



Choose Health: December 2014 Update

A health and hunger project funded by Hunger-Free Minnesota

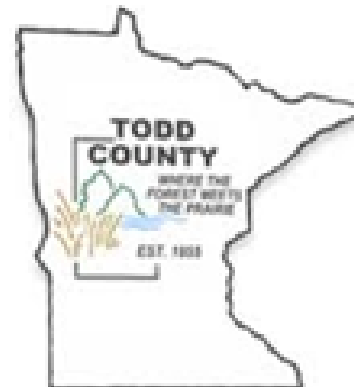
In partnership with: Region Five Development Commission, Lakewood Health System, SPROUT, Todd County, University of Minnesota Extension, Prairie Bay, and EnSearch



The goal of Hunger-Free Minnesota is to increase the number of meals available to food-insecure Minnesotans by 60 million by 2015 through:

- Increasing the amount of food available through the emergency food system by 50 million meals.
- Adding 30 million meals through increased enrollment in the Supplemental Nutrition Assistance Program (SNAP).
- Adding 20 million meals by increasing enrollment in and/or use of public child nutrition programs for children and families.

Choose Health is one of the Hunger and Health projects funded by Hunger-Free Minnesota. It was designed and is implemented by a unique public/private partnership: Region Five Development Commission (R5DC), Lakewood Health System, SPROUT, Todd County, University of Minnesota Extension, Prairie Bay. EnSearch, Inc. serves as project evaluator through a Hunger-Free Minnesota contract.

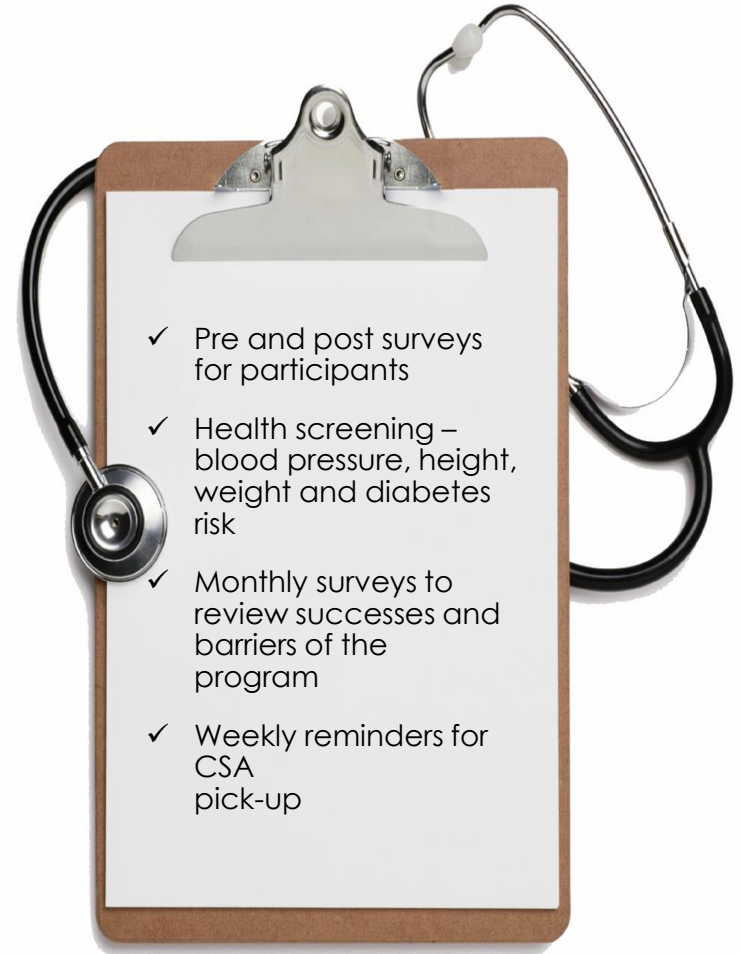


- The Choose Health project expands access to locally grown foods in ways that address food insecurity through an innovative partnership.
- Funded by Hunger Free Minnesota, physicians from Lakewood Health System refer families for a Community Supported Agriculture (CSA) membership. Families receive locally grown/raised commodities bi-monthly from “SPROUT MN” (a 5-county regional food hub of 40+ local growers).
- The program includes an extensive in-take process of pre & post health care screenings from Lakewood, and nutrition education, cooking and preparation demonstrations, and recipes from the University of MN Extension, alongside a concentrated community referral process and ongoing support for food insecure individuals offered by Todd County Public Health. Additionally, cooking demonstrations are offered by local premier chefs from Prairie Bay restaurant with participants of the program receiving small food prep supplies for those in need.
- The program is administered by R5DC.
- There were 339 families screened; 66 were food insecure
- 51 agreed to participate in the program.
- 40 families participated on a regular basis.
- 31 families completed and will continue into Phase II
- 19 new families quickly recruited for Phase II



Outcomes to Date (brief summary)

- 5,725 Meals for food insecure families (Phase I)
- \$8,000 Revenue for 40 small regional farmers.
- Through a partnership with Todd County and the Statewide Health Improvement Program (SHIP) provided \$552.00 for Market Bucks (an additional 235 meals).
- Thought a partnership with the Staples Community Foundation provided kitchen tools – based on the needs identified by a participant survey.
- A model has been developed with print and video materials that will aid in replication.
- Nation-wide discussions about the program (see NADO Webinar).



Building an Inclusive Regional Food Economy: Lessons from Central Minnesota's Choose Health Program



November 13, 2014
2:00 - 3:15 ET / 1:00 - 2:15 CT

<http://www.nado.org/choose-health-webinar/>

NADO
NATIONAL ASSOCIATION OF DEVELOPMENT ORGANIZATIONS
RESEARCH FOUNDATION

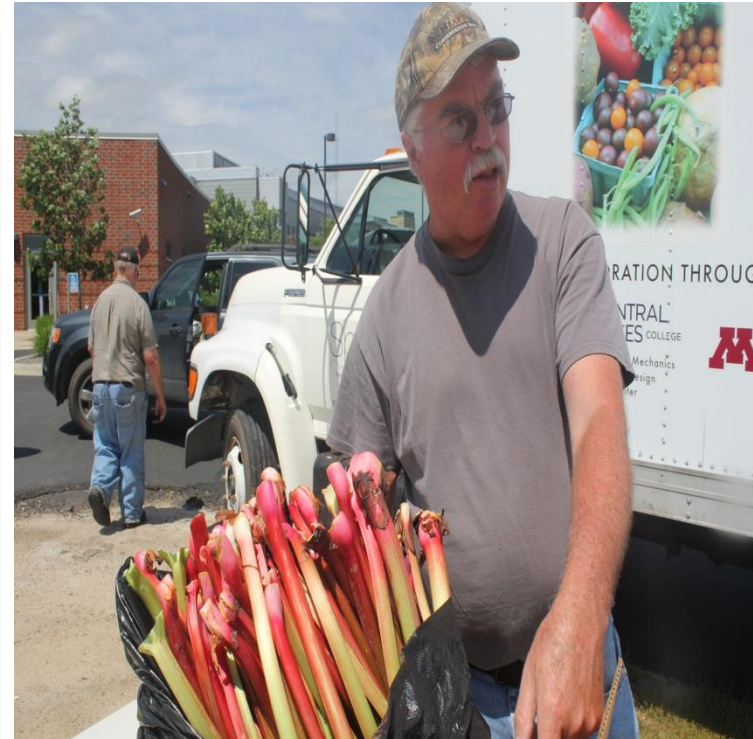
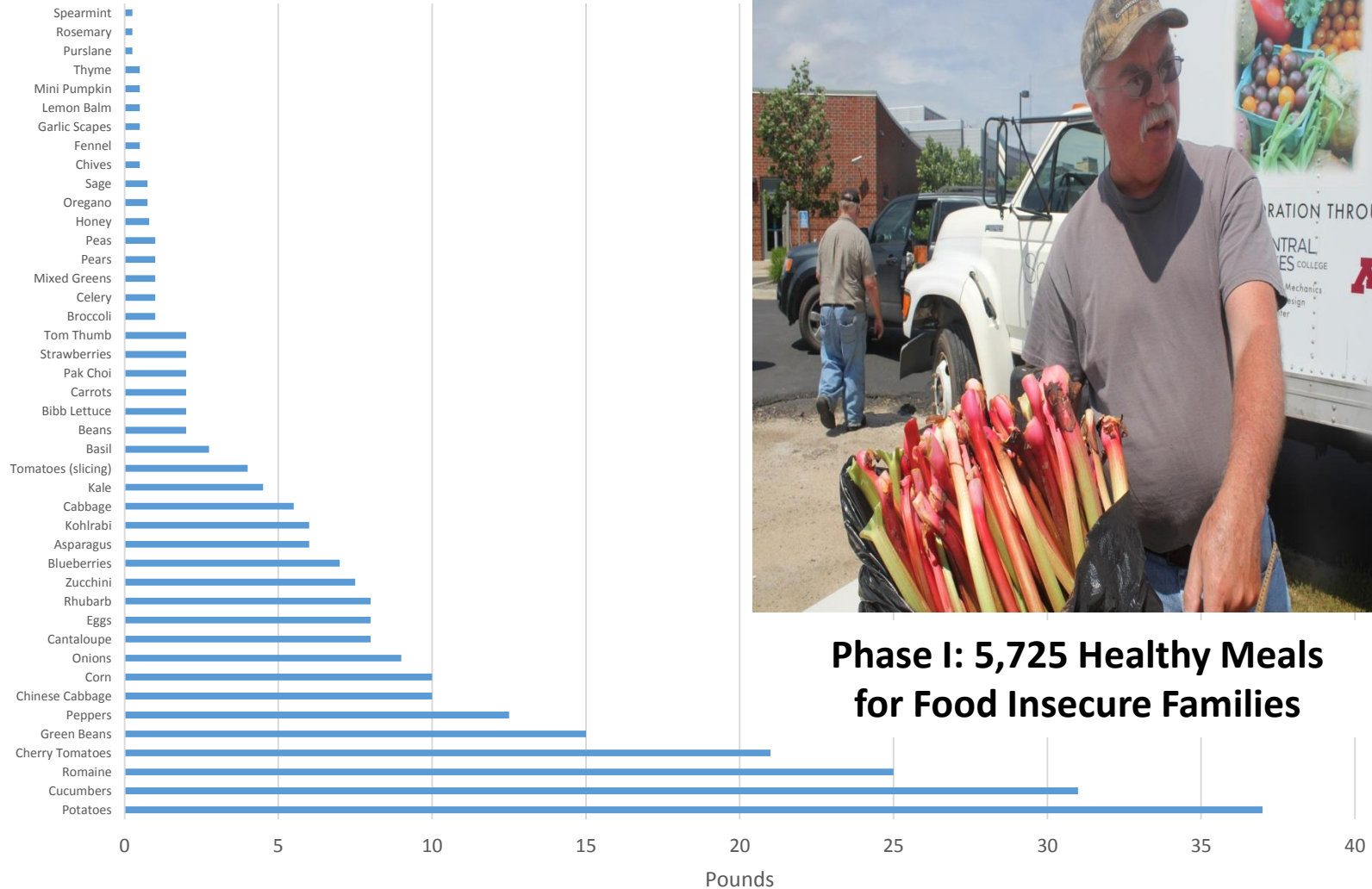
Sustainable Communities
 Learning Network

Outcomes to Date, continued

Phase II Program expansion to cover the winter months.

- SPROUT providing first ever winter CSA for 50 families
- 31 of the original cohort were retained
- 19 new families quickly recruited; providers were surprised about the level of food insecurity and response/desire to participate in Choose Health
- First Winter CSA delivery of 3,12.5 pounds for 2,244 meals in November
- The second delivery will take place on December 23. It will engage the Staples High School FFA students in repacking the sacks. A turkey challenge by Lakewood Health System staff will provide each family with a holiday turkey.





**Phase I: 5,725 Healthy Meals
for Food Insecure Families**

Health/Behavior Outcomes

The health care professionals cautioned that health and healthy behavior changes were unlikely in the few short months of this pilot; however, gains were evident for the 28 with both a pre and post survey:

- There was **an increase** in the percentage who rated their health as good or better Pre = 57% Post = 71% (Slide 28)
- The **average number of servings consumed increased** for Fruit and Vegetables (Slide 29-32)
- The average number of days of physical activity did not change (Slide 33)
- Data regarding eating habits for those with and pre and post survey (pairs) show **two promising behavior changes**: a decrease in average number of meals eaten while watching TV and an improvement in the percentage eating dinner at a table with family and friends 3 time or more. (Slide 35)



Health/Behavior Outcomes from Pre/Post Survey (Pairs = 28), continued

- There were **improvements** in their assessment of their skills to plan a healthy meal, prepare a healthy meal, and shop for healthy foods. (Slide 39)
- The changes in Blood Pressure were: **29% Improved** BP, 21% Worsened BP, 46% No change in BP. (Slide 42).
- One improved their BMI going from **Obese to overweight**. (Slide 44-45).
- 6 of the 7 who participated in Choose had diabetes. **Both measures went in the desired direction** (an increase in the number of days the participants followed their providers' recommendations regarding meals/snacks and testing their blood sugar (Slide 46-47).
- 13 (46%) **gained access to resources** such as MNCare, Energy Assistance Program, SNAP, WIC, Earned Income Tax Credit (EITC).
- **Satisfaction** with care provided at Lakewood Health Systems **remained high** (See Slide 48).



How can the program be improved? Six did not respond and 6 with a pre/post survey wrote “nothing”. A few offered suggestions regarding more help with food preparation of foods that were new to them.

Two suggestions are already being addressed in Phase II:

1. The program is now for an entire year and
2. Central Lakes College is going to provide in the spring irrigated land for participants to grow their own gardens. The will also implement a gleaning component next year.

In addition, Lakewood Health Systems is:

1. Adding the food insecurity questions to forms for both the well child visit and diabetes visit forms.
2. Working with Hunger Solutions SnapRx (another HFMN pilot project) to explore ways to support patients/families who are identified as food insecure.
3. Exploring options to manage the EBT system next year for the farmers market.



The value ... in their continuation grant to HFMN, Lakewood Health System staff described how this grant has led to a new way of doing business:

“The Choose Health team has addressed sustainability of the program through the strategic approach within this submittal.

Hunger Free MN has been the partner that has fostered new relationships and provided opportunities for our region to work in new ways.

It has been refreshing for private/public health care professionals to work alongside economic development practitioners and farmers, in new ways that achieve our collective goals.

This new way of doing business will no doubt evolve this program and benefit our region..”

Even further testimony of how the partners have benefited may be found on the soon-to-be-released video. An extended draft version may be found at:

<https://www.youtube.com/watch?v=HdudNW3zbsc&feature=youtu.be>



The value ... 100% would recommend the program to others. Nothing is more profound than the voices of the food insecure:

It gives families another food option. I have never been able to use a CSA and it was a great experience."

"I loved it all."

"Any program that provides recipes for healthy meals is an excellent idea for families and young children, in my ECFE classes we are always trying to find healthy recipes that are quick and easy."

"It is awesome trying new things and having fresh veggies to eat"

"Especially the poor, every little bit helps."

