



HEALTHY CORNER
STORE INITIATIVE

GOOD
FOR
YOU

- BUFFALO, NY -

Coalition Toolkit

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Section I: Overview of the Healthy Corner Store Initiative (HCSI)

Mission: *To address disparities in food access by creating a culture of health through engagement of residents in a healthy life style in partnership with neighborhood stores.*

History: *The HCSI is a collaborative partnership that grew out of a community report presented by the John R. Oishei Foundation's Mobile Safety Net Team. The report made recommendations for increasing access to fresh, healthy foods in the city of Buffalo and a coalition was created in order to address that issue.*

Model: *The concept of the HCSI is to incentivize and educate store owners and the community alike to change the way they view "healthy". For store owners, we want them to be more conscious of the health implications of the items they carry in their store and encourage them to stock healthier options. For residents, we would like them to be aware of the benefits of healthy eating and recognize that there are places in their neighborhood to shop healthy.*

Why Make a Toolkit?¹

Translating knowledge and research findings is a complex process. Furthermore, there is often a disconnect between evidence-based practices and public health programs. A toolkit is a strategy to synthesize and package information and tools that are used to educate and/or facilitate behavior change. Toolkits can provide a simple, flexible and efficient method of promotion and instruction of "best practices." Toolkits should be informed by high-quality evidence, have a clear purpose and rationale for each component, and be continually evaluated for their usage and effectiveness.

What Went into the Making of This Toolkit?

In 2018, the General Mills Foundation awarded 13 organizations in the city of Buffalo community food systems grants through an endowment to the United Way of Buffalo and Erie County. This funding, in conjunction with a partnership between Cornell Cooperative Extension of Erie County and the University of Buffalo, allowed for the creation of this toolkit.

The process began with a review of the existing research on healthy corner store initiatives throughout the United States. This allowed us to narrow our focus on the initiatives that have seen the greatest effect on measures such as health outcomes, self-efficacy, and perceptions of one's neighborhood. We also looked at which initiatives are more established and what components are the most likely to be implemented. This led us to corner store initiatives in

three cities – Philadelphia, Baltimore, and Chapel Hill. We connected with researchers or coordinators familiar with these three initiatives to seek their expert opinions. Their input, findings from our literature review, as well as feedback from our local HCSI Coordinator and store owners informed the content of this toolkit.

Why is this Initiative Important to Buffalo?

Buffalo has concentrated areas of poverty

- In the Buffalo-Niagara metro area, poverty is concentrated in urban areas. As of 2015, the poverty rate for the city of Buffalo was 33%, which is more than double the rate of the metro region as a whole and that of the United States.²
- The east and west side of Buffalo experience similar poverty rates of 37% and 35%, respectively.³

Residents of these areas also experience transportation barriers...

- Despite having better access than the suburbs, access to public transit continues to be limited in low-income urban areas.² In most Census tracts within the east and west side of Buffalo, more than 33% of households lack a vehicle.⁴

...as well as food insecurity

- A lack of consistent access to enough quality food can lead to poor nutrition.⁵ Food insecure households can experience hunger as well as obesity due to the low cost of unhealthy foods.^{6,7} Areas that lack access to a supermarket or grocery store that provides healthy foods, so-called “food deserts,” contribute to food insecurity. These areas are mostly clustered in the eastern part of the city.⁸
- In the city of Buffalo, the areas with the greatest poverty are on average a greater distance from markets with healthy foods during winter and spring months.⁹ This distance shortens during Farmers’ Market season.⁹
- A study of the food environment in Erie County found an absence of supermarkets in neighborhoods of color when compared to white neighborhoods.¹⁰ Black Buffalo residents are six times more likely to live in an area with limited supermarket access.⁸

There are health consequences of living in food insecure areas

- More than one-third of adults, or 37.4%, in New York State consume fruit less than once per day, and 22.4% consume vegetables less than once per day.¹¹ Consumption was lower in those with less than \$50,000 annual household income, less than a high school degree, and in Black, non-Hispanic adults.¹¹
- As of 2016, 37% of adults living in the city of Buffalo were considered obese.¹² Type 2 diabetes, a disease that is associated with overweight and obesity, impacts 13% of adults in Buffalo, compared to 10% of adults nationally.¹²
- A study of the food and built environment in Erie County found that women that lived in close proximity to a greater number of restaurants had a higher BMI while those that

lived close to supermarkets and grocery stores had a lower BMI.¹³ The food environment was also found to have a greater impact on a woman's BMI than the built environment.¹³

- Black residents of Erie County, who are more likely to reside in an area with limited access to healthy food, also experience higher rates of obesity and diabetes compared to white residents.⁸

Why Sell Healthy Food at Corner Stores?

- Corner stores are prevalent in low-income areas and tend to stock few healthy options, but can be an apt setting for public health interventions.¹⁴
- We can capitalize on the presence of corner stores in the city of Buffalo while empowering small business owners and stimulating business.
- Findings from qualitative research with low-income focus group participants from Buffalo indicate that residents have reservations about purchasing healthy food from corner stores such as concerns about safety, cost, and trust. However, interviews with urban small retailers revealed that store owners are deeply invested in the community and would like guidance on how to sell and market healthier options.¹⁵

What Does the Research Tell Us?

- Health initiatives should be developed from accepted theoretical models. The Social Cognitive Theory is an appropriate model that has been utilized in the development of successful corner store initiatives. The Social Cognitive Theory explains human behavior in terms of a reciprocal model in which one's environment, personal factors, and behavior continually interact.¹⁶ Thus, influencing the food environment while also enhancing patrons' self-efficacy to purchase healthy food can be used to promote healthy behaviors.¹⁶
- Previous studies of healthy corner store initiatives indicate that certain approaches are more likely to lead to increased availability and sale of healthy foods, increases in fruit and vegetable consumption, improvements in healthy food intentions, and self-efficacy and knowledge among corner store employees.¹⁷⁻²³
- A combination of structural changes, social marketing and promotions, education and training, and healthy food procurement in phases appears to be the most promising approach.¹⁷⁻²³
- Research also indicates that the amount of exposure a patron has to health-promoting materials and activities matters²⁴ and that all aspects of the initiative must be culturally relevant to the store staff as well as the patrons.³⁻¹⁹

Section II: Goals and Objectives of HCSI

What are the Goals of HCSI?

- ① Increase availability and access to affordable, healthy food.
- ② Promote consumption of healthy food, especially fresh fruits and vegetables, among corner store patrons.
- ③ Support and empower small business owners while cultivating a sense of community between store employees and their patrons.

