

# **Fuel for Fun Cooking with Kids Plus Parents and Play:**

## **Assessing the School Environment**

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### **Abstract**

**Objective:** To identify environmental factors described in the literature that have influenced school-based obesity prevention research interventions, and assess the existence of these factors in the Fuel for Fun (FFF) schools.

**Design:** A literature review was conducted to identify key environmental factors that may influence the impact of the Fuel for Fun research project. Databases were chosen based on their relevance to childhood health intervention programs. Key terms used were child, children, student, factor, factors, barrier, barriers, motivators, facilitators, program evaluation, school, schools, students, exercise, health, obesity, overweight, physical education, training, body mass index, sedentary lifestyle, nutrition, and wellness policy. Articles published 2003-2013 were the target date range. Participating elementary schools completed three Environment and Policy Surveys: policy, physical education and nutrition services. Surveys were adapted from the Rocky Mountain Prevention Research Center (RMPRC) Elementary School Environment and Policy Surveys. These surveys were developed by the RMPRC to assess the policies and environment in schools related to nutrition and physical activity.

**Participants:** Eight schools from two school districts participating in FFF. Schools have an average enrollment of 59 fourth grade students. All schools have a majority of white students (66%-80%) and different socioeconomic breakdowns based on the percent of students that qualify for free or reduced-price lunch (21%-62%).

**Results:** Only three articles met the literature review inclusion criteria. Categories of key environmental factors included: staff facilitators, organizational facilitators, and organizational barriers. Six of eight schools completed the policy survey and physical education surveys. Nutrition services survey data was provided by all eight participating schools. All schools had one or more grants related to PA or nutrition education and out-of-school programs that promote PA.

Recommendations for the FFF research project to assess include: 1) additional PA programs offered at the school, 2) scheduling of PE as minutes of PE per week, 3) children's participation in SPARK and similar active games, 4) gym space available, 5) outdoor space and equipment, and 6) the training of educators to lead cooking and tasting lessons.

**Conclusions and Implications:** Key factors to assess the impact the environment may have on the effectiveness of research interventions can be identified from the literature and applied to other research projects. However, the limited number of research articles identified in the school-based childhood obesity prevention literature that evaluated key environmental factors demonstrates a gap in the literature. Future studies should examine and report the environments of childhood obesity prevention research projects, both those with significant and non-significant results, to describe additional environmental factors to the ones currently published in the literature review.