



SUPPORT TO EXTEND SNAP-ED ELIGIBILITY TO SCHOOLS BELOW THE CURRENT THRESHOLD OF 50% PARTICIPATION IN FREE AND REDUCED SCHOOL LUNCH PROGRAM

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Session No. 103

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Cohort 1²

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Objective: SNAP-Ed policy requires free and reduced school lunch participation rates (FRLPR) to be ≥ 50%, impeding distric wide relationship building. This study explored extending SNAP-Ed to schools with FRLPR < 50%.

Methods: Baseline data from an impact assessment [Cohort (C1) n=415; Cohort 2 (C2) n=352; C1/C2 ≥ 75% white] were compared from 8 schools with varying FRLPR categories: < 50% $vs \ge 50\%$; < 46% $vs \ge 46\%$; < 46% $vs \le 46-49\%$ $vs \ge 50\%$. Student neasures: fruit/vegetable preference (FVP, VP), attitude toward ooking, cooking self-efficacy (SE). Parents [C1 n=86; C2 n=141] were assessed on fruit/vegetable availability (FVA), modeling ealthful mealtimes, SE. Differences among FRLPR categories were compared using GLM controlling for categorical differences Results: FRLPR were congruent with food security concerns

C2 FRLPR category differences were significant for parent BMI, education, and gender. C1 and C2 parent FVA, SE and modeling did not differ among FRLPR groups. C1 and C2 student outcomes were similar between FRLPR groups. C1 ≥ 50% FRLPR attitude was more positive than < 50% FRLPR (P=0.032). C2 FVP, VP were higher in students with < 50% FRLPR (FVP 65.3 ± 11.7 vs $61.9 \pm 12.9 P = 0.014$; VP $36.6 \pm 8.2 \text{ vs } 33.8 \pm 9.4 P = 0.007$) and < 46% FRLPR (FVP 65.4 ± 11.9 vs 62.6 ± 12.4 P=0.033; VP 36.7 ± 8.4 vs 34.5 ± 8.9 *P*=0.017). Students in 46-49% FRLPR were more similar to ≥ 50% FRLPR students Conclusions: Few significant differences in outcomes were observed for students or parents among FRLPR categories, thereby supporting review of the policy that restricts SNAP-Ed

benefits to schools with ≥ 50% FRLPR.

Student characteristics were similar among FRLPR categories. PONDEROSA
ELEMENTARY

Eight public elementary schools near Fort Collins, Colorado are delivering Fuel for Fun to 4th graders over an academic year as part of an obesity prevention initiative. Fuel for Fun includes classroom cooking (Cooking with Kids 1), physical activity, and family involvement experiences. Previous work ^{2, 3} and early analyses indicate improvements in self-efficacy and attitude toward cooking and fruit and vegetable preferences compared to a control year in the same schools; gains that are especially important for SNAP-Ed eligible schools, i.e., ≥ 50% of students are eligible for the Free and Reduced Lunch Program ⁴ [FRL].

However, not all participating schools are SNAP-Ed eligible and thus would not be eligible to receive Fuel for Fun as a SNAP-Ed funded intervention. The purpose of this project was to challenge the ≥ 50% FRL SNAP-Ed cut-off by determining if student characteristics and behaviors from schools near, but not at the SNAP-Ed FRL program eligibility levels are more similar to SNAP-Ed eligible than clearly ineligible schools.

