

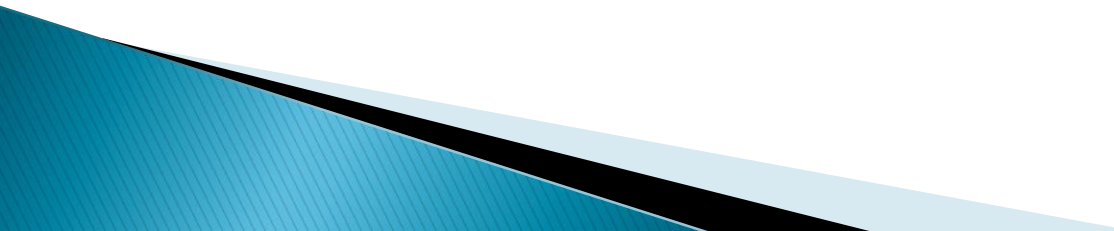


College of Agriculture,
Food and Environment

Food Access in Kentucky

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Overview of talk

- ▶ Defining the food environment and strategies for maintaining a healthy food environment
 - ▶ Connection between local food, access, and our great state of Kentucky
 - ▶ Current affairs in regards to access in Kentucky
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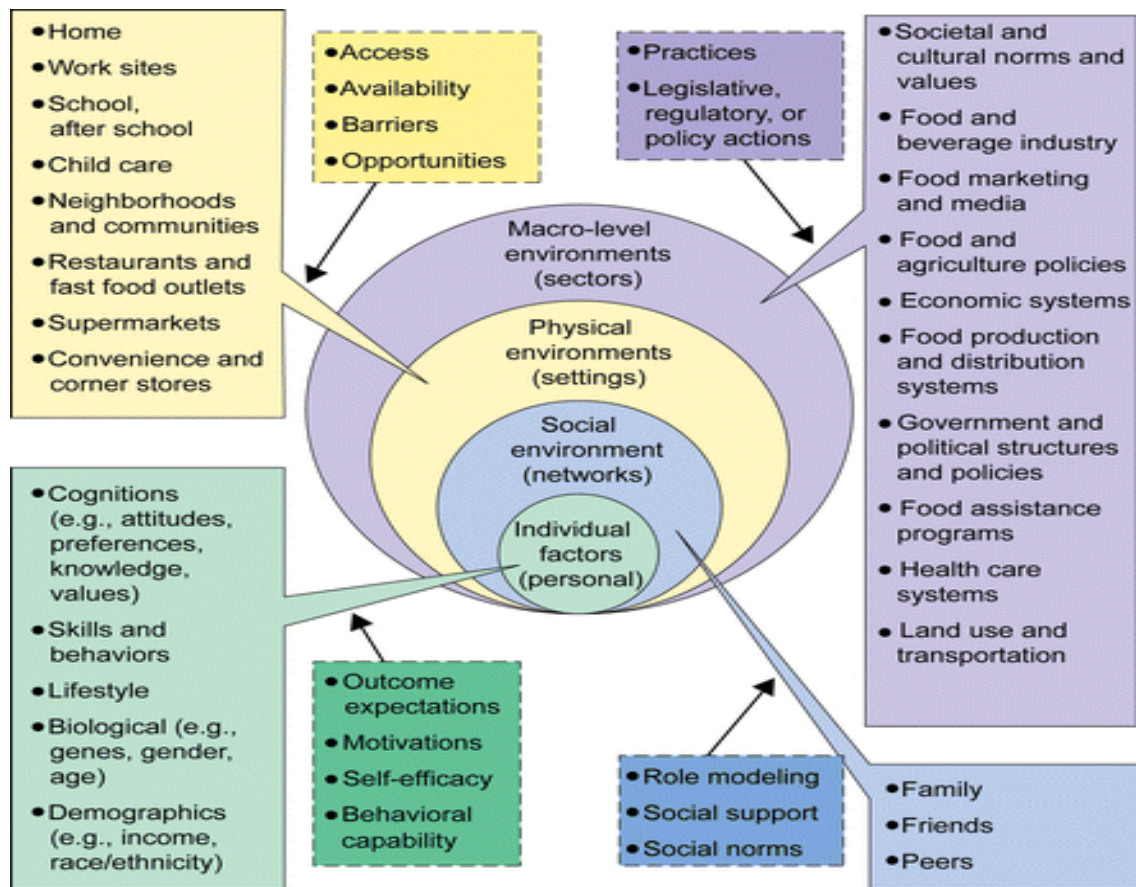
Categorizing Food Environment

