



SuperShelf

Evaluation Final Report

What Changed?



From our photos and interviews, Here's what we saw and heard from participating food shelves:

"We've been working really hard on making it a friendly, positive environment and SuperShelf has led us in the right direction."

"I think [clients] look at us differently. I don't think they look at us as a food shelf. I think they think it's more like a grocery store and they feel that way cause that's how we treat them."

"We're also doing a lot of baking items and we're really promoting using spices and condiments to cook at home."



Department of Indian Work Food Shelf, St. Paul



CHUM Food Shelf, Duluth

"[The clients] are happier... People are more content with making their choices and they can plan that meal out as they pick the things out."

"It was nice to have the backing from SuperShelf to be able to tell the board members and communities that it is important to have healthy options too."



RiverWorks Food Shelf, Rockford

"The atmosphere and the mood of those we serve is really positive."



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Many thanks to our participating food shelves!

- Anoka County Brotherhood Council (ACBC) Food Shelf, Anoka, MN
- The Aliveness Project, Minneapolis, MN
- Community Emergency Services (CES), Minneapolis, MN
- Chum Emergency Food Shelf, Duluth, MN
- Community Action Center (CAC), Northfield, MN
- McLeod Emergency Food Shelf, Hutchinson, MN
- Meeker Area Food Shelf, Litchfield, MN
- Merrick Community Services, St. Paul, MN
- Riverworks Food Shelf, Rockford, MN
- Sibley County FoodShare, Gaylord, MN
- Catholic Charities Food Shelf, St. Cloud, MN
- Department of Indian Work, St. Paul, MN
- Interfaith Outreach & Community Partners (IOCP), Plymouth, MN
- Mora Food Shelf, Mora, MN
- Salvation Army Food Shelf, Brainerd, MN
- Community Aid of Elk River (CAER), Elk River, MN



ACBC Food Shelf, Anoka



Community Action Center of Northfield



Meeker County Food Shelf



Sibley County Food Share

SuperShelf was developed in a partnership between: Health Partners, Valley Outreach, University of Minnesota Department of Family Medicine and Community Health, University of Minnesota Extension, and The Food Group



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About the Research Study (2017-2022)

The University of Minnesota received a grant from the National Institutes of Health (NIH) to evaluate the impact SuperShelf on the food shelf environment and client health measures. Sixteen food shelves across Minnesota participated. Eight were randomly assigned to a “transformation” group. This group worked with a consultant to create an appealing and client-centered environment. The aim was to increase access to healthy and culturally appropriate food and use behavioral economics to make the healthy choice the easiest choice. The other 8 food shelves received a “delayed transformation.” They did not work with a consultant until after the study ended.

Initial (pre) data were collected in Spring 2018 and Spring 2019 with follow-up (post) data collected a year later. Due to the COVID-19 pandemic, in-person data collection measures were stopped early in March 2020. Eleven food shelves had complete follow-up data. Only client dietary recalls were completed at follow-up for all 16 food shelves. This report includes all available data.

Data Collected

Food shelf measures (collected pre and post)

Food inventory	A record of all food on the shelf available to clients; collected by research team
Food Assortment Scoring Tool (FAST)	Food stocked on the shelf over 5 consecutive open days; collected by food shelf staff and volunteers
Interviews	Staff and volunteer interviews conducted among the first wave of 8 food shelves
Implementation	A walkthrough of the food shelf physical space to measure intervention fidelity; collected by the research team

Client measures (collected pre and post)

Client cart inventory	A record of all food selected by a client at their visit; collected at the food shelf visit; includes a different set of clients at pre and post
Client dietary recalls	Client report of all food consumed in the last 24 hours, collected over the phone after the food shelf visit; same set of clients at pre and post

Summary: What did the evaluation find?

- SuperShelf was well implemented. In the transformation group, measurable changes were detected in the food shelf environment. In the transformation group, FAST scores increased.
- On average, there were no changes in the the nutritional quality of the food selected and consumed by clients in the transformation group. This is based on our main outcome measure, the Healthy Eating Index.
- Intervention effects on diet quality were similar across clients in different racial/ethnic, educational, and gender groups.
- Interviews generally indicated that food shelf staff, volunteers, and clients had positive perceptions of SuperShelf changes.
- Analyses are ongoing using additional exploratory measures of nutritional quality. Some of these have shown improvement in the transformation group.