How do We Achieve these Goals?

- ① **Instructional Resources and Training**
 - Enhance store owners and employees' ability to implement store changes through training and ongoing support.
 - Provide resources to equip stores to carry out the initiative in an effective and timely manner.
- ② **Healthy Food Procurement and Stocking by Phases**
 - Increase purchasing and stocking of healthy food by store owners by prescribed phases.
 - Connect store owners with local food wholesalers, distributors, and farms to facilitate affordable and streamlined healthy food sourcing.
 - Promote continuing improvements among participating stores to achieve benchmarks and earn incentives.
- ③ **Strategic Store Layout and Improvements**
 - Assist stores with improving store layout to promote healthy food products through structure changes and stocking rearrangements.
 - Provide store owners with ideas and resources for beautification of the interior and exterior of stores.
- ④ **Healthy Food Marketing and Promotions**
 - Support purchasing of healthy food options through visual cues including posters, signs, shelf tags, and labels that are inclusive to the predominant culture of customers.
 - Support stores in pricing healthy food competitively and incentivizing purchases through promotions such as value-added products and price reductions.
 - Facilitate nutrition education, cooking demonstrations, and tastings of healthy food items.

Section III: Organization of HCSI

HCSI Structure and Communication

Currently, 16 partners collaborate on the Healthy Corner Store Initiative taking leadership from Cornell Cooperative Extension of Erie County (CCE Erie) and the *HCSI Coordinator*. Each organization brings its own expertise and resources and has a role on one of three HCSI communities: program development, community relations and store owner support. Communication is ongoing between the *HCSI Coordinator*, various partner agencies, subcommittees, and the store owners. Partners and subcommittees keep the *HCSI Coordinator* informed of communications and store activities. Committees call their own meetings and routinely communicate with the program coordinator. Partner agencies can serve as subcontractors and typically belong to a subcommittee as well.

Duties and Expectations

HCSI Coordinator [Employed by Cornell Cooperative Extension Erie County]

- Main point of contact for HCSI
- Assists in establishing and enhancing relationships with partner agencies, organizations, industries, and community leaders for the program
- Leads implementation of marketing initiatives and community outreach
- Facilitates direct communication with store owners and employees

Subcommittees

Program Development

- Strategic direction and visioning
- Limited evaluation (e.g. best practices and lessons learned)
- Development and fundraising
- Grant writing

Evaluation Committee

- Conduct evaluation
- Analyze evaluation findings

Store Relations

- Onboarding new stores
- Routine maintenance
- Trainings and education

Community Relations

- Community education
- Marketing and outreach

Section IV: Economic Development

The Importance of Economic Development

- Corner stores are businesses and we need to appeal not only to an owner's investment in their community, but their entrepreneurial interests as well. Selling produce can be profitable as retail trends indicate that consumers are shifting their preference from processed foods toward their fresh counterparts.²⁵ However, pressure from consumers as well as competitors along with a rise in operating costs is narrowing profit margins. ²⁵
- Corner stores face additional pressures including limited shelving and refrigeration, limited time and staff, and minimal buying power from wholesalers and distributors. Small retailers also have a limited capacity to promote their store. Given these unique challenges, it is essential that store owners and staff are provided adequate education, training, and ongoing support.
- HCSI can guide participating stores through maintaining quality inventory and moving perishable products quickly to ensure that they realize their full potential of profit margins.



Case Study: Baltimore Healthy Stores Program successfully increased stocking and sales of promoted healthy foods by phases. Changes were sustained 6 months after intervention. ²³



Case Study: A healthy corner store intervention in New Orleans, Louisiana resulted in greater gross profitability for fruits and vegetables (3%) compared to energy-dense snack foods (2%).²⁶

Marketing and Store Promotions

Capacity of Stores

- The majority of the corner stores in Buffalo are family-run and the owner often serves as the manager on duty. The responsibility of purchasing, stocking, pricing, attending to customers, upkeep, and maintenance often falls on the owner and a limited number of staff members. As a result, some stores may need more support in marketing and promotions. Look out for the following indications that a store could benefit from marketing guidance:
 - Lack of store specials or lack of promotions of store specials outside of the store in the media or on the storefront.
 - Advertising for unhealthy food products that is provided by manufacturers or underutilized advertising space.

- Lack of social media presence.
- Inconsistent, missing, or handwritten product names and prices.

Becoming a SNAP or WIC Retailer

- Participating in Federal nutrition assistance programs such as the Women, Infants, and Children Program (WIC) and the Supplemental Nutrition Assistance Program (SNAP) will attract customers and increase sales volume. If a store is not participating in these programs and is interested in becoming a SNAP or WIC vendor, visit the following resources to help store owners apply:
 - **SNAP:** <https://www.fns.usda.gov/snap/retailer-apply>
 - **WIC:** https://www.health.ny.gov/prevention/nutrition/wic/vendor_management_agencies_contact.htm

Cooking Demonstrations, Tastings, Coupons and Incentives

- Facilitate a relationship between HCSI stores and dietitians, nutritionists, SNAP-Ed or Extension educators that can conduct cooking demonstrations and food tastings. Inviting organizations to offer free samples of healthy food during peak hours not only benefits the store, but also allows partner organizations to reach their target market.
- Incentives and coupons are a common practice among healthy corner store initiatives to increase sales of healthy food items. HCSI can explore funding opportunities and community partnerships to entice customers to purchase healthy food at HCSI stores. Examples include, but are not limited to:
 - Giveaways are distributed by a partner organization that conducts food demonstrations to customers that try a sample
 - A hospital or clinic issues coupons to attendees who participate in a wellness class that can be redeemed for healthy food items at an HCSI store
 - A community health fair distributes coupons to be redeemed for healthy food items at an HCSI store