- ▶ **Food Store Environment:** including grocery stores, supermarkets, convenience stores, snack bars, specialty food stores, farmers' markets, bodegas, and food banks.
- ▶ **Home Food Environment:** including food available within the home.
- ▶ **Macro Food Environment:** including the food supply.
- ▶ **Public Facility Food Environment:** including cafeterias, vending machines, and snack shops in recreation centers, health care facilities, and other public venues.
- ▶ **Restaurant Food Environment:** including fast food and full-service restaurants.
- ▶ **School Food Environment:** including cafeterias, vending machines, and snack shops in daycare settings, schools, and/or colleges.
- ▶ **Worksite Food Environment:** including cafeterias, vending machines, and snack shops.

Source: National Cancer Institute

<https://riskfactor.cancer.gov/mfe/categorizing-the-food-environment>

The food environment within the framework of health



Story M, et al. 2008.

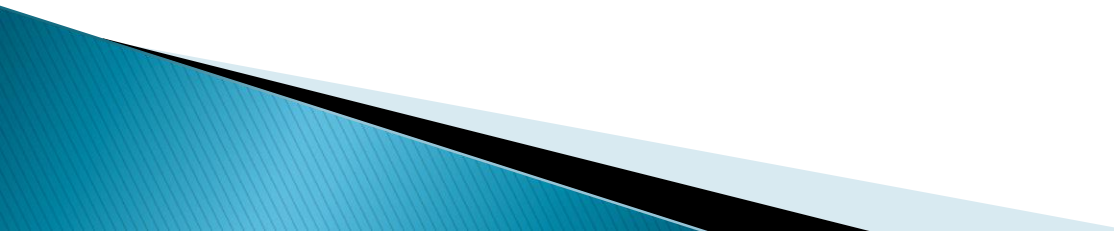
Annu. Rev. Public Health. 29:253-72

Background of food environment and health

- ▶ Several studies have found the connection between access to various food venues and intake of fruits and vegetables
- ▶ Certain studies have found that access to fast-food restaurants and gas stations consume more sugar-sweetened beverages and have higher body mass index
- ▶ Yet, other studies have found no associations with access

Sources: Zenk, S et al, Moorland, K et al, Odums-Young, Boone-Heinonen,

Is access enough to improve diet?

