Master's Theses and Project Reports

Pink and Dude Chefs: Effectiveness of an After-School Nutrition Knowledge and Culinary Skills Program for Middle School Students to Increase Fruit and Vegetable Consumption

Alyssa S. Vaziri, California Polytechnic State University, San Luis Obispo

Available at: https://digitalcommons.calpoly.edu/theses/1946

Date of Award
6-2018

Degree Name
MS in Nutrition

Department
Food Science and Nutrition

Advisor
Aydin Nazmi

Abstract
The rate of overweight and obesity among adolescents aged 12-19 years has more than tripled since 1980, and disproportionately impacts low-income and marginalized populations. Reduction in adolescent obesity rates may result in decreased health risks, decrease healthcare costs, and increased quality of life. Effective intervention methods for adolescent participants have incorporated nutrition knowledge and culinary skill building into afterschool programs. This study examines whether building knowledge, skills, and confidence through a culinary intervention can improve adolescent participants' choices of healthful foods through increased fruit and vegetable intake.

Pink and Dude Chefs (PDC) is an afterschool nutrition education and culinary skills program for middle-school adolescents aged 11-14 years. This project aimed to improve eating behavior in participants by increasing culinary and nutrition self-efficacy. PDC was implemented in Shandon, California from Spring 2014 to Fall 2014, and in Santa Maria, Guadalupe, and New Cuyama, California from Fall 2015 to Summer 2016. Eighty-three middle school students participated and completed surveys in the 12-lesson program that covered food safety, micro- and macronutrients, meal planning, and USDA MyPlate guidelines.

Participant fruit and vegetable consumption improved following participation. Girls' frequency of overall fruit consumption increased from a mean of 1.8 (SD 0.9) to 2.0 (SD 1.0). Girls' vegetable consumption increased from 1.2 (SD 0.8) to 1.5 (SD 0.9). Boys' fruit consumption increased from 1.9 (SD 1.0) to 2.2 (SD 1.0), and boys' vegetable consumption increased from 1.1 (SD 0.9) to 1.3 (SD 0.8).

More research is needed to evaluate the long-term effect of participation in nutrition education and culinary skills programs. If obesity prevention programs that incorporate a skill-based culinary approach continue to show promising outcomes for adolescents, larger scale efforts may contribute to decreasing the public health and economic burdens associated with obesity.

Hypothesis: Middle school students participating in the Pink and Dude Chef afterschool cooking program will increase nutritional knowledge, culinary efficacy, motivation to eat fruits and vegetables, and overall fruit and vegetable consumption.
vegetables, and fruit and vegetable intake compared to an attention control group. Full Title of Study: “Pink and Dude Chef Afterschool Cooking Program: Improving Food Knowledge and Skills in Middle School Students”. Study Type: Interventional.