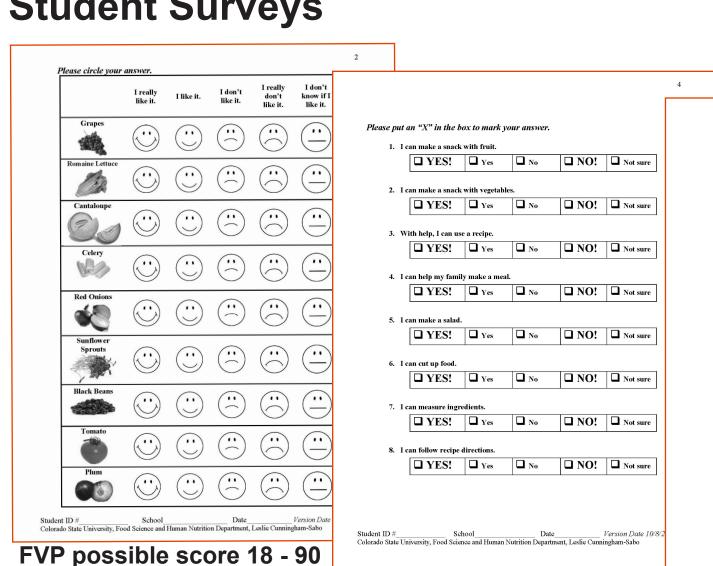
Schools (n=8) in two consecutive cohorts (C1; C2) participating in *Fuel for Fun* were categorized according to FRL program participation rate: < 46% (3 schools both C1 and C2); 46 – 49% (C1 2 schools; C2 1 School); ≥ 50 (C1 3 schools; C2 4 schools). Baseline measures of student fruit and vegetable preference (FVP), attitude (AT) and self-efficacy (SE) toward cooking and fruits and vegetable from tested, reliable ⁵ instruments were compared among the 3 FRL participation groups. Parent characteristics (e.g., education, eating competence) modeling behaviors, self-efficacy/ outcome expectancies for mealtimes, and fruit and vegetable availability were compared among the 3 FRL participation groups. One-way ANOVA was used for all student and C1 parent comparisons; a univariate GLM with income category as a co-factor was used for C2 parents to control for the significantly > number of low-income parents in the ≥ 50 % FRL schools.

Parent Surveys	Sample Items	Response Options	# Items	Possible Score
Modeling Mealtime Behavior ⁶	How often do you eat breakfast with your child? How often do you eat fruit at dinner with your child?	Never, Sometimes, Often, Always	11	0 - 33
Self-Efficacy/ Outcome Expectancies ⁶	I can prepare vegetables that my child will eat. If I buy vegetables my child will eat them.	Strongly Disagree, Somewhat Disagree, Neither, Somewhat Agree, Strongly Agree	12	12 - 50
Fruit & Vegetable Availability	Did you have [list fruit/veg/ juice] in your home during the past week? It may have been fresh, frozen, canned, or dried.	Yes, No	20	0 - 20
Satter Eating Competence Inventory 2.0 7	I am relaxed about eating. I eat a wide variety of foods. I consider what is good for me when I eat.	Always, Often, Sometimes, Rarely, Never	16	0 - 48

Student ID# School Date Version Date 10/8/2012
Colorado State University, Food Science and Human Nutrition Department, Leslie Cunningham-Sabo

AT possible score 6 - 30

Student Surveys



SE possible score 8 - 40

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Parent Participants

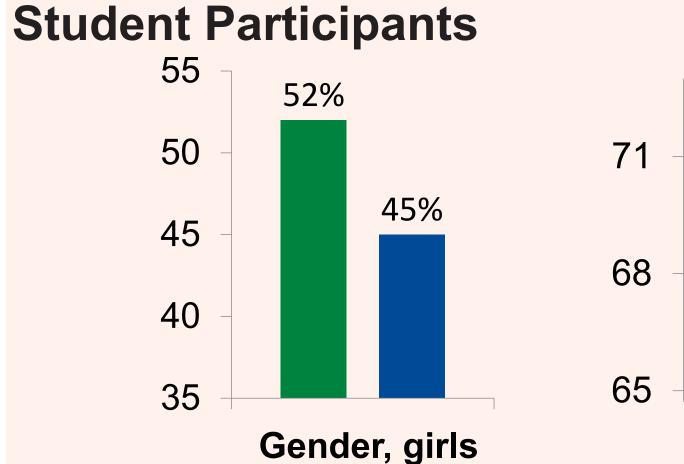
(n=86)(n=141)46 - 49% FRL 46 - 49% FRL ≥ 50% FRL < 46% FRL ≥ 50% FRL < 46% FRL 25.5 ± 5.5 25.8 ± 7.5 26.3 ± 4.9 30.6 ± 7.2 27.3 ± 5.8 Mean BMI 24.5 ± 5.2 **BMI Categories** 22 (51%) 11 (48%) 11 (65%) 18 (40%) 55 (64%) 2 (22%) 21 (49%) 12 (52%) 27 (60%) 6 (36%) 31 (36%) 7 (77%) 39.5 ± 5.8 40.0 ± 5.7 39.8 ± 6.3 41.5 ± 5.8 40.9 ± 7.0 38.8 ± 6.0 32.2 ± 9.6 31.3 ± 7.8 32.5 ± 6.1 31.2 ± 8.8 31.4 ± 7.3 31.8 ± 4.5 19 (44%) 22 (50%) 10 (43%) 12 (63%) 45 (58%) 5 (56%) 31 (67%) 18 (42%) 14 (61%) 13 (68%) 4 (44%) 31 (31%) 13 (30%) 26 (57%) 2 (22%) 6 (13%) 0 (0%) 2 (9%) 2 (2%) 1 (11%) 3 (16%) 14 (30%) 12 (28%) 8 (35%) 2 (22%) 8 (42%) 20 (23%) Some College 26 (57%) College Degree(s) 6 (66%) 64 (75%) 13 (57%) 8 (42%)

