



Helping Families Move Towards Healthier Choices: Combining Motivational Interviewing and Boosters to Increase Fruit and Vegetable Consumption

Julie Reeder, Katherine Wagner, Diane Arnold, Susan Greathouse
Oregon WIC Program



Background

- It is well accepted that consumption of 5 – 11 servings of fruits and vegetables is recommended to promote health. However, little evidence exists that Americans are following this advice. Only one-third of Oregon 8th graders eat 5 – 9 servings a day, dropping to one-fourth of adults.
- If fruit and vegetable consumption tends to decline with age, the best way to impact this trend may be to intervene early, when parents are guiding the eating habits of their young children.
- As WIC serves just under half of all pregnant women and one-third of all children sometime before their fifth birthday, the program stands in a unique position to reverse negative trends in fruit and vegetable consumption.

Goal and Objectives

- Implement and evaluate motivational interviewing, either alone or coupled with boosters, to determine the impact on the frequency of parental offering of fruits and vegetables to their 2 to 4 year old children participating in WIC.
- Determine if the addition of motivational interviewing techniques during WIC Certifications increases the frequency with which parents offer fruits and veggies to their preschool children.
- Evaluate the impact of boosters on frequency of offering fruits and veggies.

Methods

Baseline Group (N= 350)	Assessment of frequency of fruit and vegetable offering to preschool child and parent identified barrier to increasing F/V. Measured twice, six month interval between measures.
Staff Training: Motivational Interviewing	Staff from the 3 study sites received an 8-hour training in MI, followed by staff observations and continuing education lessons for more than 1-year post initial training.
Intervention Groups (N=645)	Assessment of frequency of fruit and vegetable offering to preschool child and parent identified barrier to increasing F/V. Measured 3 times over 12 month enrollment.
Random Assignment to Interventions	All families in the intervention groups receive counseling from staff trained in MI. Half are randomly assigned to also receive 4 boosters between regularly scheduled visits.
Booster Development	4 Tracks for Boosters: Feeding Relationship, Preparation, Support, and Access. Built on Stages of Change and commercial marketing theories. Both English and Spanish materials developed.
Evaluation and Data Collection	Frequency of fruit and veggie offering by parents, readiness to change, barrier to change, survey about boosters. Qualitative data from staff.

Sample Boosters

Color text allows skimming story without reading the entire page

Reminder of recent episode of risk behavior

Likelihood of experiencing consequences from their behavior

Authority

Positive but not fairy-tale outcome

Emphasize positive aspects of alternative behavior

No More Food Fights
How one mom put an end to mealtime battles with her picky eater

My 3-year-old Emily was the pickiest eater ever. She could find the smallest piece of vegetable in any dish, and spit it right back out at me, whole.

One afternoon, while trying to get Emily to eat a half-way healthy lunch, she started her usual routine of spitting out most of what I made. I told her loudly to "eat your food or you won't be able to go to the park later."

Of course that just made her more upset and after 20 minutes of going back and forth we were both exhausted and she hadn't eaten much more. Tired of always struggling, I told myself there had to be a better way... for both me and Emily.

That night, I cooked one of Emily's favorite dishes, and then put some cut-up celery and a yogurt dip on the table too. I didn't say a thing, and amazingly, she actually tried a little bit on her own!

Little by little, I started offering other veggies with her meals, always making sure that I didn't make a big deal out of it if Emily didn't eat them.

After just a few months Emily's eating became more adventurous. We both felt more relaxed when it came to mealtimes.

Six months later, Emily still has her picky moments, but at least when I sit down at the table, I feel sure that my days of food fights are over!

Parenting Tip: Children between two and four like to explore their newly gained independence and that often means not liking certain foods.

Ensalada de Nopales

Ingredientes:
4 tazas de pepillo verde rallado
2 pencas de nopal fresco limpiadas y finamente picadas (aproximadamente 1 taza)
4 rebanadas delgadas de cebolla blanca
4 rábanos, en rebanadas delgadas
1 jitomate grande, picado
1 chile serrano, sin semillas y finamente picado
2 cucharadas de vinagre
1 cucharadita de aceite
1 cucharadita de azúcar

Preparación:
• En un tazón mediano, mezcla el pepillo, nopales, cebolla, rábanos, jitomate y chile serrano.
• Mezcla el vinagre, aceite, y azúcar; rocíala sobre la ensalada.

¡Ponte creativo!

Agrega un poco de jugo de lima o de limón al aderezo para darle más gusto.

Agrega un poquito de cilantro picado a la ensalada antes de poner el aderezo.

Agrega un pizco de especias como cominos, chile en polvo, o pimienta negra.

Participant Impact

- No significant differences in the frequency of offering of fruits and vegetables between the baseline, MI only, or MI plus booster groups.
- Most frequently cited barrier to increasing produce offering were feeding relationship issues, and not cost or accessibility.

Staff Impact

- "Instead of making assumptions and right away telling clients that they need to change, I ask questions to find out what they're concerned about and then ask if they have any ideas about how to make changes. My conversations with client are less one-sided and a lot more interesting."
- "Having been in WIC a long time I was in the mindset that that I have a job to do and there are requirements and you need to let me do my job. Allowing the client freedom of choice used to mean 'beans or peanut butter,' but now we are recognizing that they can be and should be in control of what we do and what kind of information they receive."
- "Being more affirming, more positive interactions with clients. Not feeling like I always have to find what is wrong."

Implications

- Making motivational interviewing the cornerstone of WIC counseling had a positive impact on staff and may produce positive participant outcomes over time.