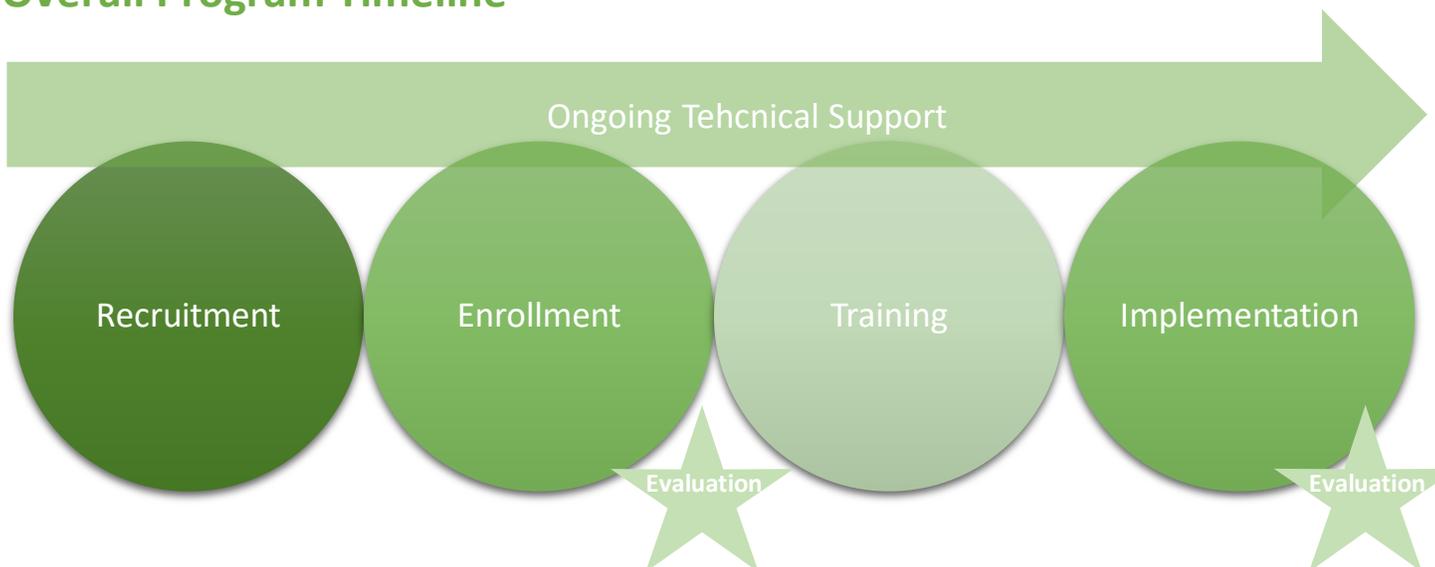


Case Study: A healthy corner store intervention in the Apache Tribes in Arizona demonstrated that cooking demonstrations that feature promoted healthy foods are feasible and can have the greatest reach if conducted according to a set protocol and schedule.²⁷

Refer to Section VII: Appendices for the “Nutrition Education Providers” chart

Section V: Program Implementation

Overall Program Timeline



Store Recruitment and Enrollment [Month 1]

Identify Eligible Store

- The *store relations committee* completes the Identification of Potential Corner Store and Community Assets Checklist which will provide the *HCSI Coordinator* and coalition with information related to store location, neighborhood needs, store history and relations, store layout and conditions.
- *Store relations committee* meets to discuss findings of the checklist and comes to a consensus on whether a store should be recommended to participate in the HCSI.
- Recommended stores are brought to the full coalition and consensus is reached on whether the store should be considered eligible for the HCSI.

Contact Eligible Store

- The *HCSI Coordinator* arranges a meeting with the store owner or manager to explain the program and answer questions.
- Suggested talking points with the store owner can be guided by the following sections of the Storeowner Toolkit:
 - Section I: Program Overview (pages 3-9)
 - Section VIII: Maintain Your Healthy Store (page 41)
- The *HCSI Coordinator* completes the section I of the HCSI Enrollment Form with the store owner or manager.

- If additional time is needed to decide whether to enroll, contact information is provided and assurance that the *HCSI Coordinator* will follow-up with the store owner or manager.

Recruitment Tips

- **Be persistent, but patient:** Some stores may be hesitant, and need time to consider the program.
- **Highlight the benefits:** Emphasize the positive impact a healthy corner store can have on both the health of the community and profitability of their business.
- **Answer questions:** Be available and timely with responding to any questions that arise through the entire recruitment and enrollment process. Offer to obtain answers to questions rather than refer stores to another organization (e.g. produce sourcing, SNAP enrollment).
- **Follow-up in the future:** If a store is not interested or is undecided, thank them and encourage them to reconnect if they would like to partner at another time.

Enroll Eligible Store

- The *HCSI Coordinator* or a member of the *store relations committee* follows-up with the potential store within 3 weeks of the initial meeting if the owner or manager has not reached out.
- The *HCSI Coordinator* completes section II of the HCSI Enrollment Form with the store owner or manager and explains the next steps.
- Stores that decide to participate are asked to sign the HCSI Store Commitment Form.

Conduct Store Assessments [Months 1 and 8]

- After a store has signed the HCSI Store Commitment Form and officially joined the Healthy Corner Store Initiative, the *HCSI Coordinator* will work with the newly enrolled store to schedule assessments prior to the store initiating changes in their store and again after all phases have been implemented.
- Pre-assessments provide the HCSI coalition with a baseline measure of the store environment prior to the HCSI which, when compared to a post-assessment, allows for assessment of changes over time. Additional details are in Section VI: Program Evaluation. With the exception of the Phases Assessment Survey, assessments are optional and the choice to conduct store assessments will depend on the capacity of the HCSI coalition and the willingness of each store. Assessments may include:
 - Store pictures
 - Store owner interview to understand the needs of the store owner and their perceptions of the HCSI

- Customer surveys to look at customers purchasing and eating habits and perceptions of the store
- Nutrition Environment Measures Survey (NEMS) for Corner Stores (CS) which measures availability of healthy food items
- Phases Assessment Survey to document current stocking and determine if the store has achieved Bronze, Silver, or Gold status [This evaluation component is **not** optional as it is used to set goals with each store]

Pre-Training Assessments Review and Goal Setting [Month 2]

A pre-training meeting should be scheduled with all new HCSI stores upon completion of baseline evaluations. The objective of this meeting is to use the results of the Phases Assessment Survey and major themes from the store owner interview to develop an action plan for implementing the HCSI phases. If a store owner interview was not previously completed as part of store assessments, the responses from HCSI Enrollment Form can be used to guide this meeting.

- **Responsible party:** *Store Relations Committee*
- **Audience:** Store owner and/or manager
- **Duration:** 30 minutes
- **Materials:** Completed HCSI Enrollment Form, Storeowner Toolkit, completed Phases Assessment Survey, NEMS-CS results*, notes from baseline owner interview*, Action Plan, and Implementation Timeline
- **Content Covered:**
 - Review HCSI Enrollment Form
 - Provide an overview of the HCSI Phases (pages 7-9 in Storeowner Toolkit)
 - Review findings from the Phases Assessment Survey, NEMS-CS*, and Baseline Owner Interview*
 - Create Action Plan based on findings from pre-assessments
 - Review Implementation Timeline and tailor based on chosen action plan
 - Determine Interest in marketing materials (if available), coolers or other equipment (if available), SNAP/WIC acceptance (if not already certified) and a store kick-off (resources permitting)
 - Inquire with the store owner or manager as to the feasibility of sourcing new healthy items from their current distributor. Gaining an understanding of the ordering process will help guide the tailoring of the store trainings.

