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Barbara Lohse
Rochester Institute of Technology, balihst@rit.edu

Stephanie Smith
Colorado State University

Leslie Cunningham-Sabo
Colorado State University

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**FUEL FOR FUN IMPACT STUDY AFFIRMS POSITIVE EFFECT ON FRUIT & VEGETABLE PREFERENCE AND APPROACH TO COOKING IN SCHOOL AGE YOUTH**

Barbara A. Lohse PhD, RD, LDN1,2, Stephanie Smith PhD, RDN3 & Leslie Cunningham-Sabo PhD, RDN3

1Department of Nutritional Sciences, The Pennsylvania State University, University Park, PA;
2Wegmans School of Health and Nutrition, Rochester Institute of Technology, Rochester, NY
3Department of Food Science & Human Nutrition, Colorado State University, Fort Collins, CO

**Agenda**

- Objective: To examine impact of Fuel for Fun® (FF, a school based experiential cooking intervention on self-efficacy (SE) and attitude (AT) toward cooking and vegetable preferences.
- Study Design, Setting, Participants, Intervention: Controlled trial of students in 3rd-5th grade classes, in 8 schools over 2 years with cohort 1, in 6th as control and cohort 2.
- Outcome Measures and Analysis: FVP (18 items), SE (5 items), AT (6 items) assessed at baseline, end of school year and start of next school year.

**Results:**

Survey administered in class at baseline (T1), 7 months later (follow-up 1/T2) and at the start of the next school year (4 months later; follow-up 2/T3) by trained research personnel; make-up opportunities were scheduled for children absent on day of administration. In addition to scales that measured Fruit and Vegetable Preference (18 items), attitude toward Cooking (AT; 6 items) and Self-efficacy for cooking and eating fruits and vegetables (SE; 8 items), the survey included questions on cooking experience (3 items), attitudes toward eating (3 items), and physical activity (8 items).

**Conclusions and Implications:**

Survey results were compared by gender, and there were significant differences for all outcomes with SE and AT for girls more than boys, and for SE for boys more than girls. However, Friedman’s test showed that distribution of FVP did not differ between C (cooking intervention) and C (usual health and nutrition curriculum).

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Cooking With Kids (FF), an experiential cooking program developed to increase Likelihood and confidence in cooking and vegetable consumption among school-aged children.

**Design & Methods:**

**Participants:** 4th grade students from 8 schools (22 classrooms in Year 1, 23 classrooms in Year 2) in Northern Colorado participated in a study to assess impact of FF on cooking attitudes with award-winning Cooking With Kids™, as the center piece of the experiential classroom component. In a randomized controlled, multi-year study with a convenience sample of 8 elementary schools, 51 students received usual nutrition education and served as controls. In 4 schools parents were exposed to About Eating 1™, an online food resource. Parental engagement and behavior was measured; parents in the remaining 4 schools did not receive treatment. Cohort 2 students participated in Fuel For Fun® throughout the school year. Parents were in 1 of 4 treatment groups: About Eating, Family component, both About Eating and Family component, or control.

**Results:**

Survey administered in classroom cohort C1: Usual health and nutrition curriculum, cohort C2; this pattern continued when controlling for cooking experience. Friedman’s test revealed that the change in distribution for C over time was not significant for either those with or without cooking experience. However, FF increase in preference was less than for those without cooking experience (Fruit and Vegetable Preference = 0.008; Fruit and vegetable preference = 0.061) as well as for those with cooking experience (Fruit and Vegetable Preference = 0.084; Veg P = 0.031).

**Conclusions:**...

1. **Control (C):** Usual health and nutrition curriculum

2. **Fuel For Fun (FF):** Academic year program components

3. **Self-efficacy:** SE increased greater for FF than C (P = 0.008). Increase in Attitude was significantly greater for FF than C (P = 0.022). Change in combined Fruit and Vegetable Preference did not differ between FF and C. However, Friedman’s test showed that distribution of self-efficacy significantly increased over time (P = 0.011), but did not change for C.