

Making the Healthy Choice the Easy Choice

**Community
Interventions**



February 8, 2024
Anne Mathews, PhD, RDN



Support Florida families to access more nutritious food choices to improve their health and well-being



Community Nutrition + Teaching Kitchens



Recipe for
Heart
Health



Nutrition in a
Box



Books and
Cooks

COOKING AND HEALTH

- Cooking more at home is connected to improved diet quality
 - Increased fruit, vegetable, and fiber intake
 - Lower total calories, saturated fat, cholesterol, added sugar, sodium
- A healthy diet patterns affects growth, development, and long-term health status

Culinary Medicine

- Applied in various forms
 - Culinary therapy
 - Teaching kitchens
 - Medically tailored meals
 - Meal kits and delivery services
 - Health apps





Recipe for Heart Health

A plant-based culinary diet intervention to test independent benefits of olive oil

Cardiovascular Disease

- Conditions that affect the heart or blood vessels
- Top cause of mortality and morbidity worldwide
 - 655,000 deaths from heart disease/year in US
 - 1 in every 4 deaths
 - Heart attack every 40 seconds

Vegan/Vegetarian Diets for CVD Prevention

- Large epidemiological studies
- Low-fat plant-based diet clinical trials
- Post-hoc PREDIMED cohort reanalyzed for provegetarian food pattern
 - Reduced risk of all-cause mortality by 41% in quintiles with highest vegetarian score



Specific Aims



Aim 1 – Biometric Analyses

→ compare effects on **clinical/metabolic cardiovascular risk factors**

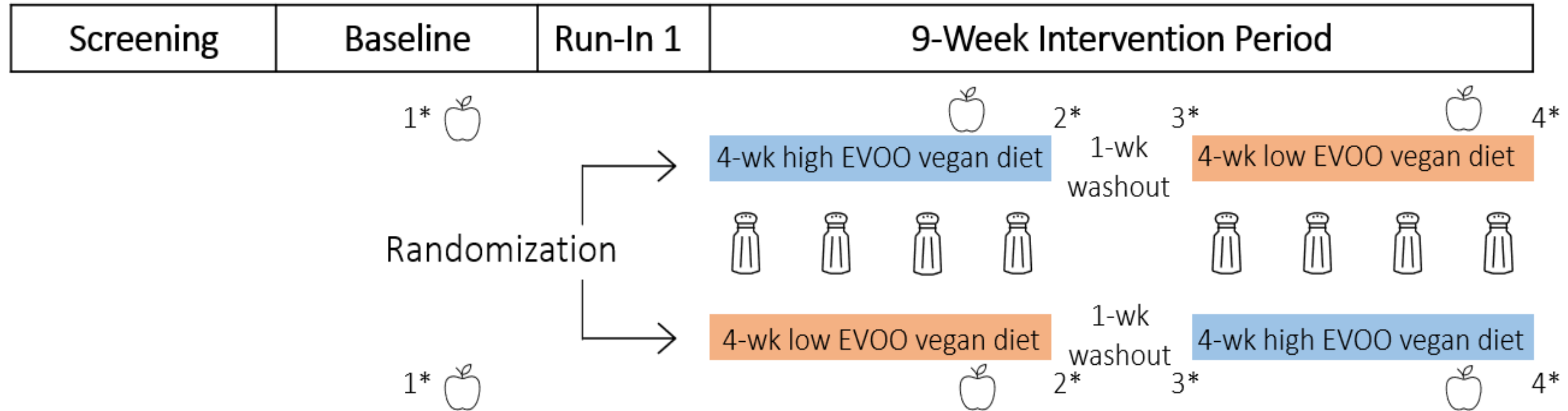
Aim 2 – Behavioral and Psychological Analyses

→ compare effects on **cooking measures, stress, and mood**

Aim 3 – Dietary Analyses


→ compare effects on **diet quality and skin carotenoid status**

Overview of Study Design



*Data collection: fasting blood, urine sample, stool sample, surveys, body measurements

 ASA-24 diet recalls

 Cooking class

Study Design: pilot prospective, open-label, randomized, controlled crossover clinical trial

Population: primary prevention adult patients at borderline to high risk for ASCVD



Teaching Kitchen Sessions

Overview of the Recipe for Heart Health Culinary Medicine Intervention Activities

High or Low EVOO Vegan Diet			
<ul style="list-style-type: none"> ○ Kitchen Basics ❖ Plant-Based Diet □ Lifestyle Behaviors Intro 	<ul style="list-style-type: none"> ○ Wheel of Cooking ❖ Balanced Meals & Plant Proteins □ Nutrition, Nature, & Sustainability 	<ul style="list-style-type: none"> ○ Soups, Salads, & Sides ❖ Fruits, Veggies, & Friendly Fats □ Goal Setting & Values 	<ul style="list-style-type: none"> ○ Beans & Grains ❖ Fiber, Carbohydrates, & Hydration □ Movement
WEEK 1	WEEK 2	WEEK 3	WEEK 4
<ul style="list-style-type: none"> ○ Pastas & Sauces ❖ Energy/Nutrient Density □ Stress Mgmt. & Mindful Eating 	<ul style="list-style-type: none"> ○ What's for Breakfast? ❖ Micro- & Phyto-nutrients □ Sleep 	<ul style="list-style-type: none"> ○ Snacks & Sweets ❖ Nutrition Label & Sweeteners □ Science of Happiness 	<ul style="list-style-type: none"> ○ Flavors around the World ❖ Building Flavor & Eating Out □ Community & Relationships
WEEK 5	WEEK 6	WEEK 7	WEEK 8

