INTENT OF THE INTERVENTION

The Minneapolis Healthy Corner Store Program is designed to increase the availability, accessibility, awareness and attractiveness of fresh fruits and vegetables and other healthy foods in corner stores by supporting changes in corner stores’ practices. The program addresses multiple levels of the socio-ecologic model with a primary focus on changing the organizational level.

The Minneapolis Healthy Corner Store Program is a practice-tested intervention.

OVERVIEW

The Healthy Corner Store Program was designed and implemented by the Minneapolis Health Department (MHD) with funding from the Minnesota Department of Health and the Statewide Health Improvement Program (SHIP).

Background

In 2008, the Minneapolis City Council passed a Staple Foods Ordinance requiring all stores selling food, regardless of size, to carry a minimum of five varieties of perishable produce and other minimum stock requirements of staple foods such as meat, bread and dairy. This ordinance made Minneapolis the first city to make selling fresh produce a condition for corner stores to do business. A year later, to determine compliance with the Staple Foods Ordinance, MHD conducted an assessment of 35 corner stores. Nearly 75% of stores did not meet the produce requirements and 34% did not carry any fresh produce. In 2009, the Minnesota Department of Health revised the minimum WIC Food Stock Requirements requiring WIC-authorized stores in Minneapolis to stock a minimum of seven varieties and 30 pounds of fresh fruit and vegetables. The Minneapolis Health Department recognized that stores needed help if they were to meet the new staple foods requirements and newly imposed WIC requirements. Consequently, the Healthy Corner Store Program was developed to provide store owners with expertise, training and support. The program’s objectives are “to support store owners in making fresh produce and other healthy foods more visible, affordable, and attractive” by providing technical assistance, increasing owners’ knowledge of fresh produce handling and merchandising, finding solutions for procuring a variety of fruits and vegetables, increasing sales of fresh produce and conducting community engagement activities to the public.

Phases of the Minneapolis Healthy Corner Store Program

- Phase I, 2010-2011, implemented in 9 stores; the city’s health department staff were the labor force for store enhancements.
- Phase II, 2012-2013, incorporated lessons learned from Phase I, implemented in 30 stores, and involved community-based organizations in intervention delivery. Phase II study results are reported in the Evidence Summary.
- Phase III, 2014-2015, invests in 10 stores to make them “model” healthy stores in their communities. The intervention includes healthy beverages, low fat, sugar and sodium as well as fresh produce.
With each intervention phase, the Health Department tests new approaches, evaluates what works and adapts the program accordingly. While the program’s objectives remain constant, strategies are modified based on lessons learned from prior experience.

**Intended Population:** Residents and store owners located in underserved, low-income communities where corner stores are the primary food sources.

**Setting:** Corner stores and small grocery stores in low-income, urban communities.

**Length of time in the field:** since 2010

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**HEALTH EQUITY CONSIDERATIONS**

Minneapolis Health Department focused the Healthy Corner Store Program on neighborhoods with the greatest health disparities and the highest rates of poverty. The city’s population of 400,070 (2013 estimate)\(^1\) is diverse with many cultural groups and immigrants, including Somali and Hmong. According to 2010 US census data, 18.6% of residents are black or African American, 10.5% are Hispanic or Latino and 5.6% are Asian. Historically, residents of color live in the neighborhoods of Near North of North Minneapolis and the Philips neighborhood of South Minneapolis. While the percentage of households reporting receipt of cash public assistance or SNAP in Minneapolis is 17%; the percentage of households reporting the same in Phillips Community is 63% and 67% in Near North Community. Residents who live in Phillips Community have a 2.6 times greater chance of reporting household receipt of SNAP or other cash public assistance than residents of Minneapolis as a whole. Residents who live in Near North have a 2.7 times greater chance of reporting household receipt of SNAP or other cash public assistance than residents of Minneapolis as a whole.\(^2\)

Minneapolis has approximately 90 convenience stores subject to requirements of the Staple Food Ordinance. Stores are often a main source of food for many low-income families and over 50% of convenience stores are WIC-authorized.

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\(^1\) [http://quickfacts.census.gov/qfd/states/27/2743000.html](http://quickfacts.census.gov/qfd/states/27/2743000.html)

\(^2\) Based on the 2009 - 2012 ACS, Table DP03; due to their nature, numbers are imprecise and should be considered estimates only. Created by the City of Minneapolis Health Department, Research and Evaluation Division on 7/16/2014
CORE ELEMENTS

This section outlines the aspects of an intervention that are central to its theory and logic and that are thought to be responsible for the intervention’s effectiveness. Core elements are critical features of the intervention’s intent and design and should be kept intact when the intervention is implemented or adapted.