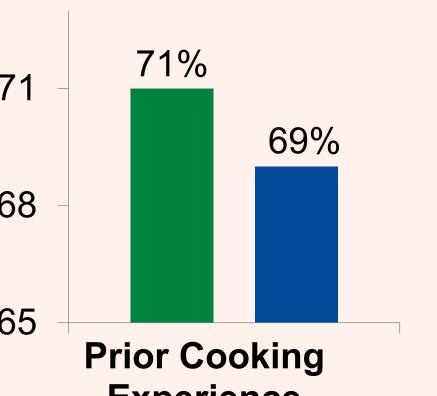
* Cohort 2 *P* < 0.001

Parents

Cohort 1 (n=85)

¹ Eating competence score ≥ 32, ² Number may not add to 100% because of rounding





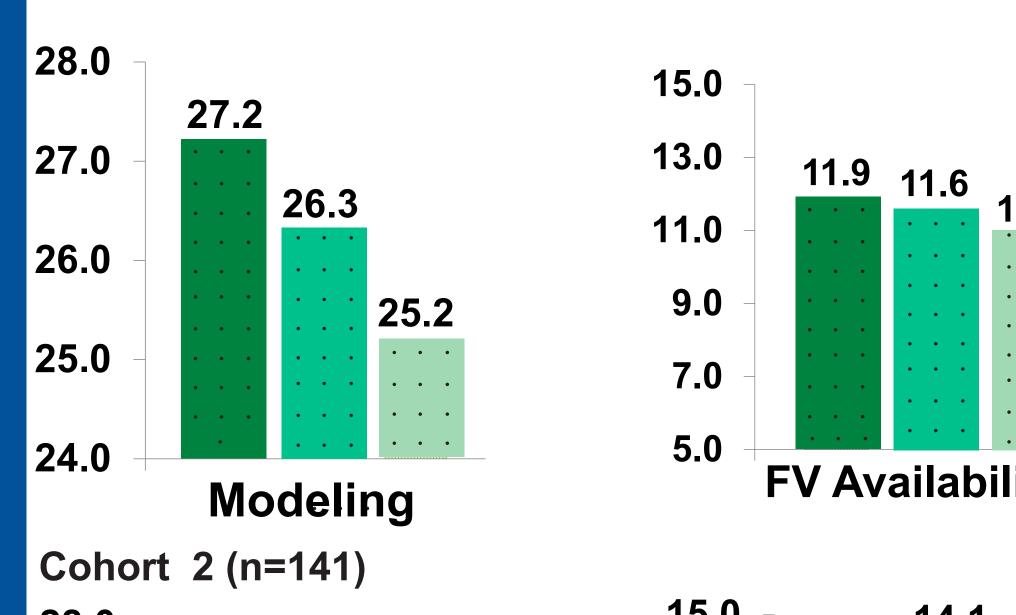


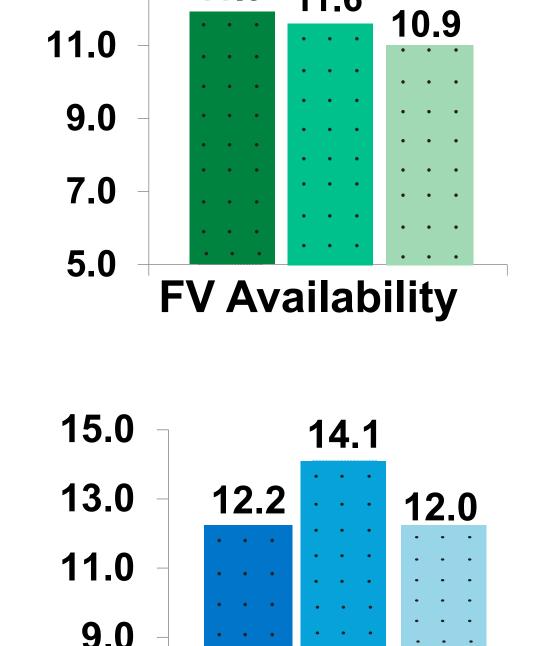
Cohort 1 (n=415)