○ Culinary Focus

❖ Nutrition Education

□ Lifestyle Wellness

5-10 min
check in &
intro

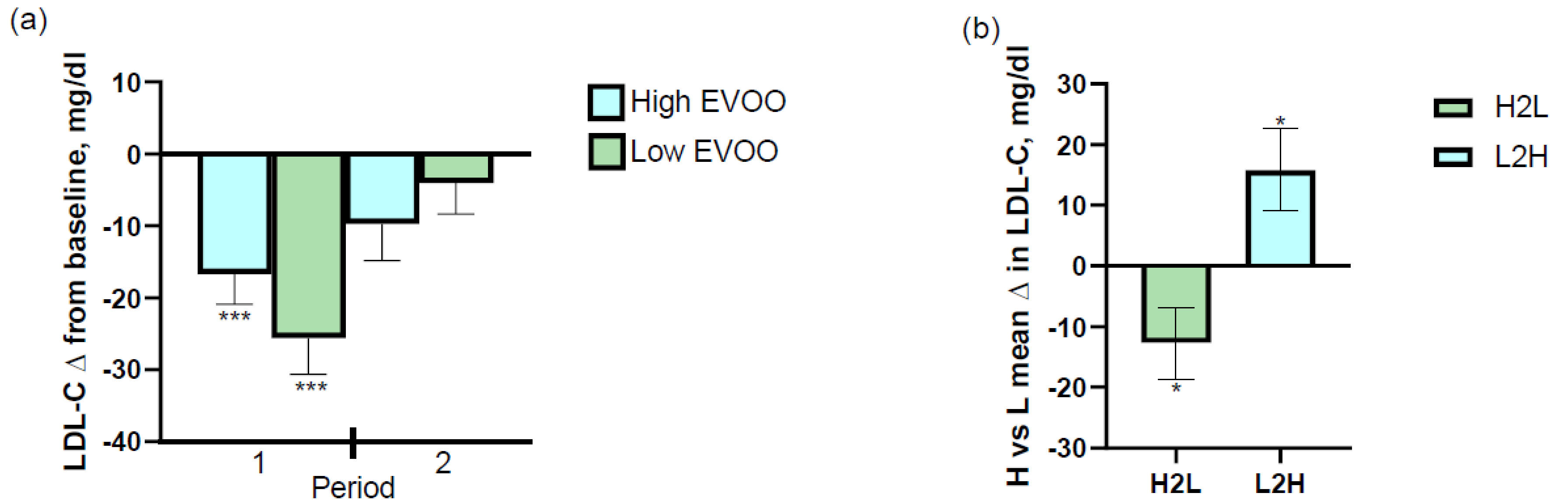
20-25 min nutrition
& culinary
education