"helped to have fresh veggies I may not have been able to afford"

"It encourages healthy eating and helps those who may not have the means to buy fresh foods to have some"

"it was such a relief to know that we would be getting fresh local produce biweekly"

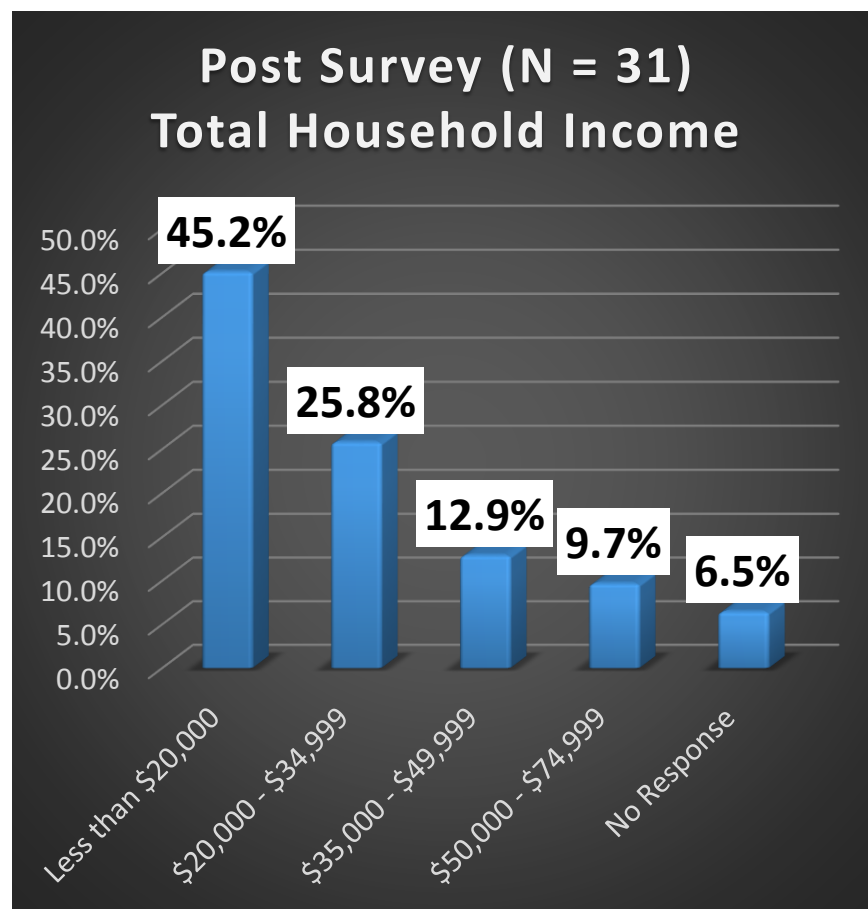
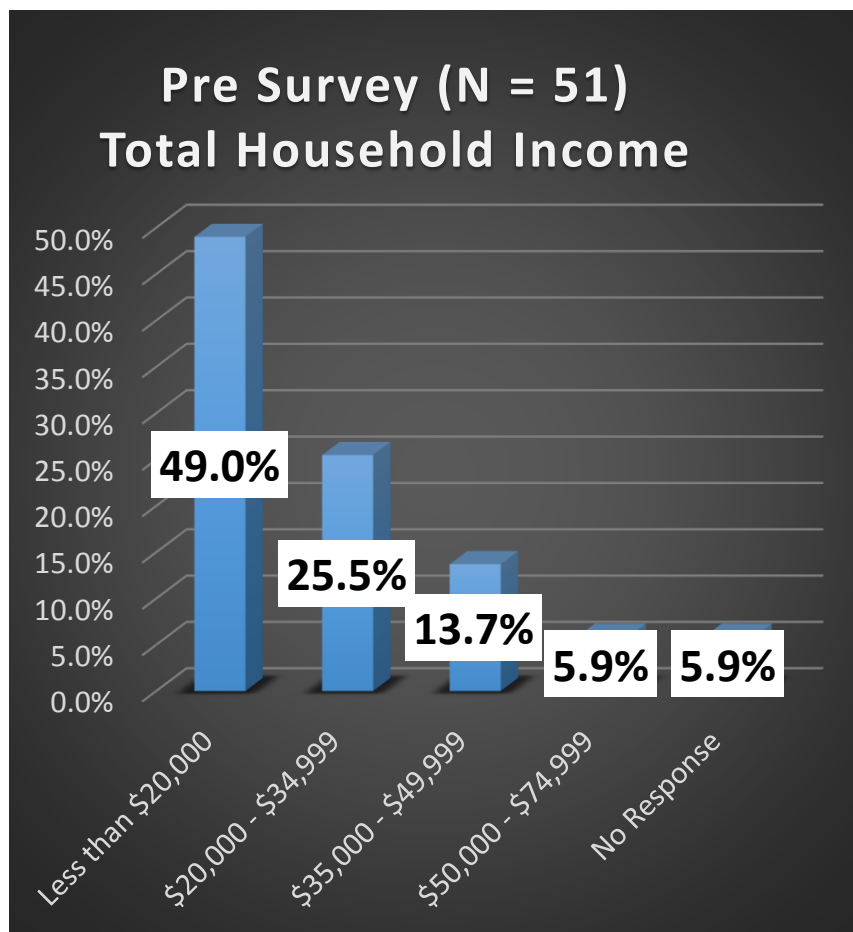




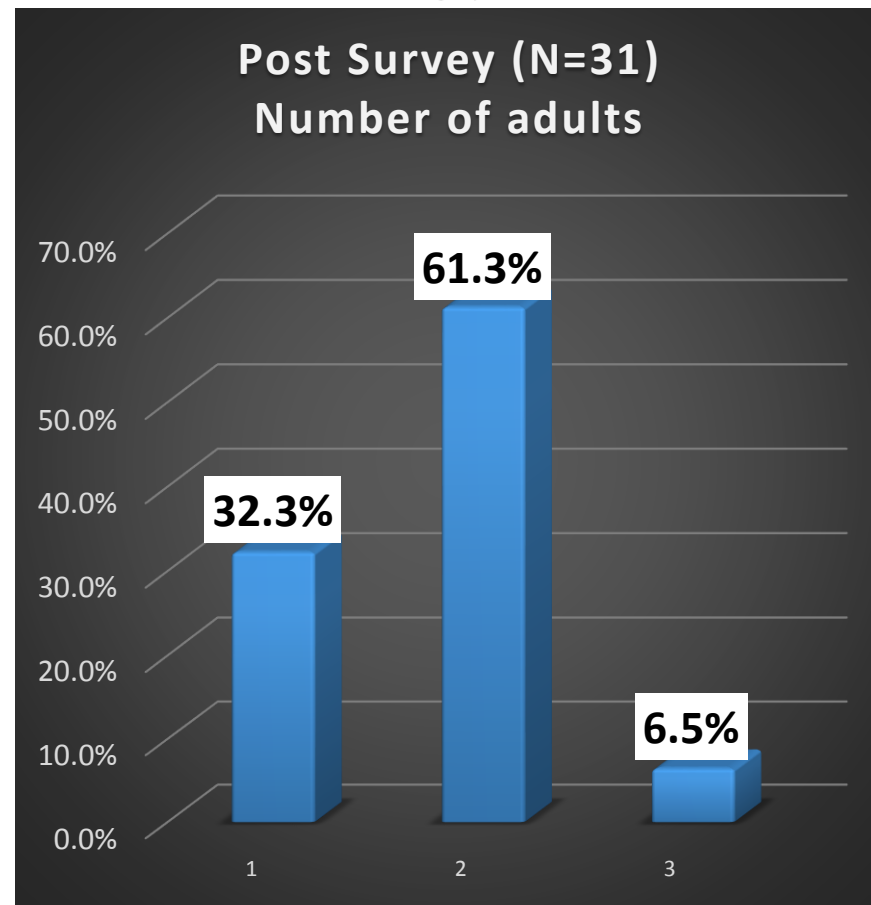
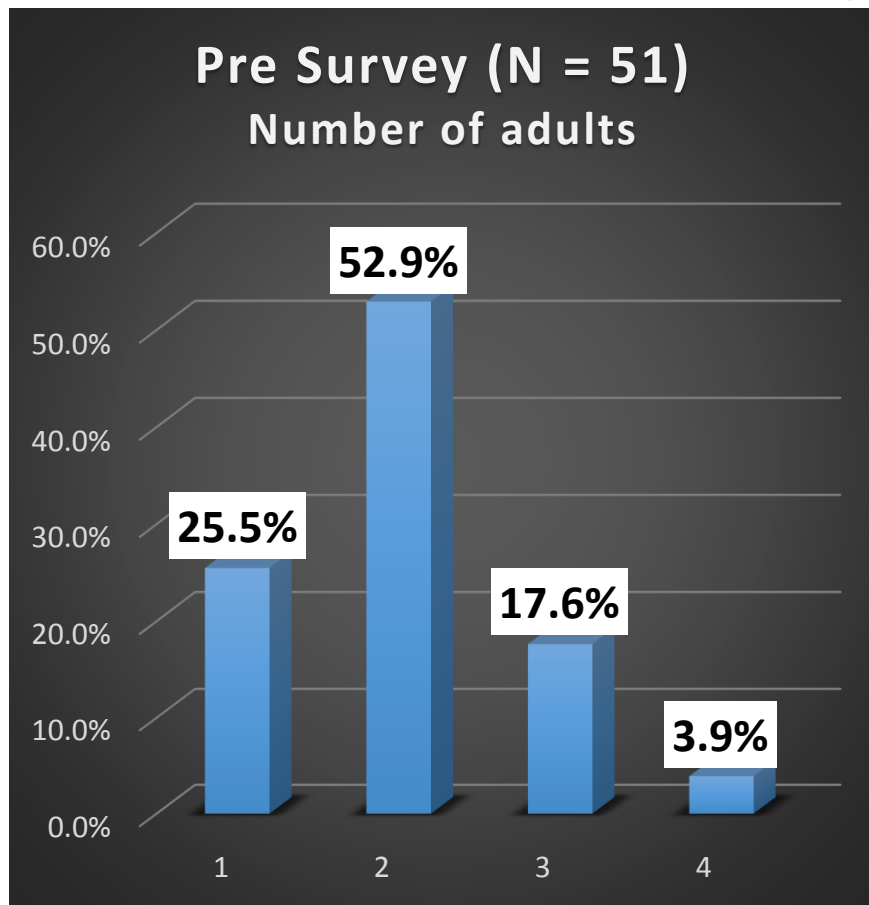
**Appendix I. Participant Profile: Food Insecure Families
Enrolled in “Choose Health”**
Pre Survey = 51 and Post Survey = 31



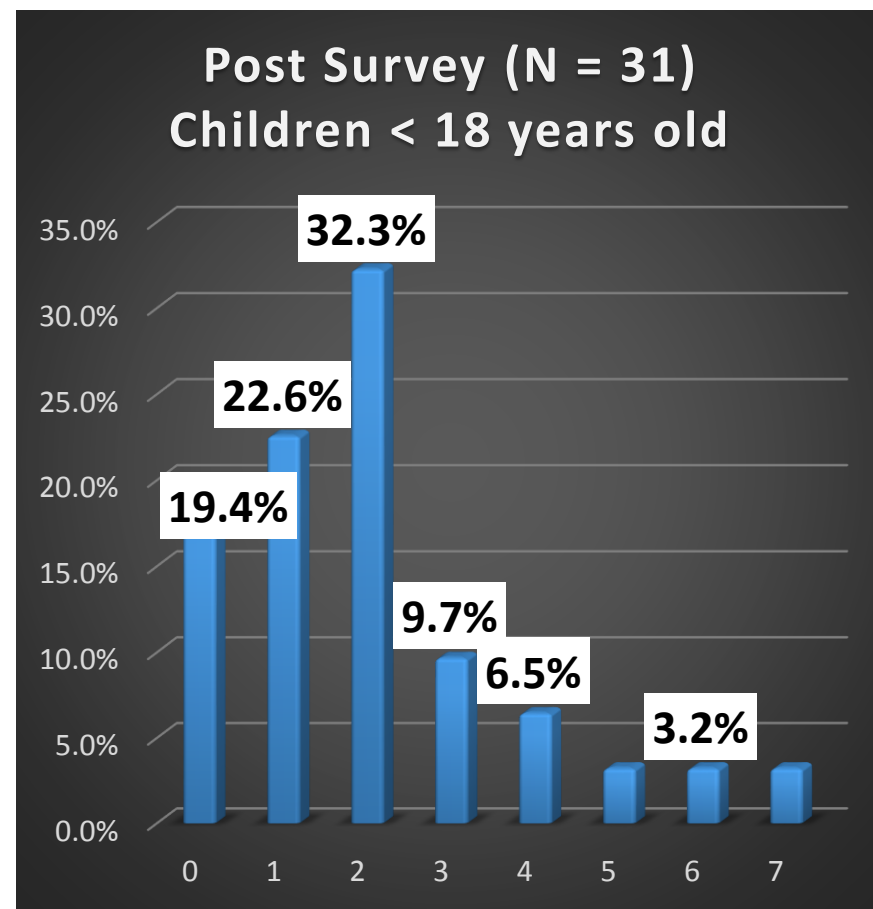
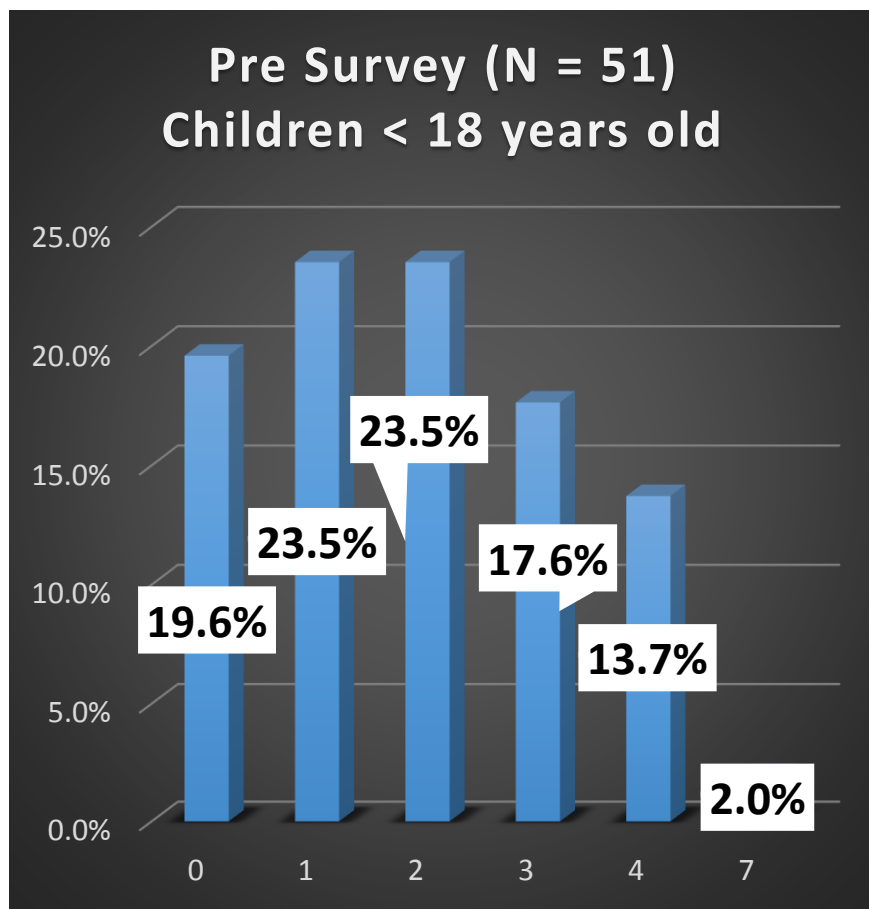
Most of the food insecure participants lived in a household with less than \$20,000 total income from all earners and all sources in 2013.



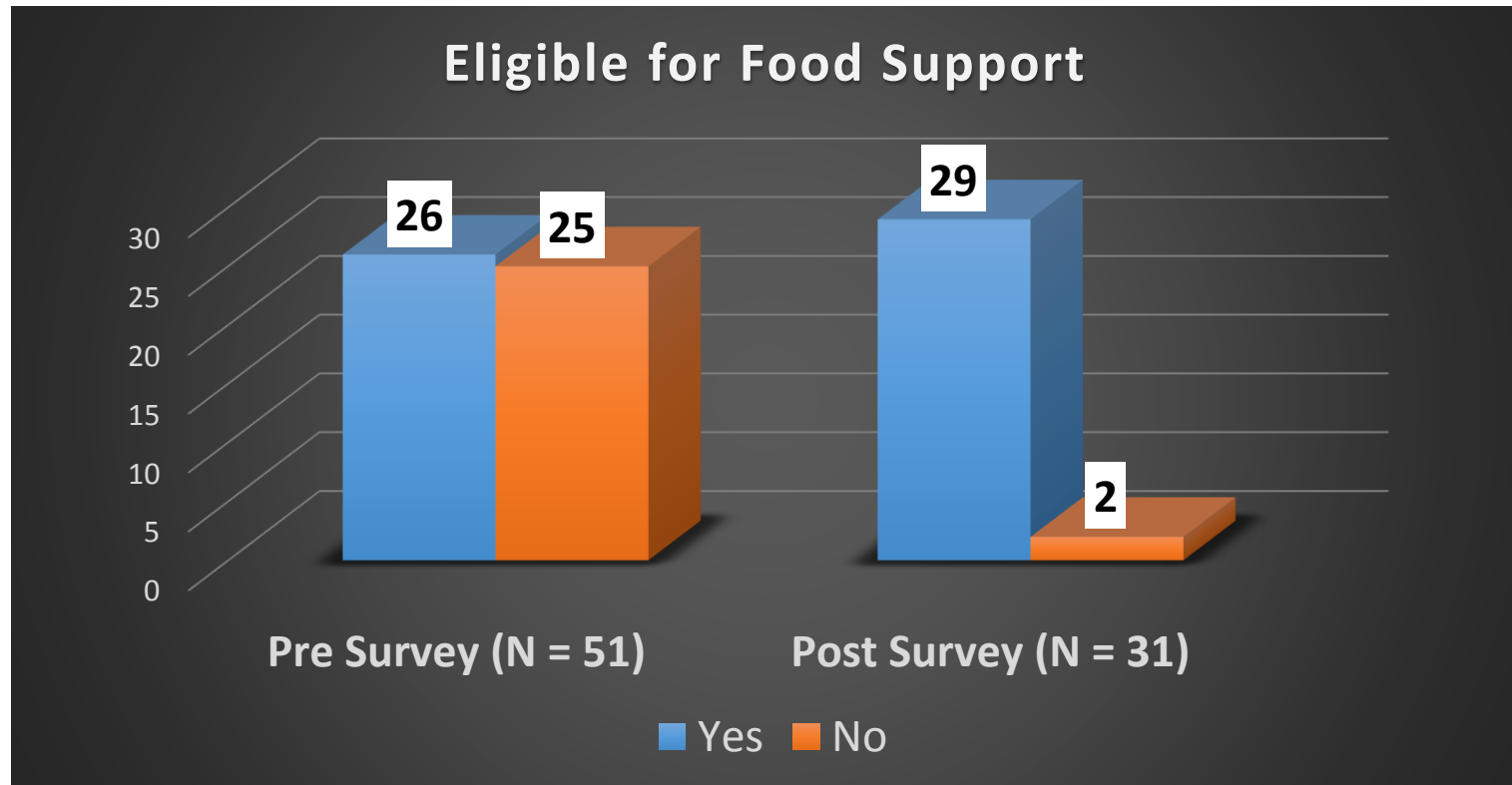
Most of the food insecure participants lived in a household with 2 adults.
(Number of adults in the household age 18 or older; including you.)



