Fact Sheet

RAND HEALTH

Do Neighborhood Economic Conditions Influence the Consumption of Fruits and Vegetables?

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Health disparities across racial and ethnic groups in the United States are large and persistent. Obesity rates, a major area of concern, are increasing faster among black and Hispanic populations than among whites. Diet, particularly the lack of intake of fruits and vegetables, figures prominently in obesity. When consumed in adequate quantities, fruits and vegetables can reduce the risk of obesity as well as diabetes and cardiovascular disease.

Because blacks and Mexican Americans tend to live in more disadvantaged neighborhoods, it is likely that neighborhood economic conditions contribute to these disparities; for example, having fewer food stores and transportation options can reduce access to healthy foods. Yet to date, few studies have examined whether economic conditions influence the intake of fruits and vegetables and whether this affects racial and ethnic groups differentially. To begin addressing this knowledge gap, a study including RAND researchers examined these issues. The analysis used an index of neighborhood socioeconomic status (SES) and individual- and county-level data. The study focused on two questions:

- What is the relationship between neighborhood SES and the intake of fruits and vegetables?
- How does this relationship vary for different racial and ethnic groups, specifically blacks, whites, and Mexican Americans?

Results showed that neighborhood SES has a positive, statistically significant relationship with fruit and vegetable intake. For example, the Anacostia neighborhood of Washington, D.C., is significantly less affluent than the adjacent Capitol Hill neighborhood (by a factor of 65 percent). This difference was associated with an average of 4.4 fewer servings per week of fruit and vegetables.

Neighborhood economic conditions also explained some of the disparities in fruit and vegetable intake. Neighborhood differences

- accounted for virtually all of the disparities between Mexican Americans and whites
- accounted for about half of the gap in fruit and vegetable consumption between blacks and whites; yet the disparity still remained sizable
- had a greater effect on whites than on blacks or Mexican Americans.

This last result suggests two alternative hypotheses. First, even though neighborhoods may have roughly equivalent SES status, predominantly white neighborhoods may have different characteristics that afford whites enhanced access to fruits and vegetables. Another hypothesis is that there are cultural influences, or factors other than the neighborhood environment, that influence diet and thus make blacks and Mexican Americans less susceptible to neighborhood influences.

The connection of neighborhood SES with fruit and vegetable intake is one important pathway through which neighborhood environments affect population health and nutrition. The study results suggest that special efforts by community groups, businesses, or government to increase the availability of fresh produce and other healthy foods in disadvantaged neighborhoods may help local residents improve their diets and would be worth pursuing. It is also important to understand the effect of cultural influences on diet, especially when considering how differing racial/ethnic groups may experience their neighborhood environment in the United States.

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Headquarters Campus
1776 Main Street
P.O. Box 2138
Santa Monica, California
90407-2138
TEL 310.393.0411
FAX 310.393.4818

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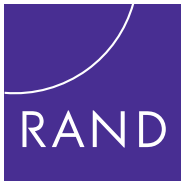

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