

# Children, Schools, and Fast Food

## What Was the Question?

Americans appear to be increasing their consumption of calorie-rich, cheap, fast foods. Researchers estimate that Americans will spend over \$150 billion a year at the 280,000 fast-food restaurants that now exist in the United States. The growth of and increase in fast-food chains is due in part to the fact that they market to children and adolescents and make themselves conveniently accessible. In 1977-1978, children between the ages of 12 and 18 got 6.5 percent of their total calories from fast-food chains or other restaurants; in 1994-1996, nearly 20 percent of their calories were consumed in these establishments. As a result of this growing trend of caloric consumption, and the need for fast-food restaurants to be in close proximity to their client base, a team of researchers assessed the extent to which fast-

food chains cluster near schools in Chicago.

## What Was Done?

The researchers compiled a list of schools (i.e., public and private kindergartens, primary, and secondary schools) and fast-food chains, with their addresses, and geocoded them by assigning longitudes and latitudes to their locations. Fast-food restaurants were defined as eating places where patrons order items prior to paying, and in which food can be consumed at the site or taken out. Typical menu items included hamburgers, French fries, fried chicken, pizza, sub sandwiches, and doughnuts. Ultimately, 613 fast-food restaurants and 1,292 schools met the researchers' criteria for location and were included in various geographical analyses.

## What Was Found?

In Chicago, the mean and median distances from a school to the nearest fast-food restaurant were .60 km (.37 miles), and .52 km (.32 miles). Four hundred and fifty two (34.9%) of the schools had at least one fast-food chain within 400 meters of its campus. The researchers selected 400 meters because it is a distance that can be walked within five minutes. In downtown Chicago, the median distance of a school to the nearest fast-food chain was only 270 meters. Nearly 80 percent of all Chicago schools (1,010) had a fast-food chain within 800 meters or a half-mile (a 10-minute walk). The authors of the study also point out that many Chicago schools have "open campus" policies that allow older students to eat lunch off-campus. From these data, the authors concluded that there is significant clustering of fast-food

chains near schools in Chicago. They go on to convey that there are three to four times the number of fast-food restaurants within 1,500 meters (nearly one mile) of school campuses, in comparison with non-school areas. Fast-food restaurants were also clustered in commercialized areas of the city and in areas where household incomes were greater.

## What Does the Study Mean?

The authors note that the clustering of fast-food restaurants around schools is an important public health concern because it may undermine public health efforts to improve the nutritional behaviors of young people, especially in light of what has been characterized as an overweight/obesity crisis in the United States. Studies like these may stimulate school officials to consider their open campus and fast-food policies. While the investigation did not examine the actual nutritional behaviors of students, the authors suggest that decision-makers take a proactive position and consider creating buffer zones between schools and fast-food restaurants.

## Reference

Austin, S. B., Melly, S. J., Sanchez, B. N., Patel, A., Buka, S., & Gortmaker, S. L. (2005). Clustering of fast-food restaurants around schools: A novel application of spatial statistics to the study of food environments. *American Journal of Public Health, 95*, 1575-1581.

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