

Community-led fruit and vegetable consumption incentive - St. Cloud, MN

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Agenda

I. Project overview

- a) Objectives
- b) Timeline

II. Approach

- a) Community
- b) Implementation

III. Impacts on the community

- a) Study participants
- b) Key outcomes



Motivation and objective

Motivation: Somali refugees and immigrants to the U.S. consume less fruits and vegetables (F/V) compared to local populations. The researchers were motivated to implement an intervention at Somali grocery stores that would make healthy food an easy choice for people who are new to American food environment.

Objective: To investigate whether or not the intervention will increase consumption of F/V among the Somali refugee community.

Project timeline

Baseline data collection

- *November 2019-September 2020*
- In-person surveys, move to enumeration over phone due to COVID-19
- 185 respondents

Intervention period

- Training:
October 2020-January 2021
- In-store educational programming:
October 2020-Present
- Refrigeration equipment:
November 2020
- Procurement subsidies:
December 2020-February 2021

Endline data collection

- *April 2021-October 2021*
- 124 respondents

Somali community in St. Cloud

- Stearns County, MN: Primary and secondary immigration
- 13 Somali owned grocery stores, 7 restaurants
- Extension/the Somali refugee community –
Community partners

Population (Source: ACS 2019 5-year estimates)	Stearns County	Minnesota
Total population	158,452	5,563,378
• Foreign-born population	10,739	472,849
• Somali population	3,137*	36,495
(as % of Foreign-born population)	(29.2%)	(7.7%)



* Local economists believe otherwise and that this number is higher, “...estimates of the Somali community range from 4,000 to 13,000 residents.” (St. Cloud Times, 2019)

Produce Handling Training

- Developed with the input from the Somali community
- Somali language, online
- Modules:
 - 1) Is selling fruits and vegetables profitable?
 - 2) What are healthy foods?
 - 3) Handling fresh produce.
 - 4) Minnesota grown produce
- In-person follow-up with each store owner to clarify their questions and provide more information
- Completed by 4 study stores and 3 additional stores



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Certificate of Completion

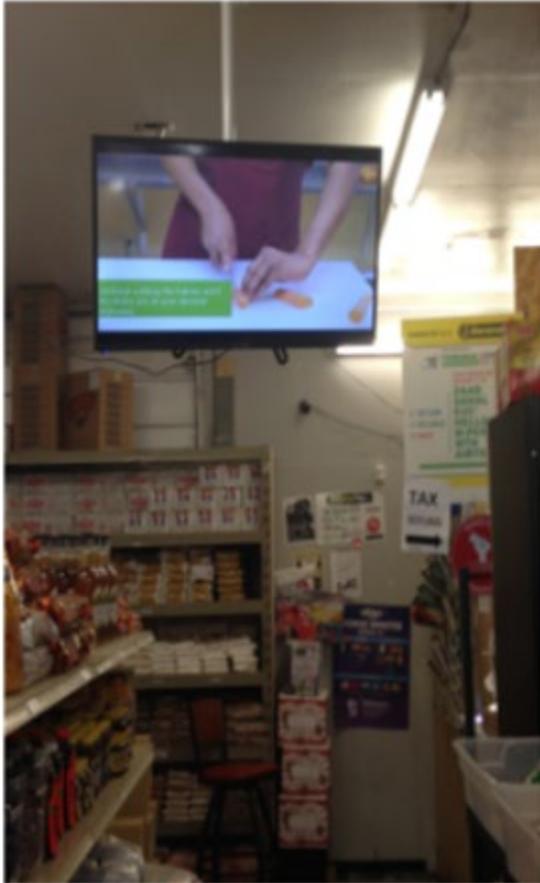
Khalil

has successfully completed the
Handling Fresh Produce Training

University of Minnesota Extension
on 10/6/2021

<https://z.umn.edu/HandlingProduce>

In-store educational programming



Refrigeration equipment

- Funds provided: \$3,375 per store
- Energy efficient and convenient produce refrigerators
- Store owners chose the type and size of refrigerator that met the needs of their stores
- Refrigerators were delivered directly to the stores



