The Contribution of the School Environment to the Overall Food Environment Experienced by Children[1]

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Abstract

With the expansion of various school meal programs, children receive an increasing fraction of their meals at school. Despite the important role of schools in the food environment faced by children, most research examining access to healthy food has focused on the retail sector. In this paper, we examine the roles that both the retail- and school-based food environments have on the nutritional choices of children. Also, we determine whether the school-based food environment, as measured through the healthfulness of foods available to students through the school meal programs, compensates for the poor retail food environment in food deserts or exacerbates the problem. Further, we examine how these relationships differ based on whether children receive free or reduced-price meals and whether children are in school. Our project brings together two important strands of research into one framework: the impact of school meal programs on what children eat and the impact of the retail food environment on children.

One important contribution of our project is the creation of a database of school menus covering about 90% of students in the US coupled with nutritional information about each item on the menu. Using this database, we document variation in the healthfulness of school meals across the country. We then merge these data with records of food purchases and acquisitions of children and households and the retail food environment contained in the National Household Food Acquisition and Purchase Survey (FoodAPS). Descriptively, initial results show that the healthfulness of the school lunch offered to students is greater for children in neighborhoods with low access to healthy food. Comparing students within neighborhoods (Census tracts) who are exposed to the same retail environment, but who attend different school districts, we find that the healthy eating index scores of students are lower in school districts which offer healthier school lunches.

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