1. Store recruitment
2. Pre-post evaluation: including visual assessments, customer surveys, owner interviews and assessments, and point-of-sale data collection
3. Fresh produce procurement and distribution pilots
4. Store enhancements
5. Community partnerships and community events
6. Regular site visits with technical assistance

RESOURCES REQUIRED

Staff: One .5 FTE DPH staff whose primary responsibilities are program planning, management, implementation and evaluation.

Materials: Merchandizing materials are essential and include produce signage, window clings, cooler stickers, and black baskets or other free-standing merchandising units for displaying produce and other healthy foods. The cost of producing or purchasing such materials is approximately $150 to $300 per store, depending on size and sales volume.

Other Costs: Contracts with community-based organizations to cover the cost of labor and supplies for community engagement activities such as demos, taste testing, or other events. The number of contracts and amount of each contract will depend upon the activities and responsibilities that CBOs undertake.

IMPLEMENTATION

How It Works:

Partnerships with community-based organizations (CBOs) to extend the program’s reach

Partnering with community-based organizations offers several advantages:

- CBOs can help identify potential stores from their neighborhoods that they believe will benefit from the program.
- They can extend the reach of the health department staff by delivering some aspects of the intervention.
- Having existing relationships with community residents and store owners, CBOs are natural partners to conduct outreach events, such as taste tests, promotions, and in-store cooking demos. These events help to draw customer attention to the availability of healthy produce sold in the stores.
Store recruitment
- The Health Department and CBOs can complement each other in the process of identifying potential stores, distributing program flyers and visiting stores.
- Store owners need to clearly understand what the program will offer them and what they will be asked to do, such as maintain produce displays, participate in trainings on produce handling and display marketing materials. Store owner interest and willingness to participate are vital.
- The program has used a Memorandum of Understanding (MOU) with participating stores and not having an MOU, depending on the needs of the cohort of stores. After Phase I, the Health Department decided the MOU process wasn’t needed and could have a negative impact if implemented too formally. Consequently, in Phase II, store owners needed only to verbally agree and demonstrate their intent to offer fresh produce. Due to the program goal of creating ‘model’ stores and desire to partner with a committed group of store owners, in Phase III the Health Department has again implemented a MOU in a more user-friendly format which holds store owners accountable for their actions and encourages engagement.

Data collection: Baseline assessments, owner interviews, and customer surveys
- Before the introduction of store enhancements, MHD conducted visual assessments in each store to identify quality of produce, number of varieties, and marketing opportunities available in the store.
- MHD conducted owner interviews to learn about the store’s product offerings, inventory system, the customer-base, their shopping preferences and the owners’ experiences in selling fresh produce. The interviews provided an opportunity to build positive relationships with participating store owners.
- The city Health Department conducted a customer survey to better understand the customer base, their shopping habits and the types of produce items they were likely to buy.

Store-specific enhancements to display produce more visibly and attractively
MHD conducted store enhancements to make fresh produce more visible and attractive. Steps to enhance stores included produce displays, in-store marketing materials and store owner training. The enhancement process included:
- Display produce in refrigerator coolers; ensure higher visibility of all produce and cross-merchandize with other healthy items.
- Place perishable goods in attractive black plastic produce baskets in refrigerator coolers and dry racks.
- Place impulse purchase baskets at front counters.
- Place “fresh produce” signage in key places to raise awareness of produce options. Signage can include banners, window decals, price signs and shelf labels.
- Train store owners one-on-one, providing produce handling guidance, merchandising tips, and support for maintaining the sets and keeping produce fresh.

Community engagement events in each store
After store enhancements, CBOs organized a few “kick-off” activities in each store to give members of the neighboring community the opportunity to sample healthy foods and learn about the new healthier options in their store. Activities included:
- In-store cooking demos
- Taste tests/distribution of samples
- Promotional giveaways (buy one, get one)
Kick-off events were preceded by write-ups in community newspapers and other free advertising, such as posting and distributing of print materials in the neighborhood and stores.

**Produce procurement**

The biggest challenge for this intervention is finding a fresh produce procurement option that meets store owners’ needs concerning pricing, delivery, order size and produce variety. Minneapolis Healthy Corner Stores has experimented with several produce procurement models in the past, including:

- Ordering from a non-profit food bank
- Delivery of produce surplus from a university greenhouse
- Farmers’ market discounting of produce remaining after peak market hours
- A local, mobile vendor with wholesale-purchased produce making rounds to stores
- Using the “right-size” ordering system from a produce distributor.
- Partnering with a produce wholesaler with delivery and small case sizes

Despite trying all these options in Phase I and II, store owners continued to prefer direct purchase of small quantities of produce several times per week from large chain supermarkets in the area; e.g. Sam’s Club, Target. They feel buying from a large retail store eliminates the middle man and gives them more control over how much they purchase and the price they can offer customers.