Most (46.5% pre-survey and 54.9% post-survey) had 1-2 children < 18 years old. There were 12 (23.5%) of the Food Insecure participants who were pregnant at the time of intake; 2 (6%) were pregnant when they completed the post survey.



Half (51%) of the 51 food insecure families are eligible for food support. Those who completed the post-survey were more likely to be the very poor – in other words those eligible for SNAP <165% FPL or WIC <185% FPL. These families will be supported through the winter with HFMN’s extension grant.



100% (51) of the Food Insecure Families who completed the pre-survey had health insurance; 94% (29 of 31) who completed the Post-survey had health insurance.

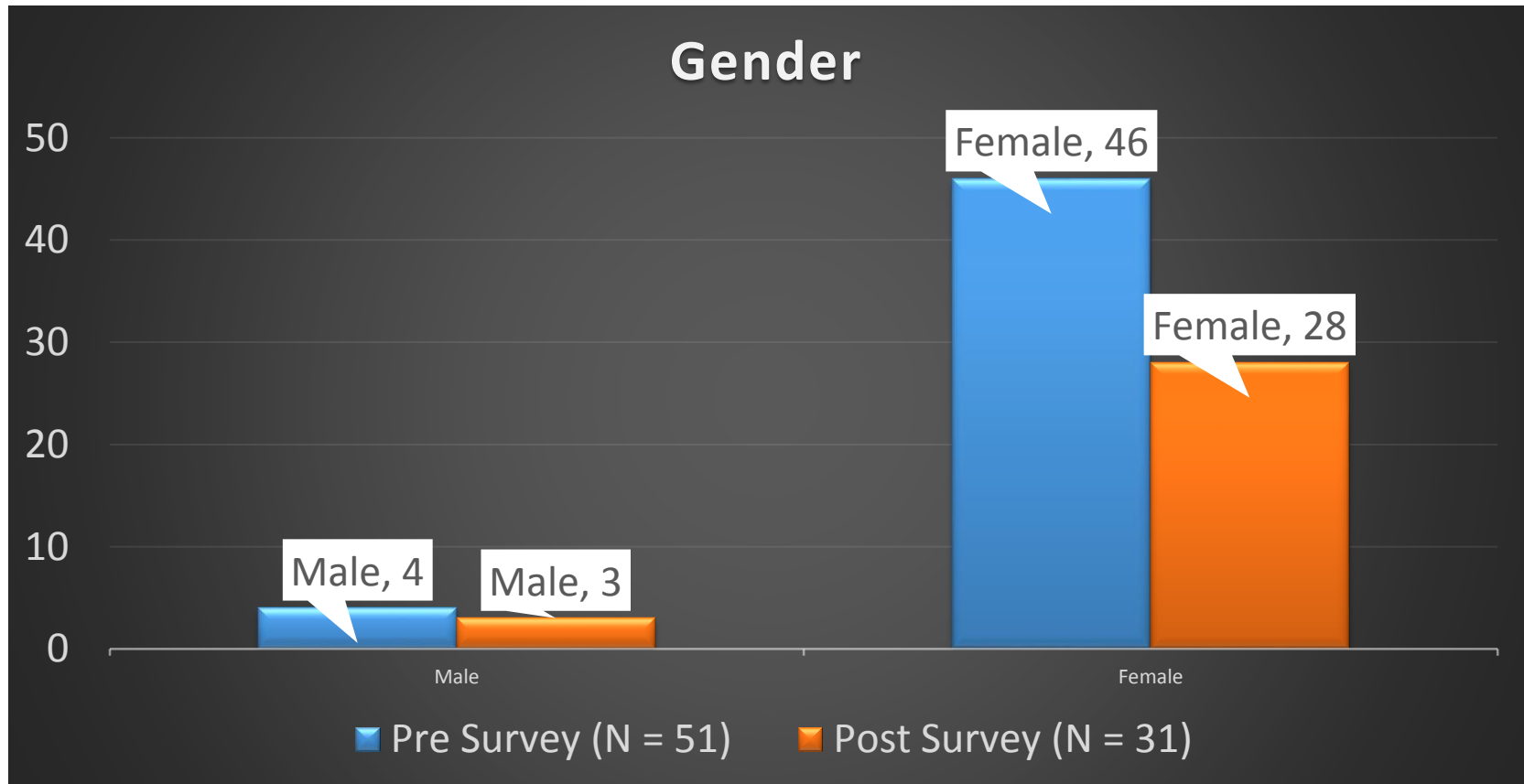
	Pre-Survey (N = 51)	Post Survey (N = 31)
Health Insurance from employer	13	6
Health insurance bought directly by yourself or family	5	2
Medicare	4	2
Medicaid, Medical Assistance (MA), or Prepaid Medical Assistance Program (PMAP)	36	22
MinnesotaCare	3	3



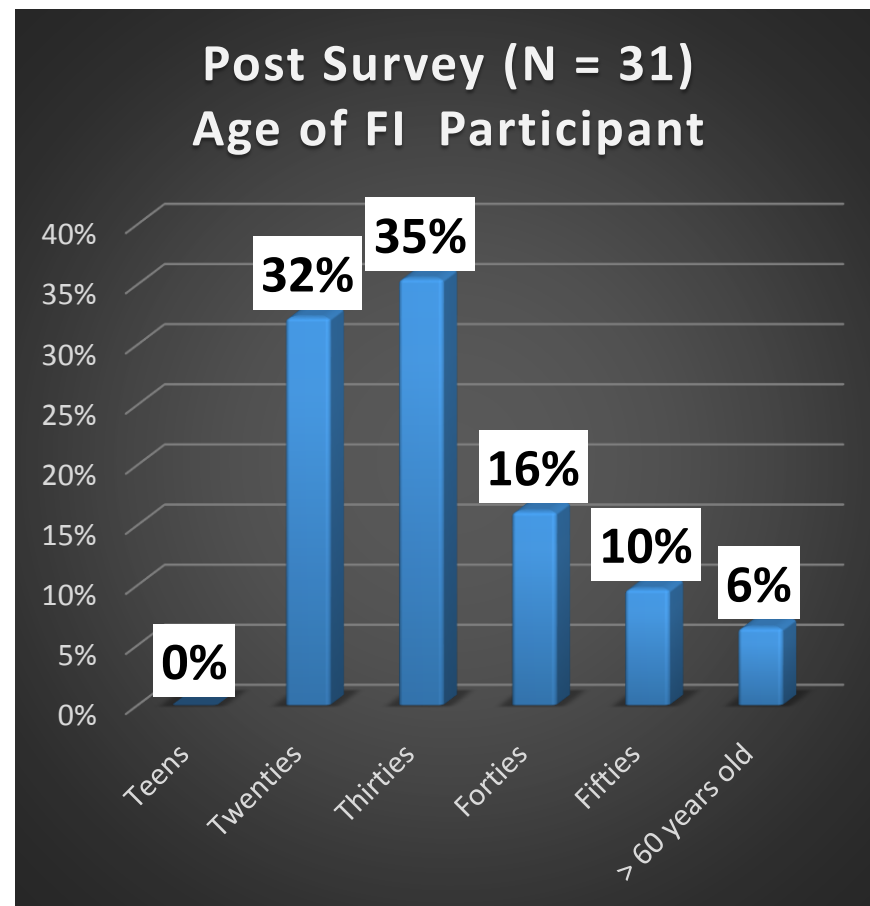
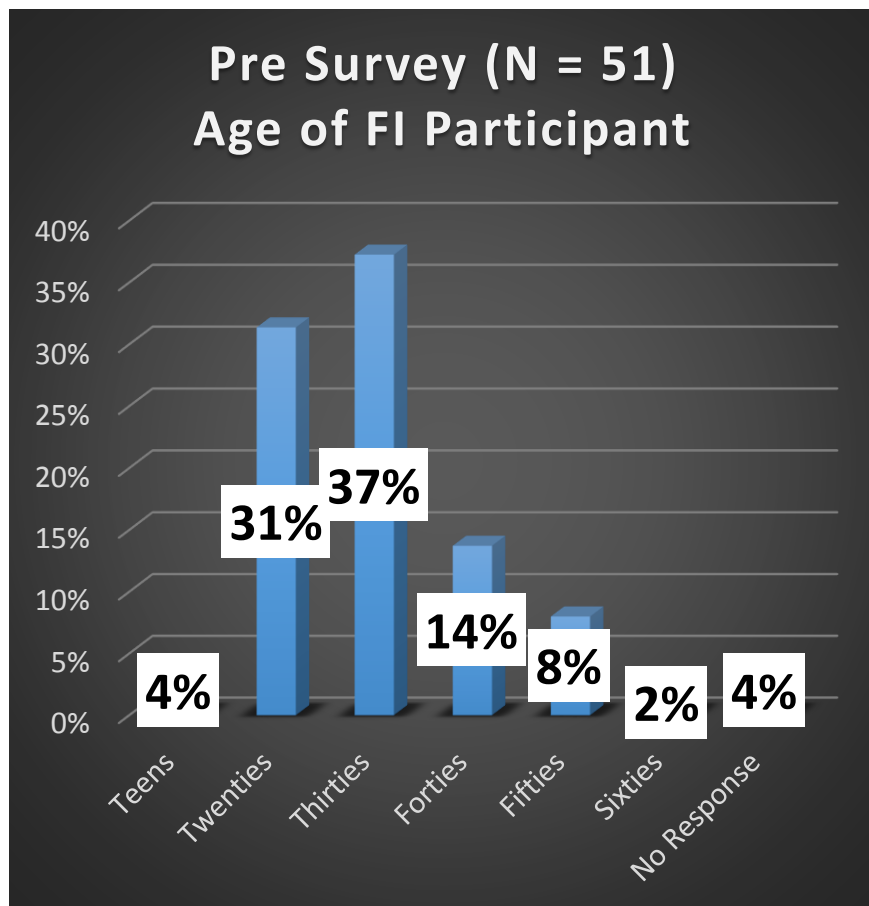
**Appendix II. Food Insecure Participants
Enrolled in “Choose Health”
*Pre Survey = 51 and Post Survey = 31***



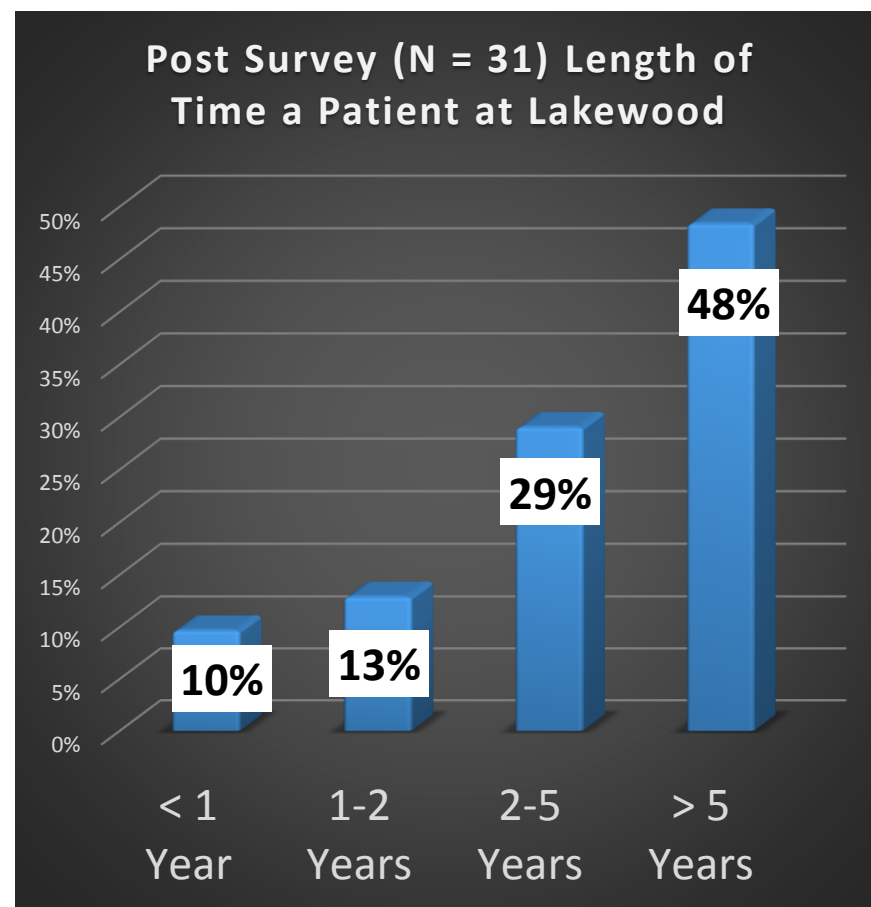
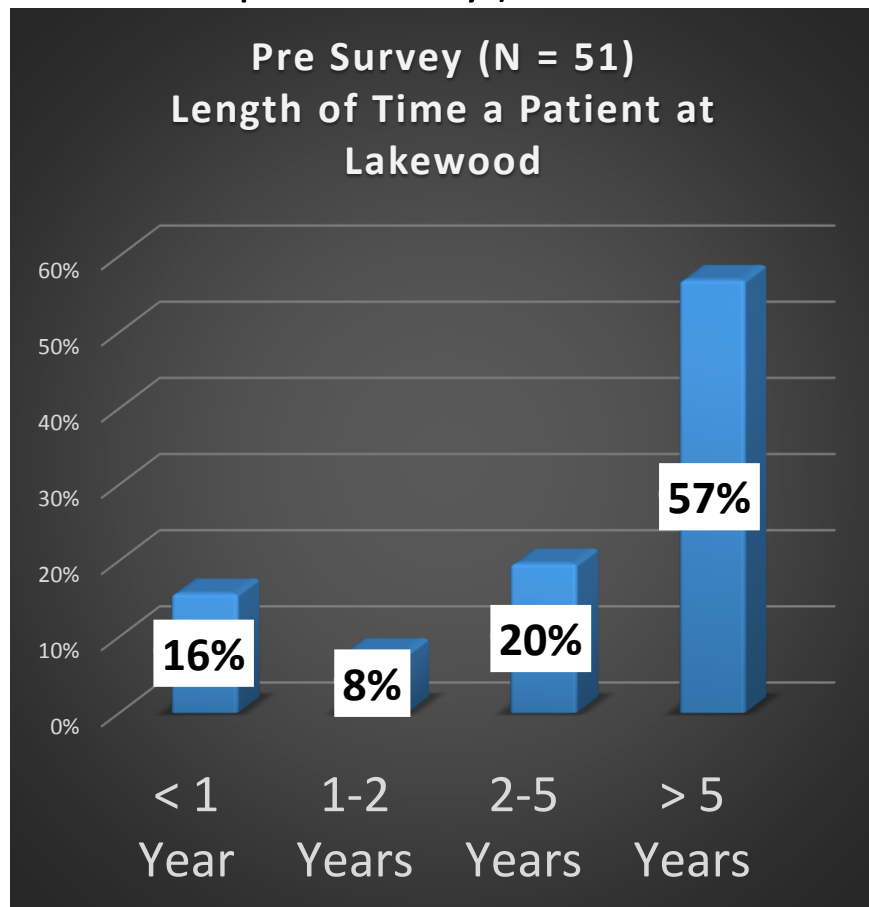
Most of the Lakewood Health System food insecure participants were female; 1 male and 18 females did not complete the post-survey.