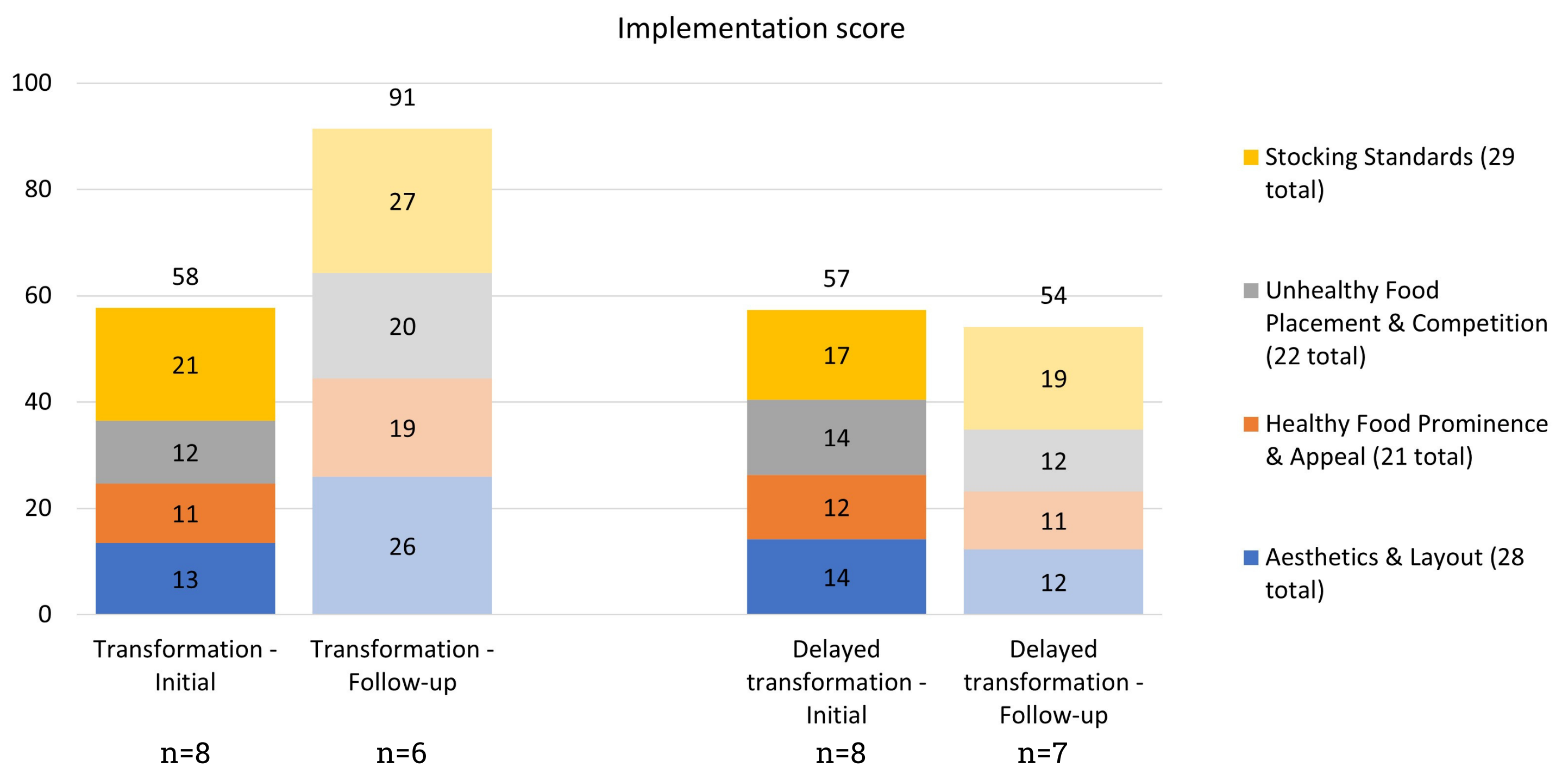
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Implementation



The **implementation** checklist is physical space and environmental assessment with a total score range 0-100. It is made up of four subscores that measure practices encouraging healthy choices: stocking standards (29 points), healthy food prominence/appeal (21 points), unhealthy food placement/competition (22 points), and aesthetics/use of space (28 points).



The Implementation score **increased** among food shelves in the transformation group and **stayed about the same** among food shelves in the delayed transformation group, from the initial time point to the follow-up.

This indicates the SuperShelf intervention was well-implemented in the transformation group. There were measureable improvements in the elements of the physical and environmental space that SuperShelf aimed to improve.

