

## Nutritional Environment Measurement Survey of Food Retail Stores in Schuyler County

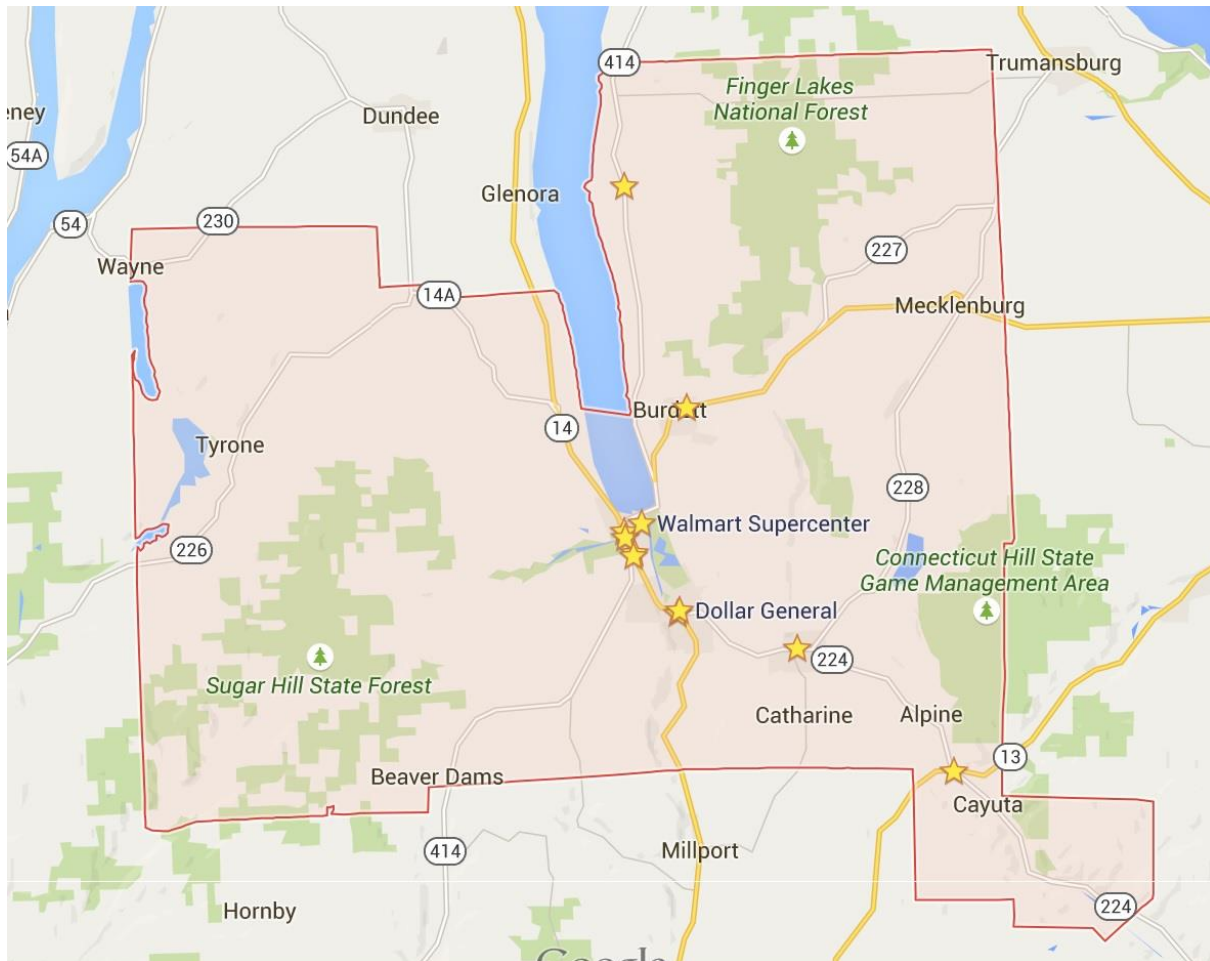
Nutrition environments are associated with obesity and other chronic diseases. The purpose of the survey is to measure the nutrition environment of food retail stores in Schuyler County, New York. Surveying retail food stores is an essential part of implementing healthier food retail initiatives. The nutritional environment measurement survey (NEMS) assessment is a modified version of the University of Pennsylvania's NEMS. The modified version of the NEMS assessment focused on availability of items that would meet USDA My Plate criteria and signage for products within stores.