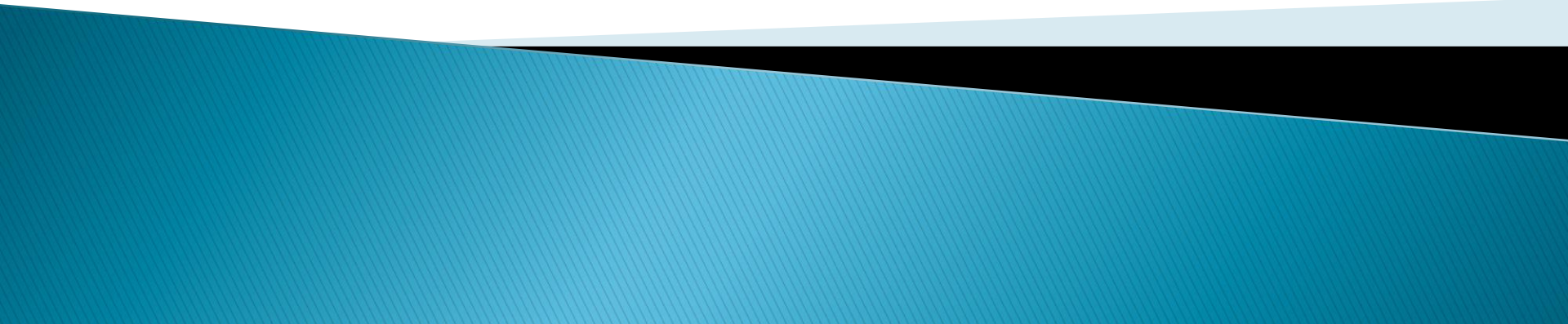
- ▶ There are limited studies connecting the idea of providing a grocery store within a neighborhood would improve intake
 - ▶ Research has begun to suggest that a cumulative effect of providing various types of venues may improve dietary intake.
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Centers for Disease Control and Prevention Strategies

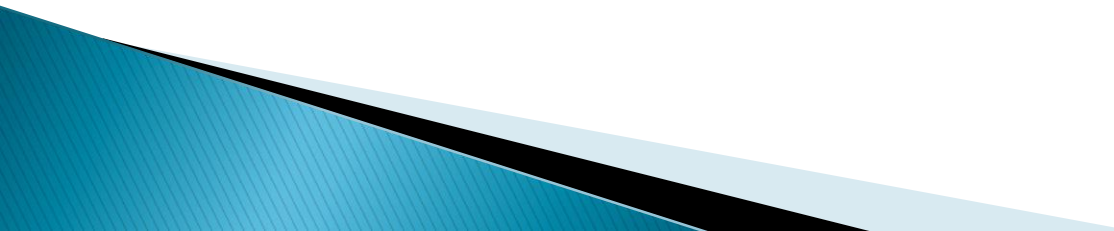
Strategies for Creating and Maintaining a Healthy Food Environment

- ▶ Land Use Planning and Urban/Peri-Urban Agriculture
 - ▶ Farmland Protection
 - ▶ Food Policy Councils
 - ▶ Retail Food Stores: Grocery Stores and Supermarkets and Small Retail Locations
 - ▶ Community Gardens
 - ▶ Farmers Markets, Community Supported Agriculture, and Local Food Distribution
 - ▶ Transportation and Food Access
 - ▶ Farm-To-Institution and Food Services
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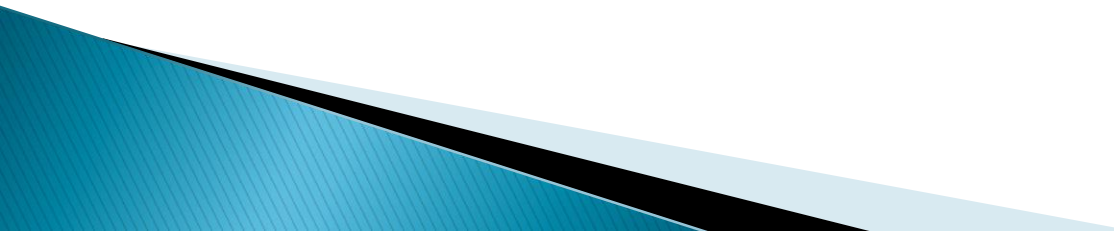
The connection to Kentucky



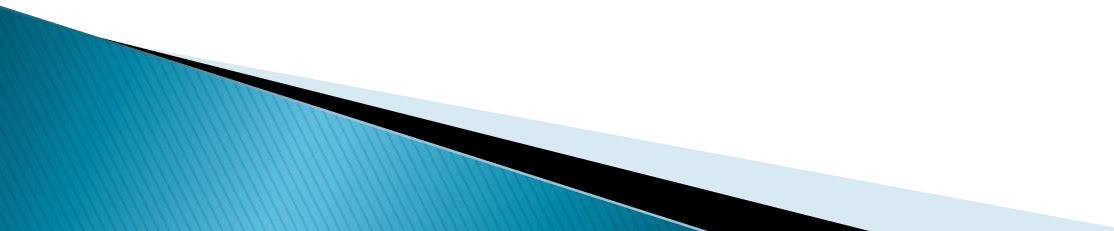
Connection between access and health for Kentuckians

