

Research to Improve the Healthfulness of Food Environments: Highlights from the field

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No conflicts to declare.

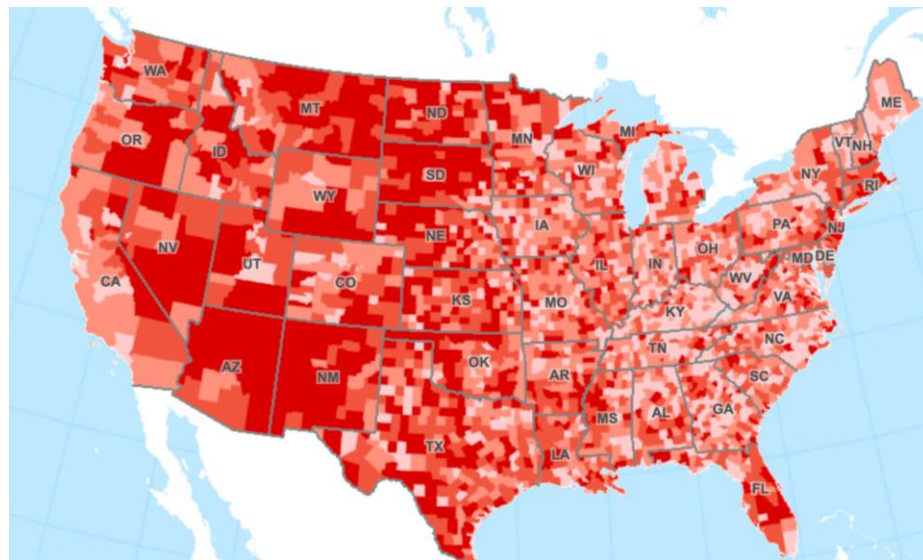


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All Americans do not have equal access to healthy food.

We have well-documented inequities in healthy food availability and retail sourcing by race/ethnicity and income.



What if we build new stores?



Research findings on the impact of healthy food financing initiatives on residents' dietary patterns has been underwhelming.

Elbel et al, Public Health Nutrition, 2015; Dubowitz et al, Health Affairs, 2015; Cummins et al, Health Affairs, 2015.

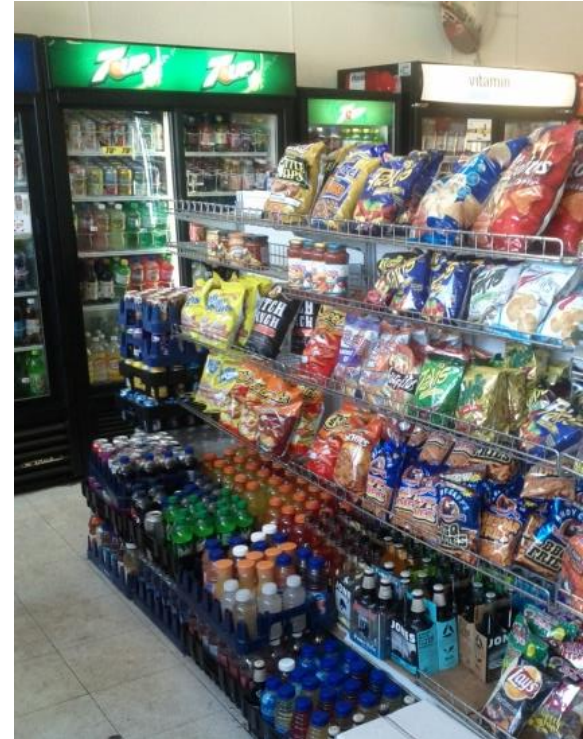


Small food stores can be important neighborhood food sources.



Small food store retailers have challenges stocking healthy foods.

- Procurement and distribution challenges for produce and other perishable goods.
- Retailer inexperience in stocking perishable foods.
- Limited shelf space and infrastructure for temperature control.
- And more!



What if we ... provide TA to small food stores?

Multicomponent, healthy corner store interventions supported:

- Procurement
- Placement
- Promotion and messaging
- Customer engagement

Much of the focus of this 1st generation work was on fruits and vegetables.



What if we ... provide TA to small food stores?

Multicomponent, healthy corner store interventions had some success but also challenges with:

- Scalability
- Sustainability



What if we ... mandate healthy food stocking?