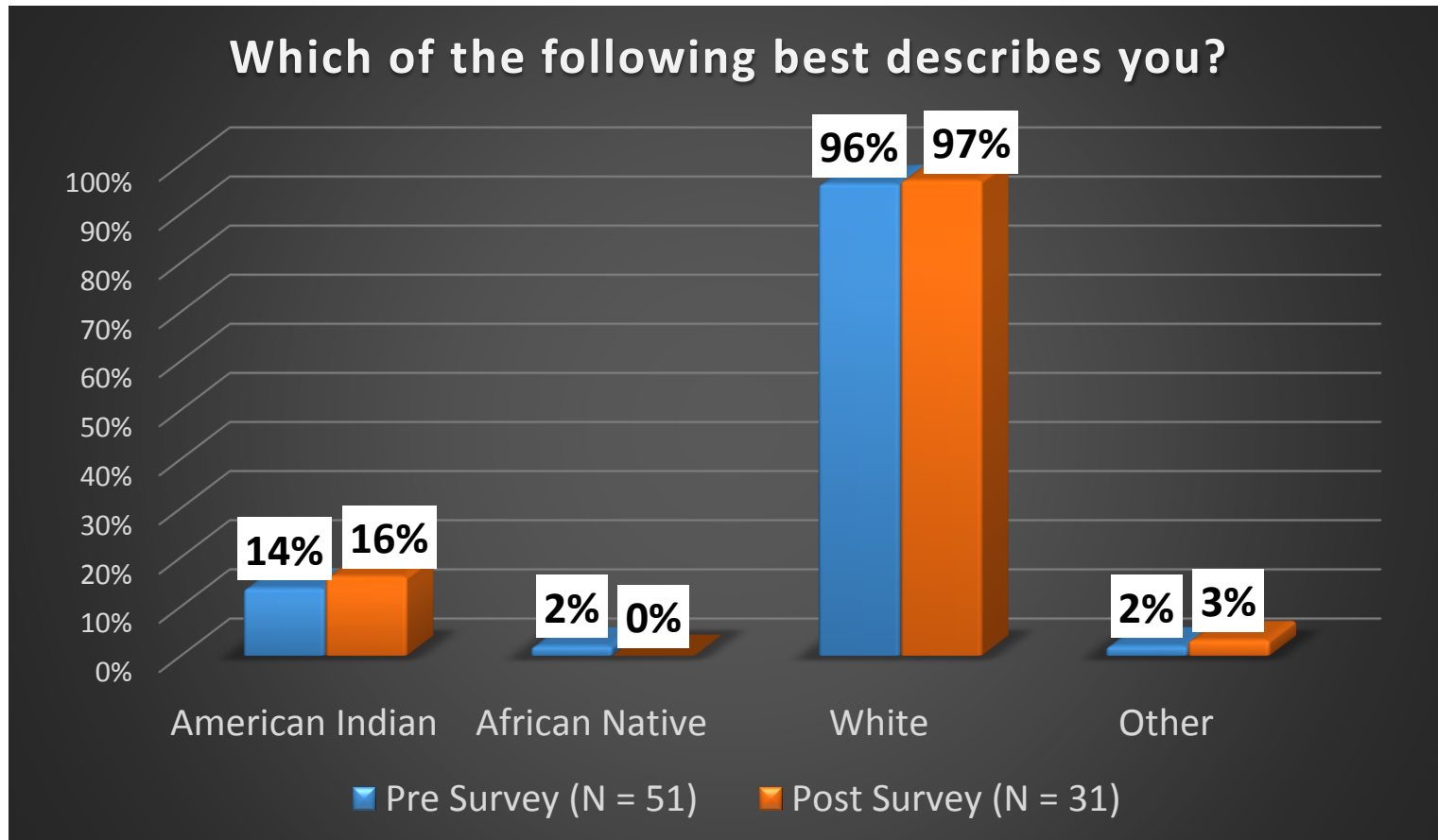
For the Pre Survey; the average age for the food insecure participants was 34 years old; the range was from 17 to 61. For the post survey the average was 38.6 and the range was from 21 to 72.



Most of the Food Insecure Participants had been patients at Lakewood Health System for more than 5 years. (57%; 29 of 51 with a pre-survey and 48%; 15 of 31 with a post survey.)

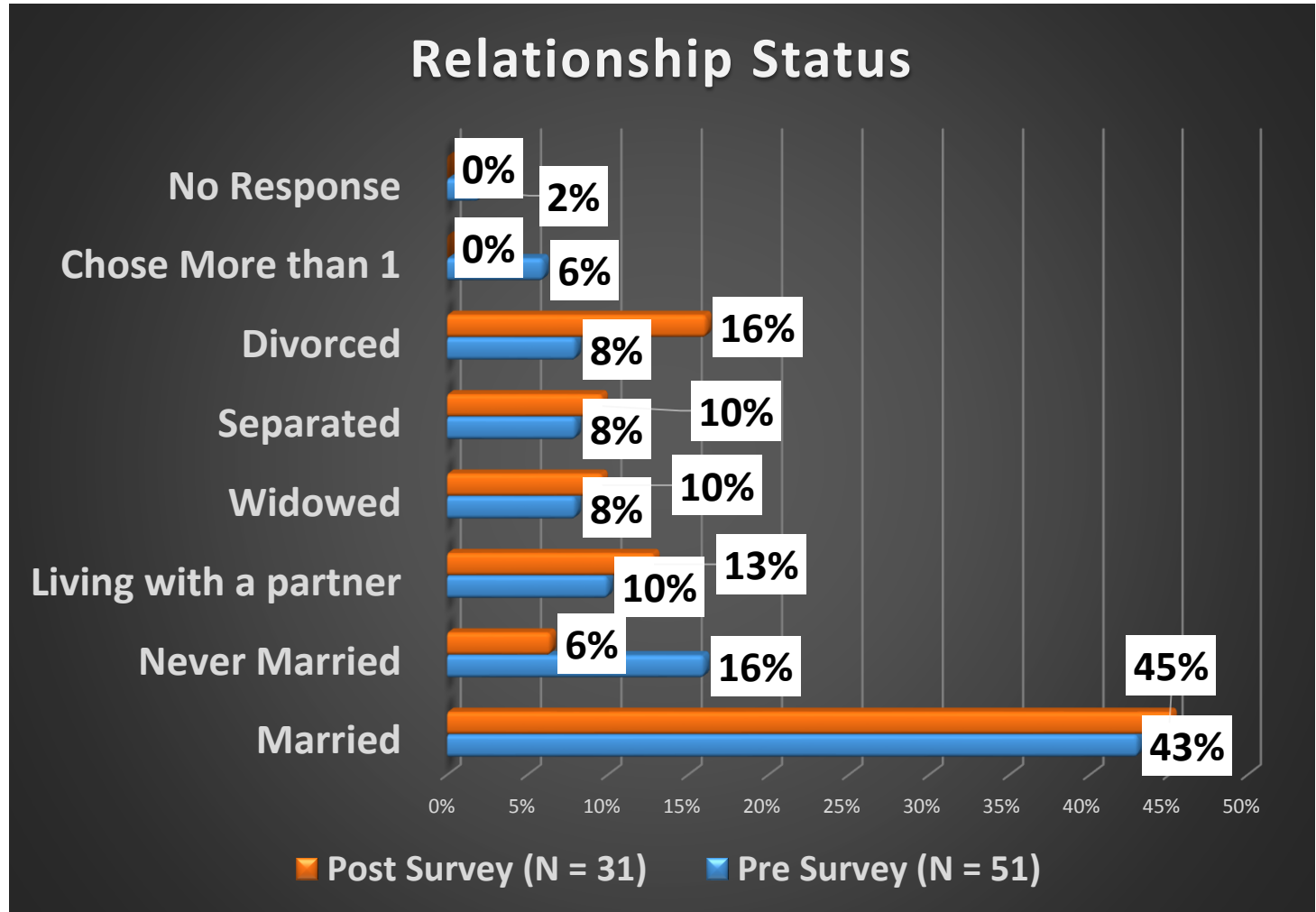


Most of the food insecure participants were white (96%).

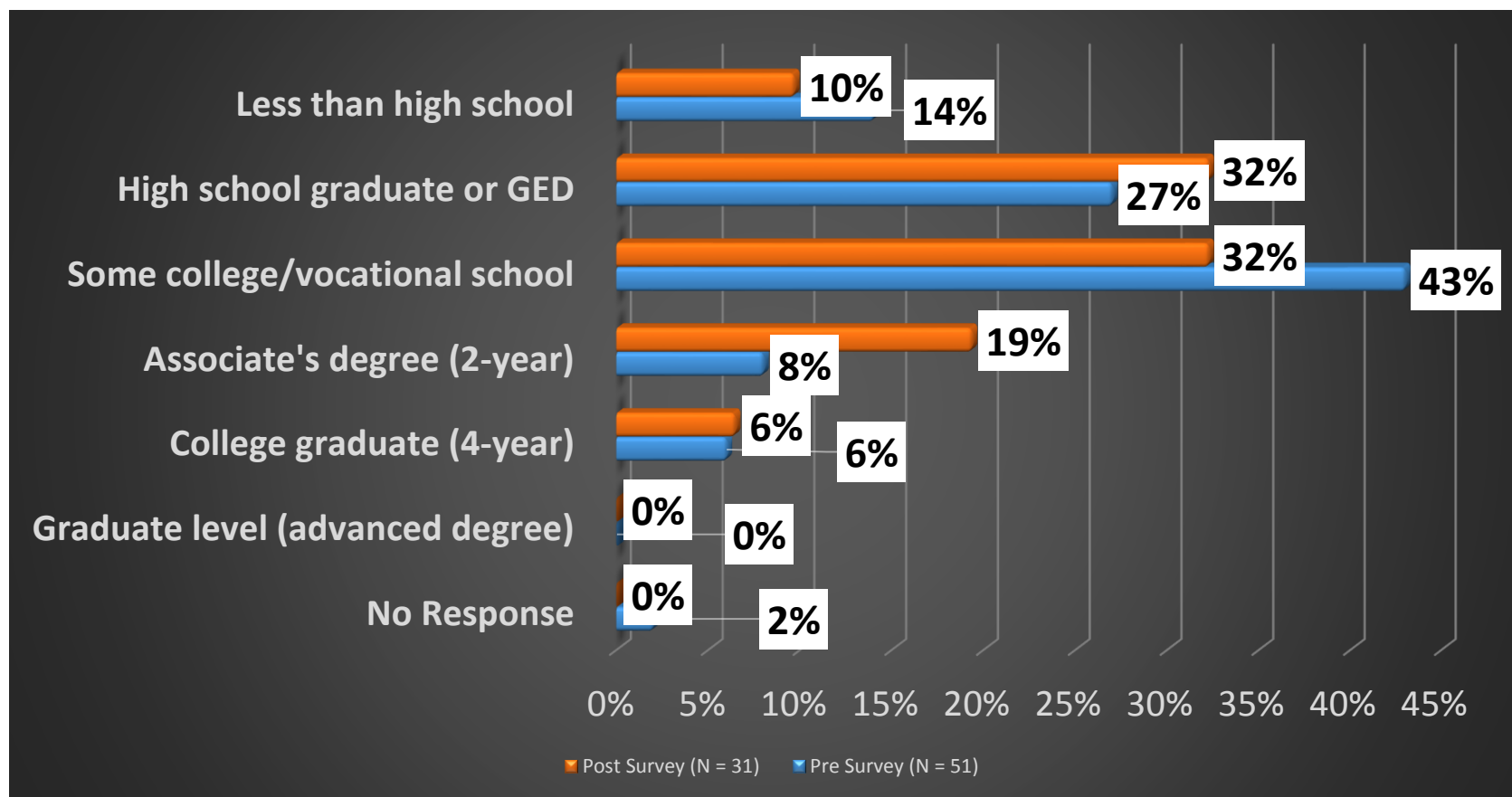


NOTE: Duplicated count. Some individuals chose more than one option.

Most (43% Pre Survey and 45% Post Survey) of the food insecure participants were married.



Most of the food insecure participants on the pre-survey (43%) had completed some college/vocational school. The post survey was bimodal High school graduate or some college/vocational school = 32%.





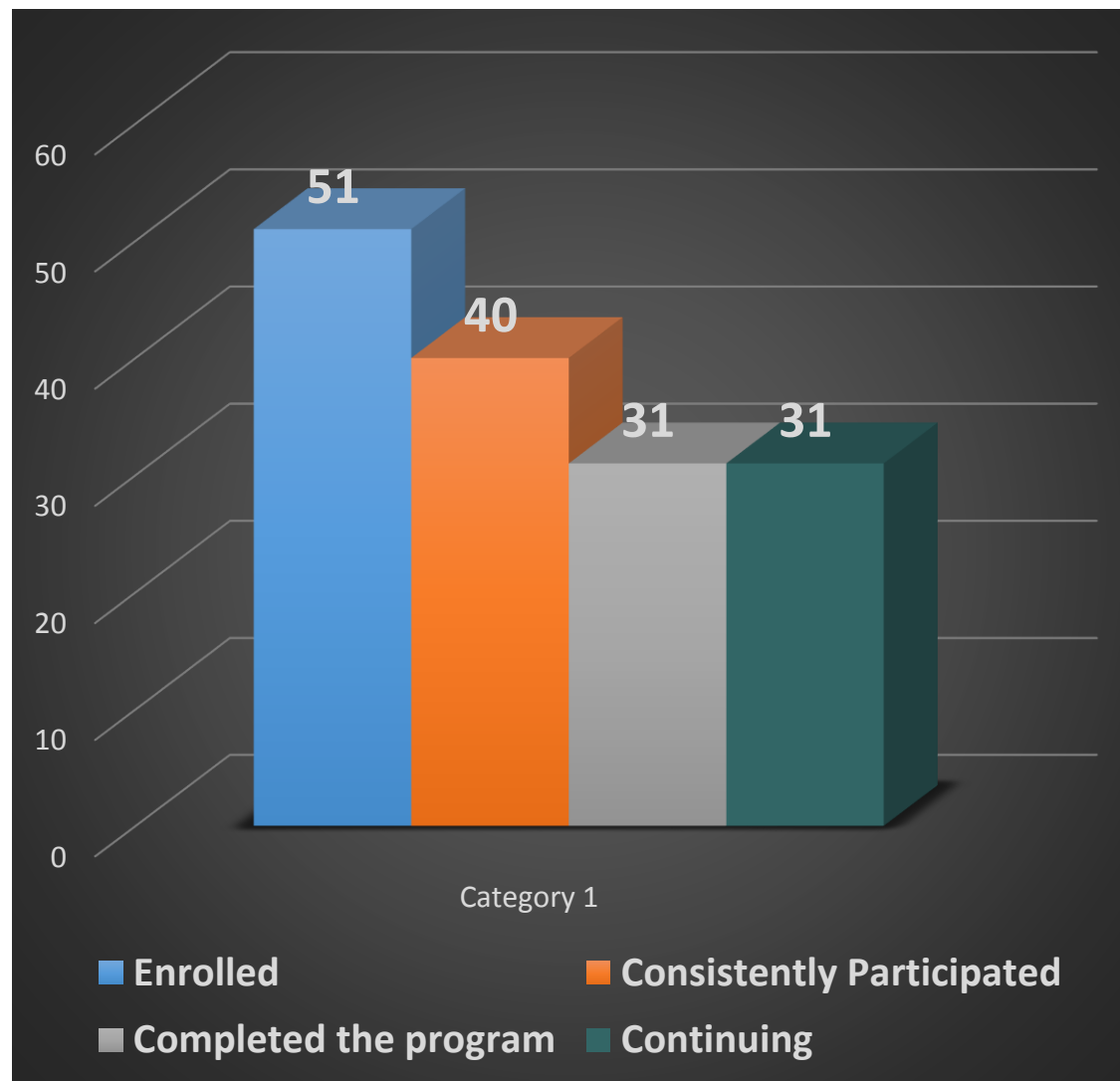
**Appendix III. Food Insecure Participants
Enrolled in “Choose Health”:
Changes in Success Metrics:
Participation, Eating Behaviors, Health & Satisfaction**



Participation

Other programs attempting to utilize farmer's markets to improve participant health have had difficulties in retaining participants. Some lamented that they may have started out with 50 participants but by the end of the program none remained.

