

WIC Vendor Access and Fruit and Vegetable Availability in Northern Illinois

Angela Odoms-Young, Shannon Zenk, Noel Chavez, University of Illinois at Chicago and Daniel Block, Chicago State University

Background

The rapid increase in overweight and obesity in the United States over the past several decades, particularly among children, has prompted discussions about the role of public policy in addressing this rising epidemic. Although the causes of obesity are clearly multi-factorial, since unhealthful dietary patterns are a major contributor, many of these discussions have focused on modifying/developing food and nutrition policy to ensure adequate access to healthy foods. Consistent with these efforts, on December 6, 2007, the United States Department of Agriculture Food and Nutrition Service (FNS) published a final interim rule that would revise regulations governing the food packages provided in the Special Supplemental Nutrition Program for Women, Infants, and Children (as known as WIC). With expenditures exceeded only by the Food Stamp Program and National School Lunch Program, WIC is one of the largest food assistance programs in the U.S. WIC serves over 8 million women, infants and children, with an estimated half of all infants and one-quarter of all children 1-4 years of age in the United States participating in the program. One of the most noteworthy revisions is the addition of a cash-voucher to the food packages of women and children to purchase fresh fruits and vegetables in the amount of \$8 and \$6 per month, respectively, which can be redeemed at participating retailers, or "WIC vendors." While WIC participants receive a variety of benefits, supplemental foods are viewed as an important aspect of the benefit package and constitute a significant portion (about 73%) of WIC program costs. Despite overwhelming support from WIC stakeholders regarding the addition of a fruit and vegetable benefit, several concerns have been raised related to vendor burden including the potential need for vendors to purchase additional equipment, obtain a new business license, and/or be trained in special handling. Other concerns center on limitations in participant access particularly for those living in areas with scarce produce, higher fruit and vegetable costs, or inadequate selection. These concerns could impact the number of vendors that participate in the program and/or types/amount of fruit and vegetables available, thus limiting the benefits of this important policy for particular subgroups of the WIC population.

Methods

In preparation for the proposed policy, the purpose of this study was to examine current neighborhood WIC vendor access and fruit and vegetable availability in selected areas in Northern Illinois. Specific aims were to: 1) Describe current availability, selection, price, and quality of fruits and vegetables offered by WIC authorized vendors in selected areas in Northern Illinois; 2) Examine variations in WIC vendor and fruit and vegetable access by neighborhood characteristics including geographic (i.e. % rural), racial/ethnic (% African-American), and socioeconomic (% in poverty); and 3) Understand factors that influence fruit and vegetable availability, selection, price, and quality from the perspective of retailers participating in the WIC program. Current fruit and vegetable characteristics were assessed at 338 authorized WIC vendors across a seven county area in Northern Illinois. WIC vendor assessments were conducted using an in-person audit tool adapted from our prior work which evaluates the availability of 150, price of 26, and quality of 10 commonly consumed and culturally specific fresh, frozen and canned fruits and vegetables. To determine variations in WIC vendor and fruit and vegetable access by neighborhood characteristics, data on neighborhood attributes in our study area were obtained from the 2000 Census (% race, poverty, urban). Vendors were classified by type and size and addresses were matched to a locationally indexed street file using geographic information system (GIS) software (ArcGIS 9.2 and GDT/TeleMap Matchmaker). Descriptive statistics, Chi-square, and logistic regression were used in data analysis.

Findings

Of the 338 authorized WIC vendors in our sample, 120 were classified as pharmacies, 115 national/regional chain supermarkets, and 109 small chain/independent grocery stores. Consistent with previous neighborhood food environment studies, larger national/regional chain supermarkets were less likely to be located in predominately minority vs. non-Hispanic white neighborhoods and high poverty vs. low poverty neighborhoods. No relationships were found between neighborhood characteristics and other vendor types. As expected national/regional chain supermarkets had the greatest availability of fresh and frozen fruits and vegetables and pharmacies had the lowest availability. None of the pharmacies in our study area supplied fresh fruit or vegetables and only about 2.3% carried frozen. Availability of fresh fruits and vegetables was positively correlated with the percentage of neighborhood residents with a college degree and households earning over \$75,000 and negatively associated with percent poverty, unemployment, and residents without access to a car. The availability of canned fruits and vegetables did

not differ by vendor type. However, chain supermarkets and vendors in predominately non-Hispanic white neighborhoods were more likely to supply canned fruits and vegetables without added salt, sugar, or fat compared to small chain/independent grocery stores and pharmacies and vendors in predominately minority neighborhood respectively. Preliminary analysis revealed limited differences in price across different vendor and neighborhood types, however, in-depth analyses of fruit and vegetable price and quality are in progress. Similar to previous studies, these findings suggest that vendors in minority and high poverty neighborhoods provide less access to fresh fruits and vegetables and canned fruits and vegetables without added salt, sugar, or fat as compared to non-Hispanic white and more affluent neighborhoods. Small/Independent grocery stores, pharmacies, and WIC vendors in minority communities may need more support to expand their availability of fruits and vegetables and meet the needs of WIC participants.