5-10 min
cooking
demo

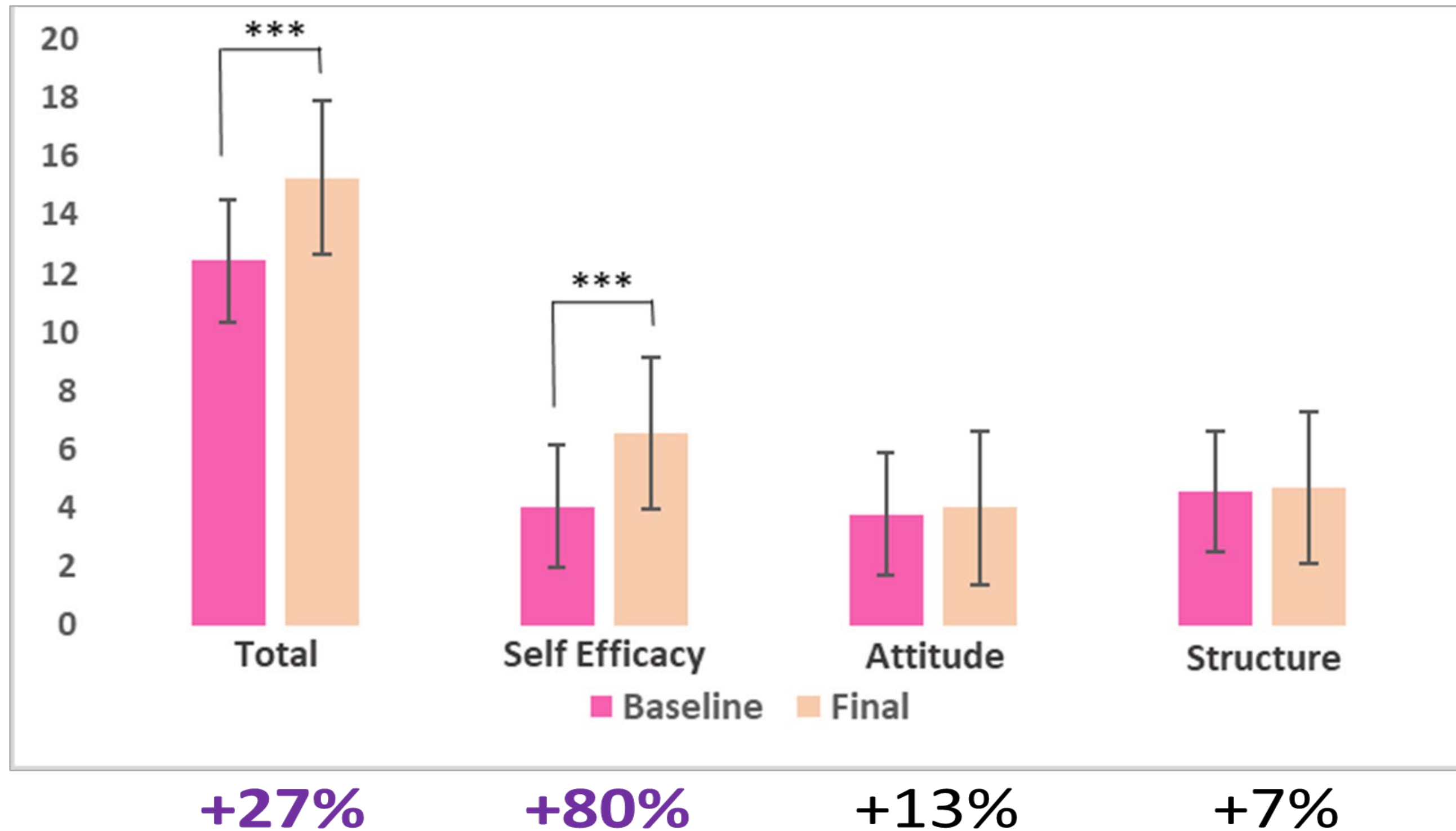
30-40 mins hands-on cooking

15-20 mins tasting &
lifestyle discussion

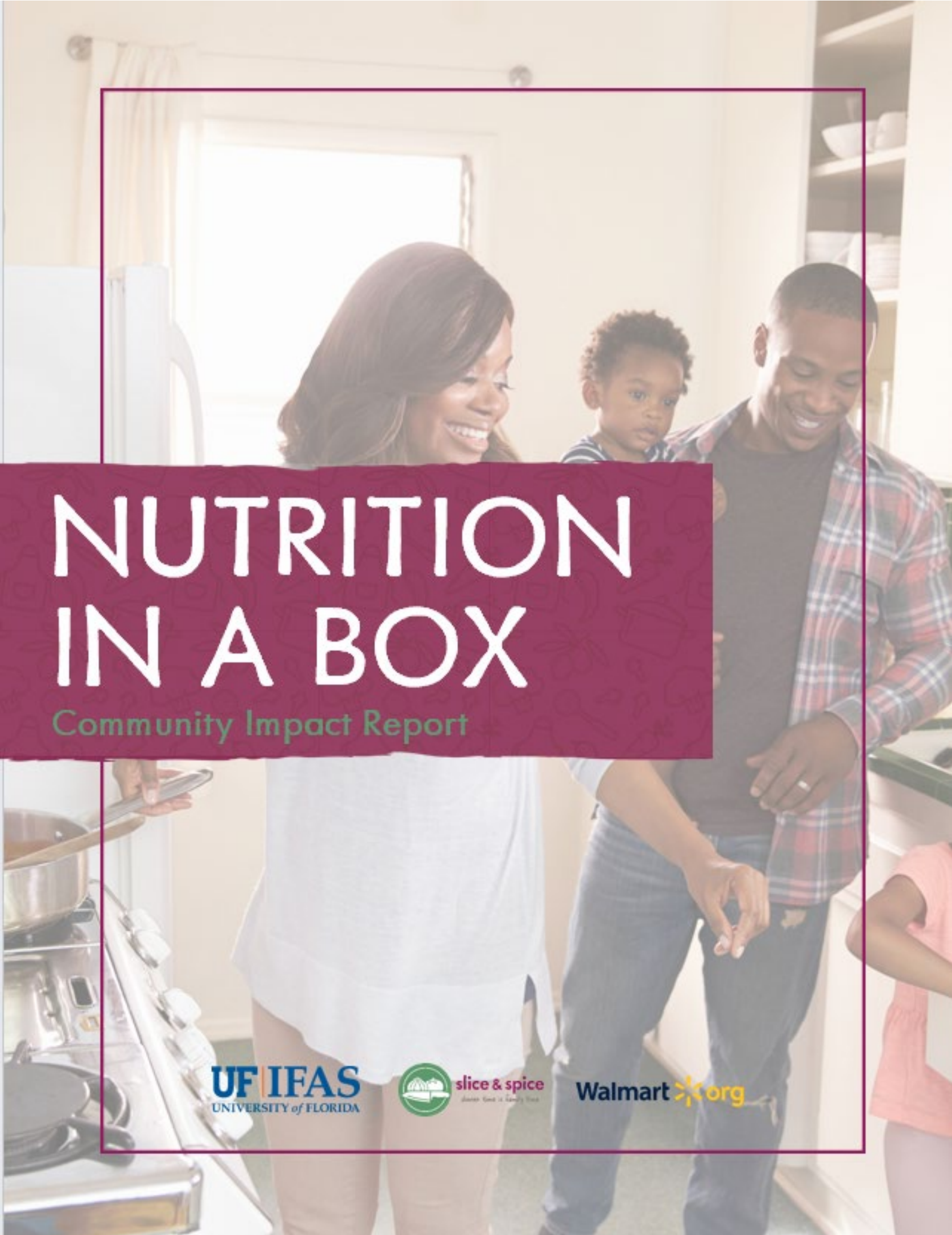
BRIEF RESULTS: MEAN LDL-C LEVELS BY TIMEPOINT AND DIET ORDER



COOKING AND FOOD AGENCY



Data presented as mean \pm SEM



NUTRITION IN A BOX

Community Impact Report



NUTRITION IN A BOX PILOT

We partnered with Eastside High School's Institute of Culinary Arts to develop a meal kit program for 40 families with low income.

This pilot program had several positive outcomes:

- Improved diet quality while participating in the program
- Decreased perceived stress
- Child engagement in cooking



HIGHLIGHTS FROM FOCUS GROUPS

Shopping Behaviors

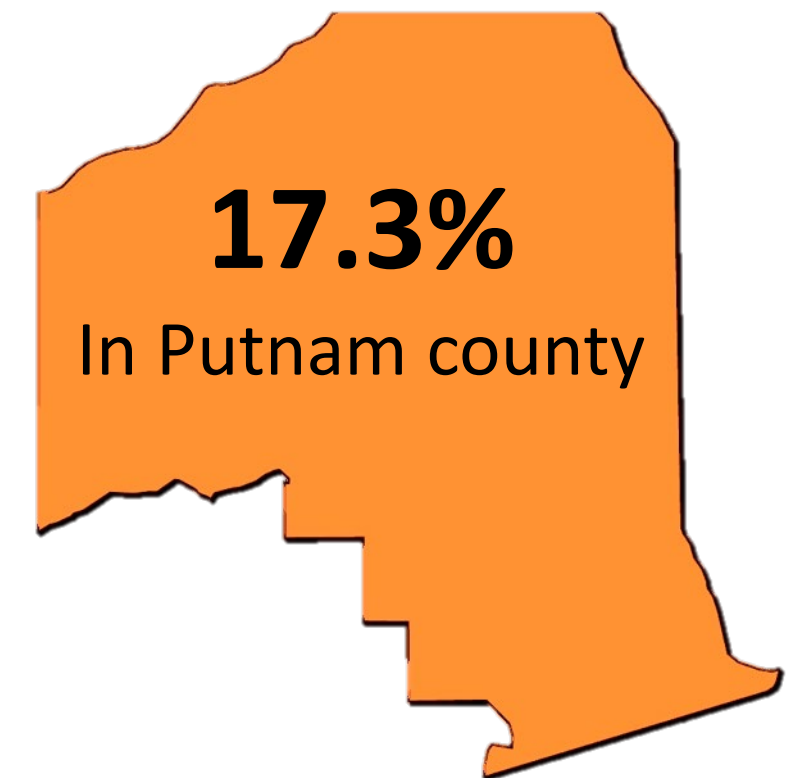
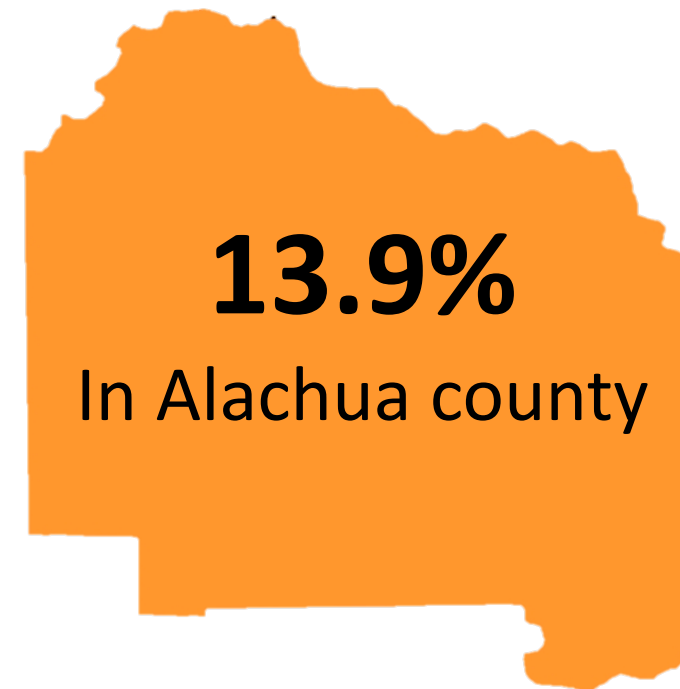
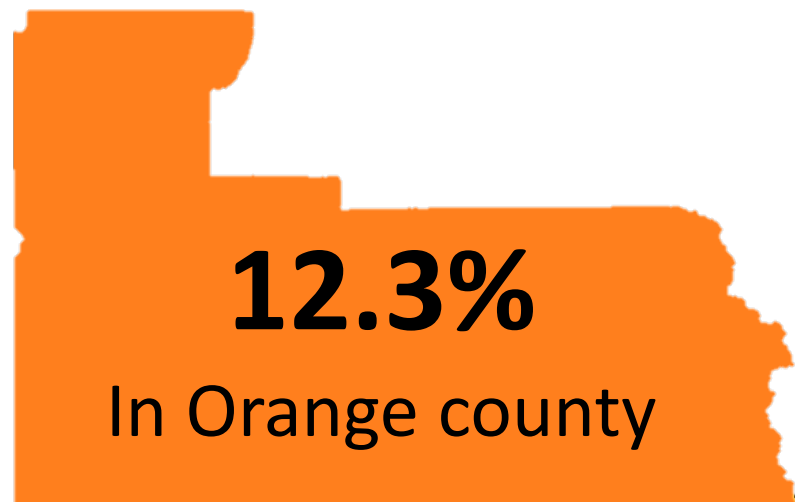
- **73% (11/15) reported cost as a major driver of food purchasing decisions**
- **27% (4/15) reported nutrition as a major driver of food purchasing decisions**

