

Capturing What's Missing: A Comprehensive Protocol to Monitor Changes in the Food and Physical Activity Environment for Studying their Impact on Childhood Obesity

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Presenter Disclosures

Michelle Kennedy

(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

“No relationships to disclose”

Outline

- Study Background
- Approach
- Next Steps
- Concluding Points

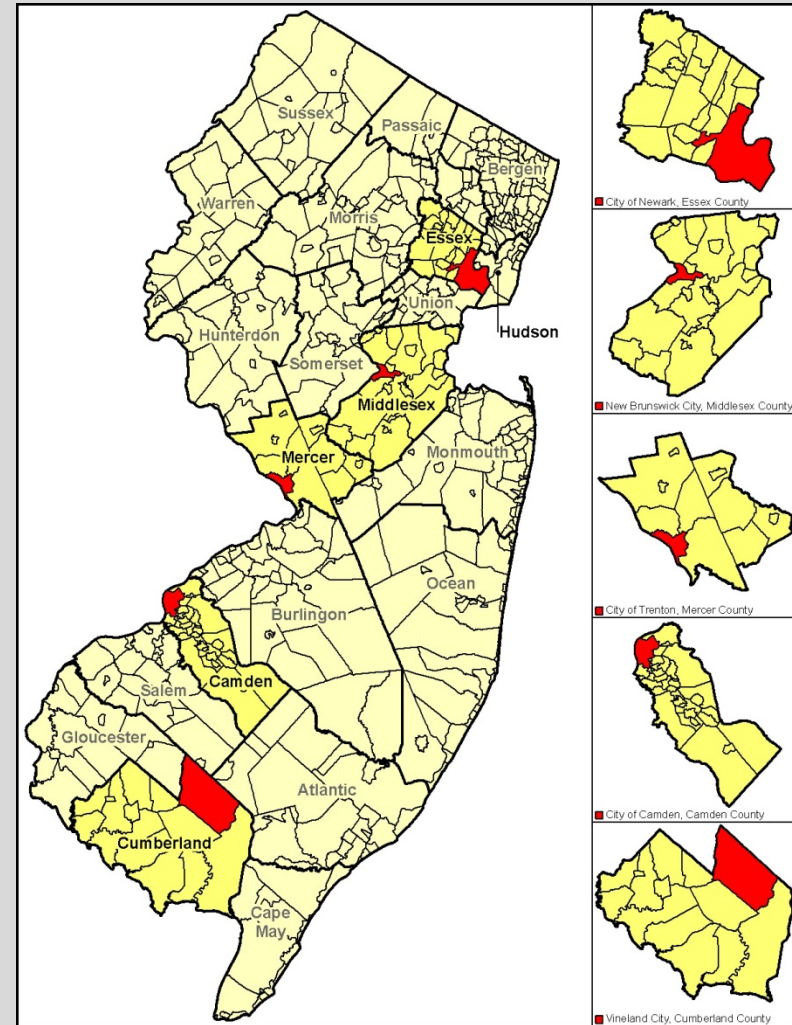
Introduction

- Associations between food and PA environments and weight status among youth have mostly been examined in cross sectional analysis
- Longitudinal studies are needed to assess the effects of environmental factors on childhood obesity.

This presentation will describe the process of developing a comprehensive protocol for documenting changes in the food and PA environments over the course of a longitudinal study which is examining the impact of changes in the food and PA environments on youth weight outcomes.

NJ Child Health Study 2012-2017

- A longitudinal panel study funded by NIH/RWJF
- Conducted in low-income high minority cities in NJ
- Building on a recently completed NJ Childhood Obesity study (NJCOB – 2008-2010)



2008-2010 NJ COB - Baseline

- Provided baseline data
 - Youth weight status
- Geospatial locations of food and PA outlets based on commercial data
 - Calculate proximity of residents to outlets

NJ Child Health Study 2012-2017

- Following children from the 2008-10 NJCOB panel to document changes in weight status
- Tracking intended and unintended changes in food and PA environments
 - Using commercial data
 - Surveying schools
 - Capturing changes and upgrades on the ground

Approach: Creating protocol to document changes in food and PA environments

- Conduct literature search and review to narrow down domains of interest
- Create contact grid of people/organizations making changes in each domain
- Develop/nurture relationships
 - Attend meetings
 - Get involved in organizational efforts
 - Be a resource

Creating protocol to document changes in these environments cont...