***Indicates an optional activity**

Store Training [Months 2 - 7] ^{17, 19, 20, 28-30}

A “kick-off training” should be scheduled with all new HCSI stores. This training should be tailored to the phase that the store owner committed to working toward improving first. Subsequent “phase rollout trainings” are scheduled for the months following the kick-off training in accordance with the predetermined action plan and timeline established with the owner.

The kick-off training and subsequent phase rollout trainings should cover only one phase at each training. In addition to the training content being phase-specific, it should be relevant to the store’s action plan. For example, if a store decides to focus on marketing and purchasing improvements in the healthy beverage phase, the section on strategic rearrangements would be omitted and could be revisited at a later date.

Ask the owner/manager which employees should be present at the training. Encourage the store owner to have all trainings completed during employees’ work time. Ideally, trainings should include employees that handle purchasing and/or stocking. However, all employees could benefit from having an understanding of the HCSI mission to encourage their involvement and prepare them to answer questions from customers.

For employees who do not require the full training, an abridged 10-minute booster employee training can be given at any time during implementation. Ask the owner the preferred language for both the Storeowner Toolkit and trainings and schedule an interpreter if needed. Use the Storeowner Toolkit as a training resource when presenting the follow topics. Finally, keep track of attendance and time spent on all trainings using the HCSI Training Log.

Kick-Off Training [Month 2]

- **Responsible party:** *Store Relations Committee*
- **Audience:** Store owner and/or manager; available employees
- **Duration:** 45 minutes (60 minutes for Fresh Fruit and Vegetable phase)
- **Materials:** Completed Action Plan, Implementation Timeline, Storeowner Toolkit, procurement/sourcing resources based on pre-training meeting, and marketing materials (if available)
- **Content Covered:**
 - If not done in the pre-training meeting or if additional employees are present, provide a brief overview of HCSI, the benefits of HCSI, HCSI phases and achievement levels (pages 5-9 in Storeowner Toolkit)
 - Phase-specific stocking suggestions (pages 11-15 in Storeowner Toolkit)
 - Phase-specific label reading (pages 17-19 in Storeowner Toolkit)*

- Review the Storeowner Toolkit, then travel throughout the store to use actual items for label reading examples
- Purchasing/procurement of phase-specific items (pages 21-22, 43-46 in Storeowner Toolkit)
 - If purchasing is part of the established action plan, follow-up with the owner and/or manager on how they plan to purchase new healthy items
 - Assist with navigating ordering system, if owner is interested and time permits
- Store Improvements (page 31 in Storeowner Toolkit)
- Strategic rearrangement of phase-specific items and store walkthrough (pages 32-33 in Storeowner Toolkit)
 - Make recommendations and decide jointly if currently stocked items should be moved and where new items will be placed
 - Assist with rearranging items, if time permits
- Marketing and promotions (pages 36-39 in Storeowner Toolkit)
 - Overall and phase-specific marketing and promotion strategies and store improvements
 - Assist with placing marketing materials, if time permits

***Omit this section if initiating the Fresh Fruit and Vegetables phase**

In addition to the above, the Fresh Fruit and Vegetables phase training will include the following:

- Produce selection and procurement (pages 21-22, 43-47 in Storeowner Toolkit)
- Stocking and handling produce (pages 23-24, 48-52 in Storeowner Toolkit)
 - Food safety (pages 26-29 in Storeowner Toolkit)
 - Food safety training can be offered at any point during implementation and can be offered as a stand-alone training. For example, if a store initiates the Healthy Snack phase *prior to* the Fresh Fruit and Vegetable phase and plans to offer grab and go fruits or vegetables that are assembled in-store the food safety training should be offered in tandem with the Healthy Snack phase training.
- Produce pricing (pages 35-36 in Storeowner Toolkit)

After the kick-off training, subsequent phase rollout trainings should be scheduled monthly based on the action plan developed with the store owner. However, these trainings should only be held if the store is making progress toward goals and is ready to proceed to the next phase.

Subsequent Phase Rollout Trainings

- **Responsible party:** *Store Relations Committee*
- **Audience:** Store owner and/or manager; available employees
- **Duration:** 30 minutes (45 minutes if initiating the Fresh Fruit and Vegetable phase)
- **Materials:** Completed Action Plan, Implementation Timeline, Storeowner Toolkit, procurement/sourcing resources based on pre-training meeting, and marketing materials (if available)
- **Content Covered:** Mirrors the content from the kick-off training above *except* for the overview of HCSI, the benefits of HCSI, HCSI phases and achievement levels

Booster Employee Training ³⁰

- **Responsible party:** *Store Relations Committee*
- **Audience:** Available employees
- **Duration:** 10 minutes
- **Materials:** Completed Action Plan, Implementation Timeline, Storeowner Toolkit, procurement/sourcing resources based on pre-training meeting, and marketing materials (if available)
- **Content Covered:**
 - Overview of HCSI, the benefits of HCSI, HCSI phases and achievement levels (pages 5-9 in Storeowner Toolkit)
 - Marketing and promotions (pages 36-39 in Storeowner Toolkit)
 - Overall and phase-specific marketing and promotion strategies and store improvements
 - Assist with placing marketing materials, if time permits

Community Engagement [Months 1-8]

In order to achieve the mission of the HCSI, we must engage the communities served by each HCSI store. Community engagement can give community members a sense of ownership over the store changes. ³¹ In the Buffalo HCSI, planned community engagement will include an assessment of community assets located near the corner store and interactive health education. Available community assets and site contact information should be documented in the Identification of Potential Corner Store and Community Assets Checklist.

Community Relations Committee Activities:

- Neuwater and Associates, LLC* provides health education workshops and nutrition demonstrations within stores or community sites surrounding participating stores. These workshops are meant to build capacity in the HCSI neighborhoods through training residents as Healthy Food Community Advocates (HFCA). When an individual completes the health education workshops, he or she will be invited to be an Advocate.

Advocates will receive additional training on how to conduct outreach for the HCSI program. They will then lead or participate in local community health events to promote HCSI stores.