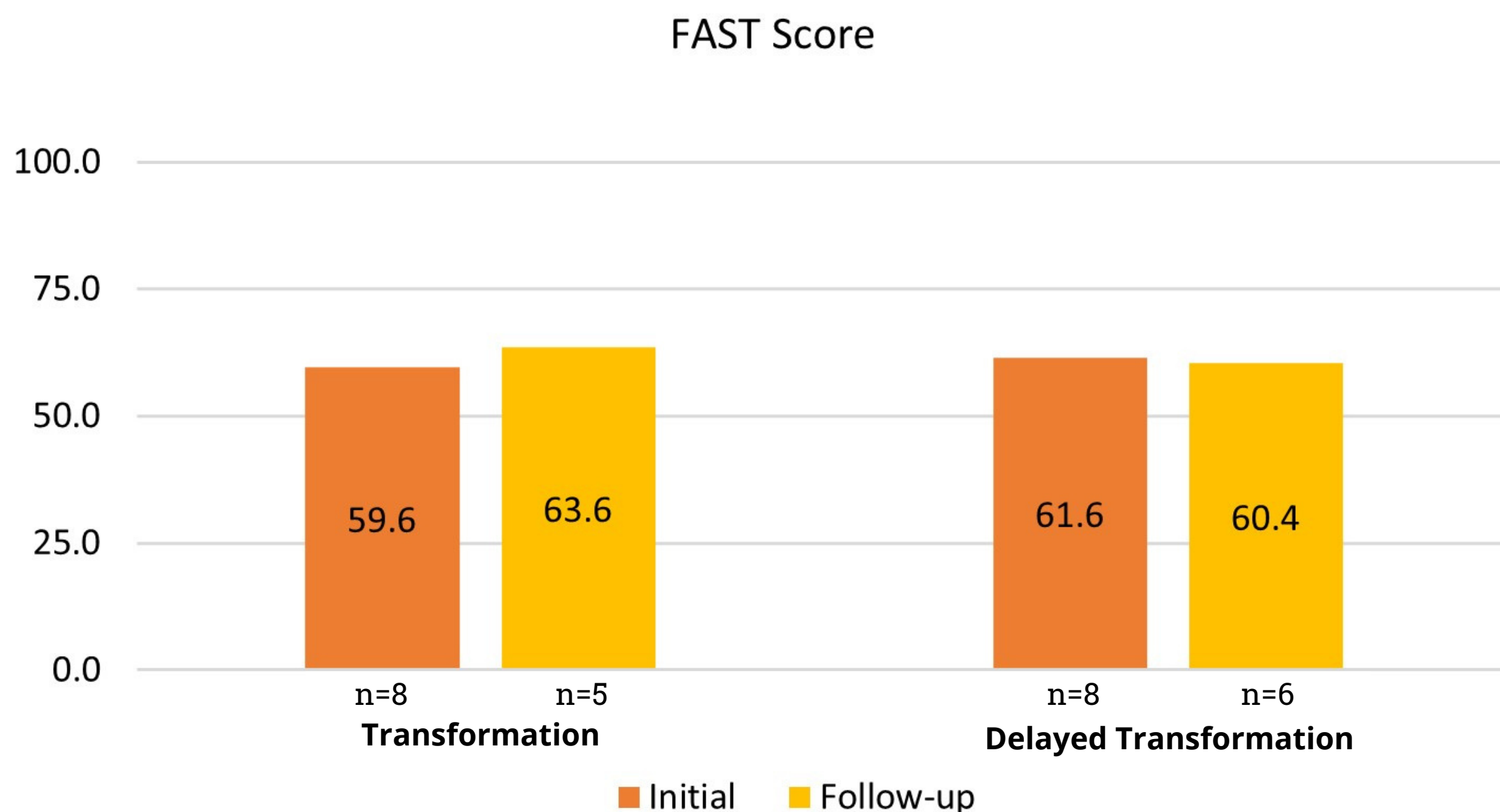


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FAST

The Food Assortment Scoring Tool (FAST) is a tool adopted for food shelves from the Healthy Eating Index (HEI). It is based on pounds and correlates well with the HEI. Scores range from 0 -100, with 100 being the highest (best) score.



The FAST score **increased** among food shelves in the transformation group and **stayed about the same** among food shelves in the delayed transformation group, from the initial time point to the follow-up.

This indicates that SuperShelf improved the nutritional quality of the food stocked on the shelf, as measured by the FAST.



