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Cooking for Health: An Integrated Approach to Enhancing Food Agency

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Background

- Food Agency:** One's ability to procure and prepare food within the contexts of one's social, physical, and economic environment. One's self-perception, attitude, self-efficacy and social structures around food related goals (Lahne, 2017). The more opportunity an individual has cooking for themselves the more food agency the person develops overtime (Wolfson et. al, 2020).
- Culinary Medicine:** A new evidenced based field combining the joy of cooking with the science of nutrition (Polak, 2016)
- Food insecurity:** Average of 35% or 1 in 3 college students are food insecure (Castellanos et al., 2020).
- Culinary Medicine curriculum for undergraduate students is a powerful educational intervention that provides cooking skills and increases food agency (Pang et al., 2019).

Aims

- Implement a twelve-week culinary health course, Cooking for Health for 14 undergraduate students.
- Assess level of food agency: food self-efficacy, cooking skills, and social structures before and after participation in Cooking for Health.

Methods

- Fourteen undergraduate students participated in 12-week culinary course, Cooking for Health incorporating food agency and culinary training with a focus on health. The course combined basic cooking skills, food science, sensory analysis and mindful eating.
- Cooking and Food Provisioning Action Scale (CFPAS) was used to assess food agency pre and post course.

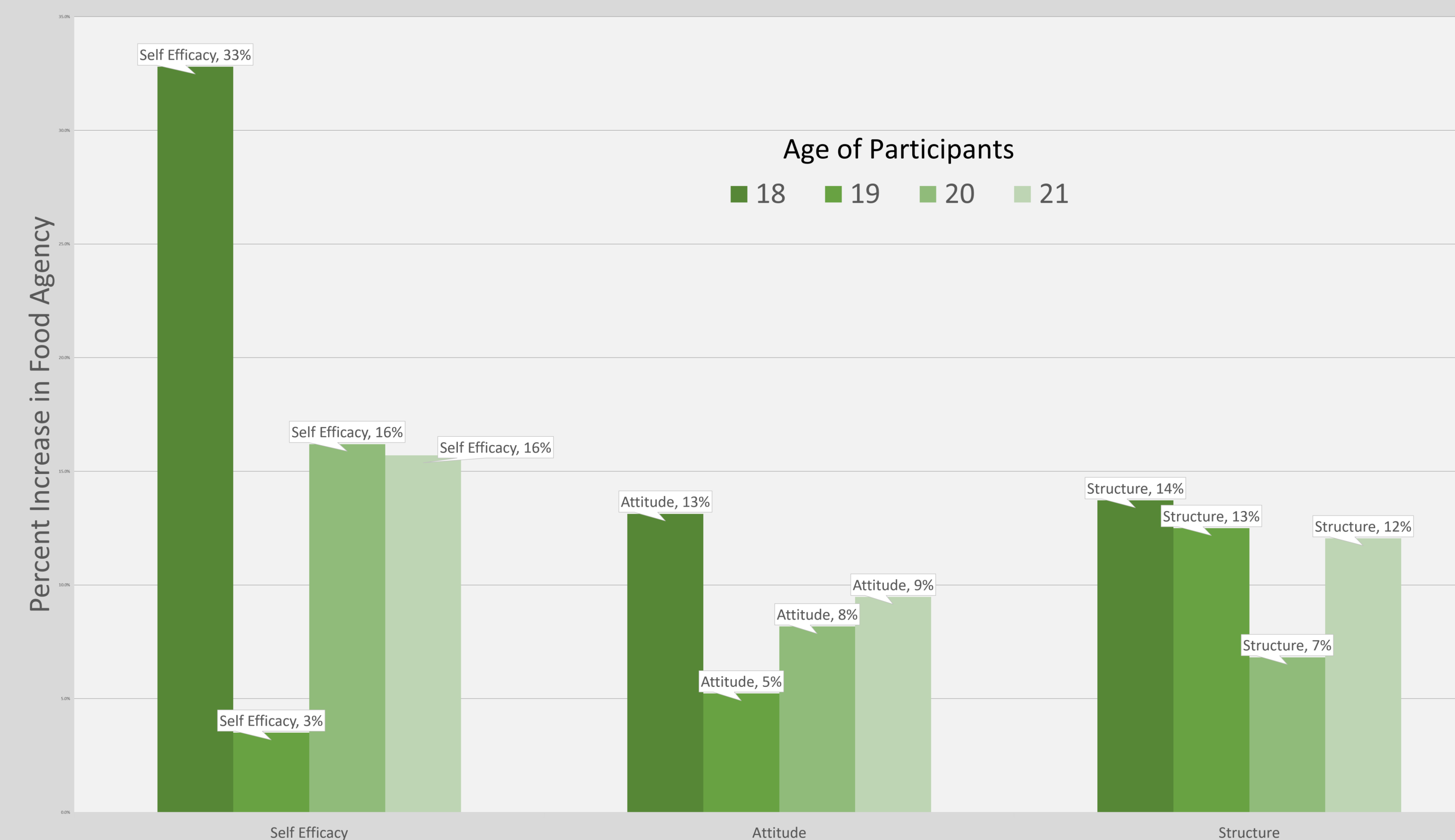
Figure 1: Demographics of participants: (n=14)

Female – 79% (11) Male - 21% (3)
Age 18 – 14% (2) Age 19 – 21% (3)
Age 20 – 36% (5) Age 21 – 29% (4)
White – 79% (11) Asian/Pacific Islander – 21% (3)

Results

- Cooking for health coursework improves food agency: including food self-efficacy and empowerment to cook for oneself, attitudes and self-perceptions toward cooking including the importance of learning cooking skills and identifying structural supports and barriers for college students.
- Association between more cooking skills and food agency prior to the course with more significant increases in food agency overall scores, better attitudes towards cooking and greater perceived self-efficacy.
- The barriers for college students identified were time constraints and social responsibilities inhibiting their ability to cook for themselves.

Figure 2: Percent difference pre and post by age, n=8



Discussion

- Providing students with culinary medicine coursework improves food agency.
- Mindful and intuitive eating encourages improved self-efficacy and nutritional goals and behaviors.
- The course was consistent with the literature in that the more opportunity an individual has cooking for themselves the more food agency the person develops overtime. Those students who came into the course cooking for themselves over 10 meals per week had more significant increases in food agency than those with less experience (Wolfson, et. al, 2020)
- Improved food agency, improves eating behaviors, increasing consumption of fruits and vegetables and improved overall health.

Limitations

- Small group of students. n=14 with only 8 completing the post evaluation.
- Age 18-21 years old.
- The students identified predominantly as white/Caucasian and non-Caucasians were underrepresented.
- COVID

Conclusions

- Nutrition can be a powerful prevention and treatment strategy for obesity related chronic diseases including cardiovascular disease, metabolic disease, and cancer.
- The investment in teaching cooking skills with individuals connecting cooking at home to health leads to improved cooking behaviors positively impacting physical health and wellbeing.
- Nutrition has benefits for prevention and treatment of anxiety and depression. Mindfulness coupled with nutrition can be a powerful strategy for teaching resilience in our college students.
- Evidence shows that up to 1 in 3 or 35% of undergraduate and graduate students are experiencing food insecurity. Cooking for Health provides the skills and strategies to cook on a budget and may reduce the risks associated with food insecurity.

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Figure 3: Food Agency and Meals Cooked Per Week n=8