**Exclusions:** Not within the boundaries of Schuyler County, farmers markets because they are not open 7 days a week, and specialty Stores i.e. health food stores, wineries

**Sample Size:** n=11

Walmart, Tops, Lake Gas Valero, Sunoco A Plus Mini Market, Dollar General, Linda's Citgo, Dandy Mart Burdett, Dandy Mart Hector, Dandy Mart Odessa, Dandy Mart Cayuta, CVS

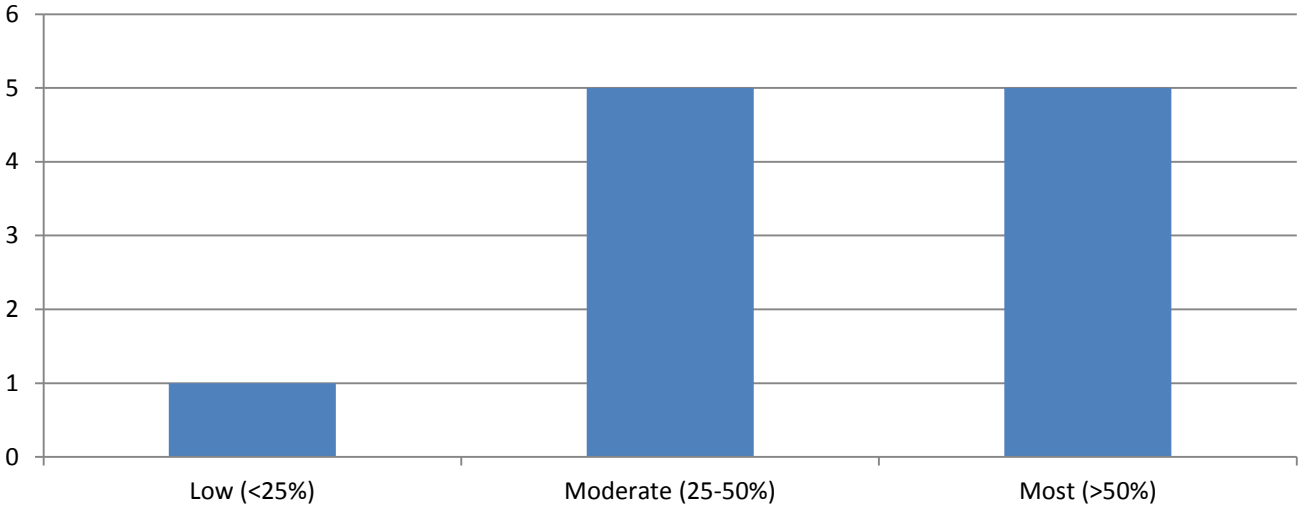
Each star represents a retail food store located within Schuyler County. Five stores are within Watkins Glen, with two in Montour Falls and the other four being in outlier communities east of Seneca Lake.