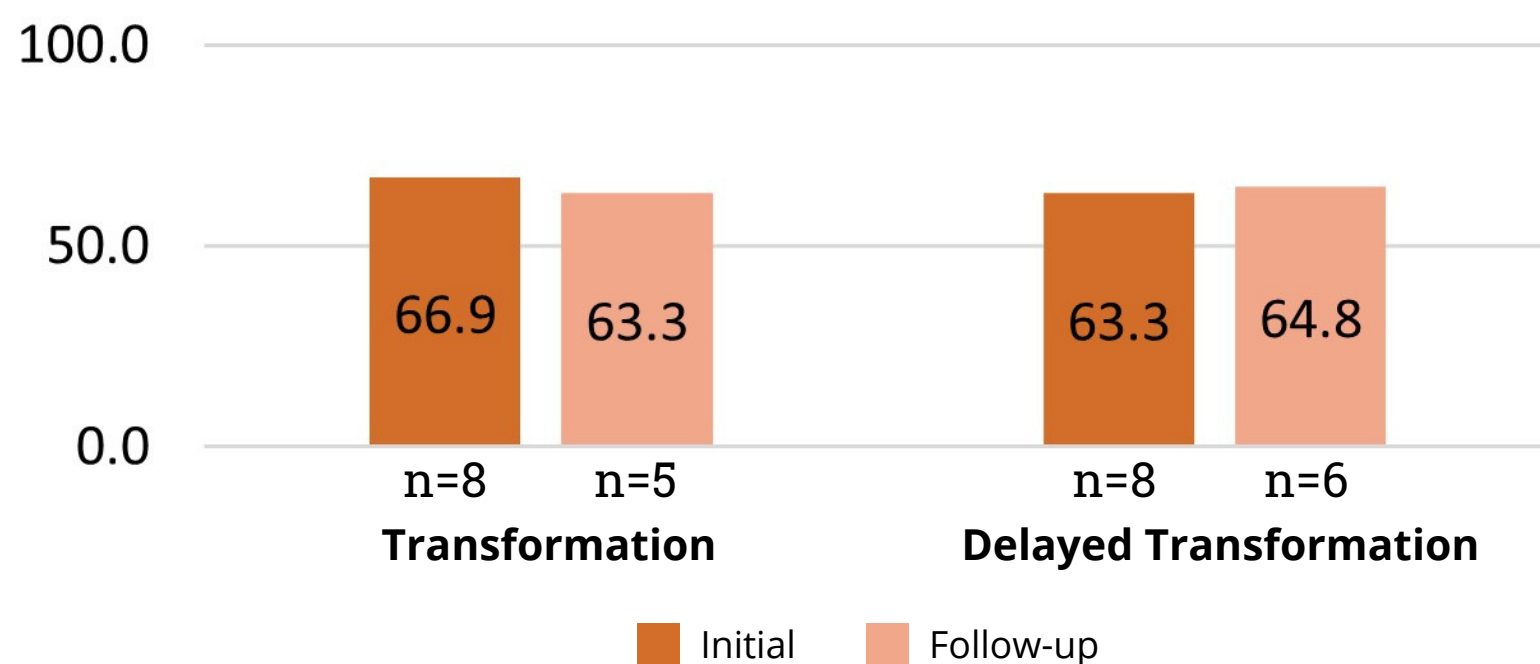
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Healthy Eating Index