- ▶ 37% of children in Kentucky are overweight or obese
 - ▶ 31% of adults in Kentucky are overweight or obese
 - ▶ 878,000 people participate in supplemental nutrition assistance program
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Connection between access and health for Kentuckians

- ▶ Those families and residents most in need for food do not always have access to healthy food items or local food sources.
 - ▶ Those who may want to buy local and buy healthy may have to travel far.
 - ▶ Those who may need to make healthier food purchases may not have the option.
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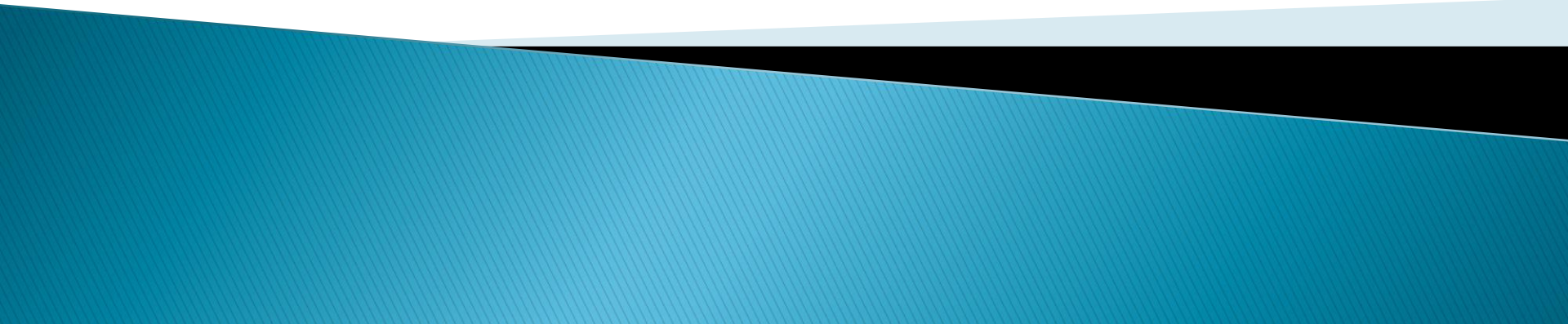
Local Food in Kentucky

- ▶ \$15 million in farmers' market sales
 - ▶ 147 farmers' markets in Kentucky
 - ▶ \$4–5 million on-farm retailing
 - ▶ \$5–7 million in local wine and tourism sales
 - ▶ \$7–10 million from Restaurant Reward program (farm to restaurant)
 - ▶ \$50 million (very hard to measure) farm to grocery sales
 - Not including Ale-8, AllTech, Smuckers, Tyons, Perdue
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Example of food expenditure

- ▶ Using average food expenditure measures from 2011 USDA statistics:
 - Total at home food bill in the Louisville area is \$5.4 billion annually.
 - About 19% is spent on fruits and vegetables.

What we have learned in Kentucky about the connection between access and health



How access to various food venues may be related to diet

- ▶ First – assessed what types of food venues were available in 14 counties in KY
- ▶ Second – assessed the neighborhood deprivation of those counties
 - Do counties who have higher unemployment, lower education, lower household income also have less access?