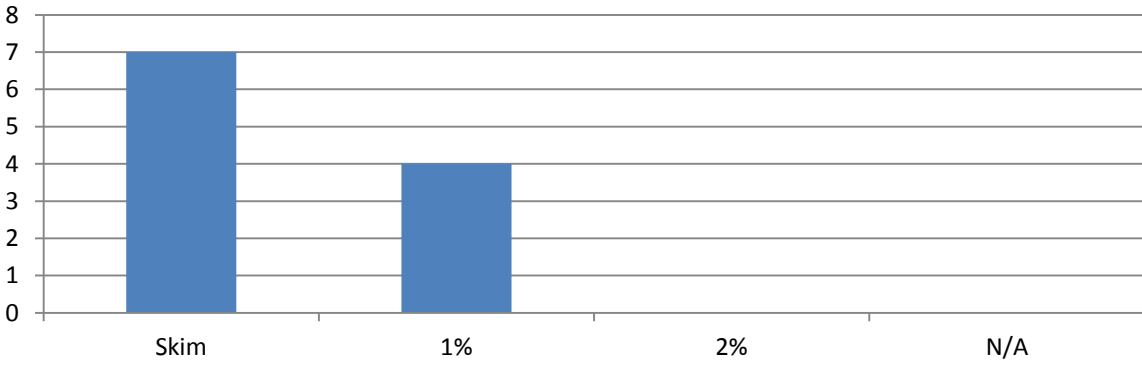
**Methods:** Because little is known about the nutrition environment in Schuyler County New York, a qualitative approach was used to approach this study. A Schuyler County Public Health intern conducted surveys of each food retail store within Schuyler County based off a listing of local stores within Schuyler County. Utilizing the modified NEMS survey which has 20 questions(see Appendix A for copy), each retail food store was visited in Schuyler County. Each question on the survey was answered by what each store had available. Reference brand was not easily answered being that each store had too many brands available to count within reason. While each store had milk available, only the lowest fat milk available was noted. Signage was looked at for whether there was promotional advertising or other signage that drew attention to the product. Signage was looked both inside and outside the retail food stores.

**Results:** 11 retail food stores were visited and surveyed. All but one store devoted at least a moderate if not most of their space to the sale of food items. All locations sold milk, with 63% of the stores offering skim milk and 36% offering 1% as the lowest fat milk available. Fruit whether fresh or canned was available at 63% of stores. 36% of the stores sold fresh fruits and 54% sold canned fruits. Vegetables were sold at 72% of stores, with 90% of stores offering canned, and 18% offering low sodium canned vegetables. Ground beef was available at 18% of stores with lean varieties available. Poultry and fish were available at 18% of stores. Bread was available in 100% of the stores, with 81% of stores offering whole wheat bread. Cereal was available in 100% of stores with 72% of the stores having healthier cereals (<7g sugar). 100% of stores offered sugar sweetened beverages, diet options, 100% fruit juice and bottled water. 27% of stores advertised healthier options (fruits, vegetables), while 81% of stores advertised unhealthy options (sugar sweetened beverages, cured meats, alcohol). Two out of 11 of the stores had all the available food items needed to make a meal that would qualify as an USDA My Plate meal.

