

Cocinando en Familia: A Culturally Informed Cooking Program Aimed at Improving Diet Quality

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Background

- Family Kitchen (FK) empowers low-income families to improve their diet.
- Focuses on promoting culinary skill building with nutrient-dense foods.
- No BMI referral cutoffs for participation.

Phase one (Sept 2018-Aug 2020): Program Design and Testing:

- Chef and RD led groups of around six families.
- 10-week program with five culinary sessions and nutrition education.

Phase two (Dec 2020-Oct 2022): Cultural Relevancy and Digital Enhancement:

- Strong emphasis on making FK culturally relevant for Spanish-speaking families.
- Utilized digital and virtual technologies to expand program reach and impact.
- Figure 1 shows the final program design.

Methods

Phase Two Enhancements:

- Culturally Adapted Version for Spanish-speaking families: 'Cocinando en Familia' (CeF).
- Recipes adjusted to match eating patterns of diverse Hispanic cultures.
- CeF classes co-taught by a Spanish-speaking chef and pediatrician.
- In-person classes conducted in Lifestyle Medicine teaching kitchen.

Digital Enhancements in Phase Two:

- Used validated digital diet quality assessment tool: Diet ID.
- Web-based assessment for evaluating pre and post participation diet quality.
- Participants chose from composite images to identify their unique diet pattern.



ORIGINAL FIGURE CREATED FOR PURPOSES OF THIS MANUSCRIPT. PHOTO SOURCE: TAYLOR BALLEK.

Results

- Cohorts consistently filled with waiting list. FK reached 124 children and adolescents.
- Program completion: 91.2% of English-speaking families, 76.4% of Spanish-speaking families.
- Nearly 100% of participants reported being likely (4) or very likely (5) to recommend the program.
- One adult per family completed the Diet ID digital assessment of the household diet quality at baseline and upon program completion. Diet ID quantifies Table 1 depicts the diet quality and nutrient improvements noted.

Table 1: Pre and Post Diet Quality and Nutrient Change (n=54)

| | Pre-Intervention | Post-Intervention | Difference |
|--|------------------|-------------------|------------|
| Average Diet ID Quality ^a | 5.9 | 6.7 | +0.8 |
| Average DIET ID HEI Score ^b | 62.5 | 71.2 | +8.7* |
| Added Sugars (g) ^c | 44.1 | 35.4 | -8.7 |
| Sodium (mg) | 3103.9 | 2886.6 | -217.3 |
| Saturated Fat (g) | 25.4 | 19.5 | -5.9 |

^a Diet Quality per 1 to 10 scale
^b Healthy Eating Index 2015 score per 1 to 100 scale
^c Nutrients represented as value and percent (%)
* $t_{53} = 2.6, p = .005$

Conclusion

- Diet quality is crucial for predicting shifts in biomarkers, long-term healthcare costs, and health disparities.
- Efficiently tracking diet quality changes is important for clinicians overseeing interventions.
- The Healthy Eating Index (HEI) measures diet quality, assessing how well a food set aligns with Dietary Guidelines for Americans, with scores out of 100. High HEI adherence reflects strong diet quality and correlates with lower risks of all-cause mortality (as well as cardiovascular mortality, and cancer mortality).
- Our program successfully improved diet quality and accommodated cultural dietary preferences through the CeF initiative.
- Our program collaborated with local food sources, driving outreach, expansion, and sustainability.