Currently, in Phase III MHD has a produce wholesaler, a local farming cooperative and a University partnering to form a procurement model better able to meet the needs of store owners. The partnership is willing to offer competitive prices, free delivery, no minimum orders or case sizes and pricing per pound rather than by the case. This model gives stores maximum flexibility and control over the purchasing process so that they can keep prices low for customers and eliminate owners making frequent trips to retail stores. This model, while still in its infancy, holds promise as a sustainable procurement option that meets the needs of store owners.

**Site-visits with technical assistance**

- MHD supported store owners and recognized their efforts through regular monthly site visits. The program was most successful when the store owner actively engaged in program activities and felt a sense of program ownership. Store site visits were key to maintaining relationships, encouraging participation and building a high level of trust with owners. These site visits were vital to help store owners maintain produce displays.
- Store owners needed training and technical assistance to prepare them for daily produce maintenance and proper handling techniques. The Health Department used site visits to hold informal one-on-one training sessions.
- Formal group trainings were also held on skill building activities for operating a small business and information was included on produce handling, product shelf-life, temperature requirements and tips for creating attractive displays.
- For stores part of the point-of-sale (POS) sales evaluation, owners received technical assistance to program POS machines or cash registers to track produce in a separate category from other sales. Store owners and their employees needed training to use the produce key on the register as well as frequent reminders to properly use their POS machines to track sales of fresh produce.
Keys to Success:
- Engage and enlist store owners committed to healthy foods and engaged in their business.
- Recruit or partner with community organizations to conduct community outreach events and engagement activities that reach the community served by the store.
- Test new procurement systems that address the needs of store owners. This may mean collaborations with local growers or distributors. Consider teaming programs together to address the food access needs of not only corner stores, but also schools, institutions, restaurants, or food shelves so that the model can gain clients from a variety of settings.
- Invest time in building trust with store owners. Listen to their concerns and help them navigate operating their business from the framework of healthy food. Long term success of the program lies in the owners’ ability to maintain the changes.
- Partner or contract with an expert in retail merchandising. A person trained in retail sales and merchandising can make changes look highly professional with little time and labor.

Barriers to Implementation:
- Program requires extensive staff time even when working with a small number of stores.
- Produce procurement is a big hurdle. The method that stores use to obtain fresh produce for sale has to be acceptable to store owners. To keep their inventory small, corner store owners frequently buy produce from bigger grocery chains rather than using the cheaper option of purchasing from wholesalers.
- Store owners have a difficult time keeping produce fresh and attractive and they feel they do not make money selling fruits and vegetables and that there is no demand for healthy products from customers.
- Customers wanting to make healthy choices may try to purchase fresh produce or other healthy foods from the store but find it priced too expensively or of poor quality, thus perpetuating the perception that corner stores lack healthy food options.
- Stores almost always hold contracts with large convenience food corporations and tobacco companies which ensure their products are located in premium locations in the store at set prices. Store owners have little power to control their own inventory or make decisions about which products they carry or promote.

EVIDENCE REVIEW SUMMARY

Strategies used:

**Changing access & availability to favor healthy foods and beverages**
The Minneapolis Healthy Corner Store Program increased access to and availability of fresh fruits and vegetables and other healthy foods in corner stores in low-income areas of Minneapolis by providing training and technical assistance to store owners and exploring solutions for procuring a variety of fresh produce.

**Food and beverage marketing to favor healthy foods/beverages**
The Minneapolis Healthy Corner Store Program increased marketing of healthier foods and beverages in corner stores in Minneapolis by training Health Department staff and/or community based organizations to conduct store enhancements, including produce displays.
and in-store signage and guiding store owners in procurement and marketing of fresh produce.

**Evaluation Outcomes**

*Formative Evaluation:*

Formative work included an assessment of 35 stores regarding compliance with the recently passed staple foods ordinance and a pilot study. The intervention used formative data from a pilot study with 9 corner stores to determine feasibility and acceptability of the intervention. In each store, the staff conducted visual assessments of availability of healthy foods, owner interviews to learn about the customer base and owner interest in specific assistance, and customer surveys (30-50 customers per store) to learn about shopping and purchasing patterns. The Minneapolis Health Department team developed store-specific enhancement strategies for each store based upon the data collected, which included creating a produce display, incorporating other healthy foods into the display and placing ‘grab-and-go’ items near the point-of-purchase.

From this data collection effort, the Minneapolis Health Department learned that stores needed to improve customer relations (stores were often perceived as not being safe places), to develop better ways to track produce sales (for evaluation) and also needed better ways to procure produce in amounts that could be stored/sold in smaller stores. As a result of this formative work, for the next Phase of the program, the Minneapolis Health Department engaged local community based organizations (CBOs) to recruit stores and assist them with customer relationships and engagement (taste tests, food cooking demonstrations). Minneapolis Health Department equipped 7 stores with better methods to track produce sales. The team also tried to learn of better ways to procure produce for stores.

