

Nutrition and Cooking Knowledge and Self-Efficacy among Adolescents Enrolled in a Summer Cooking Camp

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Background

Limited opportunities to gain knowledge regarding nutrition and food preparation techniques currently exist for adolescents. Graduate dietetic interns and researchers taught 24 incoming 7th-9th grade adolescents enrolled in a university-hosted summer five-day cooking camp how to prepare foods from scratch, use basic knife skills, meal plan and combine common kitchen ingredients to make budget-friendly meals and healthy snacks. Graduate dietetic interns also taught nutrition lessons each day of the camp. These lessons focused on nutrition knowledge applicable to the age group, including reading nutrition labels, protein, sodium, nutrient density, added sugars, whole grains, vitamin C, and iron.

Objectives

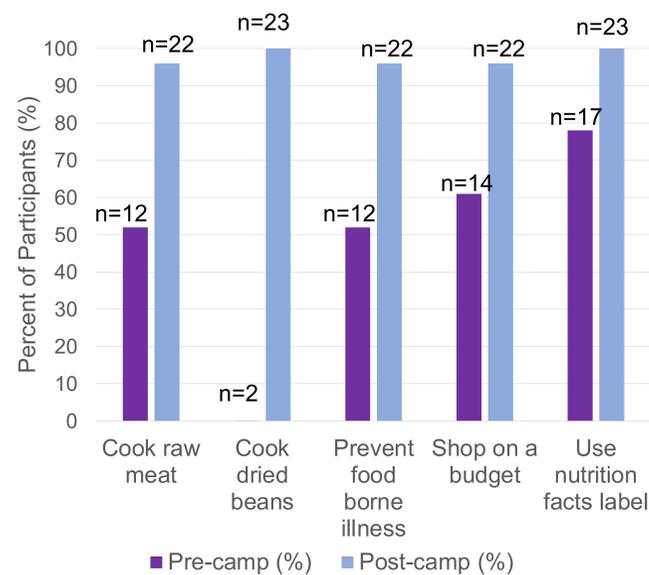
The objectives of this study were to: 1) describe cooking/nutrition knowledge and self-efficacy in adolescents before and after the camp interventions; 2) describe the correlation between caregiver cooking/nutrition efficacy and adolescent cooking/nutrition knowledge prior to education.

Methods

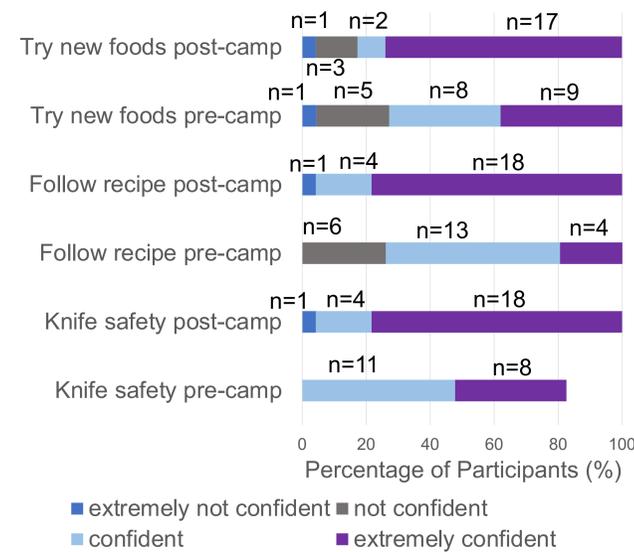
Following IRB approval, a convenience sample of 7th-9th grade adolescents enrolled in a five-day cooking camp and their caregivers were recruited to participate in the study. Adolescent participants completed pre- and post-camp surveys to measure cooking/nutrition knowledge, experience and self-efficacy. One caregiver per adolescent completed a pre-camp survey to measure cooking experience and confidence. Data were analyzed using SPSS version 29. This research was supported by a \$2000 TCU College of Science & Engineering Research (SERC) Grant.