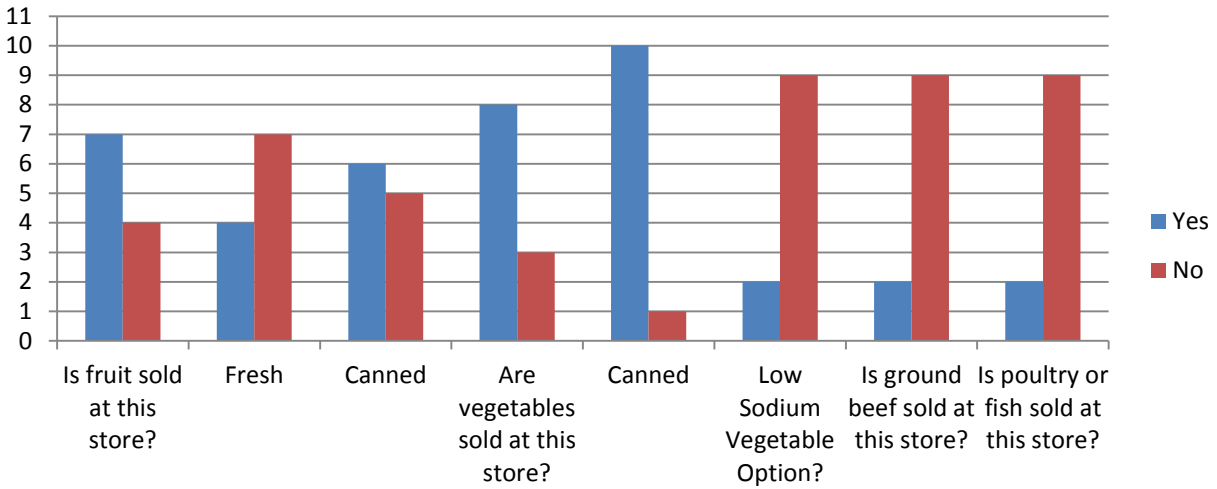
### Percentage of Store Space for Food



### Lowest Fat Milk Available



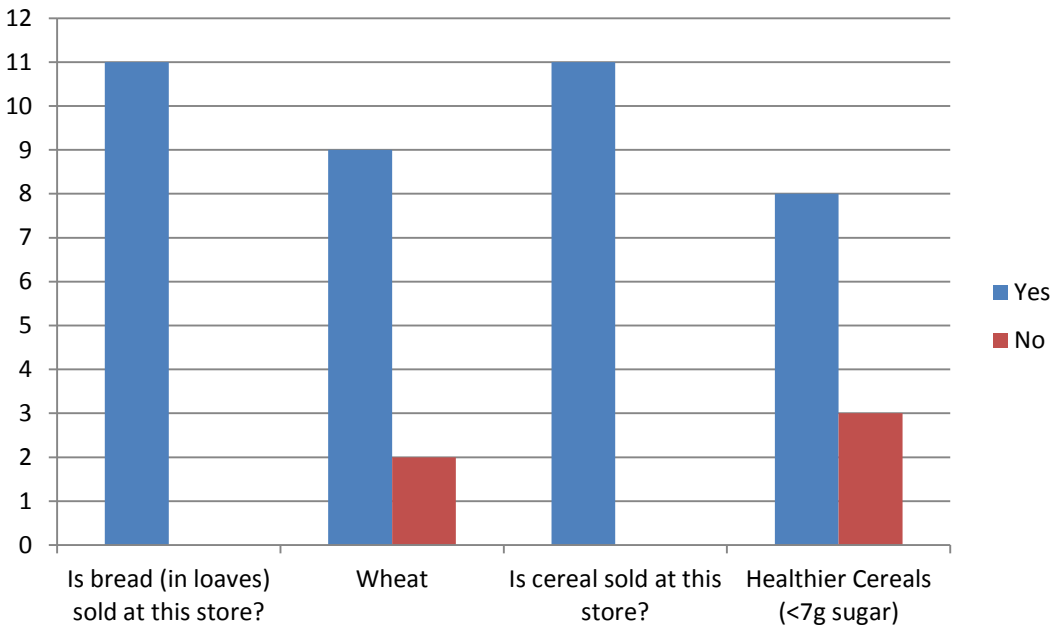
## Fruits, Vegetables & Meats



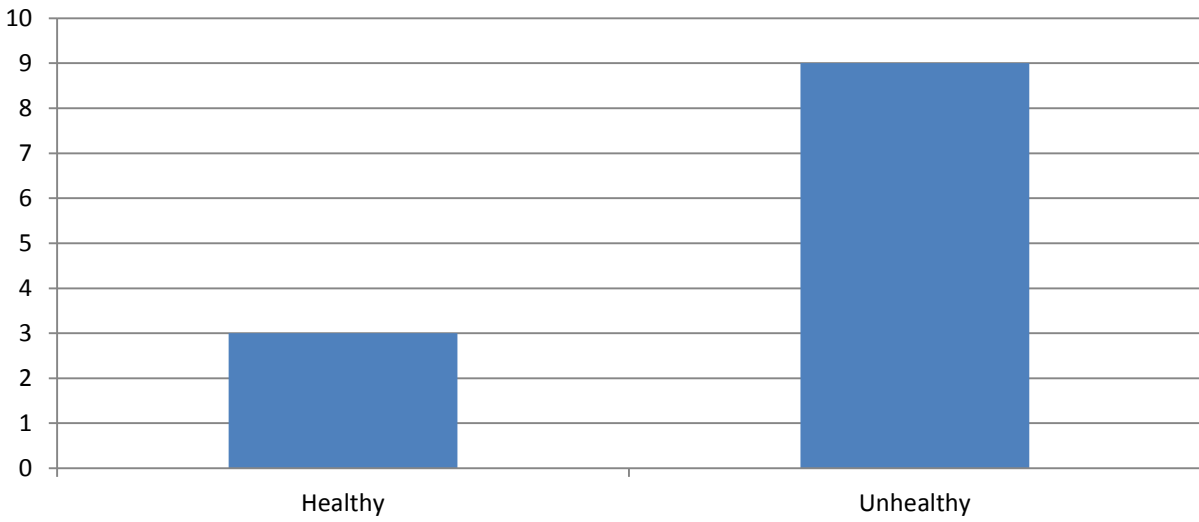
## Beverage Options



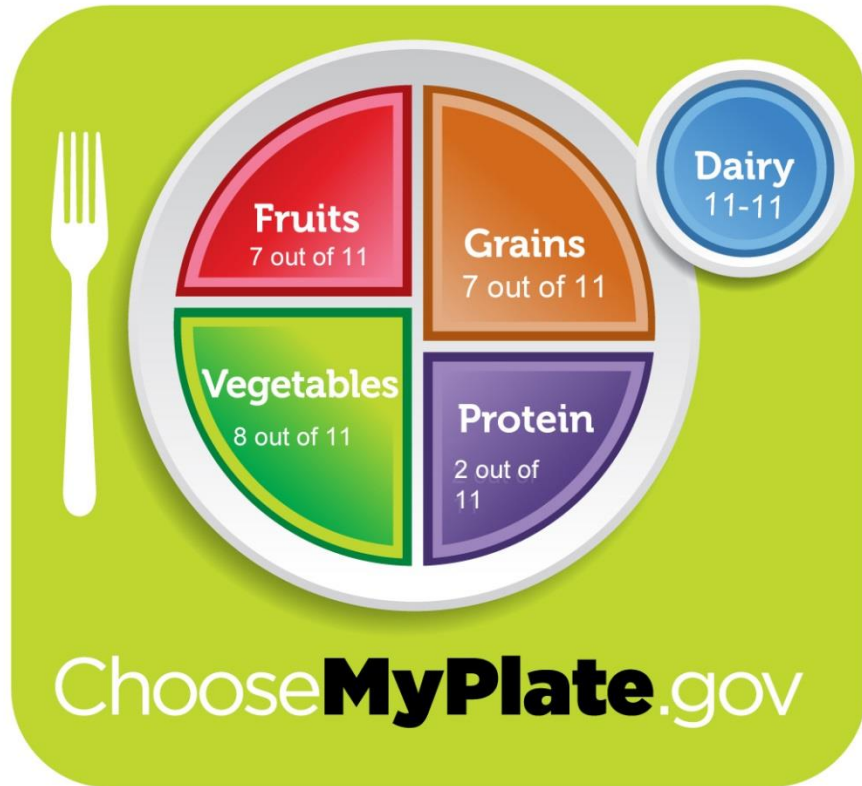
## Bread and Cereal Options



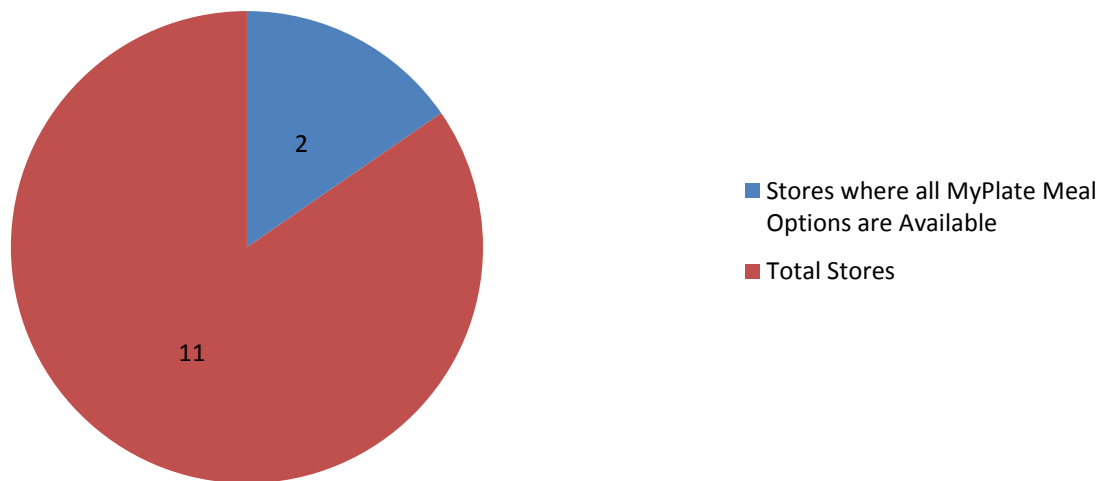
## Retail Food Store Signage



Retail food stores where MyPlate meal options can be purchased by section



Retail Food Stores where all My Plate Meal options can be purchased



**Discussion:** While reference brand was not looked at, other general observations about products available in the store were noted. Sugar sweetened beverages are available at all store locations. Inside and outside of some stores sugar sweetened beverages are advertised. At most checkout counters there is sugar sweetened beverages and or candy products at eye level. While it is easy to find sugar sweetened beverages and foods that would qualify as junk food, every store did sell milk, bread and cereal. Other options for dairy such as a cheese or yogurt, proteins such as chicken eggs, and other options for whole grain sides were not looked at during this survey. Most stores had eggs available but other options for dairy and whole grain sides were limited. Most stores have healthier options available, however selection for the