This was not the case with Choose Health – **78% consistently participated and 61% completed and will continue.**

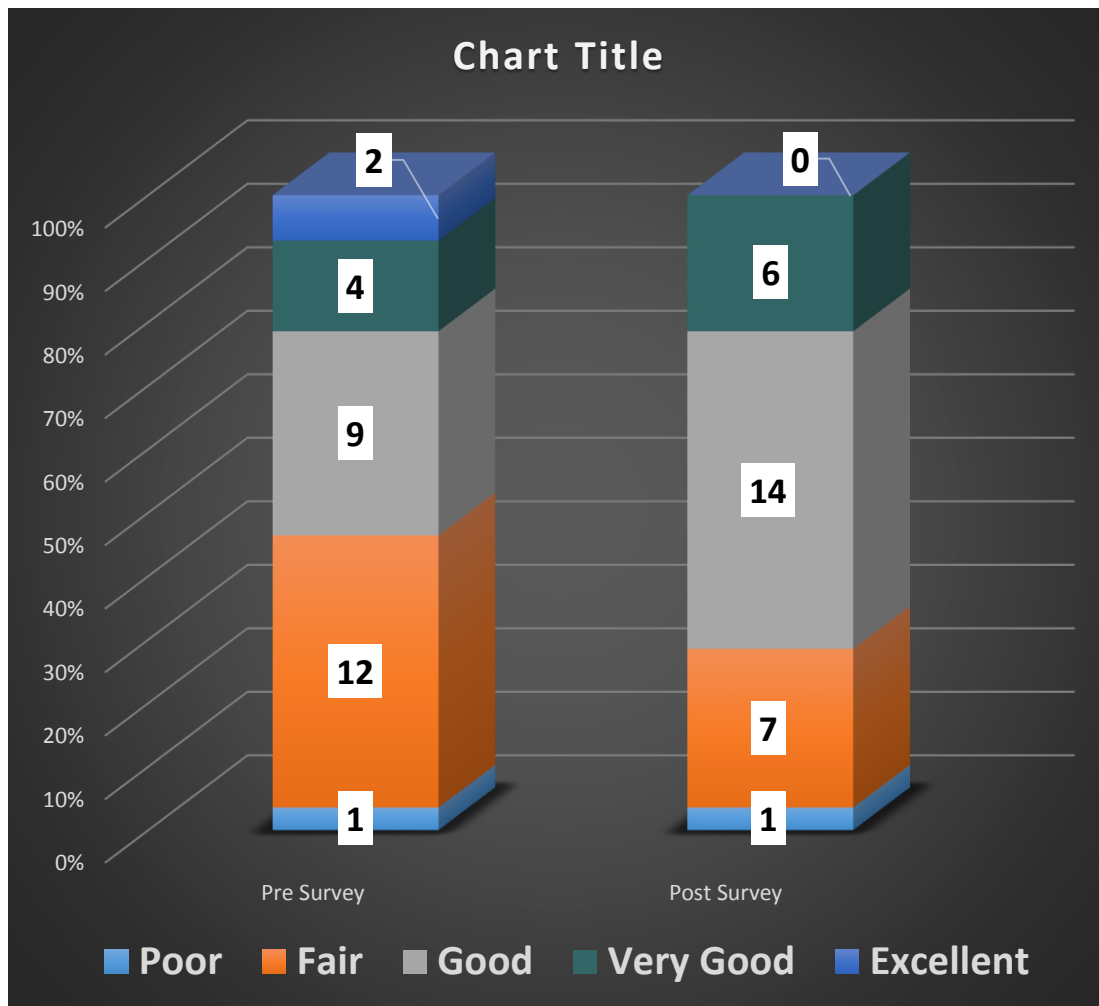


Changes in Perceived Health Status

For those with a pre and post survey (pairs, N = 28), there was an **increase in the percentage who rated their health as good or better:**

Pre = 57%

Post = 71%



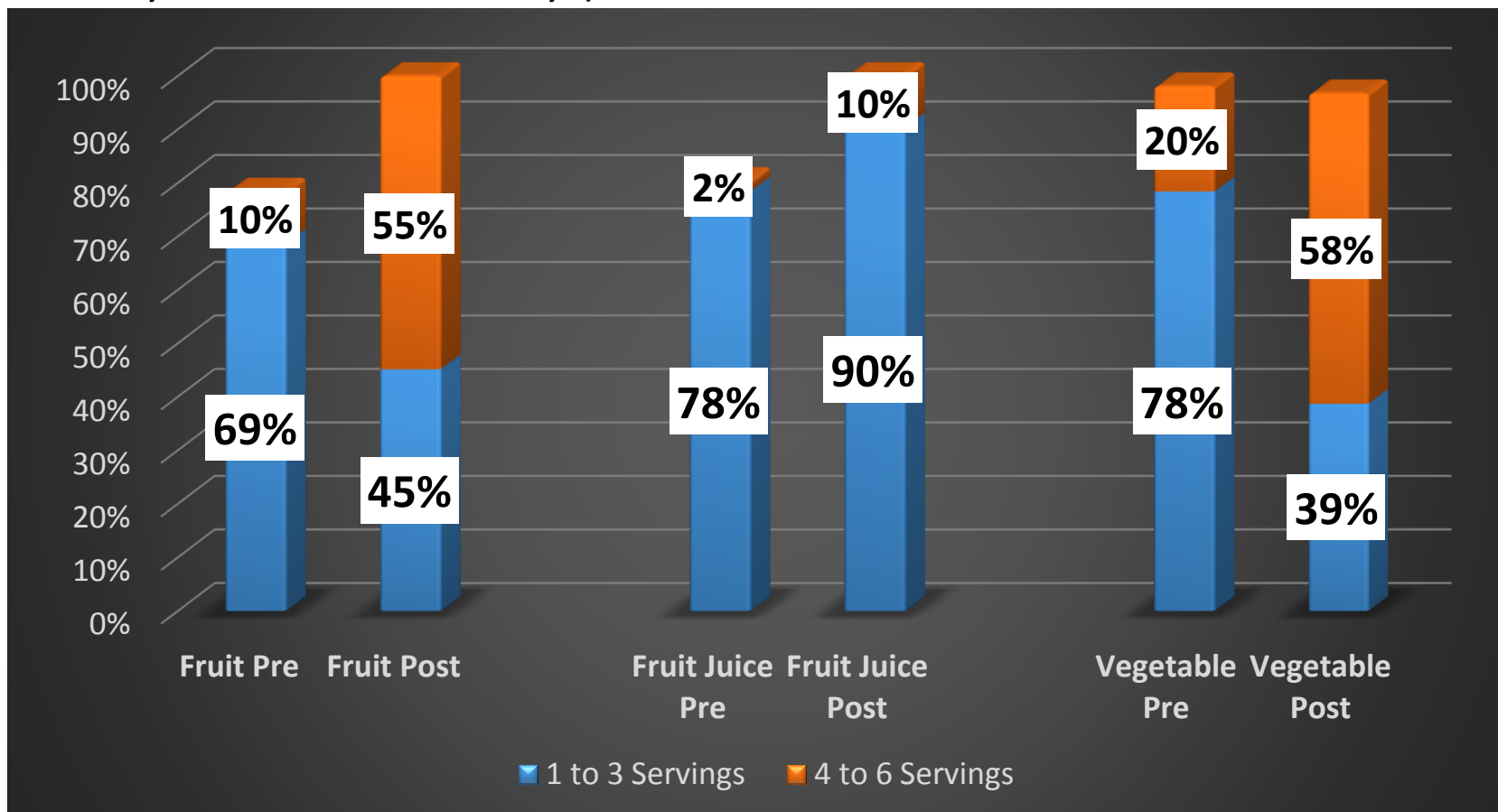
Fruit & Vegetable Consumption

The detailed data for the 51 pre surveys and 31 post surveys for fruit, fruit juice and vegetable consumption is shown in the table below. The data indicate that there was a **shift toward consuming more fruits and vegetables.**

Fruit and Vegetable Consumption

	NR	0	1	2	3	4	5 or More	Total
Fruit: 1 serving = one medium sized fruit, or half cup chopped, cut, or canned fruit.								
Pre Survey	22%	35%	18%	16%	8%	2%	0%	100%
Post Survey	0%	0%	23%	23%	42%	10%	3%	100%
Fruit Juice: 1 serving = 6 ounce serving of 100% fruit juice.								
Pre Survey	20%	43%	24%	12%	2%	0%	0%	100%
Post Survey	0%	0%	68%	23%	6%	3%	0%	100%
Vegetable: 1 serving = ½ cup of any vegetable or 1 cup of salad greens.								
Pre Survey	0%	24%	29%	26%	16%	2%	2%	98%
Post Survey	3%	0%	13%	26%	26%	23%	10%	100%

The shifts in consumption of fruit and vegetables was more evident when the data for 1 to 3 servings were compared with 4 to 6 servings (N = 51 Pre Surveys and 31 Post Surveys)

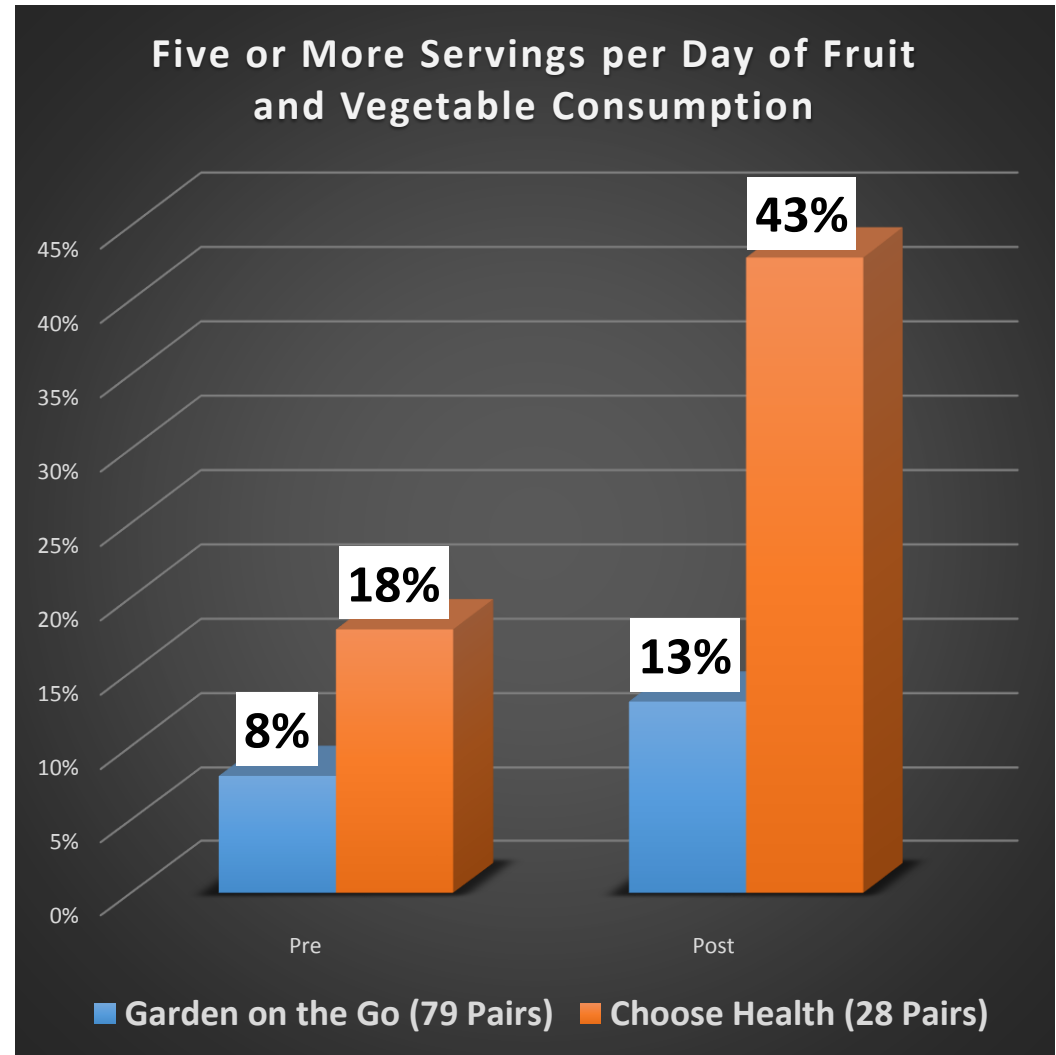


There were 28 with pre and post surveys. **The average number of servings went up for Fruit and Vegetables;** there was a slight decline for fruit juice.

Fruit and Vegetable Consumption (28 Pairs)

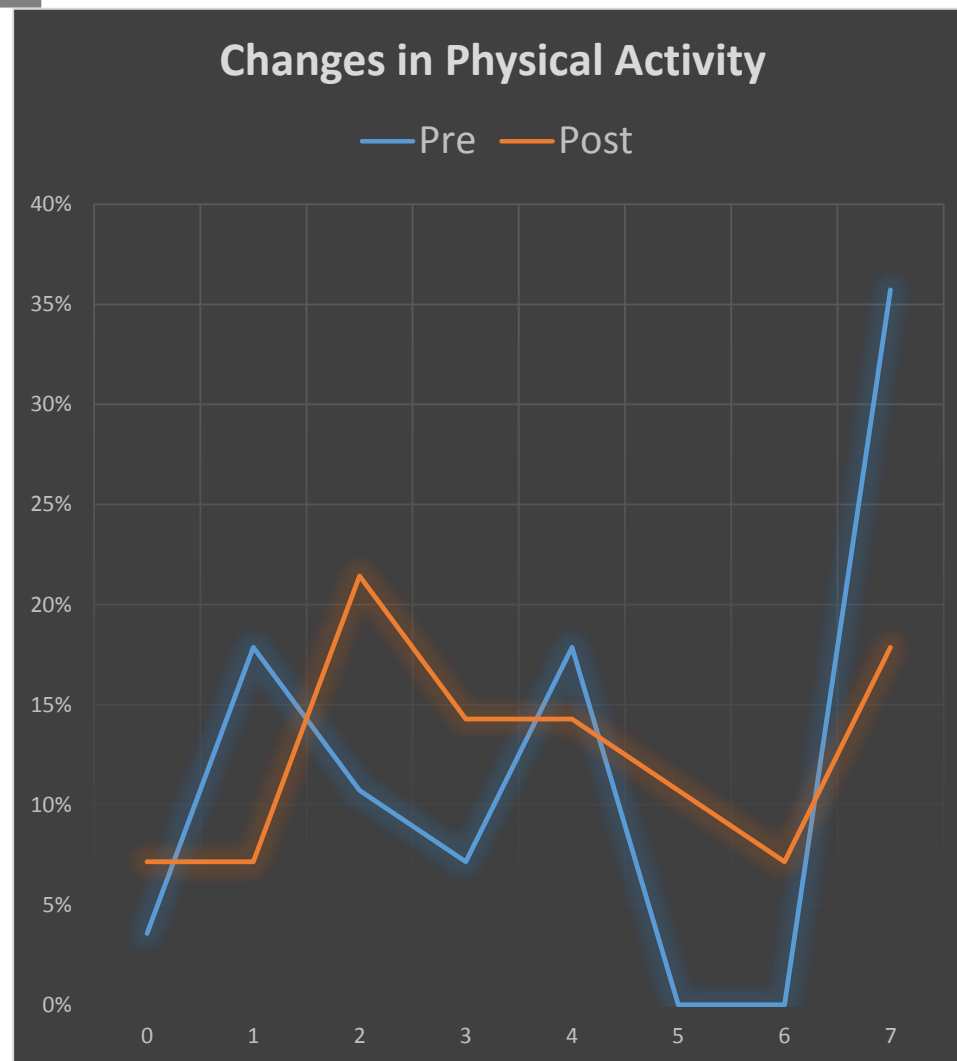
	NR	0	1	2	3	4	5 or More	Average
Fruit: 1 serving = one medium sized fruit, or half cup chopped, cut, or canned fruit.								
Pre Survey	21%	0%	36%	14%	18%	7%	4%	1.6
Post Survey	0%	0%	18%	25%	43%	11%	4%	2.6
Fruit Juice: 1 serving = 6 ounce serving of 100% fruit juice.								
Pre Survey	21%	39%	21%	14%	4%	0%	0%	.61
Post Survey	0%	69%	21%	7%	4%	0%	0%	.46
Vegetable: 1 serving = ½ cup of any vegetable or 1 cup of salad greens.								
Pre Survey	0%	32%	21%	29%	14%	4%	0%	1.4
Post Survey	4%	11%	25%	25%	7%	4%	0%	2.0

David Dayhoff, program officer for Hunger-Free Minnesota, requested that the evaluation compare the results of Choose Health with another program *Garden on the Go*. Choose Health **was nearly three times more likely to improve fruit and vegetable consumption.**



Physical Activity

Although the number days, when graphed, appear to differ, **the average number of days did not change (Pre = 3.8 Post = 3.7)** for the question, “During an average week ... on how many days do you get at least 30 minutes of moderate physical activity?” (Pairs = 28)



Healthy Eating Behaviors

Data regarding eating habits is presented below for the pre-survey (N = 51) and post-survey (N = 31). The changes are relatively small.