*Subject to availability of funding

Other ways participating HCSI stores can engage with their community:

- Connect Store Owners with Community Resources
 - Use feedback from community members to inform items to stock in store ^{21, 32} and promotional messaging ²⁴
 - Connect store owners with local distributors and farmers
 - Partner with culturally-relevant professional associations, ²³ such as the Arab-American Community Center for Economic and Social Services (ACCESS), for store recruitment and support
 - The Local Chamber of Commerce may help spread the word about the HCSI ³³
 - Work with local distributors and producers to obtain promotional items and supplies for education sessions and demos ³⁴
 - Enlist high school students to help with marketing, content development, and education delivery ³¹
 - Train community members to conduct surveys in the community ³¹
- In-Store and Community-Based Events
 - Host a kick-off event to announce a store's commitment to HCSI
 - Partner with community organizations to offer in-store cooking demonstrations, nutrition education, and health education ^{21, 31, 33, 35}
 - Post HCSI posters, flyers, and educational displays in neighboring sites ³⁵
 - Community-driven social marketing campaigns ³¹
 - Invite community groups into participating stores to highlight store changes ³²



Case Study: The Healthy Food Hawaii initiative highlighted local producers by displaying a “producer biography” by their products in the produce section. ³⁴



Case Study: In Los Angeles, Proyecto Mercado FRESCO utilized high school students for community health education and social marketing activities. After completing training, students led and participated in events, designed health education, and created promotional materials for the converted stores. Students created posters, flyers, calendars, and videos that promoted healthy eating in the community. These materials were displayed in converted stores and throughout the community, including bus shelters. Students attended in-store events and dressed in fruit and

vegetable costumes to hand out promotional materials and coupons. An evaluation showed an improvement in perceptions of corner stores. ^{31, 36}



Case Study: In Baltimore, a corner store intervention conducted regular cooking demonstrations and tastings in stores and local community centers. Nutrition education was culturally relevant and held at least twice per month. An evaluation showed that healthfulness of customers' cooking methods improved significantly in stores that had the intervention compared to those that did not. Also, the customers that were most exposed to the store changes had an increase in healthy food intentions compared to those that were minimally exposed to the changes. ²¹

Refer to Section VII: Appendices for the "Nutrition Education Providers" chart

Ongoing Technical Assistance [Months 3-8]

The *HCSI Coordinator* and store relations committee will provide ongoing technical assistance to store owners. The main objective of technical assistance is to support store owners as they work to achieve their HCSI goals and connect them with the tools and resources needed to do so. Technical assistance activities should be tracked using the Store Visit Log.

What does ongoing technical support look like? ^{22, 30, 32, 33, 35}

The *HCSI Coordinator* will reach out to store owners on a monthly basis (1-2 weeks after each training session) throughout the implementation process to follow-up on progress and offer assistance with achieving goals. Outreach could be via phone, text, or email or in-person, depending on the owner's preference and the store's implementation stage. For example, in-person assistance may be more beneficial during the first month after the kickoff training, whereas phone or email correspondence may be sufficient later in the process. However, stores that are embarking on more intensive changes may need more technical support regardless of the time point. Talking points for outreach to stores should be tailored to the implementation stage and individual action plan. If barriers arise, a store's timeline can be adjusted and future trainings may be postponed until progress has been made. Topics to discuss may include:

- Have strategic rearrangements been made? Are healthier items more visible than less healthy items?
 - If no: Discuss strategic rearrangements, problem solve, etc.
- Have new products been acquired?
 - If yes: Are these items being stocked? Are these items selling?
 - If no: Discuss strategic rearrangements, problem solve, etc.

- If no, what are the barriers? Do they need a procurement source? Do they need a list of suggested items?
- Are marketing materials (shelf tags, banners, etc.) in their appropriate places?
 - If no: Are marketing materials needed? Is assistance with proper placement needed? What are barriers to maintaining proper marketing placement?
- Are educational materials posted?
 - Are any additional materials needed? What are the barriers to posting and keeping materials posted? Are the materials relevant and comprehensible to the customers?
- Do employees require any additional training?
 - If yes, offer to schedule a booster employee training
- Is additional assistance needed?
 - Connect with resources at the local, state, and Federal level.
 - Connect with resources for microfinancing, permits (e.g. to have a produce display in front of the store), etc.



Case Study: The Baltimore Healthy Stores program showed that purchasing a promoted food because of a shelf label was more likely in stores that received the intervention compared to those that did not. ²¹



Case Study: Lessons learned from a pilot study in Sacramento, California underscore the importance of being aware of not only the fixed costs (e.g. a cooler) incurred by a store owner, but also the variable costs (e.g. time spent stocking produce). Both can be barriers to offering fresh fruits and vegetables and store owners may need assistance with offsetting either of these costs. ²⁸



Case Study: Lessons learned from Proyecto Mercado FRESCO in Los Angeles and a pilot study in Sacramento indicate that regular contact, systematic ongoing training, and booster sessions are needed to improve the sustainability of changes. ^{28, 31}

Sample Store Implementation Timeline

Month 1	<ul style="list-style-type: none">• Store Recruitment and Enrollment• Conduct Pre-Assessments	
Month 2	<ul style="list-style-type: none">• Pre-training Action Plan Meeting• Order Marketing Supplies	<ul style="list-style-type: none">• Phase-Specific Kick-off Training (First Phase)
Month 3	<ul style="list-style-type: none">• Booster Employee Training (If requested)• Provide Technical Assistance to Stores	<ul style="list-style-type: none">• Begin Purchasing/Structural/Marketing Store Changes (First Phase)• Begin Phase-Specific Promotional Activities (First Phase)
Month 4	<ul style="list-style-type: none">• Phase Rollout Training (Second Phase)• Provide Technical Assistance to Stores	<ul style="list-style-type: none">• Begin Purchasing/Structural/Marketing Store Changes (Second Phase)• Begin Phase-Specific Promotional Activities (Second Phase)
Month 5	<ul style="list-style-type: none">• Phase Rollout Training (Third Phase)• Provide Technical Assistance to Stores	<ul style="list-style-type: none">• Begin Purchasing/Structural/Marketing Store Changes (Third Phase)• Begin Phase-Specific Promotional Activities (Third Phase)
Month 6	<ul style="list-style-type: none">• Phase Rollout Training (Fourth Phase)• Provide Technical Assistance to Stores	<ul style="list-style-type: none">• Begin Purchasing/Structural/Marketing Store Changes (Fourth Phase)• Begin Phase-Specific Promotional Activities (Fourth Phase)
Month 7	<ul style="list-style-type: none">• Phase Rollout Training (Fifth Phase)• Provide Technical Assistance to Stores	<ul style="list-style-type: none">• Begin Purchasing/Structural/Marketing Store Changes (Fifth Phase)• Begin Phase-Specific Promotional Activities (Fifth Phase)
Month 8	<ul style="list-style-type: none">• Conduct Post-Assessments• Recognize Store if Achieved Silver or Gold Status	<ul style="list-style-type: none">• Provide Technical Assistance to Stores• Create New Action or Maintenance Plan (If working toward Gold Status)