STAPLE FOODS ORDINANCE

Minneapolis Code of Ordinances. Title 10. Chapter 203. Grocery Stores



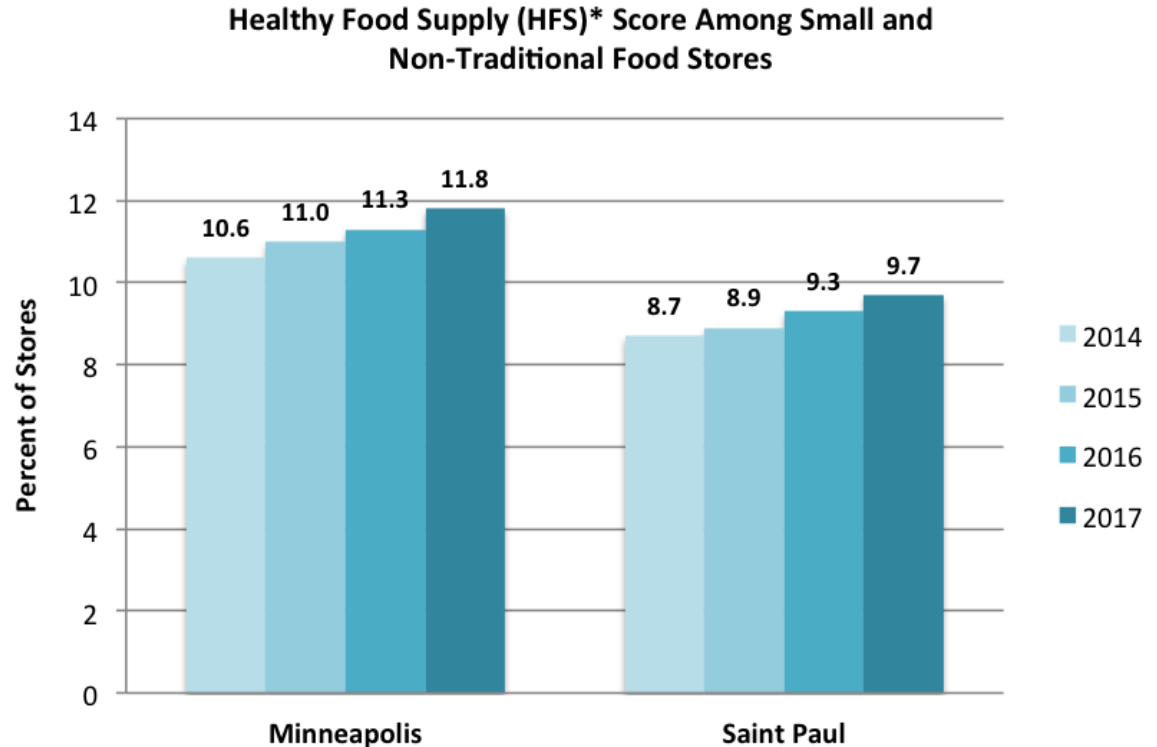
Minneapolis Staple Foods Ordinance, 2014

CATEGORY	REQUIRED
MILK 	<ul style="list-style-type: none"> • 5 gallons total • Any combination of gallon or half-gallon containers • At least 2 of the following varieties: skim/nonfat, 1%, or 2% milk, or “plain” or “original” milk alternatives
CHEESE 	<ul style="list-style-type: none"> • 6 pounds total • Packages of at least one-half pound (8oz) • At least 3 varieties
EGGS 	<ul style="list-style-type: none"> • 6 one dozen containers total • Large size only
MEAT & VEGETABLE PROTEINS 	<ul style="list-style-type: none"> • At least 3 varieties of meat, poultry, canned fish packed in water, or vegetable proteins such as nut butter and/or tofu. • Nut butter containers up to 18 oz
FRUITS & VEGETABLES 	<ul style="list-style-type: none"> • 30 lbs. or 50 items fresh and/or frozen total • At least 7 varieties; at least 5 must be fresh • No more than 50% from a single variety

CATEGORY	REQUIREMENT
100% JUICE 	<ul style="list-style-type: none"> • 6 containers total of 100% juice; at least 2 must be citrus • Frozen/non-frozen concentrate: 11.5-12 oz. containers • Juice: 59 oz. or larger containers
WHOLE GRAIN CEREAL 	<ul style="list-style-type: none"> • 4 boxes or bags total, 12 oz. or larger, whole grain cereal or cereal grains • At least 3 varieties
WHOLE GRAINS 	<ul style="list-style-type: none"> • 5 pounds total • At least 3 varieties such as 100% whole grain bread, corn tortillas, brown rice or oatmeal
CANNED BEANS 	<ul style="list-style-type: none"> • 192 oz. total of canned beans or legumes (approx. 13 cans) • At least 3 varieties
DRIED PEAS BEANS LENTILS 	<ul style="list-style-type: none"> • 4 packages total • Packages up to 16 oz.

We observed improvements in healthy store offerings over time.

Models adjusted for repeated measures and neighborhood race/ethnicity, the only covariate that differed significantly between cities at baseline.



*HFS score is a measure of overall healthfulness of store offerings. Healthier stores have higher scores. The level of change is similar in Minneapolis and Saint Paul stores.



Our data showed no consistent improvements in nutritional quality improvements of customer purchases in small and limited assortment stores in Minneapolis.



Healthy food retail interventions: 2022 review

- Strategies employed across stores of all sizes:
 - Increased stocking
 - Nutrition scoring across products
 - Nutrition messaging/in-store promotion
 - Engagement: tasting, demos, education
 - Placement: endcaps, checkouts, eye level on shelves

*Most rigorously
tested and
most promising*



Healthy food retail interventions: 2022 review

- Strategies employed across stores of all sizes:
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 - Engagement: tasting, demos, education
 - Placement: endcaps, checkouts, eye level on shelves
- Mixed results on changes in sales, purchasing and dietary outcomes for many multicomponent interventions.

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Industry's control of in-store environments

- Interviews: 72 independent food retailers in 4 cities
- Formal and informal agreements with distributors were prevalent for sugary beverages, savory snacks, and confectionaries.
- Agreements included free displays, products, signage and/or direct payments, in exchange for placement and/or price control.

*Laska et al. Food Policy, 2018;
Gittelsohn et al. J Hunger Envir Nutr, 2018;
Ayala et al. Public Health Nutr, 2017.*



Need to better understand the scope of industry influence

- Research in progress:
 - PI: Dr. Megan Winkler, Emory University
 - Qualitative interviews with ~50 industry reps, including corporate managers, sales reps, distributors.
 - Documents including photos, contracts, planograms, and other industry materials.
 - Findings to be shared at the 2023 APHA Annual Meeting.



Recommendations

- Need to have better research to more deeply understand how the food industry controls retail environments.
 - Extremely powerful, pervasive and often undetected.
 - How do we reduce the retail prominence and promotion of foods high in added sugar, sodium, refined grains, etc.?
 - Regulation can be quite limited.
- Need consumer-driven interest in these issues.





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