Meal Kit Preferences

- **None of the focus group participants had heard of a meal kit**
- **Participants were open to the idea of the meal kit, but cited cost as a possible barrier**
- **All participants preferred a meal kit that includes fresh and shelf stable ingredients**
- **Central pick-up locations suggested include local church, food bank, community center, and schools**



THE PROBLEM (PRE-COVID19)



- Food insecurity relates to poor dietary intake, negative health outcomes, and increased healthcare costs.
- There is a critical need to increase daily access to fresh, healthful foods that can be prepared in acceptable and appetizing ways for many families

NUTRITION IN A BOX 2020-2023

Program Goals for Meal Kit/Nutrition Intervention for 150 families with low income:



Increase fresh food access



Increase fruit and vegetable intake



Increase frequency of cooking meals at home



Engage 400+ high school students from 4 high schools in growing food and preparing boxes



Develop a toolkit with step-by-step guidance for establishing a community-based meal kit program

ADDITIONS TO LARGER PROJECT



New aspects of the project:

- Steering committees in each target community that meet quarterly
- Partner with high school agricultural science programs to help grow produce for meal kits
- Partner with UF/IFAS Extension to help create a sustainable program

THE PROGRAM



slice & spice

dinner time is family time

Slice & Spice

- 6-week program
- Families receive
 - 3 nutritious meals for a family of 4 each week with step-by-step instructions
 - Recipe cards and demonstration videos
 - Nutrition education materials
 - Cooking utensils
- Health and nutrition data are collected at 3 times:
 - Before receiving their 1st meal kit
 - At the end of the 6-week program
 - 6 months after the program ends

Recipe Cards



Black Bean Quesadilla with Corn, Avocado, and Tomato Salad

Prep time: 15 minutes Cook time: 15 minutes Servings: 4



Nutrition Facts	
4 servings per container	
Serving size 1/4 recipe (107g)	
Amount per serving	
Calories	510
% Daily Value*	
Total Fat	21g
Saturated Fat	10g
Trans Fat	0g
Cholesterol	100mg
Sodium	200mg
Total Carbohydrate	57g
Dietary Fiber	10g
Total Sugar	10g
*Percent Daily Values are based on a diet of other people's secrets.	

Scan code for a video of how to make this recipe!



Ingredients

- 1 cup canned corn kernels (drained)
- 1 medium avocado
- 1 medium cucumber
- 1 cup cherry tomatoes
- 1 medium onion
- 1 small red onion
- 1 tablespoon olive oil
- 1 cup cheddar cheese
- 1 (20-oz) can black beans
- 2 eggs (shelled, reduced-fat) and whisked with cheese
- 4 tablespoons fresh cilantro
- 4 (8-inch) flour tortillas
- 1 lime juice
- 1 teaspoon salt







Instructions:



1. Prep

Cut the cucumber and red onion into small dice. Slice the tomatoes and lemon in half. Finely chop the cilantro. Remove the avocado's peel and seed and cut the avocado into medium dice. Mince the garlic clove. Drain corn and black beans. Rinse the black beans.



2. Make corn, avocado, tomato salad

To a large bowl, add the avocado, cucumber, tomatoes, red onion, and corn. Carefully juice the lemon into the avocado mixture. Remove any seeds. Add 1 tablespoon olive oil, garlic, and salt.



3. Make the filling

Mix the black beans, cheese, cilantro, and salsa in a medium bowl and set aside.



4. Assemble quesadilla

Spread about 1/2 cup of the black bean mixture on half of the tortilla. Fold tortillas in half and set aside. Repeat this step for the remaining tortillas.



5. Cook quesadilla

Heat 2 tablespoons olive oil in a large skillet over medium-high heat. Place filled tortillas in skillet. Cook for 3 minutes per side or until tortillas are golden brown and cheese filling melts.

6. Final touches

Cut quesadillas into wedges and serve with corn, avocado, and tomato salad.

Did You Know ?

- » Black beans are a good plant-based protein.
- » Reduced-fat cheese offers good flavor with less saturated fat.

Try these tips!

- » Avocados have one large seed in the middle; carefully remove it with a knife or spoon.
- » Squeeze the lemon over a slotted spoon to separate the seeds from the juice.



POSITIVE FAMILY MEALS

Eating meals together as a family has educational, health, and social benefits. Parents can involve kids in the menu planning, grocery shopping, and cooking. Mealtimes can be a fun time for families to spend together.

GET KIDS INVOLVED:

- Kids can help shop, cook, and clean up dinner. Younger children can help in the following ways:

Preschoolers: wash produce, add ingredients, stir ingredients, help set the table, and put things in the trash

Elementary school-aged children: help make a grocery list, help put groceries away, measure ingredients, crack open eggs, cut food with a plastic knife, and set the table



Flip over for more! →



Nutrition Handouts

FOCUS ON FAMILY DURING DINNER:



- **Encourage conversation:** Show interest in your family's stories, praise one another, and try not to talk over each other.
- **Remove distractions:** Turn off the tv and put phones away so you can focus on family.
- **Be a good role model:** Eat from every food group and try new foods. If your children see you eating a new food, they may be more willing to try it.

LET KIDS MAKE CHOICES:

- Parents and kids can share feeding responsibilities.
- Parents can decide what, when, and where to eat.
- Kids can decide whether to eat and how much to eat.