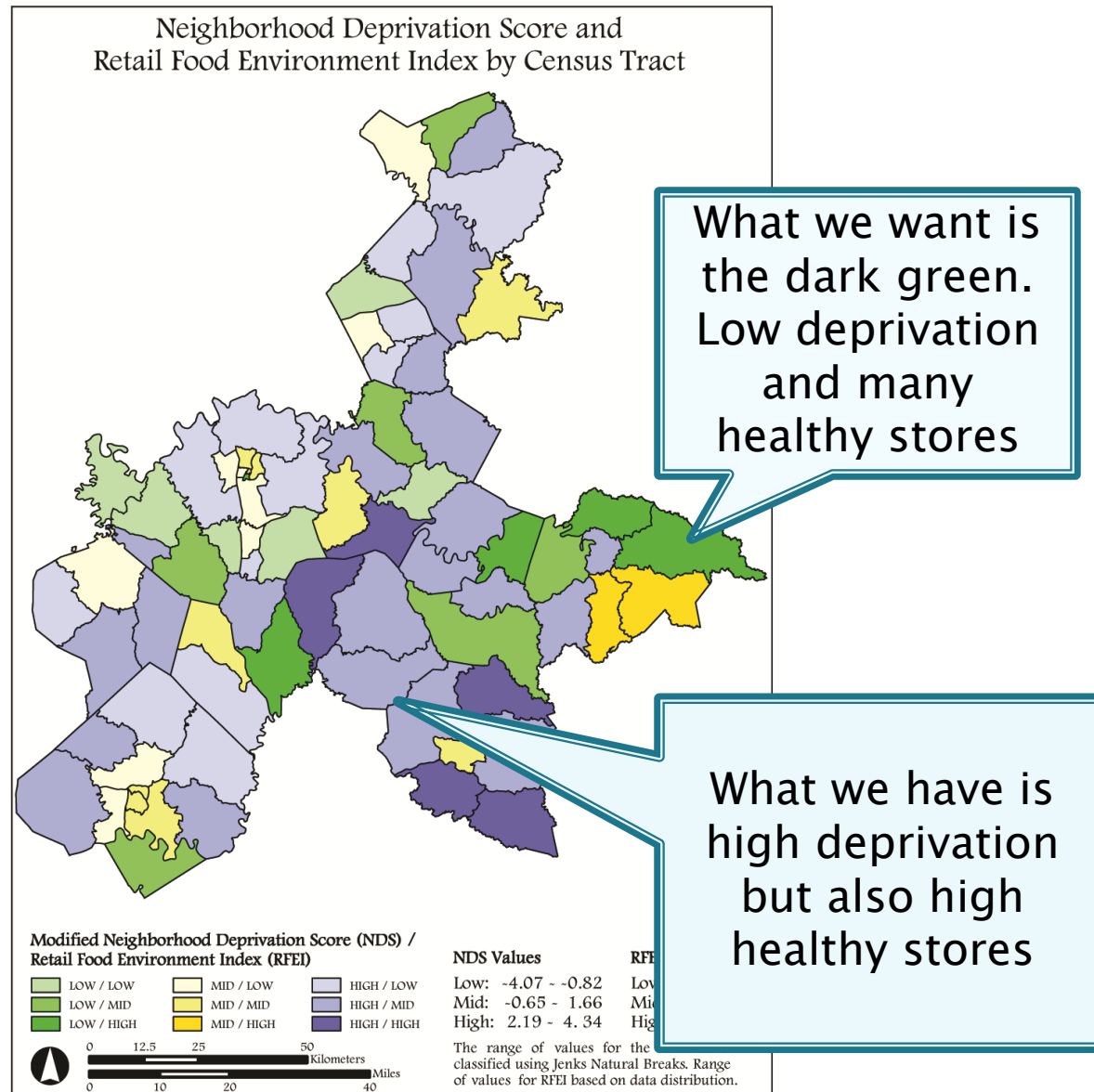


Figure 1.