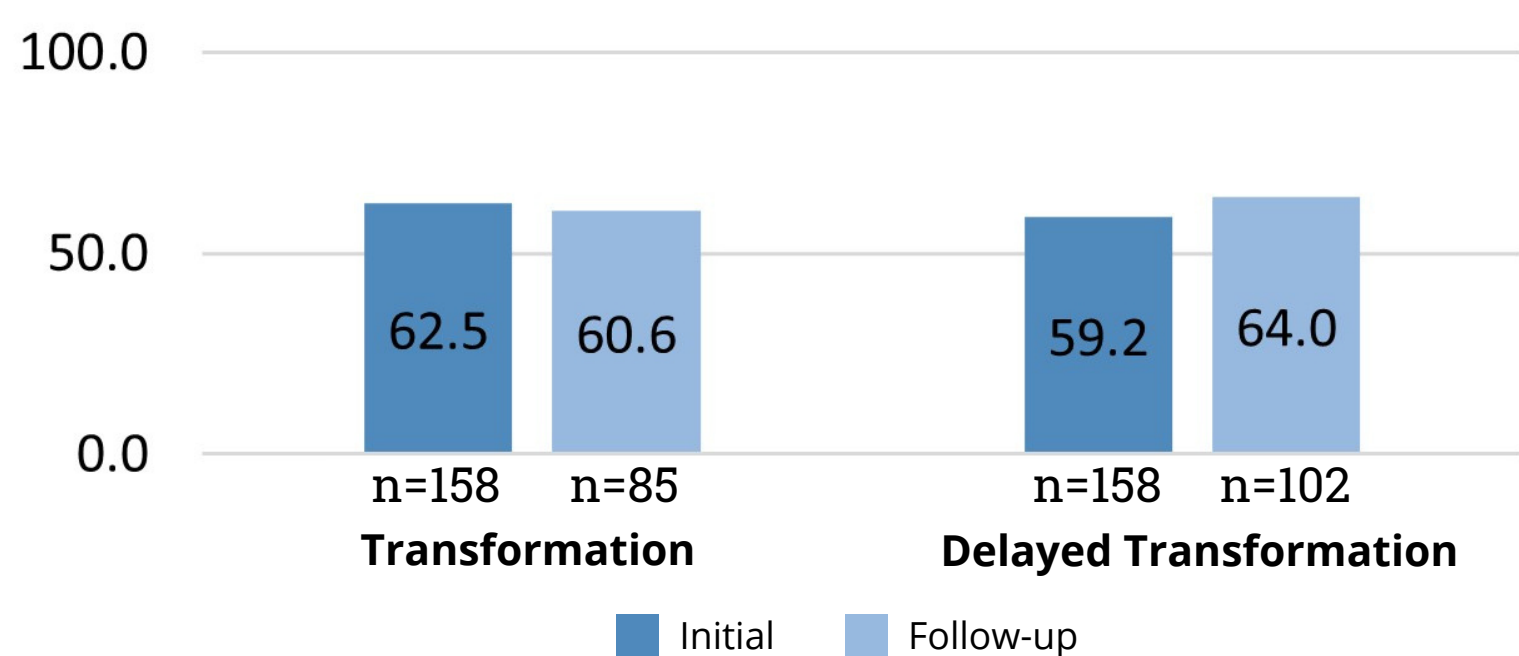
The **Healthy Eating Index (HEI)** is a scoring measure that assesses diet quality of specific foods based on the Dietary Guidelines for Americans. It has a scoring maximum of 100 points, 100 being the highest (best) score. The study used the 2015 version of HEI (HEI-2015).

HEI-2015 - Food shelf inventory



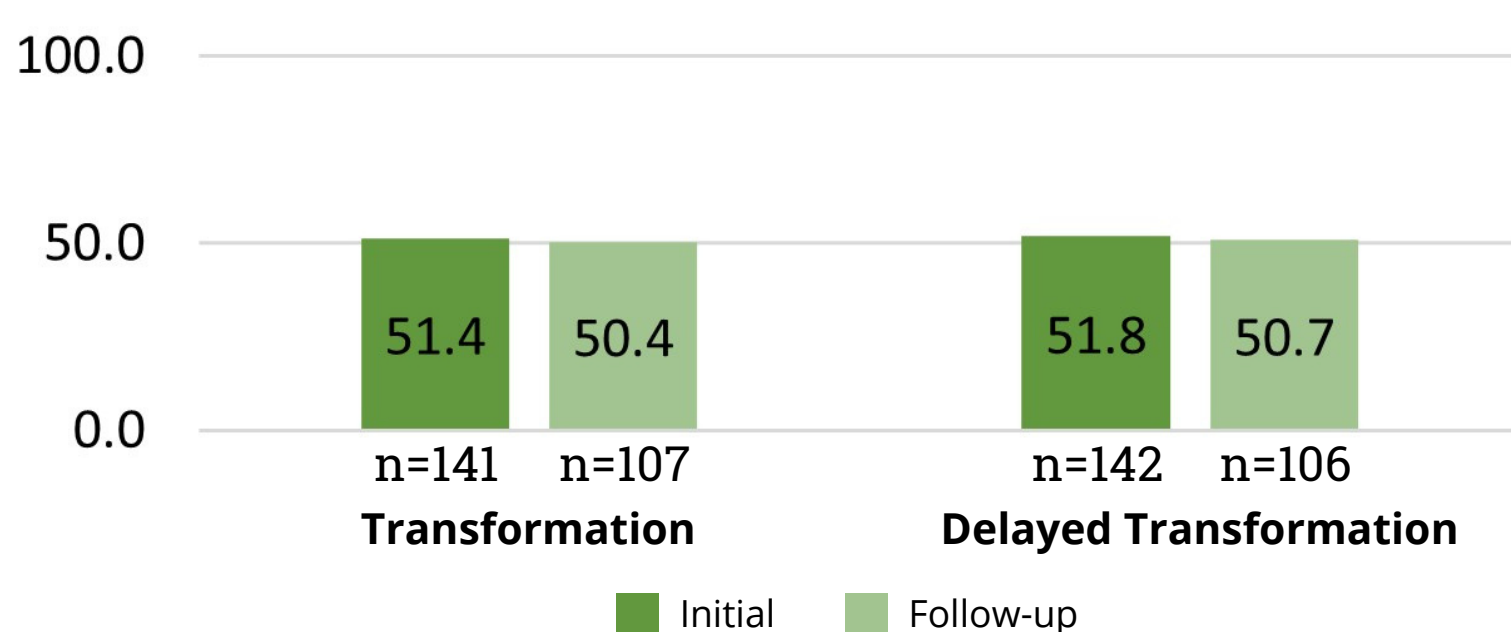
The diet quality score of the food on the shelf available to clients **stayed about the same** in both groups from the initial time point to follow-up.

