



A Multi-site Evaluation of Fruit and Vegetable Consumption Changes from SNAP-Ed for Adults and Children

Results from FFY 2010 and FFY 2011

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Presenter Disclosures

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(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose



Background

- The *Network for a Healthy California (Network)* conducts social marketing nutrition education campaigns through the USDA's Supplemental Nutrition Assistance Program (SNAP).
- A major *Network* goal is to increase fruit and vegetable (FV) consumption.
- Local partners deliver interventions aimed at specific audiences, and are trained in evaluation capacity building to assess their own programs.
- Children received either *PowerPlay!* or *Harvest of the Month* interventions.
- Adult interventions were nearly always parent education.



Evaluation

- The largest partners are required to conduct Impact or Outcome Evaluation annually
- Some aspects of evaluations are standardized
 - Minimum sample sizes
 - Standardized survey tools
 - Pre-test/post-test design
- Other evaluation components are designed locally
 - Optional survey modules can be added
 - Control groups
 - And much more...



Analysis

FFY 2010	FFY 2011
• 44 projects total	• 42 projects total
• 21 selected for analysis	• 39 selected for analysis
❖ 12 children*, 9 adult	❖ 29 children*, 10 adult
Intervention:	Intervention:
1474 children*, 646 adults	6858 children*, 1099 adults
Control:	Control:
544 children*, 159 adults	779 children*, 45 adults

*Children included in analysis were in grades 4-8.
Sample sizes are for fruit and vegetable intake.

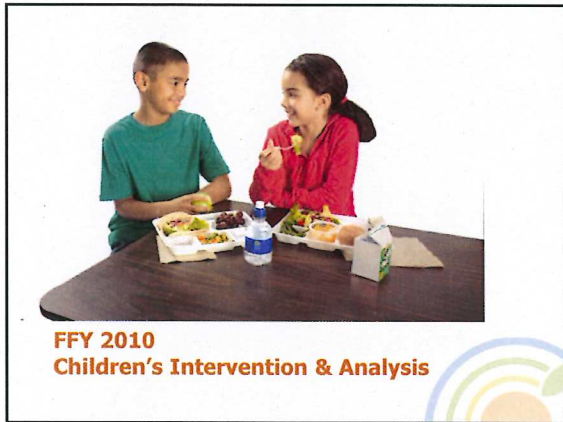


The following notations are used throughout this presentation for all analyses:

- * p< .05
- ** p< .01
- *** p< .001
- ns non-significant

If no significance level is indicated for a change between pre-test and post-test, the change is non-significant.





Interventions Used by Local Projects

Projects* Using Harvest of the Month	Moderate 1-3 Activities	Intense 4+ Activities	Projects* Using Power Play!	Moderate 1-10 Activities	Intense 11+ Activities
	5	6		1	4

**projects often use more than one intervention and may be duplicated in this count.*

Harvest of the Month provides materials and resources to support healthy food choices through increased access and consumption of fruits and vegetables as well as encourage daily physical activity. It brings together the classroom, cafeteria, home and community to promote a common goal and healthier habits for students, especially those in low resource schools.

*PowerPlay! uses tested nutrition ed lessons that are designed to be appealing to kids, easy for adults to use and understand, and grounded in proven theories from the fields of health behavior, education, social marketing, and prevention. These include the *School Idea & Resource Kits*, *Community Youth Organization Idea & Resource Kit*, *Power Up for Learning* physical activity supplement, *Kids...Get Cookin'!* cookbook, posters, parent brochures, and more.*

Evaluation Designs Used by Local Projects

Evaluation Design	Count
pre/post no comparison group	4
pre/post with comparison group	7
pre/post no comparison group, different intensities	1

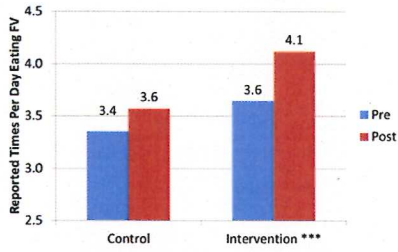
Network Youth Survey

Used by all child projects in FFY 2010 & 2011.
Condensed version of the School and Physical Activity Nutrition project (SPAN) survey, which was validated for 4th graders.

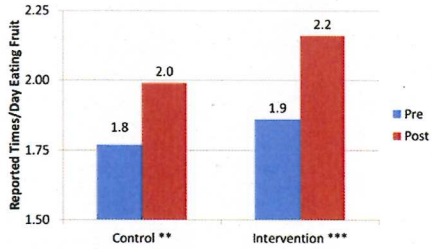
7. Yesterday, did you eat any vegetables? Vegetables are all cooked and uncooked vegetables, salads, and boiled, baked and mashed potatoes. Do not count French fries or chips.