Midnimo Grocery

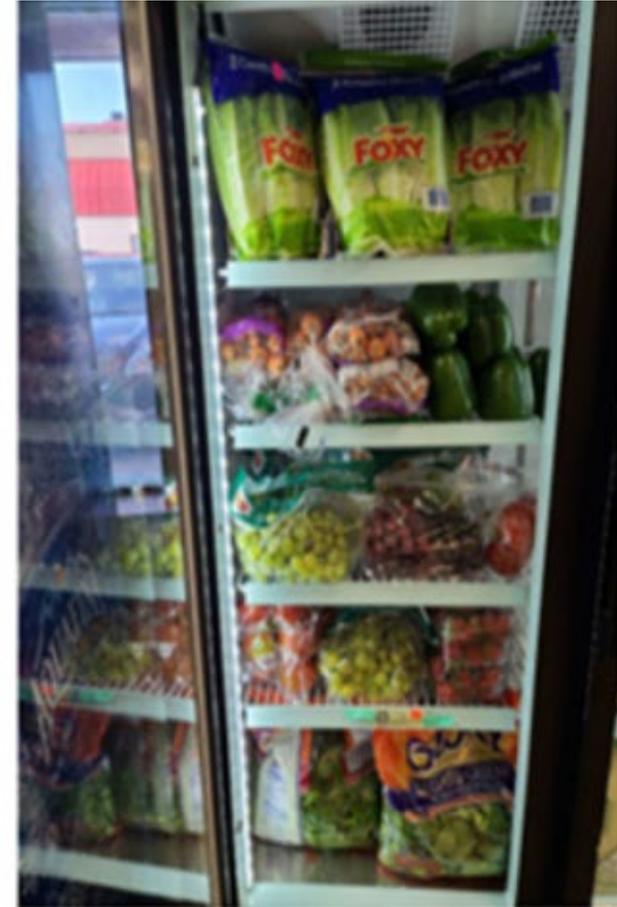
Refrigeration equipment (cont.)



Qalinle Grocery Store



Iftin Halal Store



Green Market

Procurement subsidies

- Produce procurement subsidies:
\$100/month/store × 3 months
 - Offer a variety of fruit and vegetables each month
 - Banana, papaya, apples, grapes, mango, lemon, oranges, limes, tomato, potato, green pepper, jalapenos, cabbage, lettuce, green onion, carrots, cucumber, and turmeric
- Store owners matched the subsidies
- Procured from wholesale distributors in St Paul/Minneapolis and Latino immigrant farmers in Central Minnesota