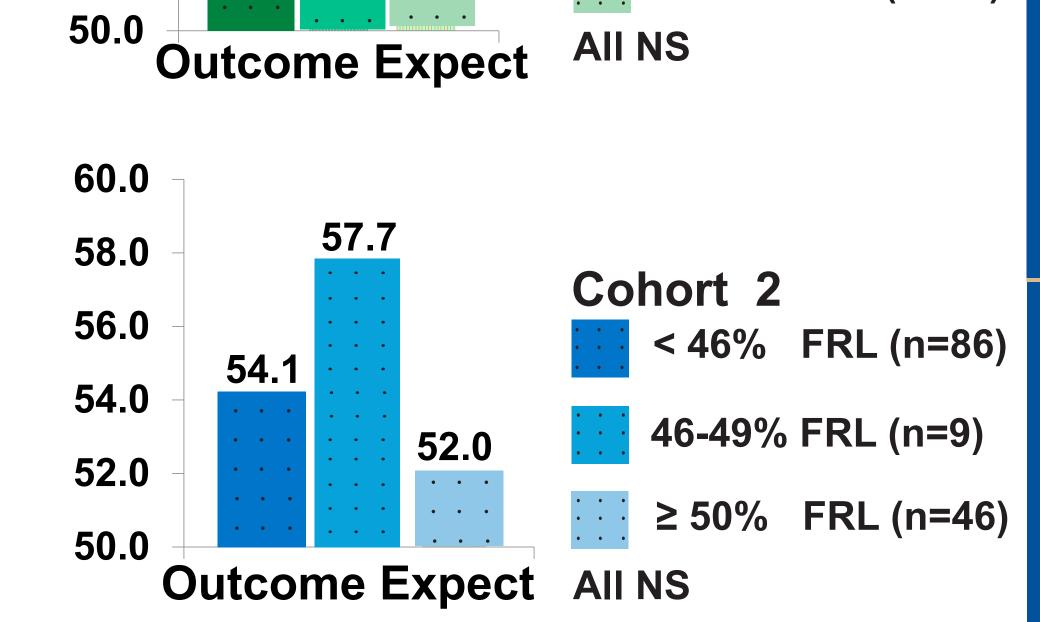
58.0

56.0

Experience







Cohort 1

< 46% FRL (n=43)

Cohort 2²

Modeling Cooking with Kids—For a Healthy Future. http://cookingwithkids.net/ Accessed August 31, 2014. Cunningham-Sabo L, Lohse B. Cooking with Kids positively impacts 4th-graders' vegetable preferences, attitudes and self-efficacy for food and cooking.