Adolescent Participant Ability to Perform Cooking-Related Tasks Pre- and Post-Camp



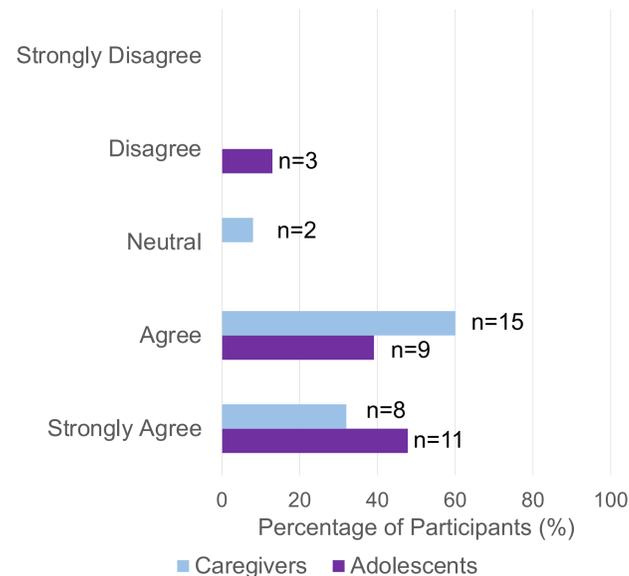
Adolescent Participant Confidence Pre- and Post-Camp



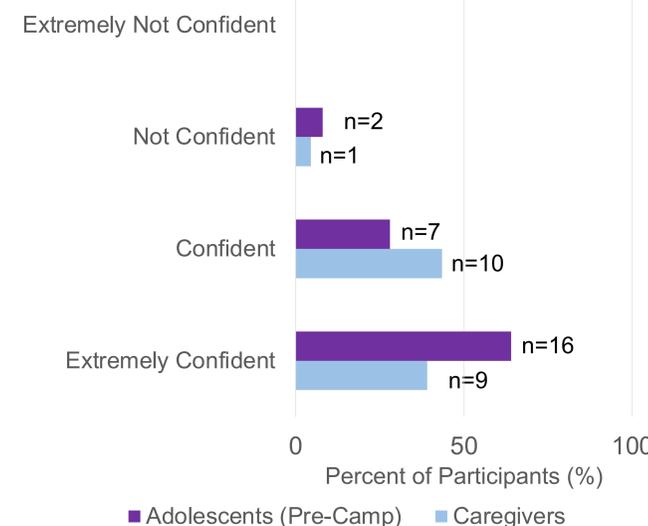
Results

- Adolescent participants (n=23) were 12.8+/-0.95 years of age.
- Participants were 74% (n=17) female and 26% (n=6) male.
- Over 65% (n=15) of adolescent participants were White, 13% (n=3) participants were Black or African American and 26.7% (n=5) were two or more races. Approximately 22% (n=5) of participants were Hispanic.
- Caregiver confidence of cooking ability using basic ingredients and adolescent pre-camp cooking confidence ($r=0.547, p=0.001$) were positively correlated.
- Frequency of caregivers preparing or helping prepare dinner was positively correlated with number of evenings per week the family eats dinner together $\alpha = 0.05$. ($r = .431, p = .031$).
- Caregivers reported sending their children to the camp for a number of reasons including adolescent interest in cooking, the opportunity to learn a basic life skill, to promote a healthy relationship with food, to increase nutrition knowledge, and to spend time with friends and peers.

Caregiver and Adolescent Participant Responses to Statement, "I like to cook."



Caregiver and Adolescent Participant Responses to Question, "How confident do you feel about being able to cook using basic ingredients?"



Conclusions

A cooking camp is an effective approach to provide adolescents with cooking/nutrition education and improve their self-efficacy related to meal preparation. Past research shows that adults with fewer cooking skills experience greater barriers to eating meals at home (Brown, 2021), showcasing the importance of teaching these skills to adolescents. As cooking/nutrition are important skills for a healthy lifestyle, similar interventions should be implemented to reach more adolescents.