RECIPE VIDEO

- <https://drive.google.com/drive/u/4/folders/1KY5LoWjmJgKhQ01zQclR-4ayKnT7xzlm>



RECIPES AND VEGETABLES

Recipe Card Name	Protein Source	Main Vegetable	Grain
Stir Fry Vegetables and Beef	Beef	Carrots, broccoli, bell pepper	Brown rice
Easy Spanish Chicken with Tomato Sofrito Sauce	Chicken	Tomato, Onions	Barley
Black Bean Quesadilla with Corn, Avocado, and Tomato Salsa	Beans	Cucumber, Corn, Avocado, Cilantro	Tortilla, Black Beans
Summer Salmon	Fish	Asparagus, Onion	Whole wheat linguine
BBQ Chicken Pizza with Garden Salad	Chicken	Mixed greens, red onion	Whole wheat English muffin
Roasted Veggie Farro Bowls with Marinated Cranberries & Pepitas	Grain	Sweet potato, potato	Farro
Hearty Spinach Salad	Chicken	Spinach	Croutons
Blackened Catfish with Cheddar Cheese Grits & Collard Greens	Fish	Collard greens, Onions	Grits
Bangin' Burrito Bowl	Beans	Peppers, Onions, Cilantro	Brown rice
Vegetable and Shrimp Stir Fry	Shrimp	Zucchini, carrots, snow peas	Brown rice
Honey Mustard Turkey Burger with Seasoned Fries	Turkey	Sweet potato, potato	Whole wheat hamburger bun
Baked Caprese Tortellini with Arugula Salad	Vegetarian	Tomato, Onions	Tortellini
Tilapia Creole	Fish	Tomato, Peppers	Brown rice
Chimichurri Cod with Roasted Carrots & Garlic Herb Couscous	Fish	Carrots, Cilantro	Couscous
Lentil Tacos with Mexican Salad	Grain	Onions, lettuce, tomato, avocado	Taco shell
Baked Pork Chops with Vegetables	Pork	Potato, Cauliflower, Carrots	Potato
Shrimp Scampi	Shrimp	Broccoli, onion	Whole wheat linguine
Chickpea-Powered Mediterranean Couscous	Beans	Thyme, zucchini, cherry tomatoes	Couscous

Story Prompts

FAMILIES

- Theme: Dinner time is family time
- Prompt: With all our day to day commitments, we may not have a chance to enjoy meals together. Share how dinner time is family time in your home.
 - How did the meal kits affect eating together as a family?



Story Prompts

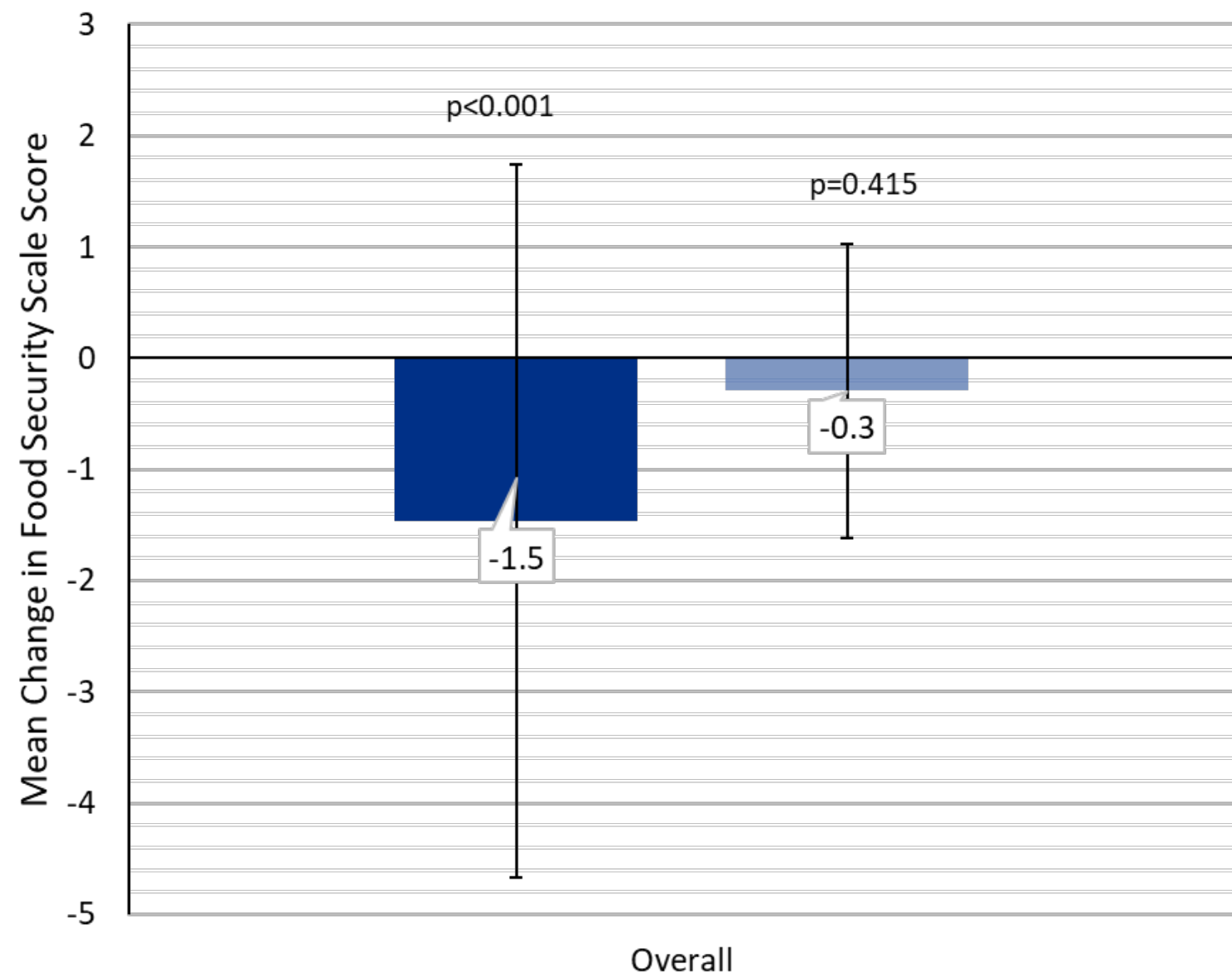


Students

- Theme: Gardening makes me feel.....
- Prompt: Gardening can generate many feelings and emotions. Show us how you felt in class.
 - How do you feel when you are working in the garden and harvesting produce for your community?

