

Fun with Fresh Food Rainbow Nutrition Program Helps Families Improve Attitudes and Behavior Around Fruits and Vegetables

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Abstract

The Fun with Fresh Food (FFF) Rainbow Nutrition program is a 6-week series of 20-minute interactive rainbow-themed food “commercials” to improve attitudes toward fruits and vegetables (FV). Each week centers on a color (i.e. purple), with a mystery food (i.e. cabbage). Sessions include taste tests, produce giveaways, and child involvement in recipe demonstrations. Average weekly attendance was 110 people. Weekly post-program parent surveys indicated 83% of adults gained FV knowledge and 78% intended to incorporate a recipe or tactic at home. Focus group data showed increased confidence in serving FV, greater interest in children cooking and eating FV, and the rainbow theme being a significant draw. The FFF program suggests short, repeat exposure to FV can have a strong impact on parental self-efficacy for cooking and eating FV and child interest in FV.



Objectives

Program objectives are to:

- Increase willingness of parents and children to try more FV
- Empower parents to serve produce in more appealing ways
- Demonstrate age-appropriate kitchen tasks for kids and increase interest in cooking
- Supply parents with recipes and ideas for working with picky eating
- Teach families to “eat the rainbow” for optimal health
- Increase exposure and access to fresh FV through taste tests and distribution of fresh produce

Program Methodology

Session Components

- FV fun facts
- Youth participation in demos
- 2-3 taste tests
- Rainbow photo booth
- Produce & recipe giveaways
- Post-evaluations

Evaluation Methods

- Weekly parent surveys
- Final retrospective survey
- Punch cards to track attendance
- Voting jars & photo booth props
- Parent social media posts
- Focus groups

Activity Guide

Color & Highlighted Food	Tasting Items	Picky Eating Tactics
Red Strawberries	<ul style="list-style-type: none"> • Strawberry Salsa • Strawberry Pancakes 	Combine with familiar foods: pancakes
Orange Carrots	<ul style="list-style-type: none"> • Carrot Muffins • Raw Carrots 	Combine with familiar foods: muffins Different shapes: Crinkle fries, coins, sticks, shredded Dipping Sauces: Ranch, Hummus, Pesto
Yellow Summer Squash	<ul style="list-style-type: none"> • Squash Sauté • Veggie Spaghetti • Raw Squash 	New Cooking Method: Sautéing Different Shapes: Spaghetti, waffle fries, sticks, coins Dipping Sauces: Ranch, Hummus, Pesto, Marinara
Green Cucumbers	<ul style="list-style-type: none"> • Cucumber-Watermelon Salad • Raw Cucumber “Slinkies” 	Different Shapes: Slinky Dipping Sauces: Ranch & Hummus
Blue Blueberries	<ul style="list-style-type: none"> • Blueberry Snack Mix • Frosted Blueberry Skewers 	Combine with familiar food: yogurt, cereal, popcorn Change temperature: frozen Change Presentation: Put it on a stick
Purple Cabbage	<ul style="list-style-type: none"> • Zesty Roasted Cabbage • Colorful Cabbage Pockets 	New Cooking Method: Roasting Change Presentation: Serve in pita or tortilla, not salad

Results and Impact

Over 650 children and parents attended FFF in summer 2018. Average weekly attendance doubled from 55 participants in 2017 pilot season to 110 participants in 2018 with introduction of rainbow theme. Adults brought children ages 5 months to 18 years, with 94% of children aged 13 or under. Week-to-week retention was high; 50 children from 29 different families attended 3+ sessions and 25 children attended 5+. Each week, at least 45 bags of the highlighted produce were given away



Zesty Roasted Cabbage

Cabbage is a low-cost, filling vegetable that's delicious raw or cooked! Roasting is a great way to transform the taste and texture of a vegetable. It's also a “set it and forget it” recipe, meaning you can pop it in the oven and do other tasks until it's done! Choose your favorite color of cabbage, though purple is more fun.

Ingredients:

- 1/2 head purple cabbage
- 1-2 Tbsp olive oil
- 1 tsp salt-free garlic and herb seasoning
- 1/2 tsp salt
- 1/4 tsp pepper

Cucumber Watermelon Salad

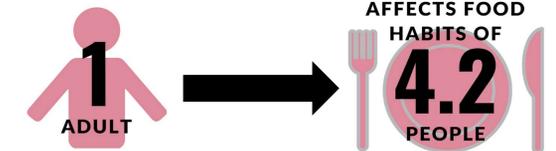
This fresh salad mixes a lot of textures, colors and tastes! The high water content in the ingredients will help keep you cool this summer. Buy a watermelon and use half for this and half for snacking! You'll be getting lots of vitamin C and vitamin A!

Ingredients:

- 4 cups cubed seedless watermelon
- 4 cups chopped cucumbers (2 medium)
- 4 green onions, thinly sliced
- 1/4 cup red wine vinegar
- 1/4 cup canola or olive oil
- 1/4 cup of mint leaves
- 1/2 teaspoon salt
- 1/4 tsp pepper
- Optional—1/2 cup feta cheese

Results and Impact

Adults reported influencing food habits of 4.2 people on average. Thus, lessons about using colorful produce, involving kids in the kitchen, making healthy recipes, and encouraging trying new foods, can have a strong ripple effect.



Focus Group Feedback

Increased confidence in serving FV

- “The seven year old said, “I don't like the red cabbage. I don't like that.” I said, “How do you know?” So when she tried it in the tortilla, she goes, “Oh, I like that.” And I said, “See? Again, if you try it, you might like it.”
- “I used to be very stern in making it a requirement for him to eat everything on his plate. But now I'm more relaxed and I'm just taking it a step at a time and trying to interest him.”
- “I think the aim of the program was to show that eating healthy can taste good and be relatively easy. [FFF] achieved that. Seeing the dishes prepared just showed you that the recipes were simple. We tried new recipes because of this program.”

Greater interest in children cooking and eating FV

- “My daughter was so excited afterwards and she wanted to help to make the foods and snacks we learned about each week. Very helpful with a picky snack eater!”
- “My daughter liked the carrots the BEST!! She has been eating carrots most days as a snack since that week!”
- “The kids had a ball. I don't know why; they were just enthralled with chopping up that cabbage. I think with the carrots too, learning the different ways of serving those and make it fun to eat instead of just a little baby carrot.”

Rainbow theme as significant draw

- “The “Eat a Rainbow” theme was perfect. Every week, [she] asked, “Mimi, what color are they doing today? I think they're doing purple.” I really enjoyed that.”
- “We came out the door, looked to our right and saw all this colorfulness going on, “What's that?” So that kind of drew us over. Then we came back each week to see what was gonna be the new thing. 'Cause all we knew was the color, not how it was gonna be used or the next recipe...so that was kind of intriguing.”

Conclusion and Sustainability

The FFF program suggests short, repeat exposure to FV can have a strong impact on parental self-efficacy for cooking and eating FV and child interest in FV. Short demos may reduce barriers by illustrating healthy eating does not have to be time consuming or difficult. The FFF model could be employed in rural, urban, and suburban settings to reach families across the country in a whimsical yet substantive way. Though initially funded by small community grants, FFF has garnered support from local businesses to continue to provide families with produce and education in the future.