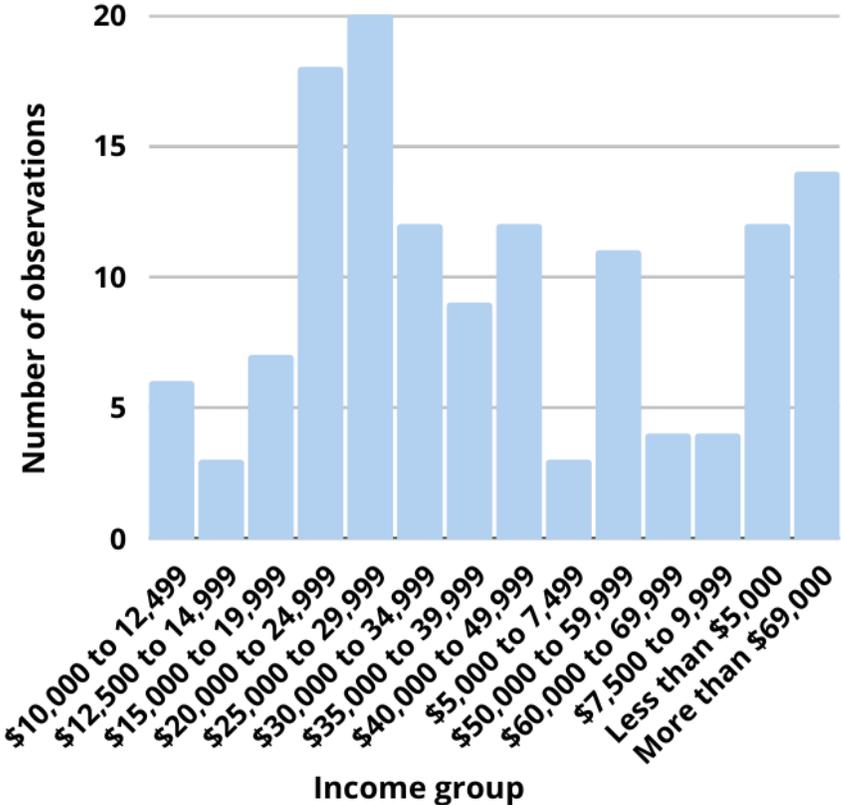


Qalinle Grocery Store

Study sample

Household income	Average	Median
2019 Stearns County <i>(n=1573, Source: ACS)</i>	\$101,798	\$83,000
Per capita household	\$37,133	\$30,760
Study sample <i>(n=135)</i>	\$36,611	\$27,500
Per capita (household) <i>(n=135)</i>	\$10,022	\$6,250

Income group distribution in study sample (n=135)



Household expenditure

Expenditure (Baseline survey)	Average weekly expenditure	Median weekly expenditure
Groceries (<i>n=171</i>)	\$254	\$200
Groceries, per capita household (<i>n=137</i>)	\$71	\$42
Nonfood household necessities (<i>n=174</i>)	\$96	\$60
Nonfood household necessities (<i>n=137</i>)	\$27	\$17

Food security status

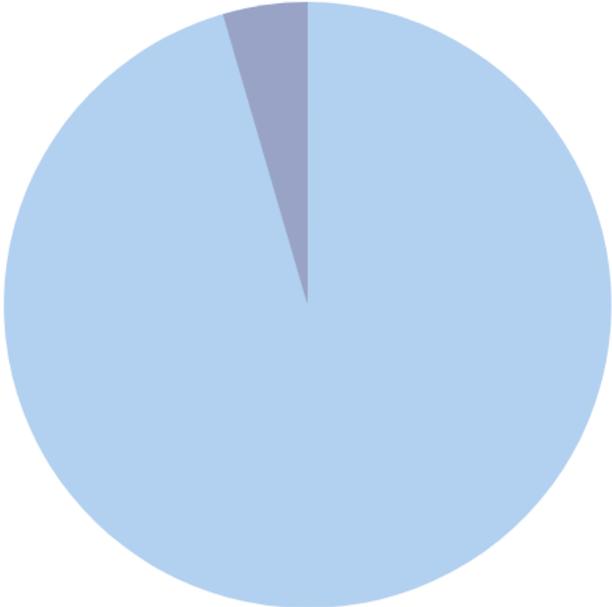
Food security (Source: ACS)	Distribution food secure
Minnesota 2019 <i>(n=1177)</i>	92.8%
Study sample	
Baseline <i>(n=178)</i>	77.5%
Endline <i>(n=124)</i>	91.9%

Food stamp/SNAP reciency (Source: CPS)	Distribution of recipients
Stearns County 2019 <i>(n=1706)</i>	5.3%
Study sample	
Baseline <i>(n=176)</i>	48.3%
Endline <i>(n=123)</i>	31.7%

Patronage at Somali grocery stores

Somali grocery store patronage distribution in baseline (n=178)

