

Research in Nutrition and Healthy Living: Geographic Variations in Produce Prices

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Farmer's Markets

- Open air market
- Fresh produce from local farms
- Several in New York City
- NYC Greenmarket program



Obesity

- Difference between obese and overweight
- Obesity defined by proportion of total body fat
- BMI: Body Mass Index
- Obesity is a BMI over 30
- Overweight is a BMI between 25 and 29.9



Goals

- How does the price of produce differ between farmer's markets and supermarkets?
- How do these differences affect risk of obesity?
- Our expectation was that higher prices at farmer's markets discourage healthy nutrition habits
- Harlem, Inwood, Union Square, Washington Heights



Procedure

- We visited farmer's markets and nearby supermarkets and four locations: 175th street, 207th street, 135th street and Union Square
- At each location there was at least one group collecting price information on a set list of produce
- Units of price were carefully recorded
- Examples: Weight, volume, bunches



Results

- Clear variation between farmer's market and supermarket prices
- Greater amount for lower price at farmer's markets
- Ex: \$2.00/lb of apples at Union Square farmer's market v \$3.99/lb at local supermarket



Price Comparison

- Sweet Peppers: \$1.50/lb at 175th street farmer's market and \$3.99/lb at 176th C-Town
- Lettuce: \$1.50/head at 207th street farmer's market and \$1.79/head at 207th street C-town
- Tomatoes: \$2.00/pound at 136th street farmer's market and \$3.99/pound at 136 street C-town



Implications

- More produce per dollar at farmer's markets
- Contrary to our expectations
- Greater value in volume
- Value in freshness: more recently shipped



Reasoning

- More service at supermarkets may account for higher prices
- Variety over different seasons
- Shipping costs
- Consistency



Future

- Conduct field surveys
- Shopping habits
- Study relationship between location of shoppers and nutrition habits
- Study relationship to obesity risk



New Research

- We have about 12 groups and each group has a leader
- Each group has certain locations to go to either supermarkets, corner stores, or farmer's markets
- Data is collected based on income, household locations, availability, education and quality of the foods available
- Risk factors of obesity are also studied



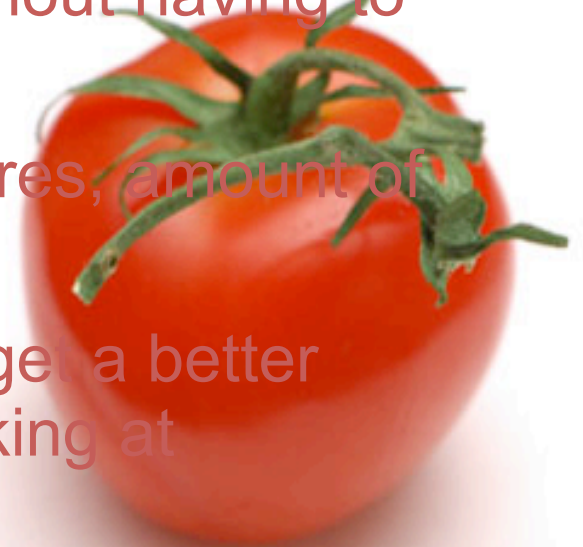
New Research Continued...

- Last year we only concentrated on the produce
- This year we are concentrating on the produce along with the kinds of people that shop in certain places and how certain locations are the way they are
- Using GIS and statistics in our research in order to keep better track of our data



GIS

- Geographic Information System
- A computer program used to research locations using maps
- Layers and layers of information that let you look at the demographics of that specific area without having to walk around it
- Example: Bronx, Amount of corner stores, amount of supermarkets
- Provides many maps so that you can get a better understanding of the area you are looking at



References

- 2003. World Health Organization Global Strategy on Diet Physical Activity and Health. [online] Available from: http://www.who.int/dietphysicalactivity/media/en/gsfs_obesity.pdf.
- Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, The Evidence Report, National Heart, Lung, and Blood Institute, in cooperation with the National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, NIH Publication 98-4083, June 1998.
- Matte T, G. C. (2007). Obesity in East and Central Harlem: A look across generations . New York, NY : New York City Department of Health and Mental Hygiene .
- CR Isasi; N Soroudi; J Wylie-Rosset. 2006. Youth WAVE Screener:addressing weight-related behaviors with school-age children.The Diabetes Educator volume 32(issue 3): pages 415-422.



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