and unhealthy dietary transitions.

Several interlinked factors contribute to this emerging crisis. On one hand, poverty, food insecurity, and lack of maternal education continue to fuel undernutrition, particularly in rural areas. On the other hand, urbanization, changing food environments, aggressive marketing of ultra-processed foods, agricultural subsidies favoring calorie-dense crops, and lack of regulation on trans fats, and sedentary lifestyles have led to rising overweight and obesity especially in middle-income households (4). Moreover, nutritional policies in Pakistan have traditionally focused only on undernutrition, leaving obesity prevention largely unaddressed. Furthermore, policy action is often hindered by industry lobbying against regulations such as front-of-pack labeling and junk food advertising bans.

The implications of DBM are alarming. Undernutrition compromises immune systems, brain development, and educational performance. Meanwhile, overnutrition significantly increases the risk of non-communicable diseases such as type 2 diabetes, cardiovascular disease, and certain cancers placing an unsustainable burden on the healthcare system (5,6).

Pakistan urgently needs a dual-action nutrition strategy that integrates undernutrition and overnutrition

interventions. Some efforts like the Benazir Nashonuma Program have shown potential in addressing stunting through conditional cash transfers, yet remain limited in scope and do not tackle rising obesity. A comprehensive response should include:

- Nationwide nutrition education campaigns targeting both urban and rural populations.
- Regulation of marketing and sale of sugary beverages and junk foods, especially around schools, with measurable targets such as reducing sugary beverage sales near educational institutions by 50% by 2030.
- Improving the quality of school meals and maternalchild health services.
- Policy alignment across sectors including agriculture, health, and education to ensure access to affordable, nutritious food, such as through agriculture-health partnerships promoting biofortified crops.

The time to act is now. Without prompt and coordinated efforts, Pakistan risks compounding its health challenges unless coordinated, evidence-based interventions are implemented promptly, as emphasized by the Global Nutrition Report 2023.

References

- National Institute of Population Studies (NIPS) [Pakistan] and ICF. Pakistan Demographic and Health Survey 2017-18. Islamabad, Pakistan, and Rockville, Maryland, USA: NIPS and ICF; 2019.
- World Health Organization. Malnutrition. Geneva: WHO; 2021.
 Available from: https://www.who.int/news-room/fact-sheets/detail/malnutrition
- UNICEF. The State of the World's Children 2019: Children, food and nutrition. New York: United Nations Children's Fund; 2019.
- 4. Popkin BM, Corvalan C, Grummer-Strawn LM. Dynamics of the double burden of malnutrition and the changing nutrition reality. Lancet. 2020;395(10217):65-74.
- 5. Afshin A, Sur PJ, Fay KA, et al. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet. 2019;393(10184):1958–72.
- Global Nutrition Report. Nutrition Accountability Framework Progress Report 2023. Bristol, UK: Development Initiatives; 2023.