Strategies to Prevent Childhood Obesity Must Extend Beyond School Environments

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n February 9, 2010, First Lady Michelle Obama launched Let's Move! (www.letsmove.gov), a campaign aimed at reversing childhood obesity trends within a generation. The campaign focuses on three targets: providing more healthful food in schools, promoting physical activity, and making healthful food available to all Americans. These goals make sense. Levels of obesity may have reached a plateau in the U.S., but overweight and its consequences remain leading causes of disease and disability.¹

A decade ago, it was already evident that efforts to prevent obesity would require more than educating individuals to make healthier food choices. It would also require addressing the formidable barriers posed by the marketing and physical environments.² Although these environments are inextricably linked, they tend to be studied separately. Indeed, the physical—the "built" environment now constitutes its own field of study, one that investigates how the design and management of cities and communities affects health behaviors, dietary choice among them.³

Because the prevention of obesity begins in childhood, and because schools are especially well-controlled locations for study, much attention has focused on school food environments and ways to improve them.^{4,5} Now, researchers are examining how the neighborhoods that surround schools affect children's food consumption and body weight. They find that "junk foods," those of poor nutritional quality relative to calories, are widely available in stores or fast-food restaurants near the vast majority of American schools, and that food access is firmly linked to consumption.⁶ Access is less firmly linked to obesity, however,⁷ in part because it is so difficult to distinguish the effects of food availability from the lack of transportation, health care, and education that typically characterize low-income areas.^{8,9}

Address correspondence to: Marion Nestle, PhD, MPH, Department of Nutrition, Food Studies, and Public Health, New York University, 35 W. 4th Street, 10th Floor, New York NY 10012-1172. E-mail: marion. nestle@nyu.edu. In this issue of the American Journal of Preventive Medicine, Kathryn Neckerman and her colleagues¹⁰ extend these observations by documenting food availability within the immediate surroundings of 1579 public schools in New York City. Their results are surprising. Although national fast-food chains are located within 400 m of 42% of city schools, the most frequent sources are bodegas, small grocery stores that sell mostly packaged foods. These are found within 400 m of an astonishing 92% of schools. On average, schools were surrounded by *ten* bodegas at a distance of 211 m, with their concentration highest near schools with more low-income and minority students.

What are the policy implications of these findings? The authors note that zoning regulations to restrict fast food near schools cannot be effective in inner-city neighborhoods because bodegas are closer and most prevalent. Their suggestions: Bodegas should be encouraged to provide more healthful choices such as baked chips, individually packed fruits and vegetables, and diet beverages or to use price, display, or calorie-labeling strategies.

But in-store interventions will succeed only if more healthful choices are equally profitable.¹¹ Unfortunately, snack foods and beverages are more profitable than fruits and vegetables. Fresh foods appear to be more expensive because they are.¹² The relative cost of fresh fruits and vegetables has increased by about 40% since the early 1980s, whereas that of sodas and packaged foods has declined by about as much.¹³

Bodegas, therefore, constitute only a small part of the obesity-promoting environment. Children have always bought candy after school. What is new in American culture is the dependence of children on junk foods, fast foods, and sweetened beverages for a major part of their caloric intake, not least because of the relentless efforts of food marketers to convince them that these kinds of foods are what they are *supposed* to be eating.^{14,15}

To succeed, federal efforts to prevent childhood obesity must ensure that children are fed nutritious breakfasts and lunches in school every day so they are less likely to be ravenous when they encounter a bodega. Let's Move! should promote restrictions on food marketing, especially when it is aimed at convincing children to

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consider junk foods to be normal components of daily diets. The government should adopt agricultural policies that reduce the relative cost of healthier foods. Improving foods in bodegas will help, but broader policy changes are essential for promoting healthier eating among our nation's school children.

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