

Improving access to healthy foods in underserved communities: The role of corner stores



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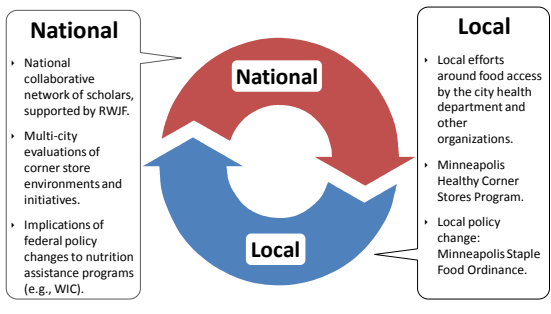
Background: Why do corner stores matter? 1

“Healthy Corner Store” programming 2

Policy action influencing corner store offerings 3

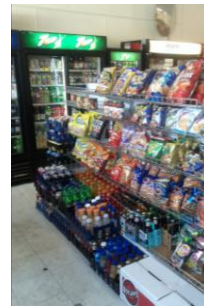
Working at the national vs. local level

Who informs whom?



Food access across the US

- All Americans do not have equal access to healthy food.
- There are systematic disparities in healthy food availability and sourcing by race/ethnicity and income.



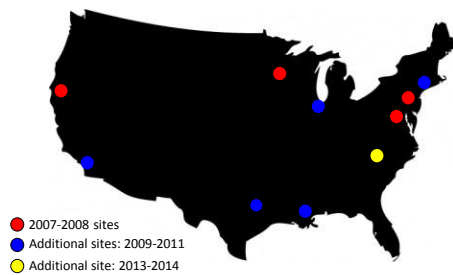
Larson, Story, Nelson, *AJPM* 2009; USDA ERS, 2012.

Small, urban corner stores:
Important food sources, particularly in
low-income, racially diverse neighborhoods



Healthy Corner Store Working Group

Robert Wood Johnson Foundation: Healthy Eating Research



Healthy food in small urban food stores

Comparing four urban areas (2008)



Laska, Borradaile, Tester, Foster, Gittelsohn. *Public Health Nutr.* 2009.

Are healthier foods available?

Gebauer and Laska. *Journal of Urban Health*, 2011. (Twin Cities data only)



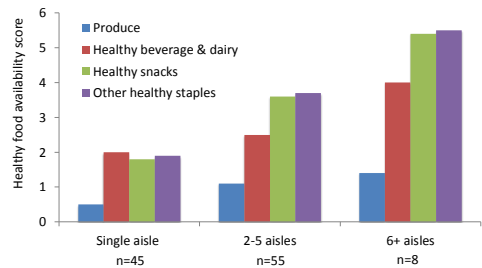
Healthy food in small urban food stores

Comparing four urban areas (2008, n=108)

- Healthy foods and beverages (including snack foods and staple items) were not available in a number of stores and selection was extremely limited.
- Significant variability by store size and geography.

Laska, Borradaile, Tester, Foster, Gittelsohn. *Public Health Nutr.* 2009.

Small stores need the most help stocking healthy foods & beverages



Laska, Borradaile, Tester, Foster, Gittelsohn. *Public Health Nutr.* 2009.

Minneapolis Healthy Corner Store Program

A program of the Minneapolis Health Department

- Phase 1: 2010-11 (n=9)
 - Supported owners in making fresh produce visible and attractive
- Phase 2: 2012-13 (n=30)
 - Expanded reach, partnering with CBOs
- Phase 3: Beginning now
 - Intensive effort on model stores (n=10) coupled with larger dissemination (n=60)



<http://www.minneapolismn.gov/health/living/new%20cornerstores>

Stages of the program

1. Recruitment & assessment.



Stages of the program

1. Recruitment & assessment.
2. Store enhancement.

Merchandizing and displays to make healthy food visible and attractive.



Stages of the program

1. Recruitment & assessment.
2. Store enhancement.

In-store advertising and promotion



Stages of the program

1. Recruitment & assessment.
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Stages of the program

1. Recruitment & assessment.
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Opportunities for impulse purchasing



Stages of the program

1. Recruitment & assessment.
2. Store enhancement.

Identifying new sources for distribution and delivery



Stages of the program

1. Recruitment & assessment.
2. Store enhancement.
3. Community engagement.

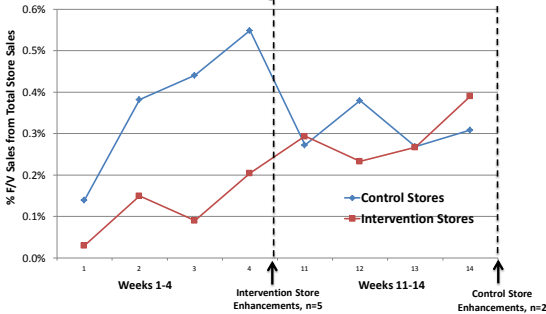


Sub-study evaluation results

Objective POS data collection.