- Review news, FB, and other social media
- Submit OPRA requests
- Research/review data sources that already exist
- Broadly document types of change
 - Nature / description of the change
 - Location
 - Date

Domains of Interest: Food Environment

- Upgraded Corner Stores
- Grocery Stores
- Supermarkets
- Farmers Markets
- Community Gardens
- Restaurants
- Healthy Food Offerings in Public Places
- Drinking Water



Photo: Corner Store, Vineland, NJ

Examples of changes: Food

- Corner Stores
 - After school snack shelf
 - Couponing for healthy items
 - Signage highlighting healthy options
 - Enhanced/removal of healthy offerings
- Farmers Markets
 - Newly opened/closed locations
 - Expanded/reduced hours
 - Change in acceptance of WIC/EBT

Domains of Interest: PA Environment

- PA outlets both public & private
- Sidewalks
- Elements of Complete Streets
- Bike paths
- Trails
- Parks
- Crime & safety
- Public transportation
- Zoning



Photo: Bike lane, Newark NJ

Examples of changes: PA

- New/enhanced /closure playground/equipment
- New/closure bike lanes
- New crosswalk signage and lights
- New/enhanced/closure community recreation spaces
- Presence of park programming
- Police substation installation
- Extended/Reduction park hours



Photo courtesy of RWJF: Monument School Playground Build, Trenton NJ ¹⁵

Protocol Data Flow Example for Corner Store Enhancements

Display baskets for fresh fruit

Coupons for healthy foods

Healthy option signs

Incentive cards

Recipe cards

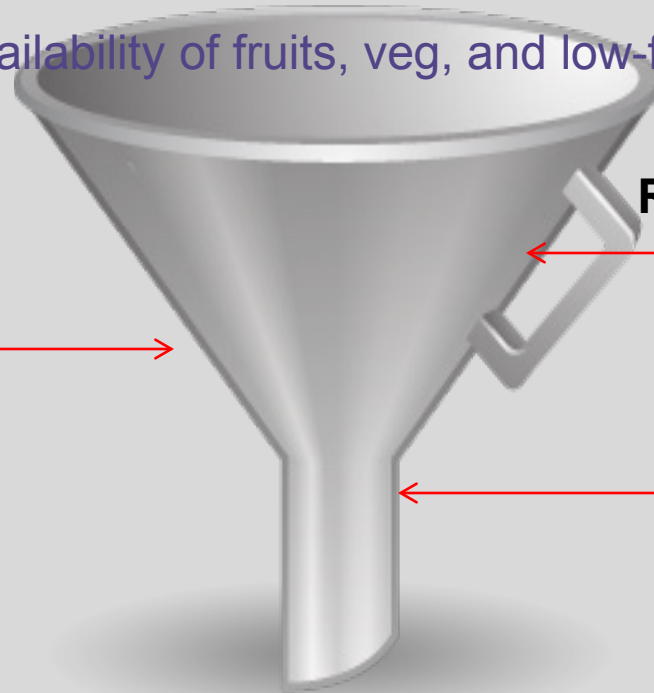
Additional refrigeration

After school snack shelf

Expanded offerings such as fruit smoothies

Change of location of healthier options

Increased availability of fruits, veg, and low-fat dairy



Review/create/adapt data collection tools

Expert Panel

Revise data collection instruments

**Date, Location, &
Nature of Significant Change**



Please help support our
Healthy Corner Stores

COUPON

Redeem this coupon to receive

25% Off

On your next purchase of Healthy Items ONLY

Cidras Market

322 N. 7th St. Vineland NJ
(856)696-9266 Danilzo

COUPON

Redeem this coupon to receive

25% Off

On your next purchase of Healthy Items ONLY

La Baratera Grocery

406 S. 6th St. Vineland NJ
(856)691-7880 Ricardo Castro

COUPON

Redeem this coupon to receive

25% Off

On your next purchase of Healthy Items ONLY

La Baratera Grocery

406 S. 6th St. Vineland NJ
(856)691-7880 Ricardo Castro

COUPON

Redeem this coupon to receive


25% Off

On your next purchase of Healthy Items ONLY

La Altagracia Grocery

336 W. Grape St. Vineland NJ
(856)690-8848 Carlos Jimenez

Which changes in corner stores will make a difference in weight status?




NUTRITION FACTS
serving size: 1 enchilada
452 Calories
8g Fat
4g Saturated Fat
419mg Sodium
76g Carbohydrates
17g Fiber
20g Protein

4. Put enchiladas in a greased baking dish and bake in the oven for 20 minutes. (Enchiladas can also be heated in the microwave.)

MIX IT UP!

- Add cooked brown rice to the enchilada.
- Mix 1 tablespoon chili powder into the bean mixture.
- Add chopped bell peppers.

FRESH FROM THE FARM!
Find local tomatoes May through October and onions July through November.



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Next Steps

- Review tools that document and confirm changes that have occurred
 - Create/adapt
- Panel of Experts: Review/Define threshold for change
 - What enhancements will make a difference?
- Refine tools for data collection
- Conduct on-going audits to confirm changes

Concluding points

- Once completed, this protocol will be helpful to other communities documenting relevant changes in the food and PA environments
- Tracks progression of on-going prevention initiatives as well as consequences of unintended changes
- Create opportunity for collaboration among traditional and non-traditional public health partners

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