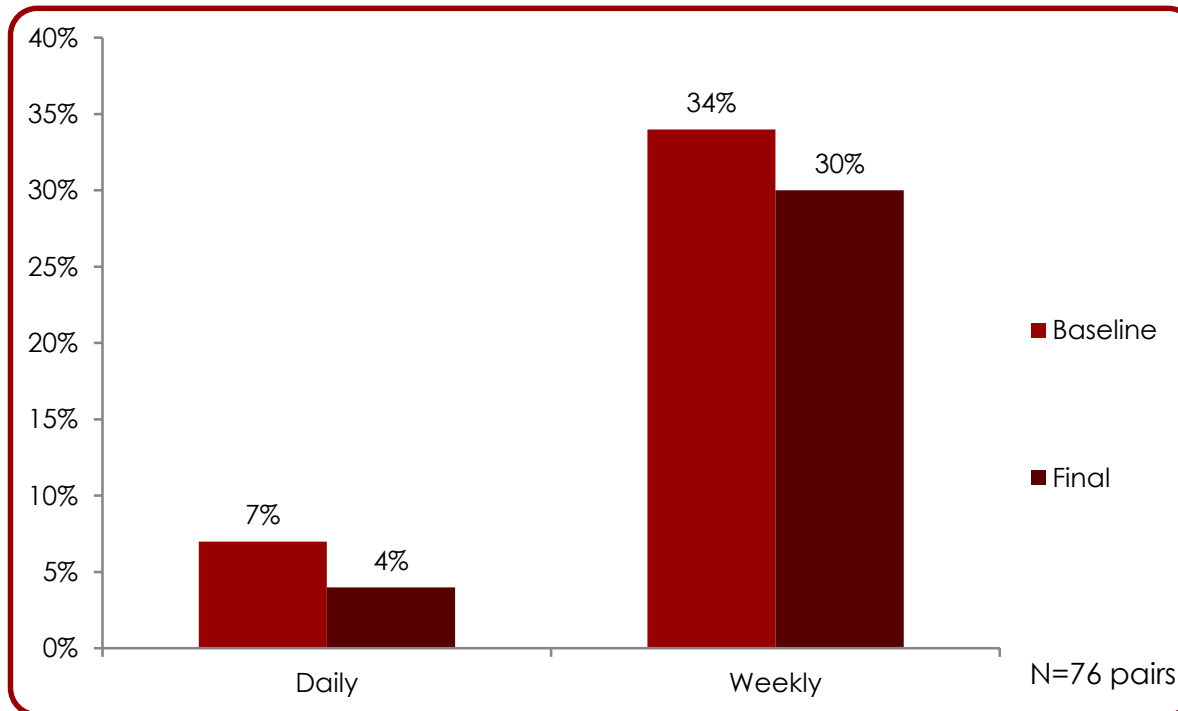
How many times a week does your family:

Number of times a week	0	1 to 2 times	3 to 4 times	5 or More	Total	Range
Eat a meal from a fast food restaurant						
Pre Survey (N = 51)	43%	51%	6%	0%	100%	0 to 3
Post Survey (N = 31)	42%	48%	3%	3%	97%	0 to 5
Eat a meal while watching TV						
Pre Survey (N = 51)	37%	18%	14%	31%	100%	0 to 21
Post Survey (N = 31)	29%	19%	23%	23%	94%	0 to 34
Eat dinner/supper sitting around a table with family and friends						
Pre Survey (N = 51)	20%	18%	18%	45%	100%	0 to 21
Post Survey (N = 31)	13%	13%	19%	52%	97%	0 to 21

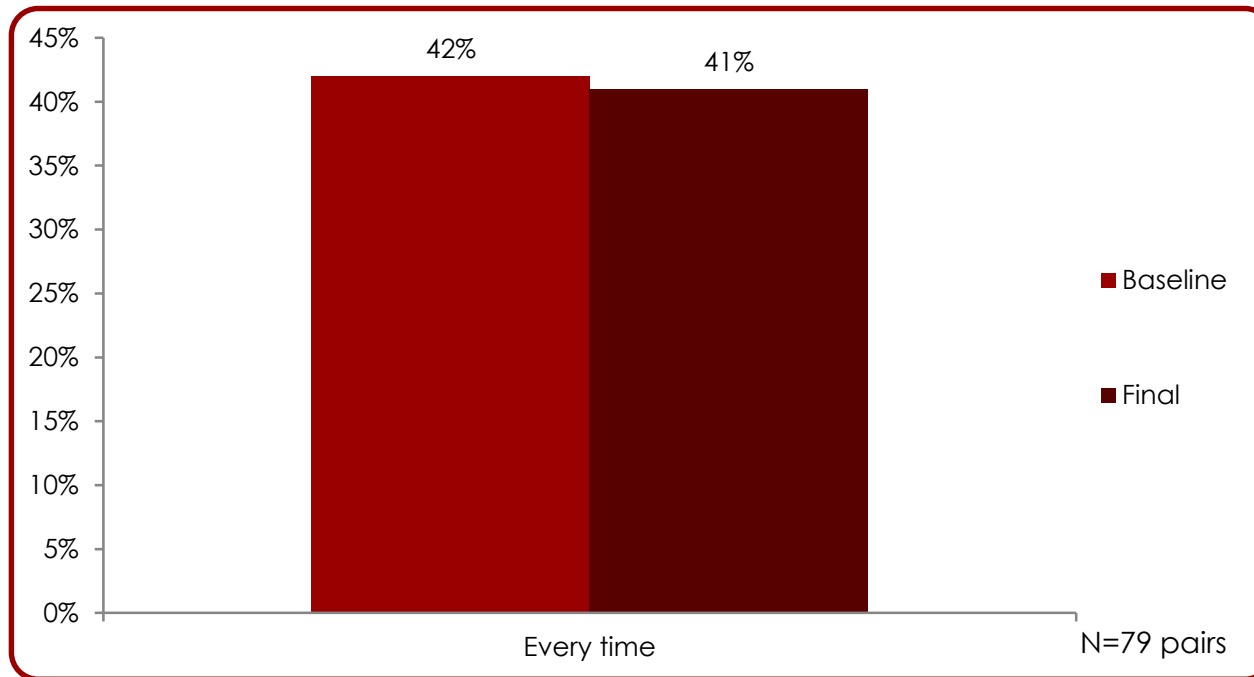
Data regarding eating habits for those with and pre and post survey (pairs) show two promising behavior changes. There was a decrease in average number of meals eaten while watching TV and an improvement in the percentage eating dinner at a table with family and friends 3 time or more - from 53% to 68%. *Garden on the Go* data included in table and following slides.

How many times a week does your family (Pairs N = 28)							
Number of times a week	0	1 to 2 times	3 to 4 times	5 or More	Average	Range	Garden on the Go
Eat a meal from a fast food restaurant							No change only
Pre Survey	43%	46%	11%	0%	.86	0-3	
Post Survey	43%	50%	4%	4%	.93	0-5	+4%
Eat a meal while watching TV							No change only
Pre Survey	39%	11%	14%	36%	5.54	0-21	
Post Survey	32%	18%	21%	21%	3.77	0-34	+1%
Eat dinner/supper sitting around a table with family and friends							Change +13%
Pre Survey	21%	25%	7%	46%	5.29	0-21	
Post Survey	14%	14%	18%	50%	4.70	0-21	

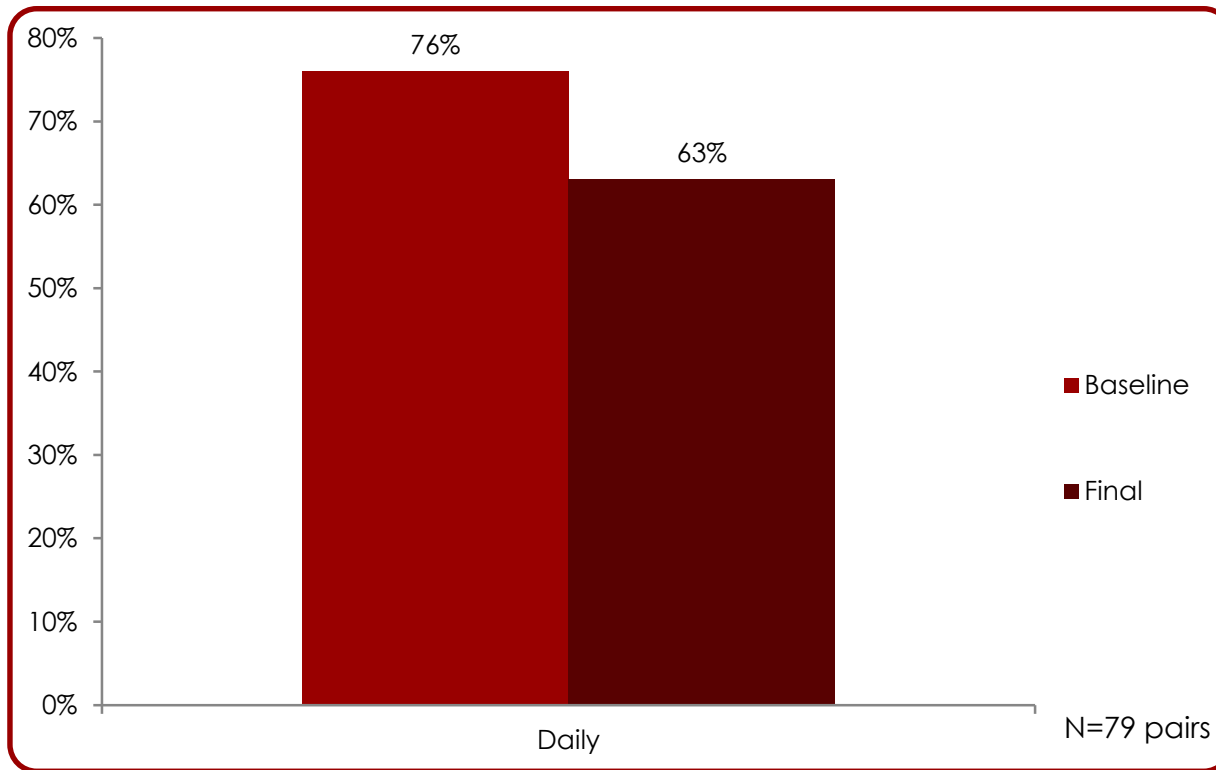
Changes in Fast Food Consumption



Change in Eating Meals while Watching TV



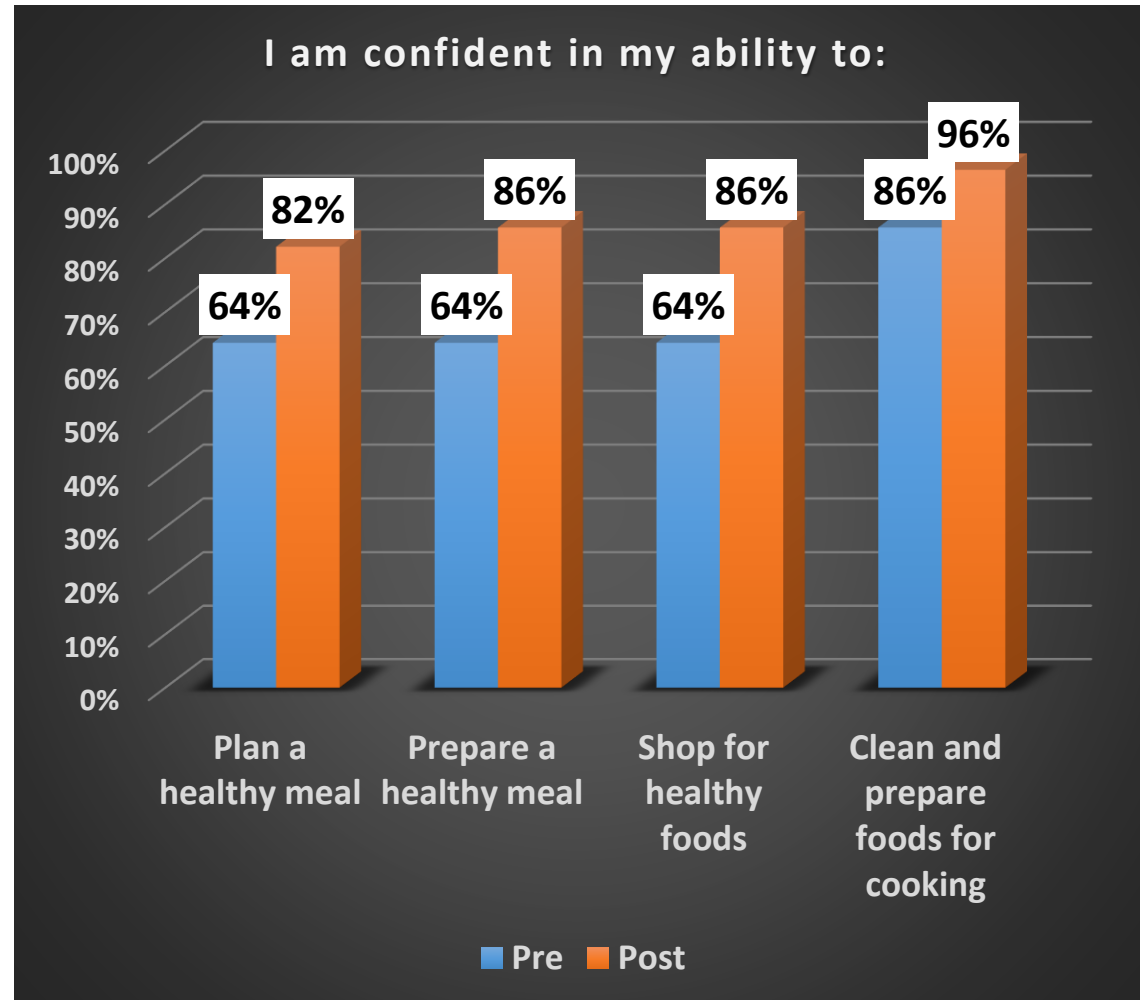
Change in Eating Meals Prepared at Home



Confidence in Food Planning & Preparation Skills

For the 28 with pre/post surveys, there were **improvements** in their **assessment of their skills to plan a healthy meal, prepare a healthy meal, and shop for healthy foods**. There was an increase as well in their assessment of their ability to clean and prepare foods for cooking, but not as high as for the other areas.

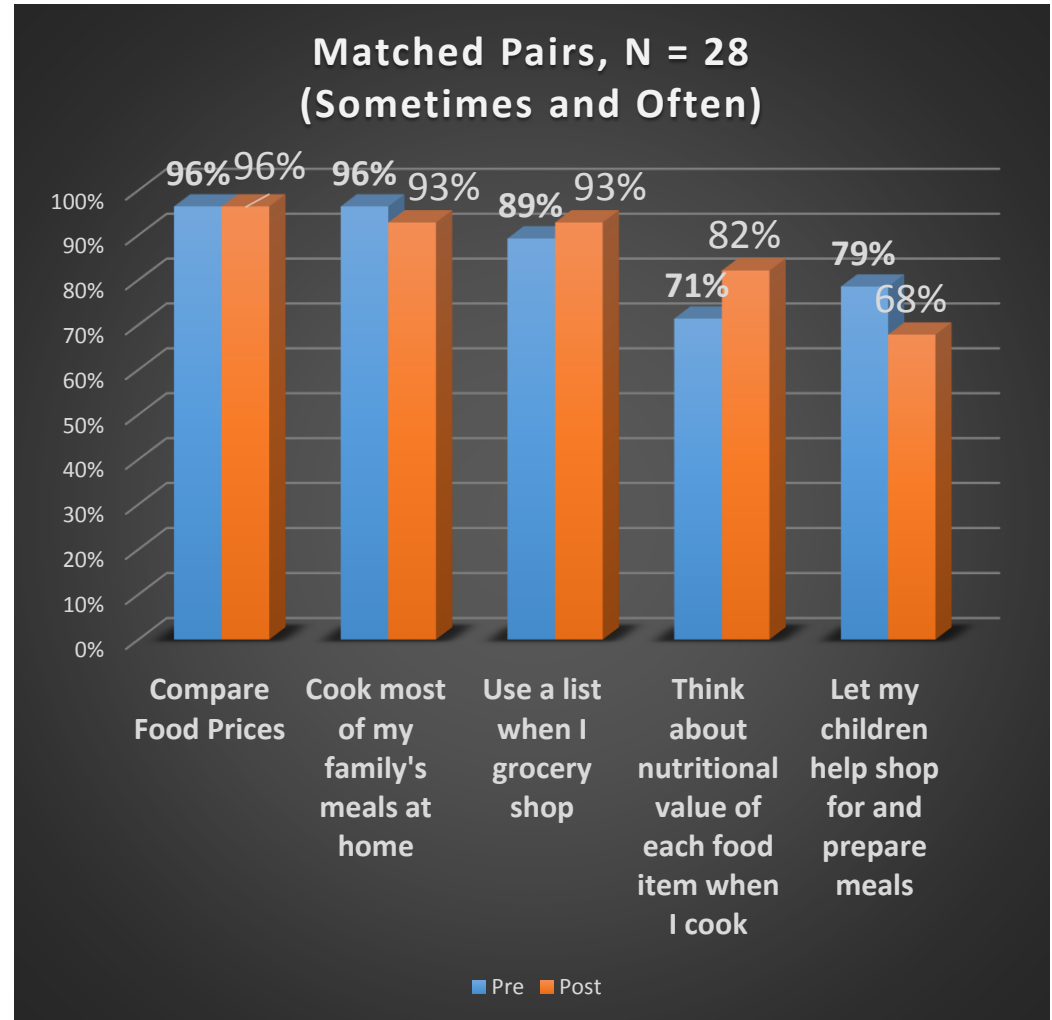
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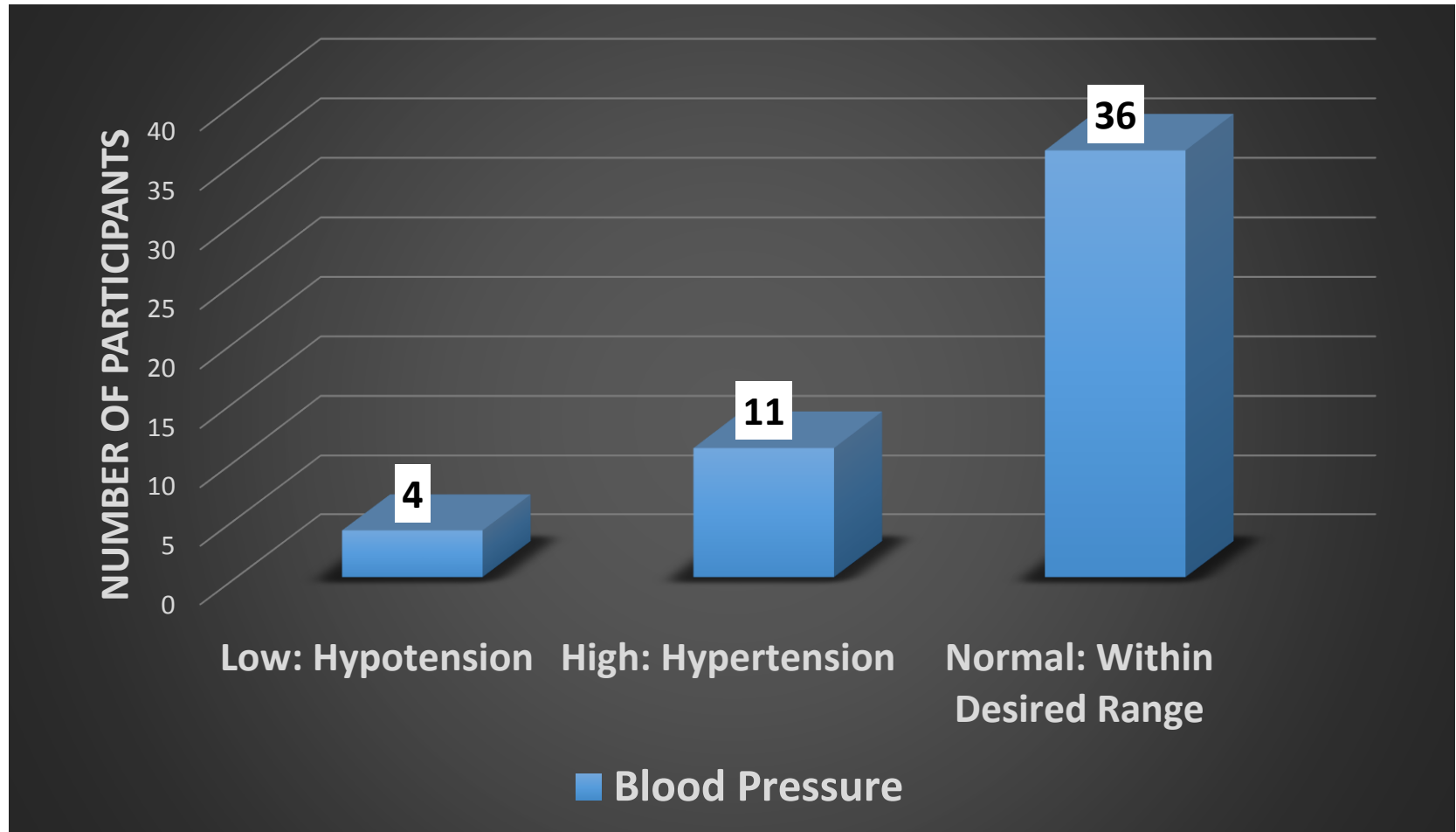
Shopping and Meal Preparation Behavior