*Outcome Evaluation:*

Outcome evaluation data included visual assessments of store produce availability (n=30), customer intercept surveys, and point-of-sale data collection (n=7; subset of 30 stores having a programmed produce key in cash register). Data from the visual assessments indicated that fresh produce was available in greater variety/quantity after the intervention: Stores increased the variety of fruits and vegetables available to customers by 39%, to an average of 11 varieties. Point-of-sale (POS) data and customer survey data indicate that customers in POS intervention stores (n = 5) purchased more fruits / vegetables than those in control stores (n = 2). POS data indicated that total fruit and vegetable sales ranged from 0 to 2.97% of overall sales before and 0 to 5.49% after the Healthy Corner Store Enhancements. Intervention stores had a 155% increase in fruit and vegetable sales pre-to post-enhancement, whereas control stores had a 22% decrease in produce sales. Intervention stores had a 146% increase in produce transactions, whereas control stores had an 11% decrease in transactions. By the end of the follow-up period, intervention stores had reached a statistically significant 171% increase in sales of fresh produce. Note: Intervention stores sold a weekly average of $6.98 in fruits and vegetables post-enhancements and $8.03 in follow-up (less than 1% of store sales).

Post-enhancement, customers in intervention stores reported purchasing fruits and vegetables more frequently than those in control stores. Customers also reported more favorable perception of fruit and vegetable availability than those in control stores. There were no differences in perceptions of quality of fruits and vegetables between intervention and control store customers.
POTENTIAL PUBLIC HEALTH IMPACT

REACH – Each of the stores included in the intervention reaches between 200 and 500 customers per week. The intervention targeted stores in low income, urban settings. The intervention therefore has potential for broad reach to low income, urban residents.

EFFECTIVENESS – The intervention was effective at increasing the availability of fruits and vegetables in participating corner stores. Stores increased the variety of fruits and vegetables they stocked by 39% to an average of 11 varieties. The point-of-sale (POS) data suggest that sales of fruits and vegetables may also have increased. In general the 5 POS intervention stores increased sales by 155% following the store enhancements with an increase of 171% during the maintenance phase, which was significant pre/post within group increase.

ADOPTION – The intervention has strong potential for adoption. Numerous stores have agreed to participate in the intervention, although no data is available on the percentage of stores who agree to participate or how they differ from those who do not participate. Nine stores participated in the pilot of the intervention, and 30 participated in the larger study. In the larger study, the Health Department partnered with community-based organizations (CBOs), which helped to recruit stores from the neighborhood and conducted outreach events.

IMPLEMENTATION – The intervention has good potential to be implemented as intended. Of the 30 stores that participated, 25 completed the intervention. Visual assessments indicated that stores increased the availability of produce. The study sought to address a central challenge to implementing corner store interventions by piloting three different approaches to produce distribution. Although those approaches had limited success, a fourth approach emerged – a local, mobile produce vendor – and that approach was successful. Little data were available on the extent to which stores implemented other components of the intervention.

MAINTENANCE – The intervention’s potential for long term maintenance is enhanced by its connection to a City ordinance that requires stores to stock certain staple foods. The potential is further enhanced by ongoing support from CBOs and the Minneapolis Health Department.

INTERVENTION MATERIALS

The Minneapolis Healthy Corner Store Program shares many of its implementation and evaluation tools and project reports on the project’s website: http://www.minneapolismn.gov/health/living/cornerstores

Implementation materials
- Corner Store Visual Assessment Tool
- Corner Store Owner Interview
- Corner Store Customer Survey
- Minneapolis Healthy Corner store Program Resource Guide: Produce Merchandizing and Handling
- Examples of merchandising materials
TRAINING AND TECHNICAL ASSISTANCE

Minneapolis Health Department recommends that interested adopters should contract or work with either a local grocery store expert through a food cooperative or a local grocers association, or consider hiring a consultant specific to retail food access in corner stores. This expertise can help guide the work specific to the location and needs of the store. While the work is reproducible by an untrained person, the end result will be more professional with less labor required if done by someone with this skill set.

ADDITIONAL INFORMATION

Web links:  http://www.minneapolismn.gov/health/living/cornerstores

Program Contact(s):
Nora Hoeft, MPH
Minneapolis Healthy Corner Store Project Specialist
Minneapolis Health Department
250 South 4th Street, Room 510, Minneapolis, MN 55415
Email: Nora.Hoeft@minneapolismn.gov
Phone: 612-673-3798

Related Resources:
Minneapolis Health Department posts evaluation reports of the Phases of the Healthy Corner Store Program on its website. Scroll to the Resources subheading:
http://www.minneapolismn.gov/health/living/new%20cornerstores