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FV Availability

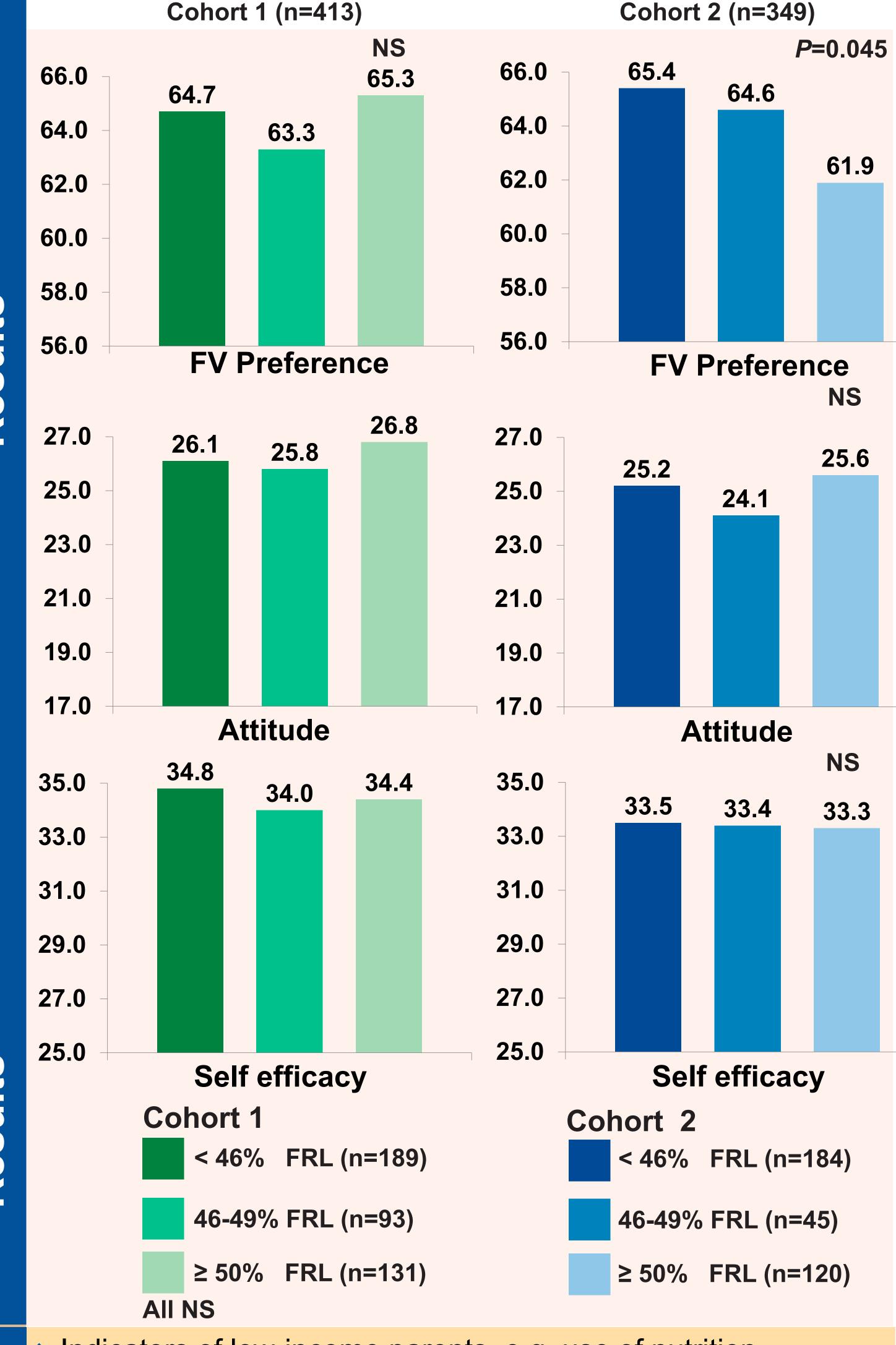
- FinalFY2015SNAP-EdGuidance.pdf. Accessed August 31, 2014. Lohse B, Cunningham-Sabo L, Walters L, Stacey J. Valid and reliable measures of cognitive behaviors toward fruits and vegetables for children aged 9 to 11 years.
- Lohse B, Cunningham-Sabo L. Eating competence of Hispanic parents is associated with attitudes and behaviors that may mediate fruit and vegetable-related behaviors of 4th grade youth. J Nutr. 2012;142(10):1904-1909

United States Department of Agriculture. FY2015 Supplemental Nutrition Assistance Program Education Guidance. Available at http://snap.nal.usda.gov/snap/Guidance/

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- Indicators of low-income parents, e.g. use of nutrition assistance programs or worrying about money for food were congruent with expectations, i.e. higher rates were noted as FRL participation rates increased.
- Student FVP, SE and AT toward cooking and fruits and vegetables were similar to previous samples of mostly white or mostly Hispanic 4th graders. However, compared to a sample of mostly Hispanic parents, of 4th graders, this mostly white sample reported more fruits and vegetables available in the home and practiced more healthful mealtime modeling behaviors.
- Student and parent baseline measures were similar between all FRL participation categories, indicating congruent nutrition education needs for students and parents from schools with rates slightly lower than the required 50%.
- Revisiting the current school eligibility policy for SNAP-Ed appears reasonable and necessary to facilitate reach to those in need of nutrition education funded with federal tax dollars.