HEI-2015 - Client Food Selection



The average diet quality score of food selected by clients at their visit **stayed about the same** in the transformation group and **increased** in the delayed transformation group from the initial time point to follow-up. Note that the initial and follow-up data come from two different sets of clients.

HEI-2015 - Client Dietary Recalls



The average diet quality score of food that clients consumed **stayed about the same** in both groups from the initial time point to follow up. The initial and follow-up data come from the same set of clients, who were followed for one year.

This indicates that SuperShelf did not improve the nutritional quality of the overall food inventory, food selected by clients, or total food consumed by clients, as measured by the HEI.



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Who Participated in the Study?

Demographics and Initial Data		
	Transformation	Delayed Transformation
	N = 158	N = 159
Age	%	%
18 - 24	3.8	3.1
25 - 44	39.9	38.9
45 - 64	39.9	45.3
65+	15.8	11.9
Prefer not to answer / unknown	0.6	0.6
Gender		
Female	61.4	66.7
Male	38.0	31.4
Non-binary or self-described identity	0	0.6
Prefer not to answer / unknown	0.6	1.3
Racial Background		
Black (African American or African)	8.2	23.9
Hispanic / Latino	12.7	8.2
Native American / Alaska Native	9.5	3.1
White	56.3	56.0
Other or more than one race / Ethnicity	11.4	5.0
Prefer not to answer / unknown	1.9	3.8
Economic Factors (percent responding "yes")		
Employed	36.7	34.0
Current participation in SNAP	38.6	45.9
Current participation in WIC	15.2	11.9
Food insecure	62.7	69.2
Food Shelf Use		
Visits food shelf once a month or more	76.6	79.3
Has been visiting the food shelf for a year or more	75.3	67.3



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What is happening with SuperShelf now?

- Over 40 food shelves have transformed to be a SuperShelf.
- SuperShelf continues to live on through a multi-organizational partnership. The partnership continues to promote the SuperShelf values and provide leadership in the Minnesota food assistance community.
- University of Minnesota-Extension Educators are available to provide support with new or ongoing SuperShelf transformations.
- For more information, visit www.supershelfmn.org
- If you need support or resources to continue implementing SuperShelf in your community, see our contact list at <https://www.supershelfmn.org/contact>

Conclusions

- SuperShelf was well-implemented. It was also well-received by food shelf staff, volunteers, and clients. Staff and volunteers especially noted a more pleasant physical space and an environment that reduced stigma and promoted client choice.
- Nutritional quality measures are difficult to change.
 - For the *inventory* HEI, scores were relatively high at the initial measure. In fact, scores were higher than the U.S. food supply. It may have been difficult to see improvements in inventory because of this.
 - For client *diet quality* HEI, scores include food from all sources, not just the food shelf. For the greatest impact, efforts must look beyond the food shelf, including improving the community food environment and addressing the root causes of food insecurity.
- The COVID-19 pandemic limited the follow-up analysis to only 11 of 16 planned food shelves. Results may have been different with complete data from 16 food shelves.



Community Emergency Services, Minneapolis