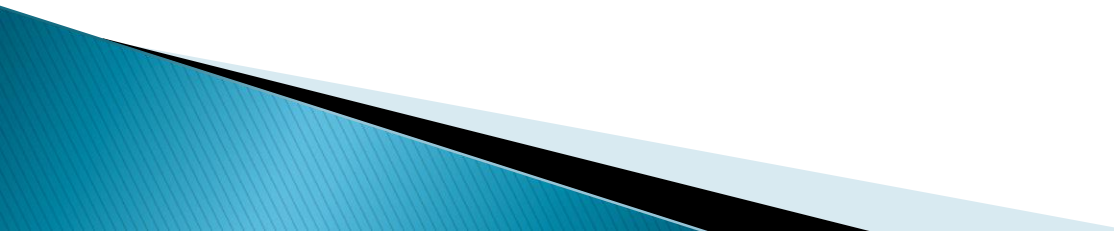
What type of stores do people have access to in rural communities?

- ▶ Walmart
- ▶ Gas stations

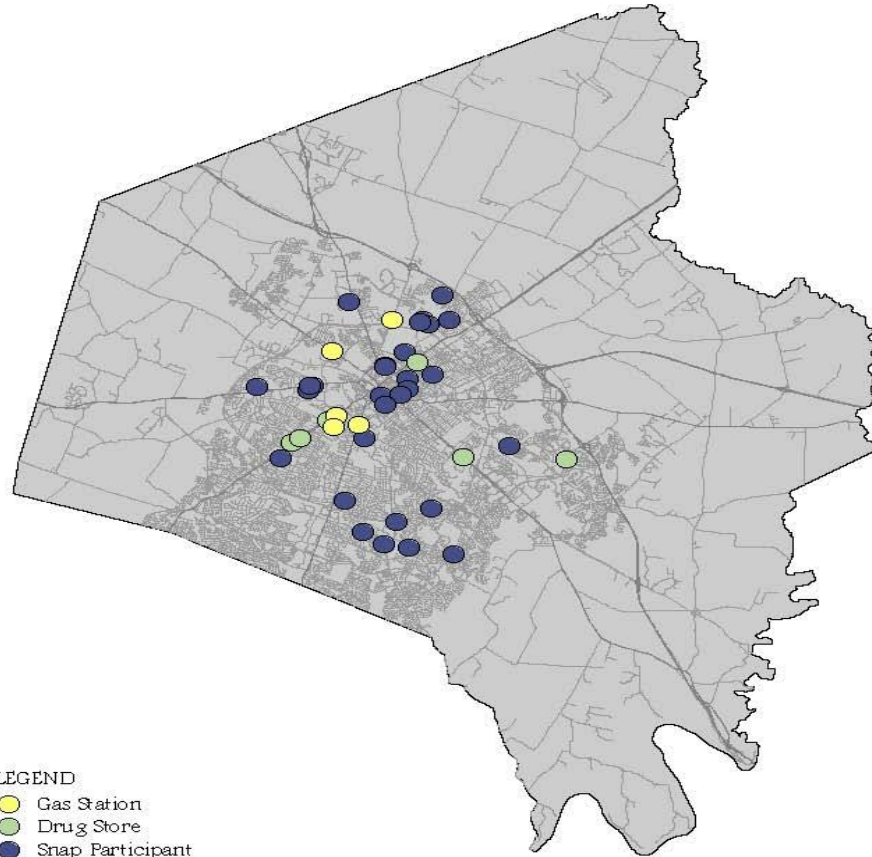


Access among low-income populations

Access is not equal

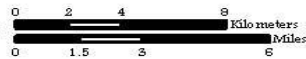
- ▶ 57 counties in KY
 - ▶ Supplemental Nutrition Assistance Program (SNAP) participants were assessed with dietary intake
 - ▶ Mapping of what is available in those counties where SNAP residents live
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SNAP Participants and Select Fayette County Gas Stations and Drug Stores