Minneapolis Healthy Corner Store Program Fruit and Vegetable Sales



Report: "Testing an evaluation model for assessing the efficacy of the Minneapolis Healthy Corner Store Program," 2013.

Sub-study evaluation results

Objective POS data and customer intercept surveys

- Fresh fruit and vegetable sales \uparrow 155% in 5 intervention stores vs. \downarrow 22% in 2 control stores ($p=0.06$).
 - Statistically significant increases also in fruit and vegetable transactions and redemption of WIC produce vouchers ($p<0.05$).
- More favorable perception of neighborhood fruit and vegetable availability among customers in the intervention stores ($p=0.01$).

Report: "Testing an evaluation model for assessing the efficacy of the Minneapolis Healthy Corner Store Program," 2013.

Lessons Learned From Small Store Programs to Increase Healthy Food Access

A case study analysis.



What challenges affect feasibility, acceptability and success of small store interventions?

Gittelsohn, Laska, Karpyn, Klingler, Ayala. Am J Health Behav. 2014.

Lessons learned: Four US cities

1 Baltimore, MD	Primarily targeted very small, Korean American-owned corner stores. Led by Johns Hopkins University team since 2004.
2 Minneapolis, MN	Focusing on produce availability. Led by the Minneapolis Health Department.
3 Burlington, NC	NIH-funded RCT in small-to-medium sized Latino grocery stores. Now being replicated in CA.
4 Philadelphia, PA	Led by The Food Trust's Healthy Corner Store Initiative. Expanded to 640+ stores in 2010.

Key themes: Preparation

Establishing relationships with owners

- Allot sufficient time to build a relationship with the store owners/manager.
- Match the cultural and linguistic characteristics of store owners.

Recognizing existing relationships

- Recognize complexity of the store owner and customer relationship.
- Consider the store owners' perspective carefully when designing the program.

Deciding on intervention approaches

- Begin with formative work. Consider starting slow and building over time.
- Improve both supply and demand.

Gittelsohn, Laska, Karpyn, Klingler, Ayala. Am J Health Behav. 2014.

Key themes: Implementation

Getting stores to stock healthier foods

- Provide store owners/managers with assistance to establish an adequate supply of healthy items.

Evaluating process & effectiveness

- Measuring improved product availability and marketing is feasible.
- Obtaining reliable, accurate store sales data and/or measuring changes in customer diet is challenging.

Gittelsohn, Laska, Karpyn, Klingler, Ayala. Am J Health Behav. 2014.

Key themes: Future planning

Maintaining changes in stores

- Maintaining changes through continued reinforcement of activities.
- Encourage store owners/managers to adopt infrastructure or systems-based changes when feasible.

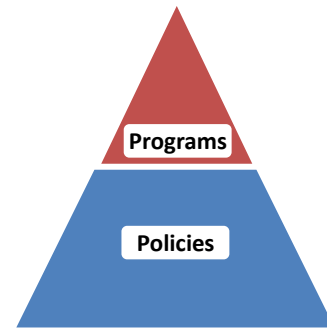
Dissemination & sustainability

- Reaching academic, policy and food store audiences is key for dissemination.
- Sustainability is challenging.

Gittelsohn, Laska, Karpyn, Klingler, Ayala. Am J Health Behav. 2014.

Programs vs. policies

Building a foundation for sustainability



Minneapolis Staple Food Ordinance

The history: 2008-present



Minneapolis Staple Food Ordinance

Examples of ordinance requirements

	2008
Bread, cereal & grains	≥3 varieties of bread or cereal, ≥2 fresh.
Dairy & substitutes	≥3 varieties, ≥2 fresh.
Fruits & vegetables	≥5 varieties of fresh.