RESULTS

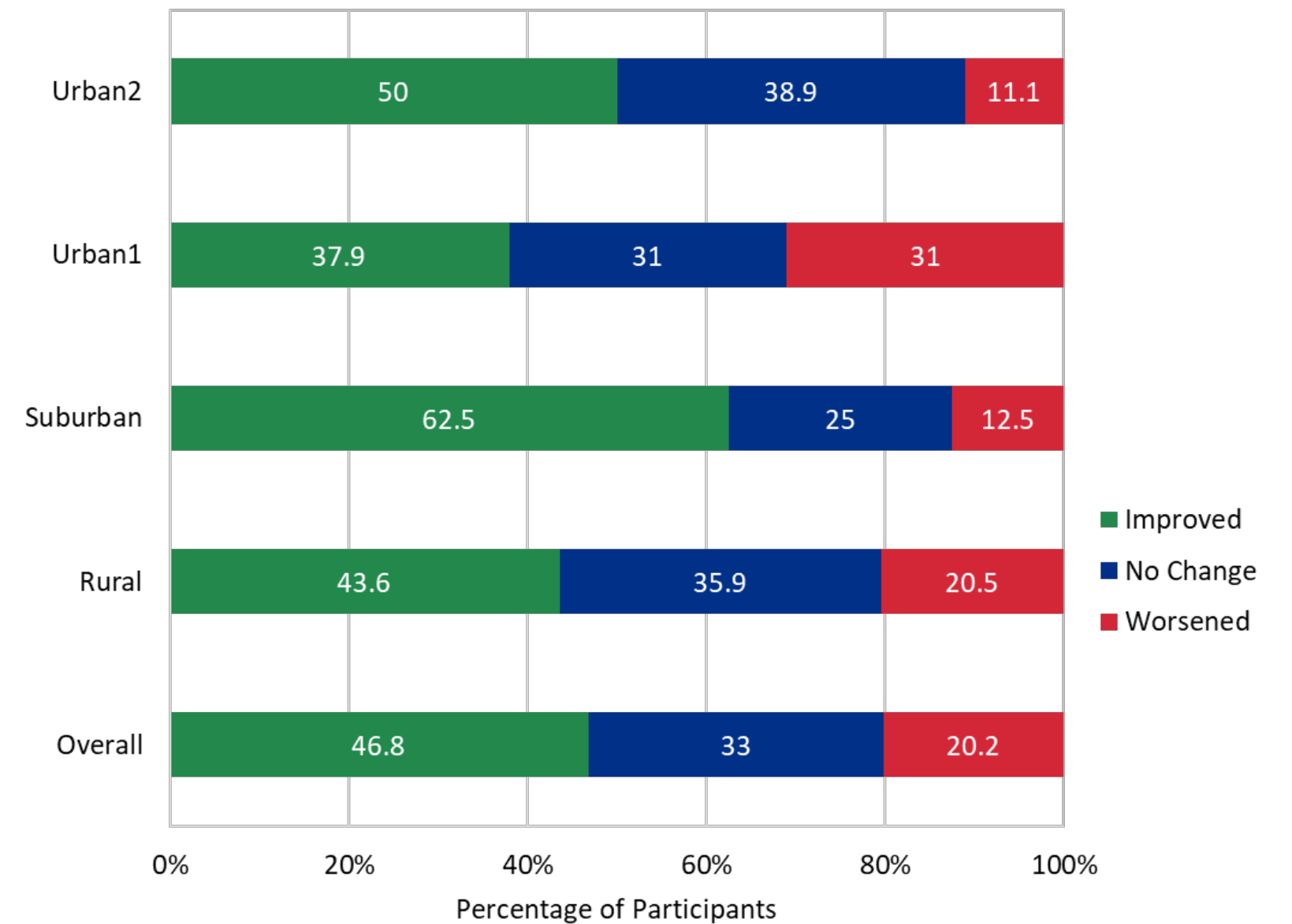
Food Insecurity Decreased



■ Baseline to Post (n=109) ■ Post to LTFU (n=85)

Overall Mean Change in FS Scores

Fruit and Vegetable Intake Increased



■ Improved
■ No Change
■ Worsened

Percentage of Participants

Change in Fruit and Vegetable Intake from Baseline to Post

UF/IFAS Extension Books and Cooks



New Worlds Reading Initiative Vision

Create at-home libraries for eligible students

Establish community & statewide partnerships

Build excitement for reading through statewide promotional campaign



Develop teacher experts in the science of reading through microcredentials and create home school connections in literacy

Develop caregivers' confidence & capacity to support children's reading

*Current Eligibility

Florida public and charter school students in kindergarten through fifth grade are eligible based on the following criteria:

- Any student who has been identified as not yet reading on grade level based on The Florida Assessment of Student Thinking (FAST)
- Any student who receives Tier 2 or Tier 3 reading instruction



New Worlds Reading Engagement at a Glance

Overview

- Attended Community Outreach Events
 - Community Health Fairs
 - School Resource Fairs
 - Community Family Nights
 - School Science Fairs
- Regional Outreach Efforts
 - District Information Sessions and emails
 - Flyers Mailed to Every Elementary School
 - Flyers Distributed at Outreach Events
- Pop-Up Banners



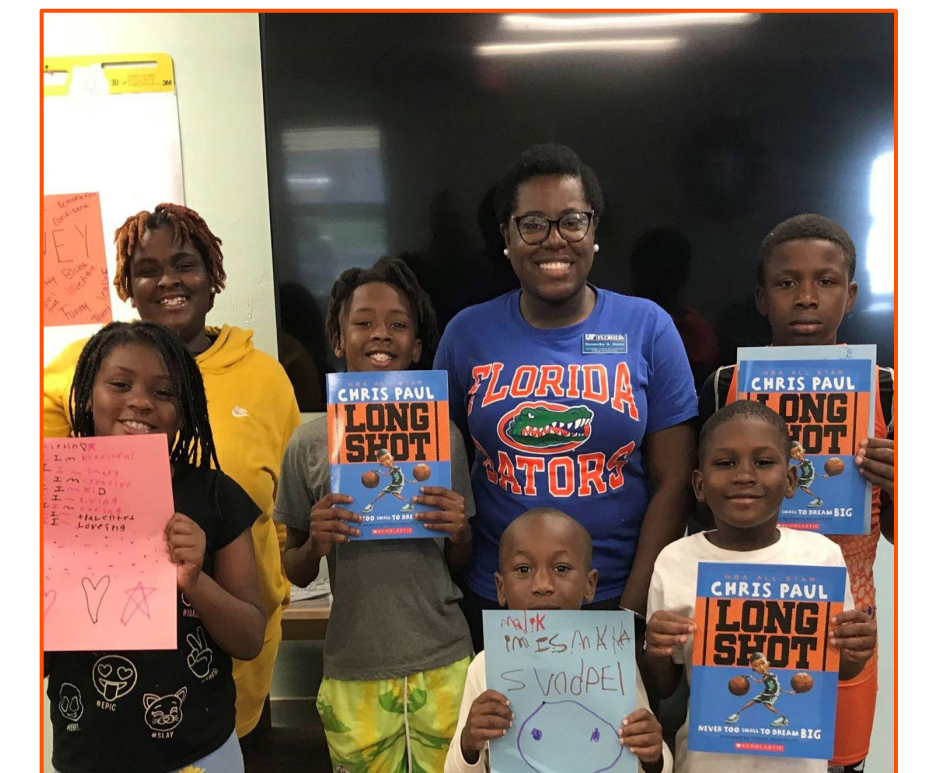
Community Event



Read Aloud



At The Capitol



Housing Authority Tour

Literacy Resources

•Book Lists

•Interactive Reading Guides (IRGs)