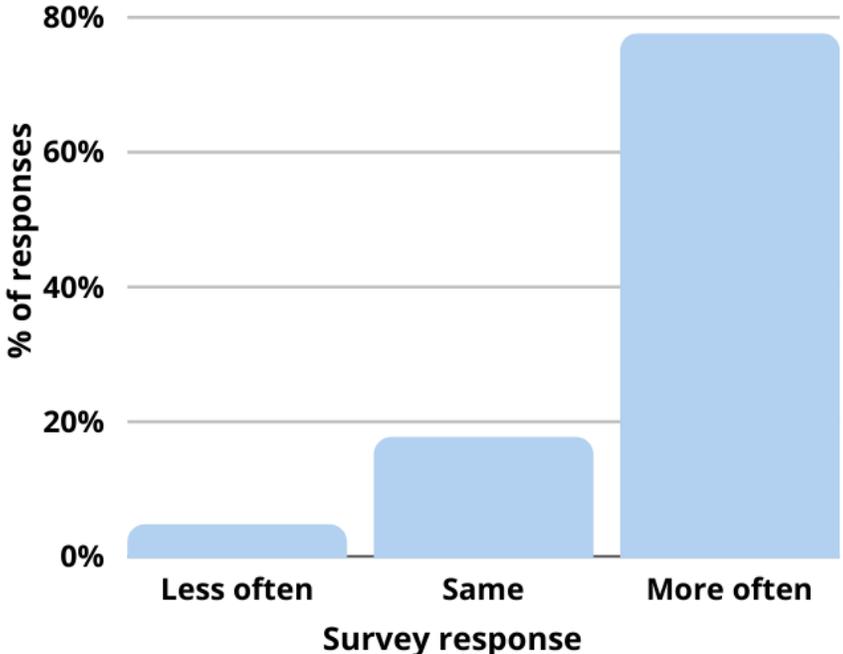
Non-Somali grocery store shopper
4.5%



Somali grocery store shopper
95.5%

Somali grocery store patronage in endline (n=124)

Do you shop more or less often at Somali grocery stores now compared to a year ago?

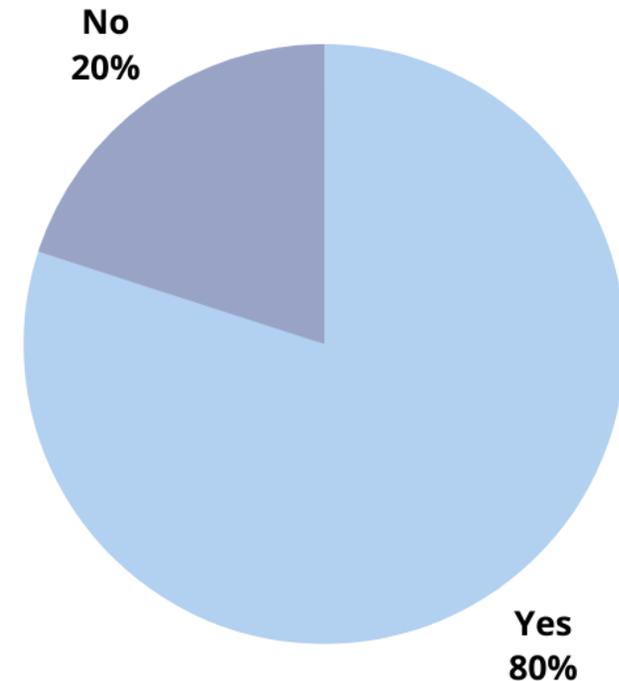


FV consumption and purchasing

Average weekly consumption (servings)	Baseline	Endline
Fruit	9.1 (n=183)	11.4 (n=123)
Green, leafy vegetables	8.9 (n=182)	11.7 (n=122)
Other vegetables	8.8 (n=182)	11.2 (n=124)

Fruit and vegetable purchasing at Somali stores in endline (n=120)

Have you purchased a F/V because you saw it at the Somali grocery store despite not planning to buy it there?



Takeaways

- Store owners can be effective agents of change to improve FV consumption among their community members
- How can we ensure similar success in future interventions?
 - Buy-in from store owners
 - Listen to store owners
 - Ease concerns of store owners
 - Build trust with store owners
 - Allow store owners to recognize their power

Q&A

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Additional citations

U.S. Census Bureau. (2019). *Place of birth, Minnesota; Stearns County, Minnesota, 2019 ACS 5-Year Estimates Detailed Tables.*

Retrieved from

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