There was no or very little change between the pre and post survey for the matched pairs. The only category that did not go in the desired direction was “Let my children help shop for and prepare meals.”

NOTE: Analyzing the data separating out “often” vs. “sometimes” did not reveal any additional insights.



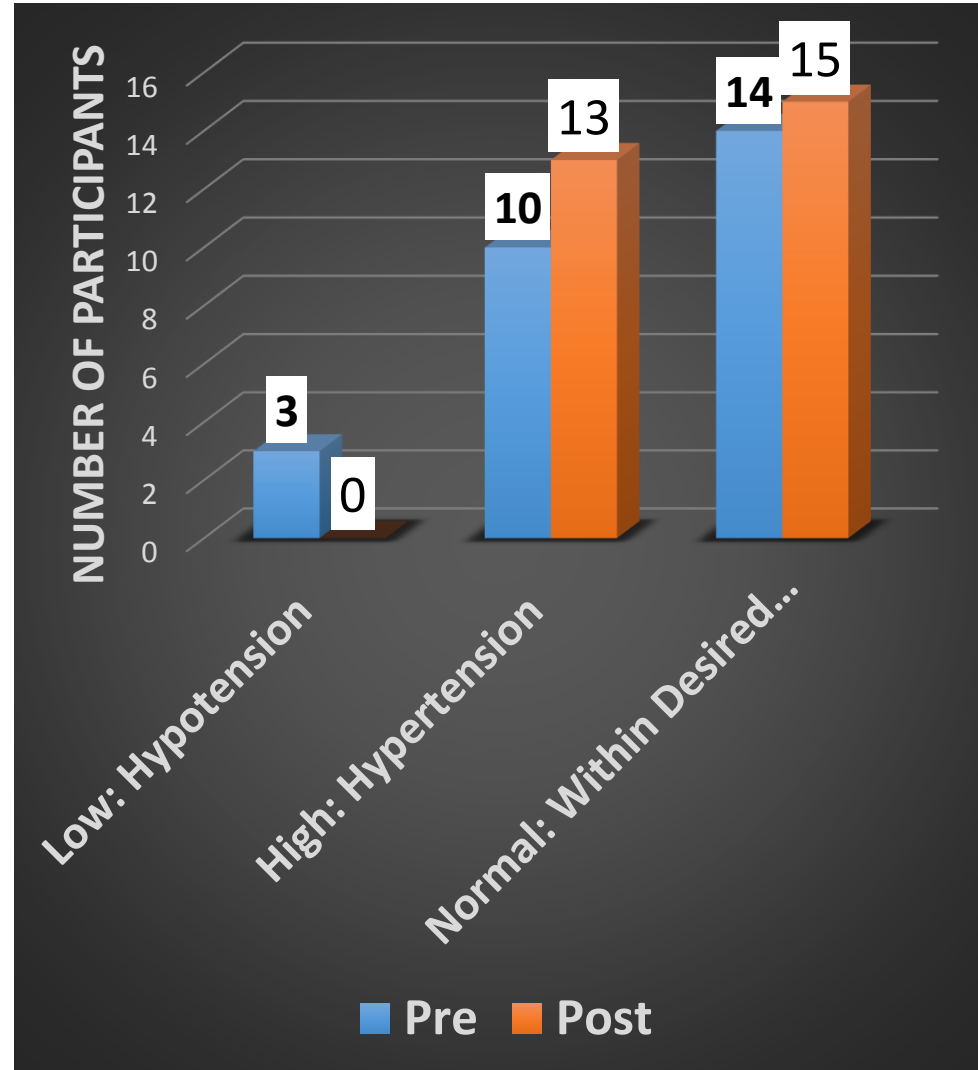
Blood Pressure. Most food insecure participants, 70.6% (36), had a desired blood pressure reading at the time of intake.



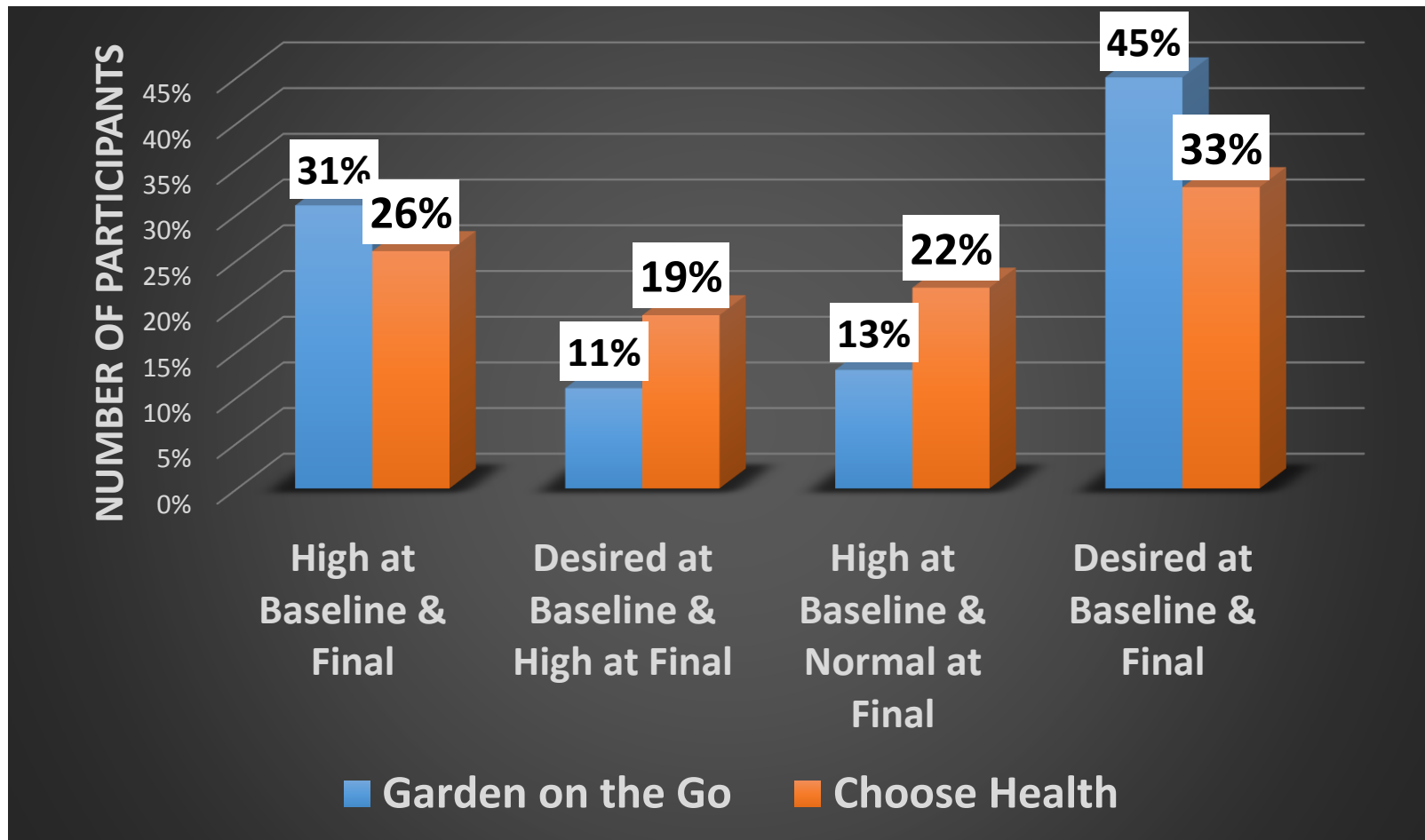
Blood Pressure

54% (15) who remained with the program had blood pressure within the desired range; 46% (13) had high blood pressure.

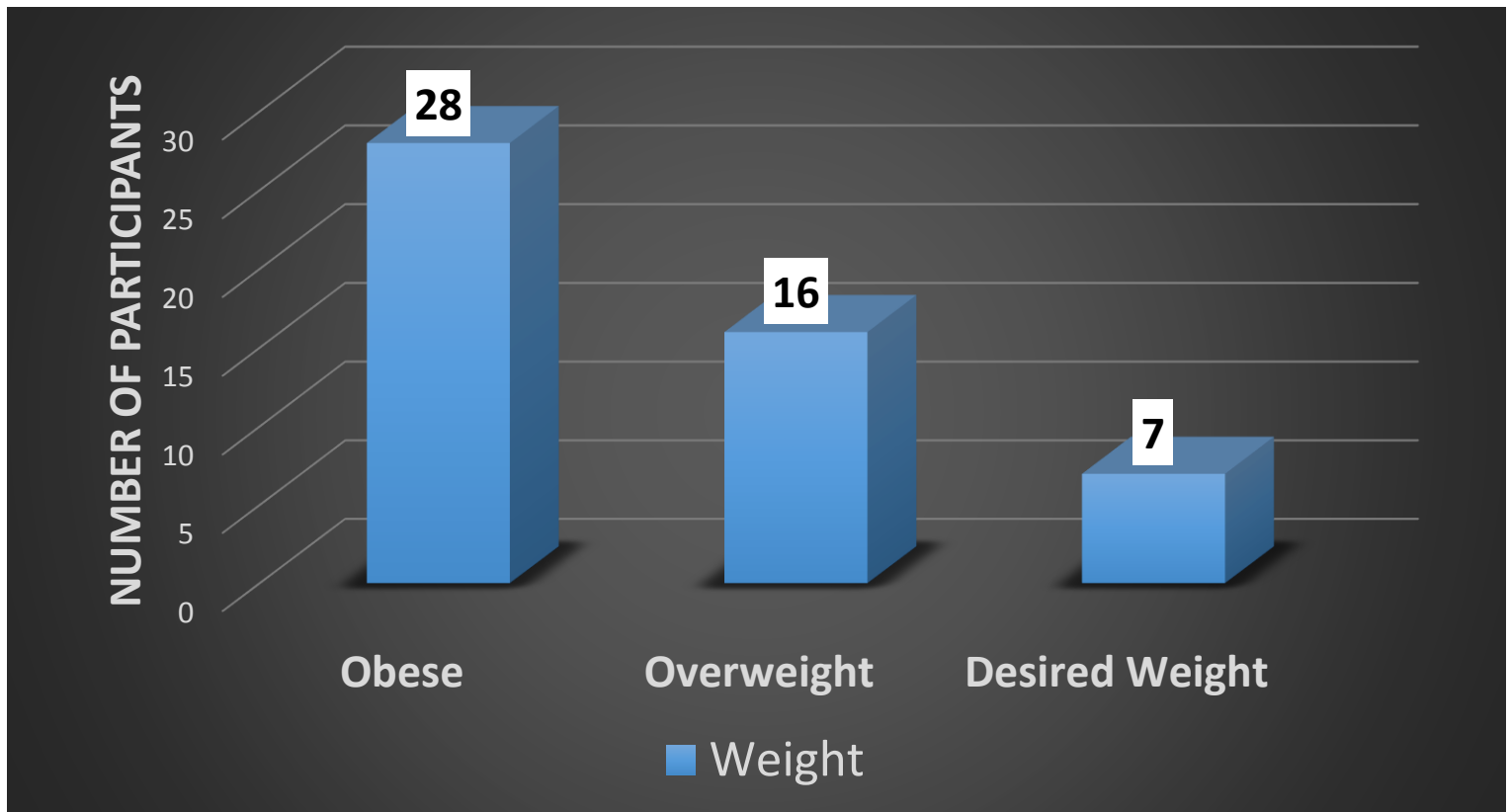
The change for each pair:
29% Improved BP
21% Worsened BP
46% No change in BP



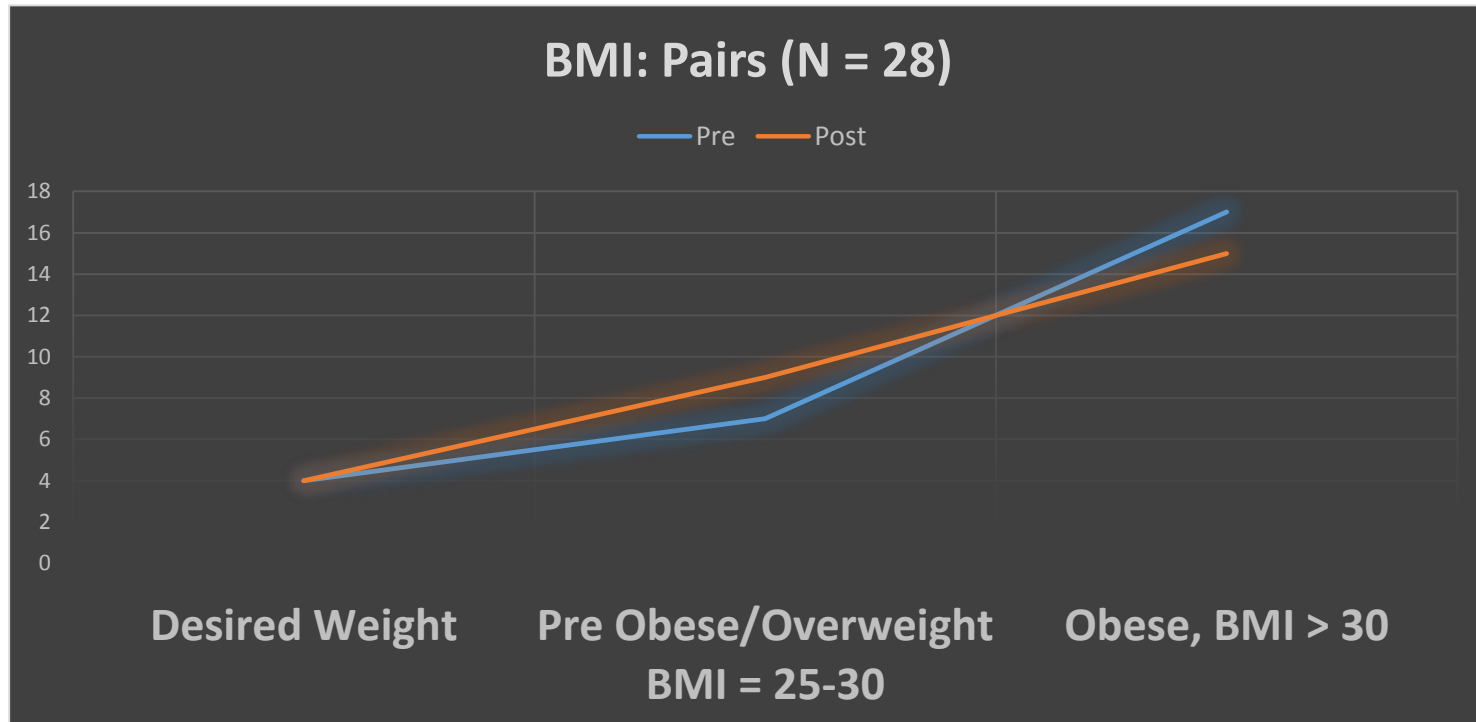
Half (55%) of the participants either improved or maintained a healthy blood pressure (22% and 33%). *Garden on the Go* had a similar result (58% = 13% + 45%).



