

Understanding Food Environment in Families Participating

in Garden Education

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Background and Objectives

- Full Circle Farm (FCF)--an 11-acre community farm in Sunnyvale, CA--partnered with Stanford to run and study 6 weeks of farming and cooking summer camp. The camp is advertised to students of all backgrounds, and scholarships are offered to those who need financial assistance.
- Recently, garden based education has become a viable approach to increasing children's vegetable preferences. Brittany Rymer, past FCF counselor, concluded that vegetable preferences and attitudes increased for children participating in FCF summer camp¹.
- It is clear summer camp improves vegetable preferences, but it is unclear how the campers families' current food circumstances affect these preferences.
- The main objective for my research is to identify the campers families' food environment and find out how they affect vegetable preferences.

Summer Fam Camp 101

FCF just completed its 4th year of summer camp

Participant Information:

- 33 children aged 8-10
- 16 children aged 11-14
- 15 (30%) received scholarships

Curriculum Design: Camp curriculum was designed to teach campers about where their food comes from and how. Key themes were: cooking skills, farm management, defining food terms such as organic, natural, local.

Deciding to Explore Home Environment

- During camp, campers are encouraged to try new vegetables at both snack and meal times. Snacks and meals are prepared on the farm typically with ingredients the campers have harvested.
- There is a noticeable variation in how interested or resistant each camper is when trying different vegetables, so I set out to explore how the campers home food environments may affect their attitudes.



Image: Making tortillas with campers and families at Family Farm Dinner

Methods

Quantitative Data on Campers

- Pre and post vegetable preference and vegetable attitude questionnaires for campers

Quantitative Data on Families

- Food environment assessment questionnaire for parents/guardians.

Qualitative Data on Families

- This year we introduced a new event called Family Farm Camp where parents invited on the weekend to come to the farm, harvest, and cook with their campers. This gave us the chance to see how familiar the families are with cooking and learn about their eating habits.



Image: Campers tasting smoothies they made with garden fruits and veggies

Food Environment Assessment

Parent Questionnaire

- I sought out to gain insight on the eating and shopping habits of families through a few fill in the blank questions I created with the help of our farm team

Eating Habits Question

- In a typical week, for dinner how many times do you: Eat out, eat a pre-prepared meal at home (i.e. microwaveable dinner), eat a meal assembled at home (i.e. boxed pasta), eat a meal made from scratch at home (i.e. home-made soup)

Shopping Habits Questions

- What percentage of your food & produce comes from the following markets: Safeway, Whole Foods, Trader Joes, Local Farmer's market, Other
- What percentage of your grocery shopping is: Fresh/frozen fruits & vegetables, rice & grains, Dairy & fish & meats & poultry, packaged snacks & foods, prepared meals, other

Limitations

- Our questionnaire is not validated as I introduced it because of trends I noticed during camp, where time was limited
- Because of the novelty of the food assessment question, there are no standards for having a "good" or "bad" food environment, we will have to use comparative terms within our population of families, which may not have high generalizability

Future Plans

- Organize data from the FCF Summer Camp surveys, assess family food environment, and look for associations between campers vegetable preferences and food environments.
- FCF and Stanford will continue their educational partnership and hopefully begin to do more food education beyond the summer
- Follow up surveys will be delivered to families to observe long term food behavior changes

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1. B. Rymer, Increasing Vegetable Preferences through Farming and Cooking Education