

# Fast-food restaurants near schools affect black and Hispanic students more than white and Asian ones

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Credit: AI-generated image ([disclaimer](#))

When their schools are near fast-food restaurants, black and Hispanic adolescents are more likely to be overweight and receive less benefit from exercise than Asian or white students, according to a study published in the current issue of *Journal of Public Policy & Marketing*.

The study underscores the importance of understanding how adolescents respond to fast-food availability near school.

"Our study demonstrates that [fast food](#) near schools is an environmental influence that has magnified effects on some minority children at lower-income urban schools," said Brennan Davis, Ph.D., assistant professor of marketing at Baylor University, who co-authored the study with Sonya Grier, Ph.D., associate professor of marketing at American University.

Students attending lower-income schools on average have a higher body mass index (BMI) and consume more soda. Likewise, urban schools have students who on average have higher BMI and consume more soda. To put these results in perspective, the study found that for all students, having a fast-food restaurant a mile nearer to [school](#) almost entirely cancels the body weight benefits of exercising one day per week. However, for black and Hispanic students in lower-income urban neighborhoods, having a fast-food restaurant a mile nearer to school may cancel the benefits of up to three days of [exercise](#) per week.

"The findings imply that it is important to examine the behaviors and contexts associated with low-income and ethnic minority status in urban areas," said Grier. "These populations not only are the fastest growing but also have the highest rates of obesity, and research is relatively limited."

According to the study authors, the school environment is, more often than many other settings, one in which [adolescents](#) make food choices free from the family structure and parental control and can occur during lunch or before and after school. The study highlights the need to understand local targeted marketing strategies and outcomes according to income, ethnicity, and geographic segmentation. Many of the ethnic groups that are increasing in size and purchasing power, and are increasingly of interest to marketers, are also geographically

concentrated.

"As mobile geodemographic location targeting increases, fast-food promotions will likely target those adolescents nearest to fast-food outlets and who are at greatest risk for obesity. Voluntary industry actions, or policies that support healthier food near schools, can contribute to healthier school food environments," Davis said.

The current study builds on previous research (American Journal of Public Health, 2009) by Davis and Christopher Carpenter, Ph.D., associate professor of economics and [public policy](#) at The Paul Merage School of Business, University of California, Irvine, which found that students with [fast-food restaurants](#) within one-half mile of their school consumed fewer servings of fruits and vegetables, consumed more servings of soda, and were more likely to be [overweight](#) than were youths whose schools were not near fast-food restaurants.

In a study not yet published (Association for Consumer Research Conference Proceedings, 2009), Davis and Cornelia Pechmann, Ph.D., professor of marketing at the Merage School, found that adolescents with higher social identification with people at school perceived restaurants near school to be socially closer, were more likely to have friends, and eat there more often. In contrast, students who were relatively low in social identification were not affected by the nearness of a fast food restaurant. In other words, low social identifiers were relatively immune to nearby fast food, while high social identifiers were highly vulnerable to it.

Student demographics, and information on students' body weight and height, which was used to determine BMI, came from their responses to the 2003 California Healthy Kids Survey, an anonymous, school-based survey. More than 36 percent attended school in a large suburban area, and 55 percent attended school within a half-mile of a fast-food

restaurant. Respondents reported their age in years by category: 21percent were 12 years and under, 11 percent were 13 years, 24 percent were 14 years, 12 percent were 15 years, 23 percent were 16 years, and 9 percent were 17 years or older. Slightly more than half of the [students](#) were female and 40 percent were white, 13 percent were Asian, 7 percent were black, 38 percent were Hispanic, and 18 were other ethnicity.

To measure fast-food proximity to schools, researchers used a database of all middle and high schools in California, including latitude-longitude coordinates, from the California Department of Education (2009); a database of all restaurants in California in 2003 with latitude-longitude coordinates from Microsoft Streets and Trips; and a list of restaurant brands classified as fast food from Technomic Inc., a food industry consulting firm.

Provided by Baylor University

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