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The Availability and Affordability of Healthy Food Items in Leon County, Florida, 2008

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Most Americans do not meet the dietary recommendations, although federal nutrition recommendations including the 2005 Dietary Guidelines for Americans and Healthy People 2010 emphasize the importance of increasing the consumption of healthy foods. Research has demonstrated that individuals living in low-income and/or predominantly black neighborhoods tend to have limited access to supermarkets that carry a large selection of healthy foods at an affordable price, which may limit the purchasing and consumption of healthy foods. This study analyzed the availability and price of healthy foods by store type, income level and racial composition of neighborhoods in Leon County, FL. The modified Nutrition Environment Measures Survey in Stores (NEMS-S) was used in this study to survey 73 selected stores across the county (30.1% supermarkets, 9.6% grocery stores, and 60.3% convenience stores). A list of all available stores in Leon County was obtained from the Florida Department of Agriculture and Consumer Services and stores were geocoded to census tracts. Analyses included chi-square, t-test, and analysis of variance. Availability of all healthy food items (e.g. fruits, vegetables, low-fat milk, and whole-grain bread) was significantly different by store type ($P < 0.0001$). Average availability of all 20 fresh fruits and vegetables (e.g., apple, banana, broccoli, and carrot) was highest in supermarkets (96.2%), followed by grocery stores (37.9%) and convenience stores (6.5%). Overall, supermarkets provided the cheapest price for the three fresh fruits that were available in all 3 stores, low-fat milk, and whole-grain bread. The availability of 10 out of 20 fresh fruits and vegetables (7 fruits and 3 vegetables) was significantly different by income level ($P < 0.05$), but no trends were seen for the availability or affordability of healthy food items by neighborhood racial composition. This finding may be due to the disproportionate distribution of supermarkets by neighborhood characteristics, especially by income level ($P = 0.06$). This study suggests that store type is the most influential factor affecting the availability and affordability of healthy foods. Individuals that do not have adequate access to supermarkets may have limited ability to purchase healthful foods.