- No, I didn't eat any vegetables yesterday.
- Yes, I ate vegetables 1 time yesterday.
- Yes, I ate vegetables 2 times yesterday.
- Yes, I ate vegetables 3 times yesterday.
- Yes, I ate vegetables 4 times yesterday.
- Yes, I ate vegetables 5 or more times yesterday.

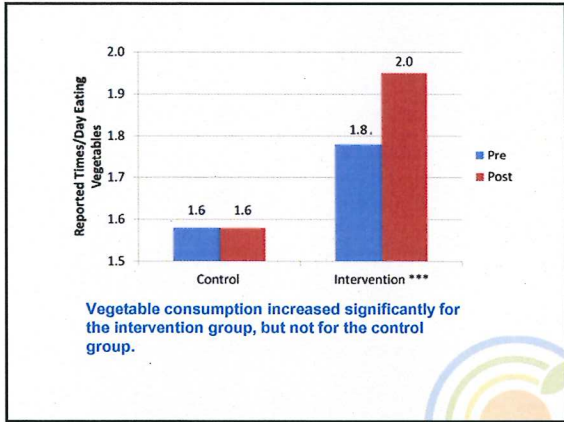


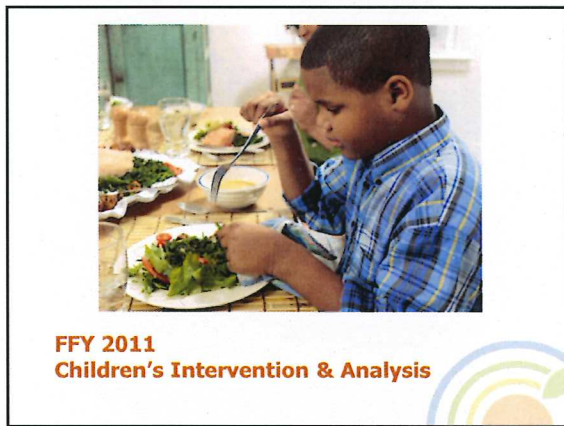
FV consumption increased significantly for the intervention group, but not for the control group.



Fruit intake increased significantly for both intervention and control groups.

The pre/post change for control vs. intervention was not statistically different, indicating a possible secular trend or seasonal influence.





Interventions Used by Local Projects

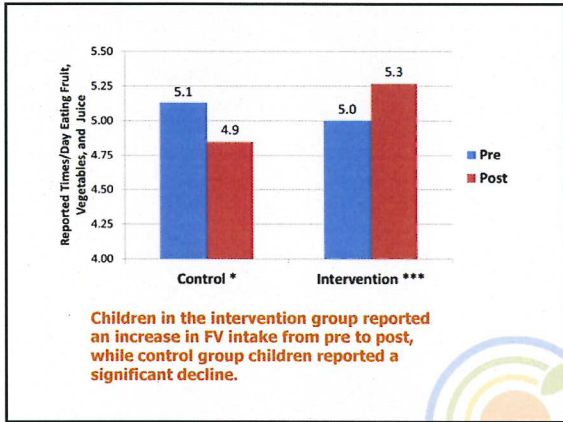
Educational Intervention	Count*
Harvest of the Month	23
Power Play!	12
Other materials or resources	8

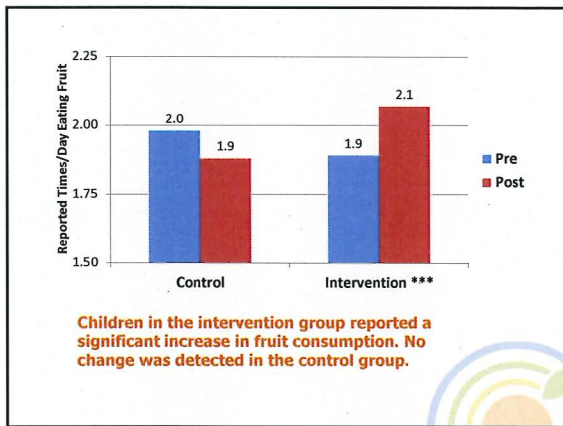
*projects often use more than one intervention and may be duplicated in this count.