- *This timeline assumes that the store has not satisfied all 5 phases and is interested in working toward fulfilling all 5 phases*
- *Each phase may not include all types of changes – purchasing, structural, and marketing – and this timeline may need to be adjusted based on each store's chosen action plan*

Recommended Materials, Activities, and Promotions by Phase

Phase	Materials	Activities	Promotions
Healthy Beverages	Shelf labels: Lower in sugar, no sugar, healthy beverage Posters and displays: Promoting water and healthy beverages	Cooking demonstration: Healthy beverages such as fruit flavored water	Incentives: Water Bottle Sales and coupons: Healthy beverages
Healthy Snack Items	Shelf labels: Lower in fat, lower in salt, no salt, high fiber, whole grain, healthy snack Posters and displays: Promoting fruits and vegetables as snacks	Cooking demonstration: Healthy snacks such as trail mix, vegetables with healthy dip	Incentives: Reusable snack container, bag clip Sales and coupons: Healthy snacks, grab and go fruits and vegetables
Healthy Packaged Fruits and Vegetables	Shelf labels: Lower in sugar, no sugar, lower in salt, no salt, healthy fruit, healthy vegetable Posters and displays: Promoting buying fruits and vegetables in all forms	Cooking demonstration: Meals incorporating healthy packaged fruits and vegetables	Incentives: Can strainer, can opener, bag clip Sales and coupons: Healthy canned and frozen fruits and vegetables
Healthy Whole Grain Options	Shelf labels: Whole grain, high fiber Posters and displays: Promoting substituting half of daily grains with whole grains	Cooking demonstration: Snacks and meals incorporating healthy whole grain products such as a whole grain tortilla wrap	Incentives: Measuring cups, rice cooker, bag clip Sales and coupons: Healthy whole grain options
Fresh Fruits and Vegetables	Shelf labels: More matters Posters and displays: Promoting eating a variety of fruits and vegetables	Cooking demonstration: Highlighting a newly stocked fruit or vegetable	Incentives: Cutting board, vegetable brush Sales and coupons: Fresh fruit and vegetables

Refer to Section VII: Appendices for the “Marketing Materials Catalog” and the “HCSI Recipe Book”

Section VI: Program Evaluation

Why Evaluate the Healthy Corner Store Initiative? ^{33, 37-40}

Evaluation is an important component of health interventions and projects. It allows us to examine programs by gathering and analyzing information, or data, about the program. Evaluation can determine if a program is achieving goals and outcomes and the results can guide future judgements and decisions about the program. Improvements to a program's design and implementation that are informed by evaluations can ensure that the program is as effective as possible. Demonstrating a program's effectiveness is crucial to maintaining a positive relationship with community members, participating stores, partner organizations and funders. Various types and methods of evaluation are available and useful at different time points of a program. The Healthy Corner Store Initiative takes a comprehensive approach to evaluation through evaluating the process, outcomes, and impact of the program. However, evaluation activities are optional based on store interest and coalition capacity.

Process Evaluation

Process evaluation is a form of evaluation used to determine to what extent the program activities are carried out according to plan. Data is collected throughout the implementation of the program and allows us to see how a health intervention translates to “real world” practice. Fidelity, how compliant the program is with the intended plan, is often the focus of this type of evaluation; however, process evaluation also collects data on adaptations made to the program and unforeseen barriers to implementation. This valuable feedback allows for changes to the program that can facilitate and enhance its implementation. Process evaluation can help to answer the following questions:

- What intervention activities were conducted? Were they carried out as planned? What changes were made?
- How many people participated in activities? Were the participants representative of the target population? How engaged were they in activities?
- What resources were needed to carry out activities?
- What were the facilitators and barriers to implementing the program activities?

Outcome Evaluation

Outcome evaluation measures the degree to which the intended outcomes of a program are reached within the target population. It can provide evidence that changes in a group occur in conjunction with an intervention, however it cannot provide definitive evidence that changes are due to the intervention alone. Data collection is typically done before store changes are made (i.e. baseline) and again after all store changes have been made (i.e. follow-up).

Outcome evaluation can help to answer the following questions:

- Have the objectives of the program been reached?
- What were the outcomes of the program, both intended and unintended?

- Is it justified to continue allocating resources to and implementing the program?
- What were the beneficial or adverse effects of the program on the target population?
- Did program participants experience lasting changes in knowledge, attitudes, beliefs, or skills?
- Did long-term behavioral or health outcomes differ from baseline to follow-up in the target population?



Case Study: In Los Angeles, Proyecto Mercado FRESCO formed a Community Advisory Board (CAB) that included participants from various local social service agencies and community residents. CAB members advised on study rationale and implementation, study protocols, recruitment and retention efforts, participated in focus group and interviews, and assisted with outreach. ³¹

Evaluation Plan and Timeline

Process Evaluation:

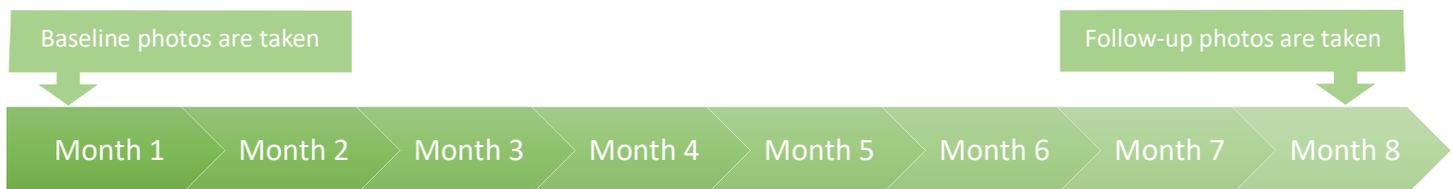
Pictures of Store Improvements

Structural rearrangements and marketing changes can alter patrons’ perceptions of a store. These changes should be captured by taking pictures before and after changes are made. The initial pictures, or baseline pictures, should be taken before any trainings take place. Pictures may be taken throughout the implementation as changes are being made. Finally, pictures should be taken at the end of the program after all changes have been made. Pictures should be labeled with the appropriate date and may be supplemented with notes documenting the changes that were made.

