

# Proximity to Fast Food Restaurants and Its Association with Obesity: A Public Health Concern

Ameneh Marzban<sup>a</sup> , Payam Emami<sup>b\*</sup> 

<sup>a</sup> Department of Health in Disasters and Emergencies, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran

<sup>b</sup> Department of Emergency Medical Sciences, School of Paramedical Sciences, Kurdistan University of Medical Sciences, Sanandaj, Iran

## ARTICLE INFO

### Letter to the Editor

### Article History:

Received: 2 May 2025

Revised: 27 August 2025

Accepted: 27 September 2025

### \*Corresponding Author:

Payam Emami

### Email:

payamemami115@gmail.com

Tel: +98 9188786115

**Citation:** Marzban A, Emami P. Proximity to Fast Food Restaurants and Its Association with Obesity: A Public Health Concern. 2025; 9(2): 1609-1610.

## Dear Editor

Obesity has emerged as one of the most pressing public health challenges of the 21st century. Its prevalence has escalated globally, affecting both high-income and low- to middle-income countries (Jiwani et al., 2019; Sanchez-Vaznaugh et al., 2019). The consequences of obesity extend beyond individual health, contributing to increased rates of cardiovascular disease, type 2 diabetes, respiratory complications, and certain cancers (Hamano et al., 2018). Moreover, the economic burden is staggering, with obesity-related healthcare costs accounting for a significant portion of national health expenditures estimated at 1.2% of GDP in the United States alone (Van Hulst et al., 2025).

While genetic and behavioral factors are often cited in discussions of obesity, growing evidence points to the critical role of environmental determinants (Hamano et al., 2018). Among these, the spatial distribution of fast food restaurants has garnered increasing attention (Jiwani et al., 2019). Studies have consistently shown that individuals

residing in close proximity to fast food outlets are more likely to exhibit unhealthy dietary patterns, including higher consumption of energy-dense, nutrient-poor foods and lower intake of fruits and vegetables (Gallego & López-Gil, 2024; Hamano et al., 2018; Van Hulst et al., 2025). This trend is particularly alarming among children and adolescents, whose exposure to fast food near schools and recreational areas correlates with increased intake of sugary beverages and processed snacks (Jia et al., 2021).

The proliferation of fast food establishments reflects broader socioeconomic and cultural dynamics (Jia et al., 2021). In many urban settings—particularly in countries such as the United States and the United Kingdom—fast food restaurants are disproportionately concentrated in low-income neighborhoods, where access to fresh produce and healthy food options is limited. For example, in the UK, 29% of people living in the most deprived areas reside in neighborhoods with the highest concentration of fast food outlets,



compared to only 11% in the least deprived areas (Sanchez-Vaznaugh et al., 2019). Similarly, a multi-country study across 68 nations found that food insecurity was significantly associated with increased fast-food consumption, especially in low- and middle-income countries (Smith et al., 2022). This imbalance in the food environment exacerbates health disparities and perpetuates cycles of poor nutrition and obesity (Gallego & López-Gil, 2024). Despite public health campaigns which aims at promoting healthier eating habits, the nutritional profile of fast food offerings has remained largely unchanged, and aggressive marketing strategies continue to target vulnerable populations (Gallego & López-Gil, 2024).

To address this multifaceted issue, The authors recommend a comprehensive public health approach that includes both regulatory and educational interventions (Jiwani et al., 2019). Zoning policies should be implemented to restrict the establishment of fast food outlets near schools, parks, and residential zones (Van Hulst et al., 2025). Simultaneously, incentives should be provided to encourage the development of supermarkets and grocery stores offering affordable, nutritious food options. Community-based programs that promote food literacy and empower individuals to make healthier choices are also essential (Jiwani et al., 2019).

Furthermore, longitudinal research is needed to examine the causal relationship between food environments and obesity outcomes. Such studies should account for confounding variables such as socioeconomic status, physical activity levels, and cultural dietary preferences. By deepening the understanding of these dynamics, policymakers can design targeted interventions that are both effective and equitable.

In conclusion, the spatial accessibility of fast food is not merely a convenience; it is a determinant of public health. Tackling obesity requires a shift in how we conceptualize and regulate our food environments. Through coordinated efforts across urban planning, education, and health sectors, we can create

communities that support healthier lifestyles and reduce the burden of obesity.

## Keywords

Obesity, Fast Foods, Public Health, Schools, Food Environment

## References

- Gallego, A., & López-Gil, J. F. (2024). The role of individual and contextual economic factors in obesity among adolescents: A cross-sectional study including 143 160 participants from 41 countries. *Journal of Global Health, 14*, 04035.
- Hamano, T., Li, X., Sundquist, J., & Sundquist, K. (2018). Association between childhood obesity and neighbourhood accessibility to fast-food outlets: a nationwide 6-year follow-up study of 944,487 children. *Obesity Facts, 10*(6), 559-568.
- Jia, P., Luo, M., Li, Y., Zheng, J. S., Xiao, Q., & Luo, J. (2021). Fast food restaurant, unhealthy eating, and childhood obesity: a systematic review and meta-analysis. *Obesity Reviews, 22*, e12944.
- Jiwani, S. S., Carrillo-Larco, R. M., Hernández-Vásquez, A., Barrientos-Gutiérrez, T., Basto-Abreu, A., Gutierrez, L., . . . Parra, D. C. (2019). The shift of obesity burden by socioeconomic status between 1998 and 2017 in Latin America and the Caribbean: a cross-sectional series study. *The Lancet Global Health, 7*(12), e1644-e1654.
- Sanchez-Vaznaugh, E. V., Weverka, A., Matsuzaki, M., & Sánchez, B. N. (2019). Changes in fast food outlet availability near schools: unequal patterns by income, race/ethnicity, and urbanicity. *American journal of preventive medicine, 57*(3), 338-345.
- Smith, L., Barnett, Y., López-Sánchez, G. F., Shin, J. I., Jacob, L., Butler, L., . . . Tully, M. (2022). Food insecurity (hunger) and fast-food consumption among 180 164 adolescents aged 12–15 years from sixty-eight countries. *British Journal of Nutrition, 127*(3), 470-477.
- Van Hulst, A., Zheng, S., Argiropoulos, N., Ybarra, M., Ball, G. D., & Kakinami, L. (2025). Overweight and obesity in early childhood and obesity at 10 years of age: a comparison of World Health Organization definitions. *European Journal of Pediatrics, 184*(4), 270.