019 Comparison of the Consumer Nutrition Environment Within Chain Supermarkets Located in Low and High Income Communities

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Objective: A high prevalence of overweight/obesity has been linked to low income neighborhoods. One factor that has been found to impact this association is the availability of healthy foods in neighborhood supermarkets, but study results are often confounded by differences between stores. Investigating food availability within chain supermarkets may minimize confounders and provide a better understanding of the relationship between neighborhood income level and the consumer nutrition environment. The purpose of this study was to compare the availability, pricing, quality, and shelf space of healthy foods compared to regular food options using the Nutrition Environments Measurement Survey for Stores (NEMS-S) in 36 chain supermarket stores located in low and high income neighborhoods using the model of community nutrition environments.

Design, Setting and Participants: Using the Nutrition Environments Measurement Survey for Stores (NEMS-S) 36 chain supermarket stores were surveyed.

Outcome Measures and Analysis: Data were compared by neighborhood income level using t test and chi-square analysis. A significant difference was seen in the availability score when comparing low and high income neighborhood stores.

Results: Results showed that healthier food items, specifically tomatoes, corn, cauliflower, honeydew melon, strawberries, oranges, lean ground beef, and baked chips were more available at high income neighborhood stores compared to low income stores ($p < 0.05$). There were no significant differences in price score, quality score, shelf space, or the overall combined score.

Conclusions and Implications: This research broadens the conversation on healthy food availability and promotes positive social change by identifying possible avenues for store level, individual, and community initiatives that would improve the nutrition environment and reduce nutrition-related chronic diseases in low income communities.

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020 Vegetable Velocity: More Time in Aisle Means More Produce in Carts

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Objective: To determine how a shopper's time in a supermarket section relates to sales and when this increases fruit and vegetable purchases.

Design, Setting and Participants: An observational study of 1,026 shoppers measured time spent and quantity purchased in the produce (fruits and vegetables), dairy, meat, and cereal sections. Shoppers were not screened by

demographic or socioeconomic statuses. Overlooked drivers, such as a shopper's attitude (facial expression) and if they were shopping with children were also observed. **Outcome Measures and Analysis:** ANOVA tests analyzed time and money spent, the number of items in a basket, and overlooked drivers. Drivers were coded using categorical and dummy variables.

Results: While the average shopper spends about 3 minutes in each of the produce, dairy, meat, and cereal sections (3.16, 2.58, 3.52, and 2.19 respectively), the number of different items purchased per minute were 0.86, 1.31, 0.65, and 0.77 (estimated \$2.21, \$3.23, \$3.36, and \$3.13). The first five minutes in a section had the highest shopping velocity (items bought per minute), but this dropped dramatically when shopping for meat and cereal. This decline was least in produce, where shoppers were still purchasing additional items for each minute up to between ten and fifteen minutes.

Conclusions and Implications: Shopping with kids, a positive attitude (smiling), and keeping a specific travel route throughout the store can result in significantly higher purchases and may provide the key to useful rules-of-thumb to help shoppers select more produce. Shopping with the fresh produce section first, a happy mindset, and shopping with children can mean money spent wisely and a healthier shopping experience.

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021 Parent Verbal Communication With Young Children About Food and Nutrition During Snacks

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Objective: Adult verbal communication about nutrition can influence children's health eating. The objectives of this study were to identify adult use of verbal communication about food and nutrition, identify adult use of Child Centered Nutrition Phrases (CCNPs), and examine frequency of self-service and trying of foods in children 3-5 years of age.

Design, Setting and Participants: Parent child dyads ($n=28$) were randomly selected to one of three groups: Group A received education and use of CCNPs; Group B received education, use of CCNPs, and weekly reminders to use CCNPs; and Group C received education and no information about CCNPs. Each dyad attended a snack session once/week for six weeks that was video recorded. The videos were content analyzed ($r=0.95$) to identify parent and child verbal nutrition communication, children's self-service, and trying of foods.

Outcome Measures and Analysis: Nutrition education and guidance to use CCNPs significantly increased the frequency adults talked about nutrition (4.5 times/session, $p<0.05$), used CCNPs (13.8/session, $p<0.05$), and children self-served (47/session, $p<0.05$). More than half of the parents (53.5%) served food, in particular quinoa, in the first two weeks, but after two weeks children self-served in 93% of dyads. Children self-served fruit (307) and grain

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