•Videos



Things You Can Try At Home:

Make your reading spot quiet and comfortable.



new worlds reading

INTERACTIVE READING GUIDE

The Word Collector

by Peter H. Reynolds

Jerome collects something very special and it isn't bottle caps, stamps, or baseball cards. He collects words—big words, small words, and all the words he finds fun and interesting. What new words will you collect today?

One great way to motivate your child to read often is to keep books everywhere! Easy access to books means that kids are more likely to read. You can even take books with you when you leave home! Have your child pick out a book or two to bring along. Whenever your child gets bored, encourage them to read their book! Your child can read out loud to you or other family members to help pass time!

Keep books available in places such as these:

- kitchen
- bedrooms
- bathrooms
- living areas
- backpacks
- purses
- vehicles

UF Lastinger Center for Learning
UNIVERSITY of FLORIDA

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MY STINKY SOUP RECIPE

1 cup of _____
2 spoons of _____
½ cup of _____
3 steaming _____
A pinch of _____
1 chopped _____
A sprinkle of _____

Directions: Mix all the ingredients into a pot, and cook for _____ minutes. Serve in a soup bowl and enjoy!

When you taste your stinky soup, what face will you make? Draw it here:

In *Super Fly Guy*, Roz the lunch lady makes Fly Guy stinky garbage soup. Place the smelly stickers in the bowl to create your own stinky soup. Write down your recipe, and draw a face to show how it will taste!

SCHOLASTIC new worlds reading **UF** Lastinger Center for Learning UNIVERSITY of FLORIDA

BOOKS AND COOKS

Goal and Objectives

Improve the literacy and **nutrition security** status of families from Florida communities with low income.

Objective 1:

Recruit and enroll eligible families into the New Worlds Reading Initiative statewide.

Objective 2:

Develop local partnerships through county-level steering committees to guide New Worlds Reading recruitment and educational delivery.

Objective 3:

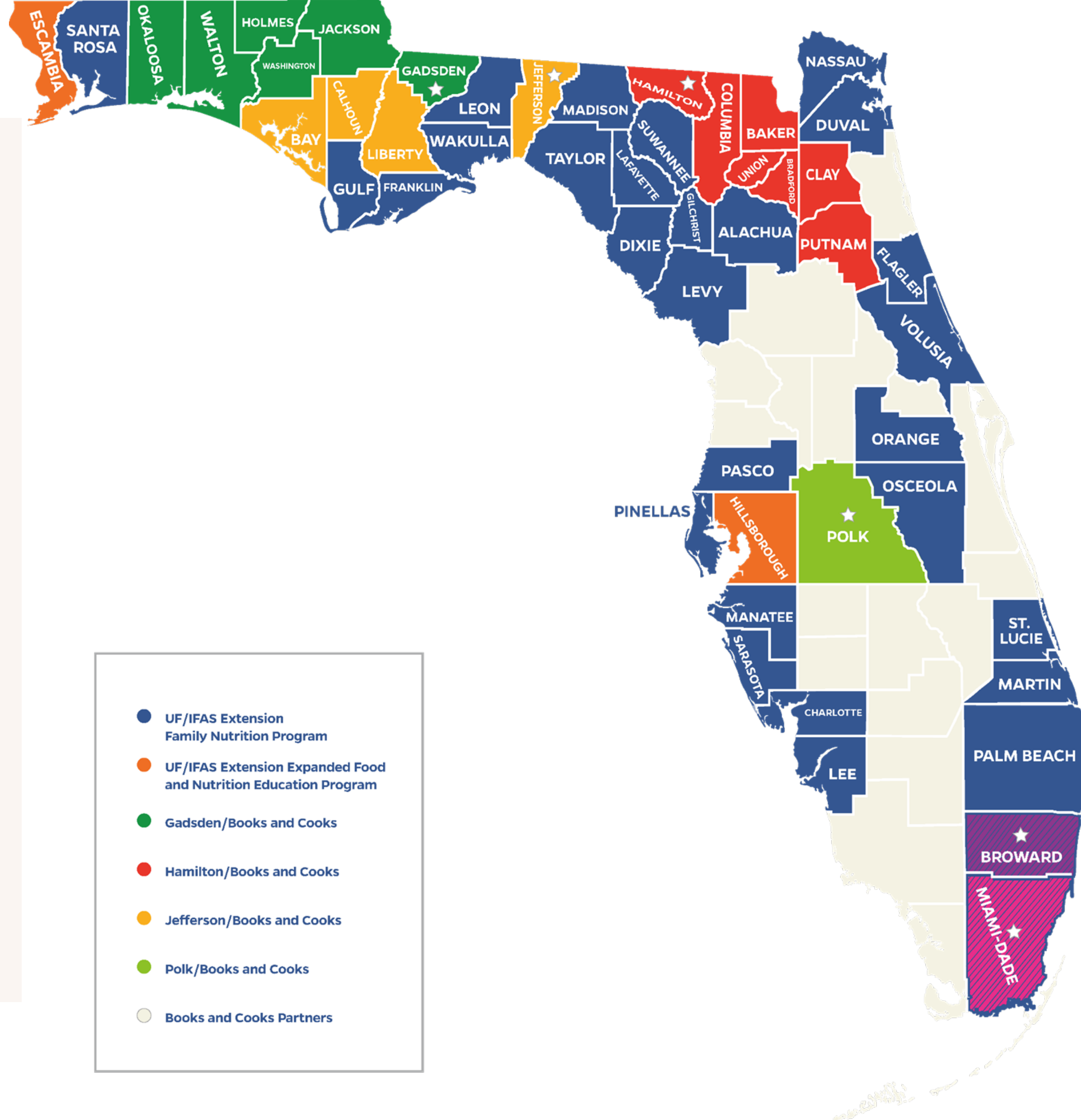
Deliver the Books and Cooks educational curriculum to increase family literacy capacities and improve nutrition security status.

Objective 4:

Optimize program quality and assess the achievement of outcomes through formative and summative evaluation of the Books and Cooks Program.

Objective 1:

Recruit and enroll eligible families into the New Worlds Reading Initiative statewide.