BMI: For the 51 with a pre-survey; only 13.7% (7) of the food insecure participants were at the desired weight (BMI < 25); 31.4% (16) were overweight (a BMI between 25 and 30); and 54.9% (28) were obese (a BMI > 30).



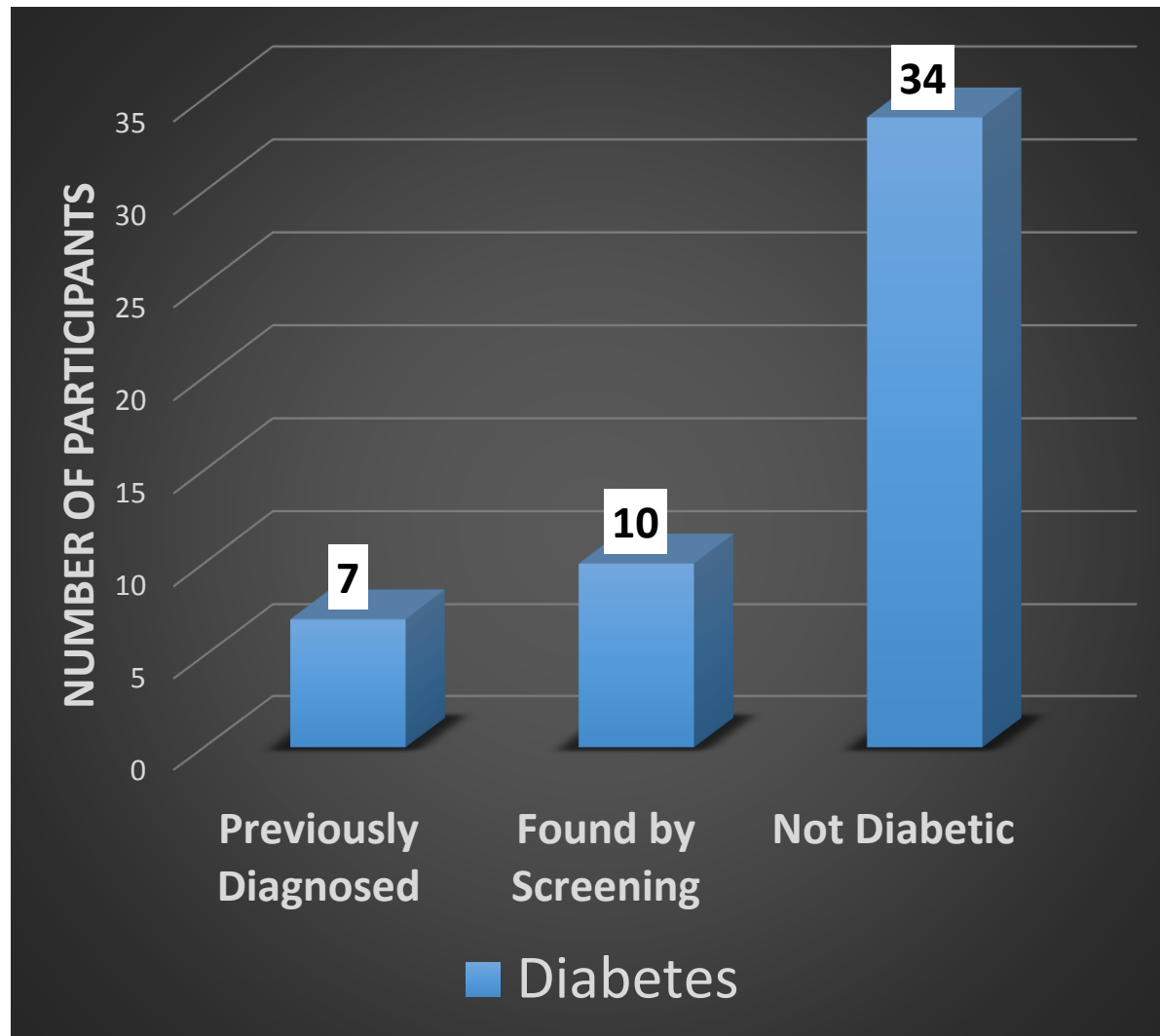
BMI: For the 28 pairs with a pre and post survey, **one improved – going from obese to overweight.** The data is somewhat confounded in that 6 women were pregnant at the time.



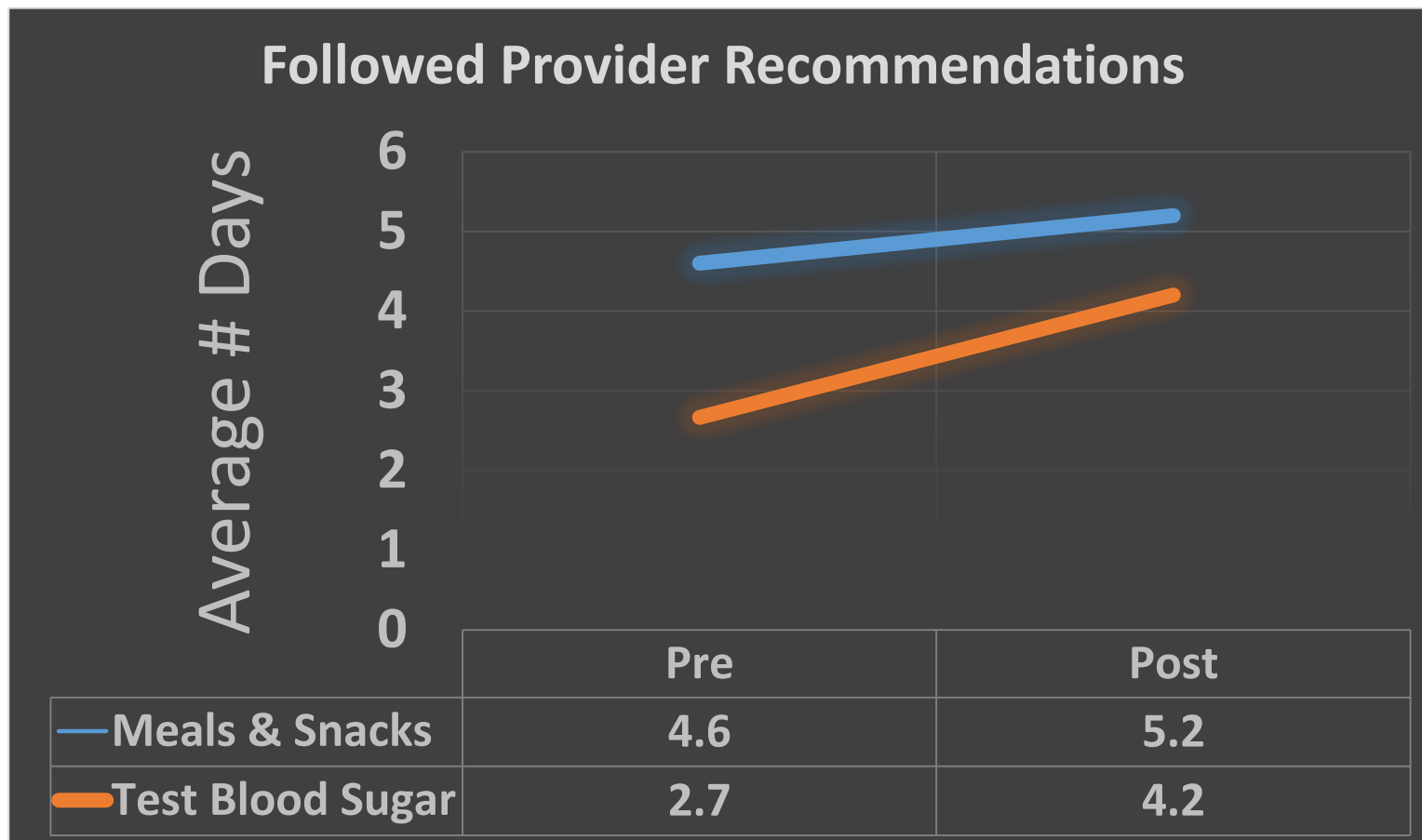
Diabetes Metrics

For the Pre-Survey:

A third (33.3%) were either previously diagnosed with diabetes (13.7%, 7) or through the Choose Health screening process identified as either pre-diabetic (13.7%, 7), diabetic (3.9%, 2), or gestational diabetic (2.0%, 1).



For the Matched Post Surveys: 6 of the 7 who participated in Choose Health had a pre- and post-survey. **Both measures went in the desired direction** (an increase in the number of days the participants followed their providers' recommendations).



Satisfaction with Lakewood Health Systems. Ratings of the care received at Lakewood Health Systems remained high (Pairs = 28).



What is your biggest challenge in feeding your family? (verbatim from participant survey)

buying food that my young kids will eat, time for prep=30mins max

time especially since having baby in July

preparing healthy meals

having enough money after bills paid to get food

thinking of new meals to make

pleasing many individuals

Affording some of the healthier foods

not enough money, since my other half has also been sick I've had to take care of everything. All the junk is gone, that's how we pay the power which has been over \$200 a month

having the food

have enough time to cook, buying food

Kenney does not always like what I am eating, since winter is coming it seems like the daily chores takes all my time so I am unable to prepare what I think would be healthy

buying healthy food and knowing how to prepare healthy meals

having enough time to cook, picking foods they like or are willing to try

trouble preparing meals and having the money to buy healthy foods

being able to buy health foods/produce. My kids will eat the veggies and fruits, but it is very expensive to buy

being able to afford the food

not enough money to buy the foods I need to make healthier dinners. Recently with my new job times is a problem also.

having enough time to cook, buying foods they will eat

buying

time to cook

having enough money to buy food in general

all the above

affording food and coming up with meals that everyone enjoys

having money to afford healthy food and sometimes any food in general

having enough time to cook

How can the program be improved? (verbatim from post survey)

less lettuce

The quantity to fit the household size

More written scripts for meds individually need

nothing I enjoyed it greatly

I would add more, like even a delivery to those unable to go to the market. I would add a craft time, other programs so then poor can have something positive to look forward to, if I was even as high as the Gov. I would even increase money to the poor. Not everyone wants to be poor. I was forced I lost everything when i became ill. Even my retirement. So please tell those that hate those on welfare, that not all of us are there by choice. thank you for all your help.

nothing

It gives families another food option. I have never been able to use a CSA and it was a great experience

Longer time period to pick food up, I would have liked more fruit

have more information given on healthy meals recipes and information on healthy food items to shop for besides vegetables and fruit, break down on how to read the labels on food items

better quality of foods provided

I would not change a thing cuz it is a great program with all the veg. and fruit

I would also include not just recipes but instructions on how to freeze or can things like the green beans and corn

nothing

Dates and times

I would give out more fruit

nothing

I loved it all

not every Monday for cooking class, every other week would be better

Maybe more fruits and a better understanding of what was being given to us. Some more stuff should be labeled or a list of everything with a picture would be more helpful some items were confusing at first

Include more ideas on using produce, there were times the recipes didn't match produce or they had other ingredients that are not normal in our household, have cooking classes either earlier in the day or later (after 7), teach people about container gardening

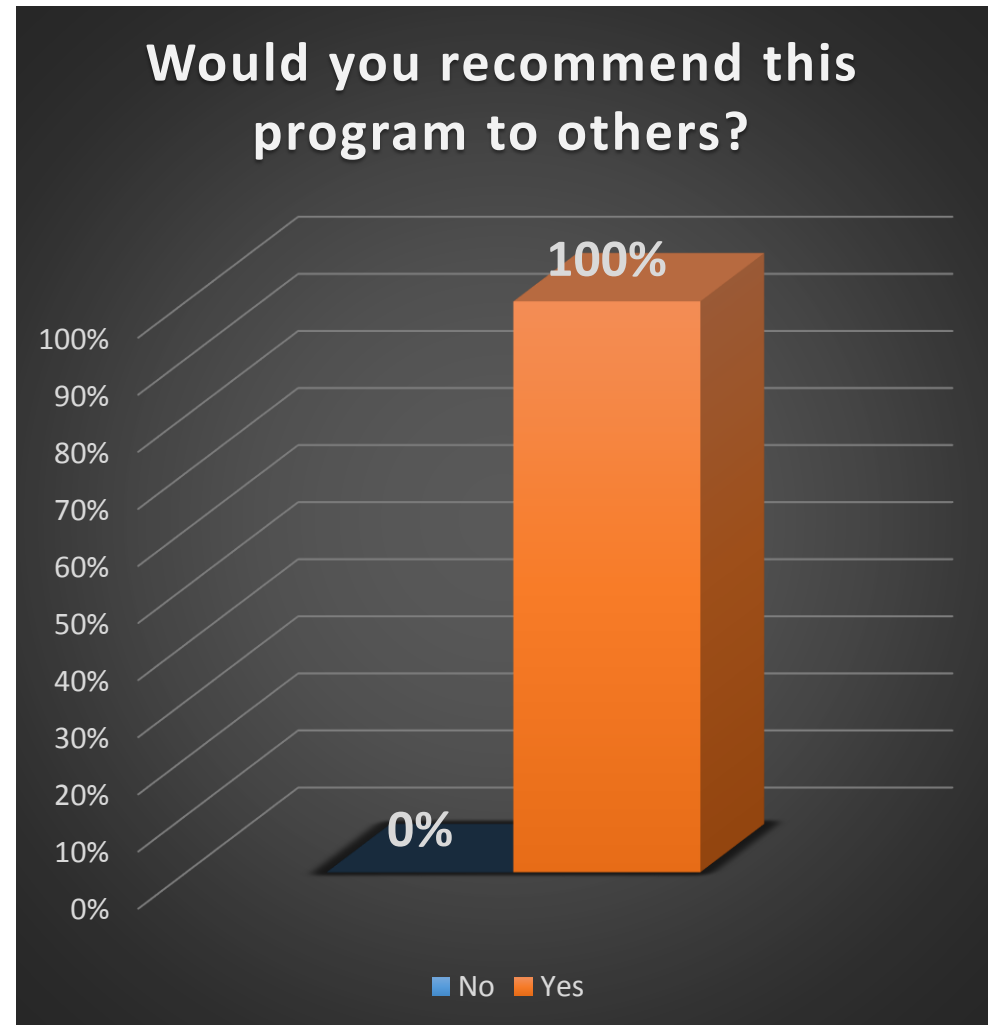
nothing really other than having it for the whole year

more cooking classes geared towards those that work and don't have a lot of time on their hands

Program Satisfaction

100% chose “yes” to the question, “Would you recommend this program to others?” Their responses to the follow-up “Why or Why not?” follow on slide 50 and often illustrate the depth of their regard for this program.

“it was such a relief to know that we would be getting fresh local produce biweekly.”



Would you recommend this program? Why or why not?

any program that provides recipes for healthy meals is an excellent idea for families and young children, in my ECFE classes we are always trying to find healthy recipes that are quick and easy

Is offers advice and food

because it is awesome trying new things and having fresh veggies to eat

Especially the poor, every little bit helps

it helps with healthy food and also learning to prepare healthy foods with the recipes we got

beneficial, healthy food

it was such a relief to know that we would be getting fresh local produce biweekly

helped to have fresh veggies I may not have been able to afford

I believe that other families could use the help w/food and meal planning.

it was very helpful to get healthier foods for everyone to eat

It encourages healthy eating and helps those who may not have the means to buy fresh foods to have some

because it is very helpful