

**ASSOCIATION BETWEEN FAST FOOD CONSUMPTION & OBESITY AMONG YOUNG
ADULTS (18-25) YEARS IN NEW YORK CITY****Md. Awlad Hossain Babu^{1*}, Syeda Tashrufa Nashfin², Md. Abdul Mannan³**¹MS in Healthcare Management, St. Francis College, USA.²Department of Food Engineering and Technology, State University of Bangladesh.³Associate Professor, Hamdard University Bangladesh.***Corresponding Author: Md. Awlad Hossain Babu**

MS in Healthcare Management, St. Francis College, USA.

DOI: <https://doi.org/10.5281/zenodo.18480123>**How to cite this Article:** Md. Awlad Hossain Babu^{1*}, Syeda Tashrufa Nashfin², Md. Abdul Mannan³. (2026). Association Between Fast Food Consumption & Obesity Among Young Adults (18-25) Years In New York City. World Journal of Pharmaceutical and Medical Research, 12(2), 409-411.

This work is licensed under Creative Commons Attribution 4.0 International license.



Article Received on 05/01/2026

Article Revised on 25/01/2026

Article Published on 04/02/2026

ABSTRACT

Background: Public discourse and public health research on obesity have intensified in the wake of marked increases in US obesity rates, increases that have been particularly acute among the disadvantaged (Block et al., 2004). For African Americans, obesity is endemic, the National Health and Nutrition Examination Survey (NHANES) gave prevalence rates at 45% in 2003–2004 (Burdette & Whitaker, 2004). Multiple studies show that **greater fast-food consumption (and greater local fast-food availability/density) is associated with higher BMI or increased odds of overweight/obesity among children and adolescents**, including analyses using New York City data. These associations are often stronger in lower-income neighborhoods. Fast food is calorie-dense and often consumed in large portions. Frequent consumption leads to **excess caloric intake**, promoting **weight gain and obesity**. High-glycemic foods and saturated fats increase **insulin resistance** and **risk of diabetes**. The objective of this study was to collect information about the relationship between fast food consumption and obesity among adults aged 18–25 Years old in New York City. The Study was conducted with customers in Two Pizza shops: one is Basilico Pizzeria, located at 59 1st Ave, NY 10003, and the other is Limon Pizzeria Halal, situated at 50 E 125th St, NY 10035. **Methodology:** A cross-sectional analytical study was carried out with 400 participants in New York City. Data were gathered through a verified, self-reported questionnaire that included sociodemographic information, eating behaviors, motivations for fast food consumption, and levels of physical activity. Self-reported height and weight were used to calculate body mass index (BMI), and obesity was categorized according to the standards set by the World Health Organization (WHO). Ethical approval was granted, and informed digital consent was acquired from all participants. **Result:** The research included 400 participants with a mean age of 21.67 years (SD = 1.60), a median age of 22 years, and an age range of 18 to 25 years. Of these, 240 (60%) were Male, and 140(40%) were Female. The age group most frequently observed was 20–21 years. Participants reported an average height of 166.18 cm (SD: 9.88 cm) and an average weight of 64.42 kg (SD: 14.73 kg), resulting in a mean body mass index (BMI) of 23.30 (SD: 3.27), which falls within the normal range for young adults. **Conclusion:** The research revealed that most young adult participants exhibited a normal BMI, suggesting a predominantly healthy weight condition. None of the participants were underweight, and the prevalence of overweight was greater in males compared to females. These results emphasize the significance of encouraging healthy lifestyle habits, especially in young adult men, to avert future health risks associated with weight

KEYWORDS: Fast Food, Association, Consumption, Obesity, Diet, Young Adult, New York.**INTRODUCTION**

Obesity is a significant global health issue and is becoming more common among young adults. The shift from teenage years to early adulthood is a significant

phase characterized by changes in lifestyle, such as greater autonomy in food selections and decreased physical activity, potentially leading to unhealthy weight(WHO, 2023). Obesity rates in young adults in the

United States have consistently increased, presenting long-term dangers for chronic conditions like heart disease, type 2 diabetes, and specific cancers (Prevention, 2016).

The consumption of fast food has become a significant aspect of urban living, particularly in cities like New York, where fast food restaurants are readily available and aggressively promoted. Fast foods are generally rich in calories, saturated fats, sugar, and sodium, yet low in vital nutrients, which makes them a major factor in excessive energy consumption and weight (Bowman & Vinyard, 2004). Young adults often turn to fast food because it is convenient, affordable, and suits their busy schedules, which are often tied to school and job responsibilities.

Despite growing concerns, there is a lack of research specifically investigating the link between fast food intake and obesity in young adults aged 18–25 years in New York City. Understanding this connection is crucial for developing targeted interventions and effective public health initiatives. Consequently, this research aimed to investigate the relationship between fast food consumption and obesity in young adults in New York City.

MATERIALS AND METHODS

An analytical, cross-sectional study was carried out involving young adults aged 18–25 years in New York City, United States. The research was conducted from August 2025 to December 2025 to investigate the link between fast food intake and obesity. Four hundred Participants from Two Pizza shops throughout New York City took part in the study.

A census-based method was employed, incorporating all eligible Participants who agreed to participate in the study to enhance statistical power. The minimum necessary sample size was determined to be 189

participants, considering a high prevalence of fast-food intake noted in earlier studies, and a 98% confidence level (Shree *et al.*, 2018), and a 2% margin of error, but the final sample consisted of 400 participants to enhance the robustness and reliability of the results.