Performed by: *HCSI Coordinator*

Analyzed by: *HCSI Coordinator, Evaluation Committee*

Timeline:



Training Log

All trainings that are conducted with store owners and employees should be recorded in the Training Log. The type of training (e.g. kick-off, booster), phase that was covered, date, duration, content covered, employees present, resources used, and adaptations made should be documented for each training. Tracking the details of trainings will ensure that stores receive sufficient guidance throughout the implementation process.

Performed by: *Store Relations Committee*

Analyzed by: *HCSI Coordinator, Evaluation Committee*

Timeline:



Store Check-In Log

All correspondence with participating stores related to technical assistance and implementation updates should be recorded in the Store Check-In Log. The type of correspondence (e.g. in-person, phone, email), date, implementation updates, assistance provided, requests for resources, and name of contact should be documented for each contact.

Performed by: *HCSI Coordinator*

Analyzed by: *HCSI Coordinator, Evaluation Committee*

Timeline:



Food Demonstration Log

Food demonstrations can be an effective way to promote healthy products to store patrons and increase sales for the owner. All food demonstrations that are conducted should be recorded in the Food Demonstration Log. Ideally, the recipes used should incorporate healthy ingredients that are available in the store and align with the phase that the store is promoting. Food demonstrations can be offered by the regional SNAP-Ed program or other partner organization. The *HCSI Coordinator* facilitates scheduling of food demonstrations between the partner organization and participating store. Each store in the program should receive the same amount of food demonstrations throughout the implementation timeline. Refer to Section VII: Appendices for a list of local nutrition education providers and healthy recipes.

Performed by: SNAP-Ed program or partner organization

Analyzed by: HCSI Coordinator, Evaluation Committee

Timeline:



Outcome Evaluation [Store Outcomes]:

Store Owner Interview

The Store Owner Interview provides valuable information about the owner or manager, the customers who shop at the store, characteristics of the store, and plans for program implementation. These assessments help inform the *HCSI Coordinator* and coalition of each store's needs, successes and challenges. The interview should be conducted prior to the changes being made and at the end of the program.

Performed by: Evaluation Committee

Analyzed by: HCSI Coordinator, Store Relations Committee, Evaluation Committee

Timeline:



NEMS-CS

The Nutrition Environment Measures Survey (NEMS) for Corner Stores (CS) is a validated tool that measures the availability and quality of food items in stores and the condition of a store's environment.⁴¹ This survey should be administered at baseline and again at follow-up. Training and NEMS protocols are free and available through the University of Pennsylvania Center for Health Behavior Research at the following link: <https://nems-upenn.org/#nemscs>. Individuals that are conducting a NEMS evaluation should complete the NEMS online training course.

Performed by: *Evaluation Committee*

Analyzed by: *HCSI Coordinator, Evaluation Committee*

Timeline:



Phases Assessment Survey

For the HCSI project, the Phases Assessment Survey will be used. It incorporates the healthy food phases and stocking recommendations for small retail food stores published by Healthy Eating Research.⁴² Similar to the NEMS-CS, this survey captures the availability of healthy food items within a participating store. This tool aligns with the healthy food phases chart that store owners use to guide their store changes and is used to determine if a store has achieved Bronze, Silver, or Gold status in the program.

Performed by: *Store Relations Committee*

Analyzed by: *HCSI Coordinator, Store Relations Committee, Evaluation Committee*

Timeline:



Outcome Evaluation [Customer Outcomes]:

Customer Surveys

The Customer Surveys collect information on customer demographics, purchasing and dietary behaviors, and perceptions of the store. The HCSI will complete surveys with approximately 20 customers in-person at the store at baseline and over the phone with the same customers at follow-up.

Performed by: *Evaluation Committee*

Analyzed by: *HCSI Coordinator, Evaluation Committee*

Timeline:



Summary of the HCSI Evaluation Timeline:

Month 1	Store Pictures	Store Check-In Log	Owner Interview	Customer Surveys	NEMS-CS	Phases Assessment Survey
Month 2	Training Log	Store Check-In Log				
Month 3	Training Log	Store Check-In Log	Food Demonstration Log			
Month 4	Training Log	Store Check-In Log	Food Demonstration Log			
Month 5	Training Log	Store Check-In Log	Food Demonstration Log			
Month 6	Training Log	Store Check-In Log	Food Demonstration Log			
Month 7	Training Log	Store Check-In Log	Food Demonstration Log			
Month 8	Store Pictures	Store Check-In Log	Owner Interview	Customer Surveys	NEMS-CS	Phases Assessment Survey