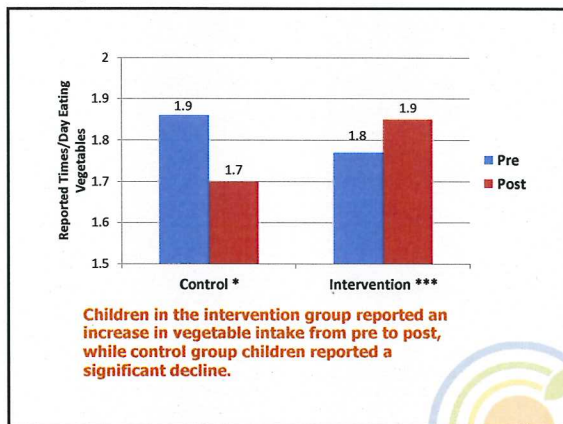
Evaluation Designs Used by Local Projects

Evaluation Design	Count
pre/post no comparison group	16
pre/post with comparison group	11
pre/post no comparison group, different intensities	2

All child projects continued to use the Network Youth Survey in FFY 2011.









**FFY 2010
Adult Intervention & Analysis**



**Intervention Components Used by
Local Projects in FFY 2010**

**Most frequently mentioned materials,
activities, topics, and learning strategies:**

- Food demos
- Taste tests
- MyPyramid
- Understanding and measuring portions
- Label-reading
- Cookbooks and recipes
- Multilingual handouts

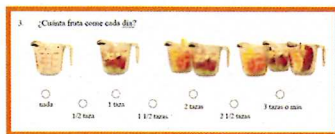


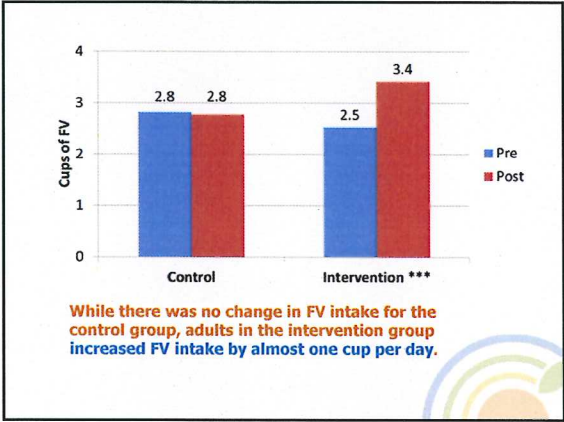
**Evaluation Designs & Surveys Used by Local
Projects**

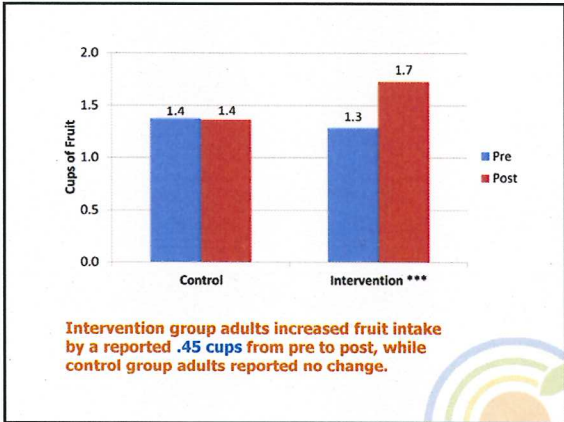
Evaluation Design	Count
pre/post no comparison group	3
pre/post with comparison group	3
pre/post no comparison group, different intensities	3

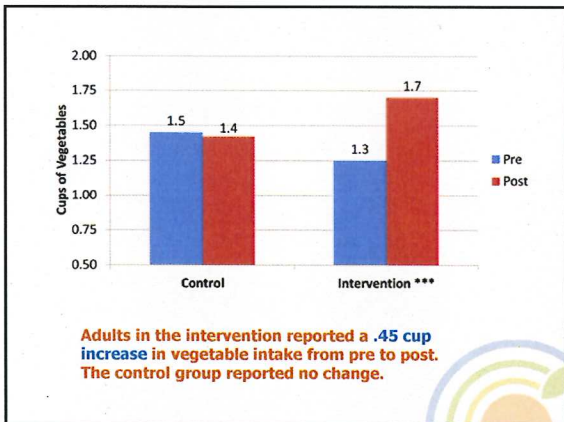
Survey	Count
Fruit and Vegetable Checklist (FVC) – 7 items	3
Food Behavior Checklist (FBC) – 16 items	6

The **FVC** is a 7-item fruit and vegetable scale. It is contained within the **FBC**, which includes a broader range of dietary behaviors. Both are **validated** for use with **low-income** populations and available in **English** and **Spanish**.