Objective 2:

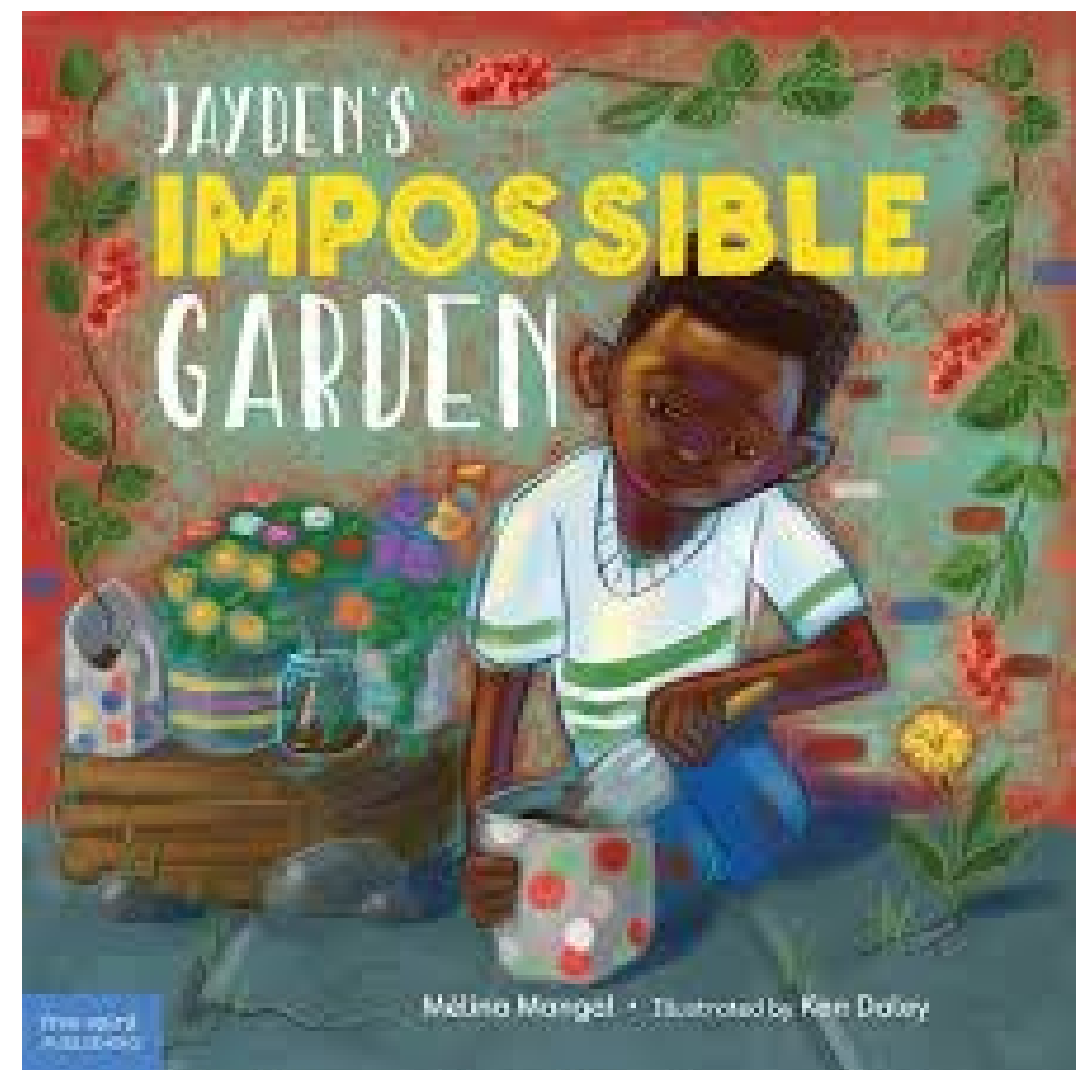
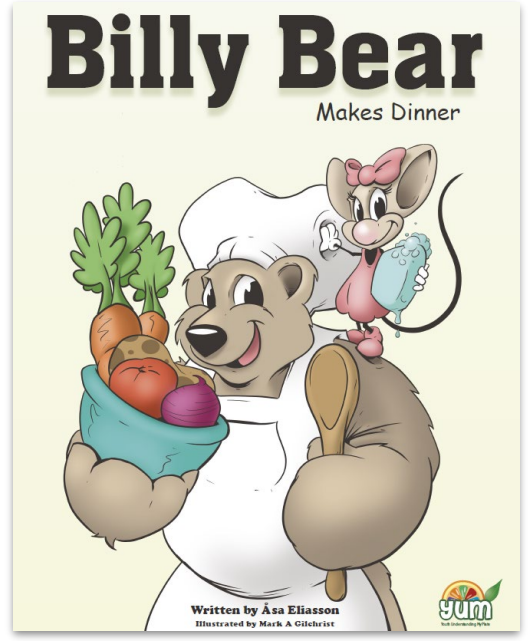
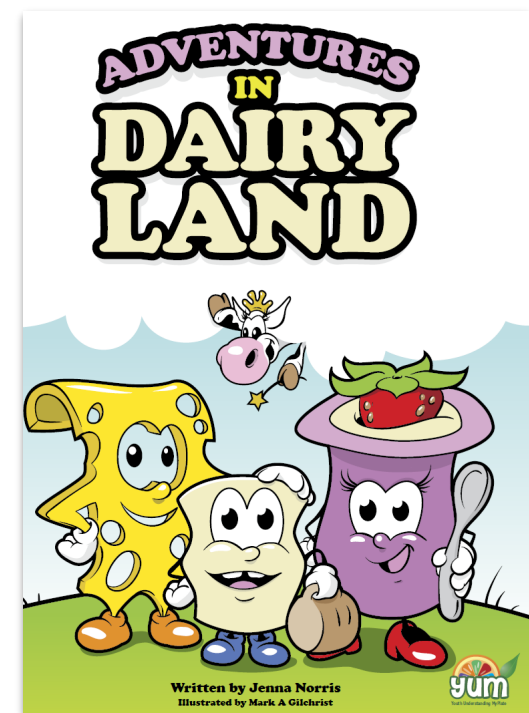
Develop local partnerships through county-level steering committees and networks to guide New Worlds Reading recruitment and delivery of the Books and Cooks program in 6 targeted counties.





Objective 3:

Deliver the **Books and Cooks** educational curriculum to increase family literacy capacities and improve nutrition security status.





- **Educational sessions for parent-child pairs**
- **Focus on parent skills**
- **Literacy and nutrition education**
- **Dinner, child care, and social time**
- **Meal kits for families**
- **6 free books per child**





Objective 4:

Optimize program quality and assess the achievement of outcomes through formative and summative evaluation of the Books and Cooks program.



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Thank You!