Minneapolis Staple Food Ordinance

Examples of ordinance requirements

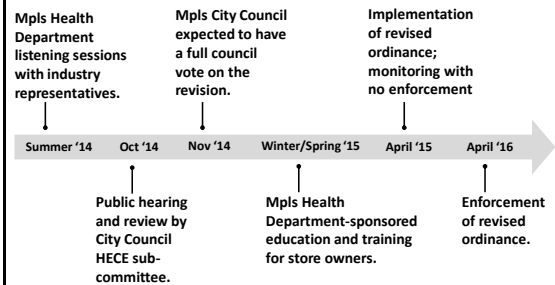
	2008	Proposed
Bread, cereal & grains	≥3 varieties of bread or cereal, ≥2 fresh.	12 containers of WG cereal in ≥6 varieties AND 5# of WGs in ≥3 varieties (including bread, tortillas, rice).
Dairy & substitutes	≥3 varieties, ≥2 fresh.	5 gallons of unsweetened cow's milk in ≥2 varieties: skim, 1%, 2%, plain soy or other plain milk alternative.
Fruits & vegetables	≥5 varieties of fresh.	30# in ≥7 varieties, with ≥5 varieties fresh.

2008: Also includes meat, fish or vegetable proteins.

Proposed: Also includes meats, fish or vegetable proteins (expanded); eggs; canned beans; dried peas, beans, lentils; 100% juice.

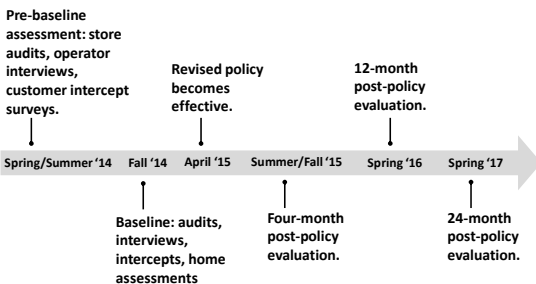
Minneapolis Staple Food Ordinance

Anticipated timeline for ordinance revisions



Minneapolis Staple Food Ordinance

Anticipated timeline for evaluation: The STORE Study



PI: M. Laska. R01 pending (NIDDK).

Can this be informed by federal policy?
The WIC Program (2009)

What was the retailers' perspective?

Mixed methods study of small stores (n=52) in 8 cities.

- Many store owners reported that their sales of healthy foods increased 1 year after the federal policy change.
 - 75% reported fresh fruit sales increased.
 - 69% reported fresh vegetable sales increased.
 - 89% reported whole grain-rich bread sales increased.

Ayala, Laska, Zenk, et al. Public Health Nutr. 2012.

I think it's positive changes ... our grocery sales improve and are gaining up. Usually the juice are selling more because they have more flavors, so the people can choose....
(San Diego, P20)

Oh, everybody happy! [Laughter] Like people been comin' in and it's more easy for them. They don't have to go too far to get what they need.
(Philadelphia, P25)



Gittelsohn, Laska, Andreyeva, et al. Am J Health Behav. 2012.

Upcoming issue:
The Supplemental Nutrition
Assistance Program (SNAP)

SNAP policy

Minimum stocking requirements for retailers

- Current: Must offer 3 varieties across 4 staple food categories, with perishable foods in 2 categories.
 - Meat, poultry or fish
 - Vegetables or fruits
 - Bread or cereal
 - Dairy
- In the 2014 Farm Bill: 7 items across 4 categories; perishable items in 3 categories.
 - USDA can implement other standards around healthy food.

A snapshot of SNAP retailers

Data have been submitted for publication.

Limited healthy food availability

Data have been submitted for publication.

Stay tuned

- USDA is undergoing rulemaking soon for the changes to the SNAP retailer minimum stocking requirements.
 - [Public comment on the rule-making expected to be open before the end of 2014.](#)
- USDA also considering a range of “nudging” strategies in food stores to improve the dietary quality of SNAP purchases.

In summary

- Corner stores are important parts of food environments.
- Offer many opportunities and challenges increasing healthy food availability.
- Important to consider systems-based policy approaches to complement programmatic efforts.



In summary

- There can be numerous benefits to a successful government-university partnership.
- Local policies and programming can be used to inform national initiatives in important ways, and vice versa.



- Supported by:
 - Minnesota Statewide Health Improvement Program
 - RWJF/Healthy Eating Research
 - Johns Hopkins Global Center on Childhood Obesity
 - UMN Center for Urban and Regional Affairs
- Key collaborators:
 - HER Corner Store Working Group: J. Gittelsohn, G. Ayala, J. Tester, G. Foster, K. Borradaile, A. Karpyn, et al.
 - Minneapolis Health Department: K. Klingler, L. Pratt, A. Ali.
 - UMN faculty (L. Harnack, T. Beatty, D. Erickson), post-doctoral fellows and students (C. Caspi, N. Hoeft, H. Gebauer, V. Pane)