**Evaluation plan and timeline may need to be adjusted based on each store's chosen action plan*

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References

1. Yamada J, Shorkey A, Barwick M, Widger K, Stevens BJ. The effectiveness of toolkits as knowledge translation strategies for integrating evidence into clinical care: a systematic review. *BMJ Open*. 2015;5(4):e006808.
2. *Poverty in Buffalo-Niagara: Partnership for the Public Good*; 2018.
3. *West Side Study: A review of demographics in Buffalo, New York*: Partnership for the Public Good; 2016.
4. *Poverty in Buffalo: Causes, Impacts, Solutions*: Partnership for the Public Good; 2018.
5. USDA Economic Research Service Web Site: Definitions of Food Security. September 5, 2018. Available at: <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>. Accessed January 24, 2019.
6. Drewnowski A, Specter S. Poverty and obesity: the role of energy density and energy costs. *Am J Clin Nutr*. 2004;79:6-16.
7. Rao M, Afshin A, Singh G, Mozaffarian D. Do healthier foods and diet patterns cost more than less healthy options? A systematic review and meta-analysis. *BMJ Open*. Dec 5 2013;3(12):e004277.
8. *Strengthening WNY's Safety Net: A Community Report City of Buffalo (East of Main Street)*: University at Buffalo Regional Institute 2014.
9. Widener MJ, Metcalf SS, Bar-Yam Y. Dynamic urban food environments a temporal analysis of access to healthy foods. *Am J Prev Med*. Oct 2011;41(4):439-441.
10. Raja S, Changxing M, Yadav P. Beyond Food Deserts. *Journal of Planning Education and Research*. 2008;27(4):469-482.
11. *Behavioral Risk Factor Surveillance System New York State Brief*: Centers for Disease Control and Prevention; 2015.
12. 500 Cities: Local Data for Better Health, 2018 release | Chronic Disease and Health Promotion Data & Indicators. Available at: <https://chronicdata.cdc.gov/500-Cities/500-Cities-Local-Data-for-Better-Health-2018-relea/6vp6-wxuq/data>.
13. Raja S, Li Y, Roemmich J, et al. Food Environment, Built Environment, and Women's BMI: Evidence from Erie County, New York. *Journal of Planning Education and Research*. 2010;29(4):444-460.
14. *Healthy Corner Stores Guide*. Washington, D.C. 2016.
15. Kasprzak CM, Sauer, H.A., Schoonover, J.J., Lapp, M.M., Leone, L.A Barriers and facilitators to fruit and vegetable consumption among lower-income families: matching preferences with stakeholder resources. *Journal of Hunger and Environmental Nutrition*; In Review.
16. Glanz K, Bishop DB. The role of behavioral science theory in development and implementation of public health interventions. *Annu Rev Public Health*. 2010;31:399-418.
17. Cavanaugh E, Green S, Mallya G, Tierney A, Brensinger C, Glanz K. Changes in food and beverage environments after an urban corner store intervention. *Prev Med*. Aug 2014;65:7-12.
18. Lawman HG, Vander Veur S, Mallya G, et al. Changes in quantity, spending, and nutritional characteristics of adult, adolescent and child urban corner store purchases after an environmental intervention. *Prev Med*. May 2015;74:81-85.
19. Ayala GX, Baquero B, Laraia BA, Ji M, Linnan L. Efficacy of a store-based environmental change intervention compared with a delayed treatment control condition on store customers' intake of fruits and vegetables. *Public Health Nutr*. Nov 2013;16(11):1953-1960.

20. Baquero B, Linnan L, Laraia BA, Ayala GX. Process evaluation of a food marketing and environmental change intervention in Tiendas that serve Latino immigrants in North Carolina. *Health Promot Pract.* Nov 2014;15(6):839-848.
21. Gittelsohn J, Song HJ, Suratkar S, et al. An urban food store intervention positively affects food-related psychosocial variables and food behaviors. *Health Educ Behav.* Jun 2010;37(3):390-402.
22. Gittelsohn J, Suratkar S, Song HJ, et al. Process evaluation of Baltimore Healthy Stores: a pilot health intervention program with supermarkets and corner stores in Baltimore City. *Health Promot Pract.* Sep 2010;11(5):723-732.
23. Song HJ, Gittelsohn J, Kim M, Suratkar S, Sharma S, Anliker J. A corner store intervention in a low-income urban community is associated with increased availability and sales of some healthy foods. *Public Health Nutr.* Nov 2009;12(11):2060-2067.
24. Gittelsohn J, Kim EM, He S, Pardiella M. A food store-based environmental intervention is associated with reduced BMI and improved psychosocial factors and food-related behaviors on the Navajo nation. *J Nutr.* Sep 2013;143(9):1494-1500.
25. *Produce Industry Procurement: Changing Preferences and Practices*: Charles H. Dyson School of Applied Economics and Management College of Agriculture and Life Sciences Cornell University; 2015.
26. Futrell Dunaway L, Mundorf AR, Rose D. Fresh Fruit and Vegetable Profitability: Insights From a Corner Store Intervention in New Orleans, Louisiana. *Journal of Hunger & Environmental Nutrition.* 2016;12(3):352-361.
27. Curran S, Gittelsohn J, Anliker J, et al. Process evaluation of a store-based environmental obesity intervention on two American Indian Reservations. *Health Educ Res.* Dec 2005;20(6):719-729.
28. Jetter KM, Cassady DL. Increasing Fresh Fruit and Vegetable Availability in a Low-Income Neighborhood Convenience Store: A Pilot Study. *Health Promotion Practice.* 2010;11(5):694-702.
29. Paek H-J, Oh HJ, Jung Y, et al. Assessment of a Healthy Corner Store Program (FIT Store) in Low-Income, Urban, and Ethnically Diverse Neighborhoods in Michigan. *Family & Community Health.* 2014;37(1):86-99.
30. Ayala GX, Baquero B, Pickrel JL, et al. A store-based intervention to increase fruit and vegetable consumption: The El Valor de Nuestra Salud cluster randomized controlled trial. *Contemporary Clinical Trials.* 2015;42:228-238.
31. Ortega AN, Albert SL, Sharif MZ, et al. Proyecto MercadoFRESCO: a multi-level, community-engaged corner store intervention in East Los Angeles and Boyle Heights. *J Community Health.* Apr 2015;40(2):347-356.
32. Dannefer R, Williams DA, Baronberg S, Silver L. Healthy bodegas: increasing and promoting healthy foods at corner stores in New York City. *Am J Public Health.* Oct 2012;102(10):e27-31.
33. Santos N, Smith R, Friberg J, Reishus J. *Shop Healthy Iowa Toolkit*: University of Iowa College of Public Health; Iowa Department of Public Health; Iowa State University, and Iowa State Extension and Outreach; 2015.
34. Gittelsohn J, Vijayadeva V, Davison N, et al. A food store intervention trial improves caregiver psychosocial factors and children's dietary intake in Hawaii. *Obesity (Silver Spring).* Feb 2010;18 Suppl 1:S84-90.
35. Gittelsohn J. *Baltimore Interventionist Manual of Procedures*: Johns Hopkins Bloomberg School of Public Health; 2016.
36. Ortega AN, Albert SL, Chan-Golston AM, et al. Substantial improvements not seen in health behaviors following corner store conversions in two Latino food swamps. *BMC Public Health.* May 11 2016;16:389.
37. Foronda C, Baptiste DL, Reinholdt MM, Ousman K. Cultural Humility: A Concept Analysis. *J Transcult Nurs.* May 2016;27(3):210-217.
38. My Environmental Education Evaluation Resource Assistant. Evaluation: What is it and why do it? Available at: <http://meera.snre.umich.edu/evaluation-what-it-and-why-do-it>.
39. *Stock Healthy Shopt Healthy Program Evaluation Toolkit*: University of Missouri Extension; 2015.
40. *USDA Supplemental Nutrition Assistance Program Education Plan Guidance FY 2018*: United State Department of Agriculture; 2017.
41. NEMS Measures. Available at: <https://www.med.upenn.edu/nems/measures.shtml>.
42. Laska MN, Pelletier JE. *Minimum Stocking Levels and Marketing Strategies of Healthful Foods for Small Retail Food Stores*: Healthy Eating Research; 2016.