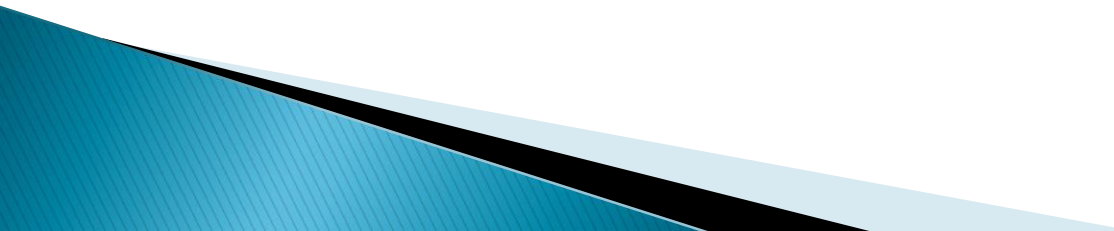
LEGEND

- Gas Station
- Drug Store
- Snap Participant
- Major Road
- Road
- Fayette County Boundary



**Access to different food
venues may help**

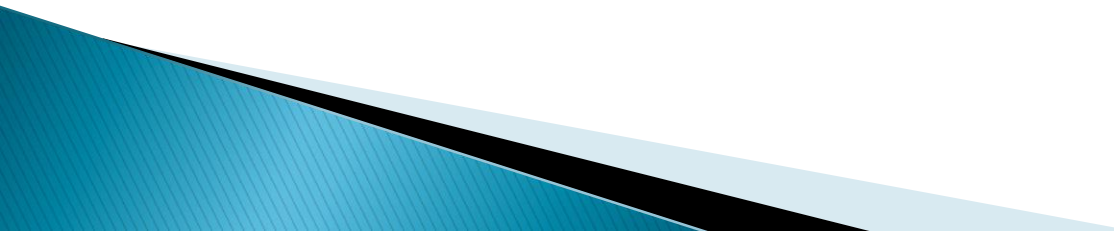
Access to local food sources

- ▶ In one recent study among farmers' markets customers and those living in counties with farmers' markets we find that
 - Those who shop at a farmers' market consume more fruits and vegetables
 - Those who shop at a farmers' market 88% also shop at a supercenter and 95% also shop at a grocery store
 - The average person spends between \$17–\$25 per trip at the farmers' market
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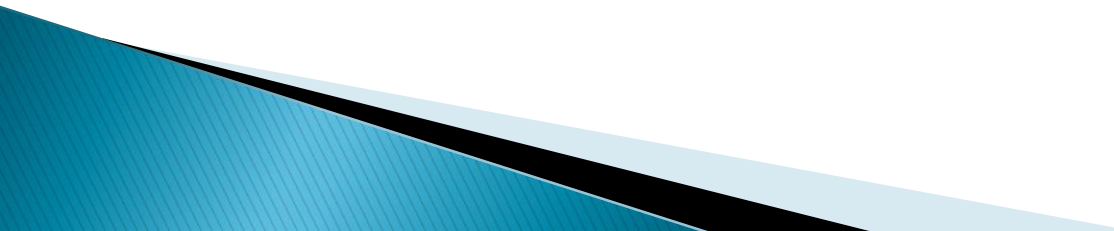
Access to local food sources

- ▶ In a similar study done in Fayette county we found that:
 - Those shopping at a farmers' market consume more fruits and vegetables
 - Frequently shopping at a farmer's market was also associated with consuming more fruits and vegetables

Summary

- ▶ Rural areas have access to some venues that sell healthy food and some venues with less healthy food
 - ▶ Among low-income residents less access to less healthy food venues is associated with improved dietary intake
 - ▶ Among all residents the behavior of shopping at farmers' market or access to this venue is associated with improved dietary intake
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Federal Suggestions

- ▶ Farmers' markets may be one strategy that holds promise within the whole food environment picture
 - ▶ Improving access to various types of food venues (retail, grocery) may improve intake
 - ▶ Linking to local farmers' to improve access within stores may be promising
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Thank you

Questions