Data was gathered utilizing a pre-designed, pre-tested, and validated self-administered paper-based questionnaire that was distributed by hand. The survey gathered data on sociodemographic traits, patterns of fast-food consumption, frequency of eating fast food, motivations for choosing fast food, behaviors related to skipping meals, and levels of physical activity.

Participants provided their height and weight, which were used to calculate their Body Mass Index (BMI). BMI was classified based on World Health Organization (WHO) guidelines as underweight (<18.5 kg/m²), normal weight (18.5–24.9 kg/m²), overweight (25–29.9 kg/m²), and obese (≥30 kg/m²).

Approval for ethical considerations was secured from the WCG IRB. Participation was optional, and written consent was obtained from all participants prior to the commencement of data collection. The study ensured that participants' confidentiality and anonymity were rigorously upheld.

RESULTS

The research included 400 participants with a mean age of 21.67 years (SD = 1.60), a median age of 22 years, and an age range of 18 to 25 years. Of these, 240 (60%) were Male, and 140(40%) were Female. The age group most frequently observed was 20–21 years. Participants reported an average height of 166.18 cm (SD = 9.88 cm) and an average weight of 64.42 kg (SD = 14.73 kg), resulting in a mean body mass index (BMI) of 23.30 (SD = 3.27), which falls within the normal range for young adults.

Participants	Under Weight	Normal Weight	Overweight
Male	0	185	55
Female	0	128	12

DISCUSSION

The current study investigated the demographic characteristics and body mass index (BMI) distribution among a group of 400 young adult subjects. The results show that the study group was mainly male (60%), with an average age of 21.67 years, representing a uniform cohort of young adults. This age distribution aligns with the demographics typically examined in health and nutrition research focusing on young-aged populations. The age group most represented was 20–21 years, indicating that the sample predominantly comprised individuals in early adulthood, an essential stage for forming lasting health behaviors.

The average BMI of participants was 23.30 (SD = 3.27), which is within the normal BMI range established by the World Health Organization. This indicates that, generally, the participants kept a healthy body weight. The lack of underweight individuals in both male and female categories further suggests that malnutrition or severe weight inadequacy was not common in this population. These results might indicate a sufficient nutritional state and overall health consciousness among young adults within this demographic.

While the average BMI appeared normal, significant gender variations in weight status distribution were noted. Among male participants, 55 were categorized as overweight, while only 12 female participants were

classified as such. This indicates a higher prevalence of overweight status among males in the study. Potential reasons for this discrepancy may involve differences in eating patterns, levels of physical activity, muscle mass, and lifestyle choices among male and female participants. Men may also participate in consuming more calories or engaging in strength-oriented exercises that increase body mass, potentially leading to elevated BMI figures.

Female participants were more inclined to be in the normal weight range, as 128 out of 140 females were identified as having a normal BMI. This result aligns with earlier studies indicating that young adult women may be more aware of body weight and diet management due to social, cultural, or health-related factors. Nonetheless, it's crucial to acknowledge that BMI fails to differentiate between fat mass and lean mass, which can potentially affect gender-specific interpretations of weight status.

The typical height and weight of the participants fell within the anticipated ranges for young adults, further validating the sample's representativeness. Nevertheless, the existence of overweight individuals, especially among men, underscores the significance of early prevention measures focused on encouraging healthy lifestyle habits during young adulthood. Tackling elements like diet quality, exercise levels, and inactivity during this phase could potentially lower the chances of developing obesity-related health issues in the future.

Although this research provides important insights into BMI distribution in young adults, it has several notable limitations. Height and weight information were provided by individuals, which may have led to reporting bias and affected the precision of BMI. Moreover, the cross-sectional design restricts the capacity to determine causal relationships. Future studies should adopt longitudinal methods and incorporate objective assessments of body composition to enhance understanding of weight-related health risks within this group.

To conclude, the results indicate that most participants had a normal BMI, with a greater occurrence of overweight status noted in males. These findings highlight the necessity for focused health promotion efforts that advocate for balanced diets and routine exercise, especially in young adult males, to enhance long-term health results.

CONCLUSION

The research revealed that most young adult participants exhibited a normal BMI, suggesting a predominantly healthy weight condition. None of the participants were underweight, and the prevalence of overweight was greater in males compared to females. These results

emphasize the significance of encouraging healthy lifestyle habits, especially in young adult men, to avert future health risks associated with weight

Conflicts of interest

The authors state no conflicting interests.

Limitation

Due to technical, logistical, and financial constraints, we were unable to conduct the study on a large scale.

REFERENCES

1. Block, J. P., Scribner, R. A., & DeSalvo, K. B. Fast food, race/ethnicity, and income: a geographic analysis. *American Journal of Preventive Medicine*, 2004; 27(3): 211–217.
2. Bowman, S. A., & Vinyard, B. T. Fast food consumption of US adults: impact on energy and nutrient intakes and overweight status. *Journal of the American College of Nutrition*, 2004; 23(2): 163–168.
3. Burdette, H. L., & Whitaker, R. C. Neighborhood playgrounds, fast food restaurants, and crime: relationships to overweight in low-income preschool children. *Preventive Medicine*, 2004; 38(1): 57–63.
4. Prevention, C. for D. C. and. (2016). *Adult Obesity Facts* <http://www.cdc.gov/obesity/data/adult.html> 2015. Accessed.
5. Shree, V., Prasad, R. R., Kumar, S., Sinha, S., & Choudhary, S. K. Study on consumption of fast food among medical students of IGIMS, Patna. *International Journal Of Community Medicine And Public Health*, 2018; 5(7): 2750–2754.
6. WHO, O. (2023). *overweight*, Available online: <https://www.who.int/en/news-room/fact-sheets/detail/obesity-and-overweight>. Accessed.