**FFY 2011
Adult Intervention & Analysis**



**Intervention Components Used by
Local Projects in FFY 2011**

**Most frequently mentioned materials,
activities, and learning strategies:**

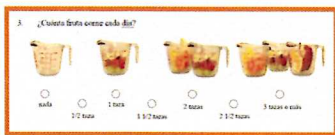
- Food preparation
- Taste tests
- MyPyramid
- Role-playing
- *Harvest of the Month*
- Shape of Yoga
- Field Trips

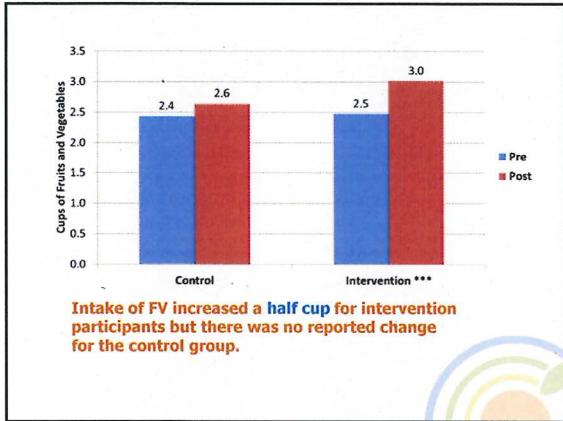


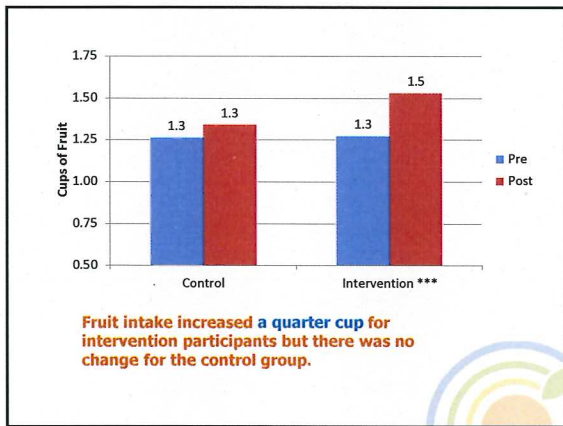
**Evaluation Designs & Surveys Used by Local
Projects – FFY 2011**

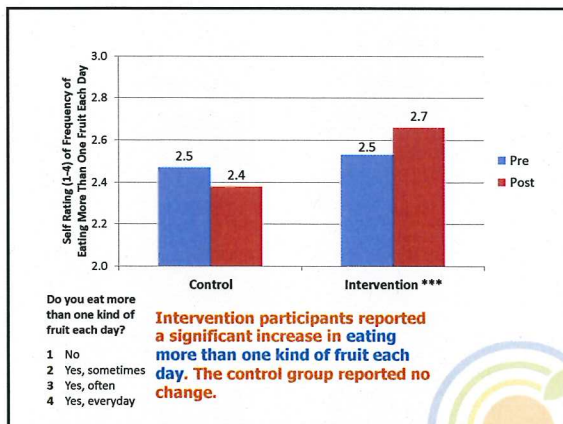
Evaluation Design	Count
pre/post no comparison group	10
pre/post with comparison group	2

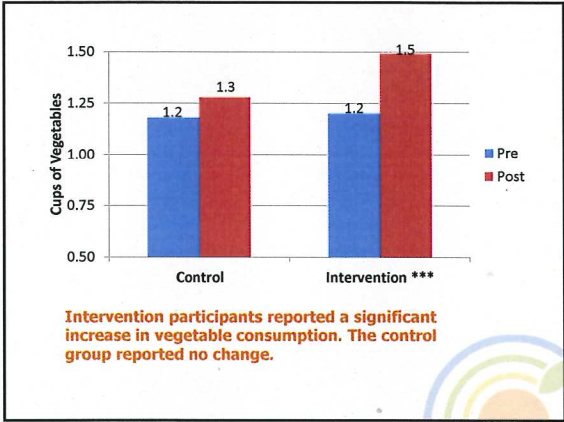
Survey	Count
Fruit and Vegetable Checklist (FVC) – 7 items	4
Food Behavior Checklist (FBC) – 16 items	8











Summary

- Local projects delivered interventions targeted to their specific audiences.
- In both FFY 2010 and 2011, results showed positive change in FV intake for adults and children participating in these local SNAP-Ed interventions.

Conclusions

- When assisted with developing the capacity to participate in evaluation, local programs can be an integral part of a multi-site evaluation like this one.
- Local, targeted nutrition education initiatives are an essential component of the success of multi-level social marketing campaigns such as the *Network for a Healthy California*.

Thank You!

- Former and present colleagues on this multi-site evaluation: Amanda Linares, Jennifer Gregson, Sharon Sugerman, Andrew Fourney, Patrick Mitchell, Evan Talmage
- The many colleagues on our local projects
- The program managers and Nutrition Education Consultants who guide our local projects in choosing and developing the best educational resources available



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