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Fuel for Fun: Cooking with Kids Plus Parents and Play

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Fuel for Fun: Cooking with Kids Plus Parents and Play


**Background**

Fuel for Fun: Cooking with Kids Plus Parents and Play is an integrated research, extension, education project targeting 4th-grade students. Its long-term goal is reducing the risk of childhood obesity will be addressed by promoting healthy food and activity environments, policies and behaviors through: 1) evaluating the efficacy of a 4th-grade comprehensive school-based intervention, 2) designing, implementing, and evaluating a family-based intervention, 3) applying it to an after-school setting to broaden its reach, and, 4) disseminating both versions through outreach. This experiential school-based program, designed to enhance fruit and vegetable preference, self-efficacy and attitudes toward cooking, and physical activity levels, has 5 components:

1. **CWK – Colorado** – hands-on cooking and tasting classroom lessons to enhance cooking skills and provide positive experiences with a wide variety of wholesome, healthy foods.
2. **Sports, Play, and Active Recreation for Kids (SPARR) Active Recess** – physical activity program designed to encourage maximum participation for every player, regardless of ability.
3. **Fuel for Fun (FFF) Cafeteria** – classroom lessons linked to healthful foods in the school cafeteria to encourage students to make more healthful choices.
4. **Fuel for Fun (FFF) Family** – program that engages parents and reinforces what students experience through the classroom, recess, and cafeteria components.

**Dissemination of Study Findings**

- **Published Manuscripts**
- **Presentations**
  - The Academy of Nutrition and Dietetics, Food and Nutrition Conference and Expo 2014
  - Support to extend SNAP-Ed eligibility to schools below the current threshold of 50% participation in free and reduced school lunch program.
- **Accepted Abstracts**
  - World Social Marketing Conference 2015
  - The Primary Barriers and Motivators to more Healthy Eating at Home: Formative Research to Inform the Fuel for Fun Intervention
- **American College of Sports Medicine 2015**
  - Exploring the Relationship Between Parent and Child Physical Activity
- **International Society of Behavioral Nutrition and Physical Activity 2015**
  - Validating Portion Size Assessment Methods in Elementary Schools with Self-Service Salad Bars
  - Fuel for Fun Spring Family Night Technical Report
  - The Development, Implementation and Evaluation of Fuel for Fun Action Packs
  - The Development, Implementation and Evaluation of a Blog Tailored to Parents of Children Participating in the Fuel for Fun Program

**Accomplishments and Results**

- **Data Collection and Analysis**
  - Average student participation rate of 81% for Cohort 3 (C3), 73% for Cohort 2 (C2), 80% for Cohort 1 (C1).
  - 349 C2 students completed baseline (BL) surveys and HT/Wt, 325 at follow-up 1 (FU1), and 287 at follow-up 2 (FU2).
  - 374 C3 students completed BL survey.
  - C2 parent pairs completed BL surveys, 68 at FU1, 73 at FU2, 116 C3 parents completed BL survey.
  - 26 C2 student parent pairs completed 24-hour recalls, 15 completed FU1, and 9 completed FU2.
  - 23 C3 pair completed BL 24-hour recalls.
  - Accelerometry data (ACCI) gathered at 3 schools: 130 C2 students and 110 parents at BL, 110 students and 89 parents at FU1, 126 C3 students and 103 parents at BL, 109 students and 80 parents at FU1.
  - SOPLAY observation of students’ recess activity 16 completed times for each school.
  - Plate waste assessed from 739 C3 student lunch trays.
  - Process measures completed for all intervention components.
  - All outcome data dual-entered, managed and analyzed in SPSS.

- **Intervention Implementation**
  - Implemented 19 introductory, 76 tasting and 95 CWK-Colorado cooking lessons, representing 86% of project goal. One school declined the intervention but participated in measurement activities.
  - Conducted SPARR during recess average of 4 days/week/school (100% of project goal for participating schools).
  - Implemented FFF cafeteria intervention: TV promotional signs, verbal prompts from staff, and staff clothing (chef coats and T-shirts).
  - Developed and implemented FFF family-based component in 3 schools (187 families).
  - Elements included family nights, take-home action packs, and a weekly parent blog.
  - Collected process and outcome data from parents participating in About Eating.

**Education**

- Conducted trainings for 4 graduate student Food Educators and 18 undergraduate students on FFF program implementation.
- Enrolled 18 undergraduate Food Science and Human Nutrition students in FFF practicum, gained experience in program implementation, process and outcome evaluation, and data entry.
- Trained 13 Health and Exercise undergraduate students to implement SPARR games and conduct SOPLAY observation.
- Completed 3 graduate student projects
  - Development and Administration of a Survey to Measure Elementary School Teachers’ Nutrition Beliefs and Practices in the School Environment
  - Validating Portion Size Assessment Methods in Elementary Schools with Self-Service Salad Bars
  - Fuel for Fun Spring Family Night Technical Report
  - The Development, Implementation and Evaluation of Fuel for Fun Action Packs
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**Extension**

- Conducted 11 interviews with potential adopters of FFF to identify barriers and facilitators for statewide dissemination.
- Began piloting and determining changes necessary for after-school and Youth EFNEP adoption.

**Next Steps**

- Add cohort 4 to replicate cohort 1—a as control group for students and parents with half of parents assigned to About Eating.
- Continue data analysis, interpretation, and dissemination through publications and presentations.
- Explore opportunities for program sustainability locally.
- Develop and pilot versions for Youth EFNEP and out-of-school audiences.
- Assess Community Readiness to adopt Fuel for Fun in other Colorado communities.

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**Cohort 2 (2013-2014)**

Eight schools (20-70%) of students eligible for free or reduced-priced school meals, four from each district. Approximately 440 4th and 450 5th grade students will participate each year.

**Cohort 3 (2014-2015)**

**Students Surveys & Diet Assessments**

- **Thompson School District**
- **Poudre School District**

**Parents Surveys & Diet Assessments**

- **Thompson School District**
- **Poudre School District**

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*Student-led abstract/presentation, * Student participated in abstract/presentation development