most part is limited and lacks in visual appeal, eye level product placement and advertising for unhealthy items is more common

This nutrition environment survey only looked at what was available in the county and did not present any interventions. Moving forward, Schuyler County Public Health needs to develop a strategy to approach the needs of county's population that align with the community health improvement plan. Possible intervention include healthy food retailer program, to work with food retail stores to stock and display healthier options. There are various studies and toolkits available that offer insight into interventions for healthier nutrition environments. The feasibility of interventions needs to be taken into consideration with the resources that are available within Schuyler County Public Health. There is also much to be learned in regards to best practices for a healthy food retailer program due to the interventions being a new program. With whatever intervention that is decided upon, an evaluation should be planned in accordance with the program.

## Appendix A

## Retail Store Nutrition Environment Survey

Store Name:	Store Address:
How much of the store space is for FOOD?	<input type="checkbox"/> Low (less than 25%) <input type="checkbox"/> Moderate (25-50%) <input type="checkbox"/> Most (>50%)
What is the lowest fat milk available?	<input type="checkbox"/> Skim <input type="checkbox"/> 1% <input type="checkbox"/> 2% <input type="checkbox"/> N/A
Reference Brand (brand with most shelf space)	
Is fruit sold at this store?	<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Total Types:</b> (count # of yes responses)
Are vegetables sold at this store (frozen or canned)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Total Types:</b> (count # of yes responses) If canned # of low sodium varieties (<200mg/serving)
Is ground beef sold at this store?	<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Types:</b> Lean ground beef, 90% lean/10% fat



Is poultry or fish sold at this store?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is 100% fruit juice sold at this store?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is bottled water available?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is bread (in loaves) sold at this store?	<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Whole wheat:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
Is cereal sold at this store?	<input type="checkbox"/> Yes <input type="checkbox"/> No <b>Healthier cereals (&lt;7g sugar):</b>
Signs promoting products? i.e. sugar sweetened beverages, candy, fruits , vegetables etc.	<b>Healthy:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Unhealthy:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No