

# The Expanded Food and Nutrition Education Program's Impact on Vulnerable Families in California

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## Background

The California Expanded Food and Nutrition Education Program (CA EFNEP) provides nutrition education to low-income parents, and evaluates outcomes in nutrition practices (NP), food resource management practices (FRMP), food safety practices (FSP), and food security (FS) (not running out of food before the end of the month).

## Objective

To examine the association between poverty, education and improvements in Nutrition Practices (NP), Food Resource Management Practices (FRMP), Food Safety Practices (FSP), and Food Security (FS).

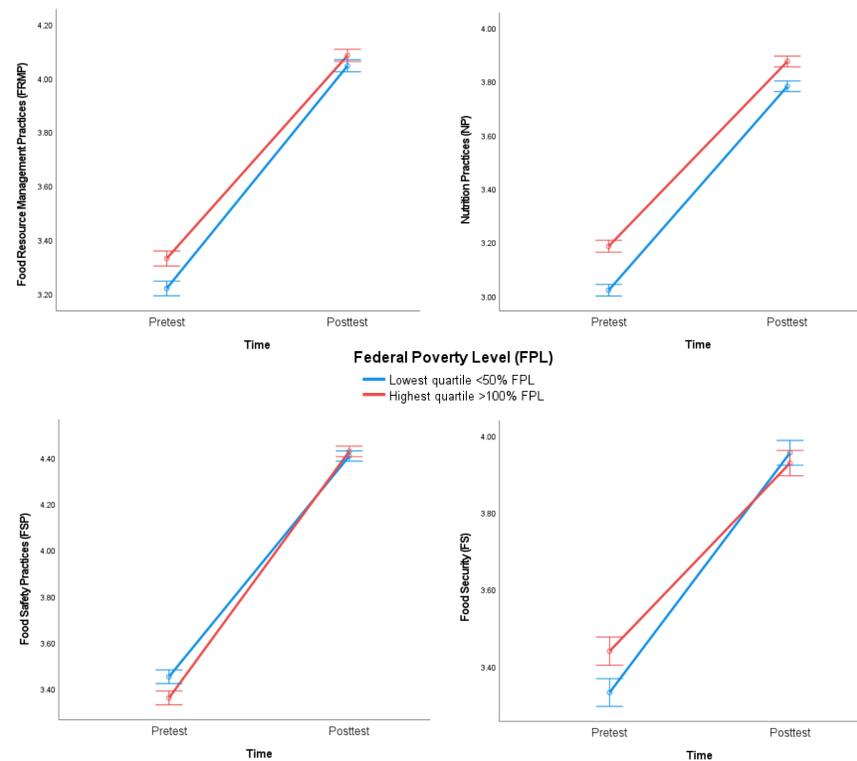
## Study Design and Participants

This study utilized pre-post-secondary data analysis including 19,190 CA EFNEP participants (FFY 2014-2017 Food Behavior Checklist), who were female (93%) and Hispanic (80.3%). Twenty percent of participants who completed the program reported less than a 6th grade education and 25% lived in extreme poverty (below 50% of the Federal Poverty Level, FPL).

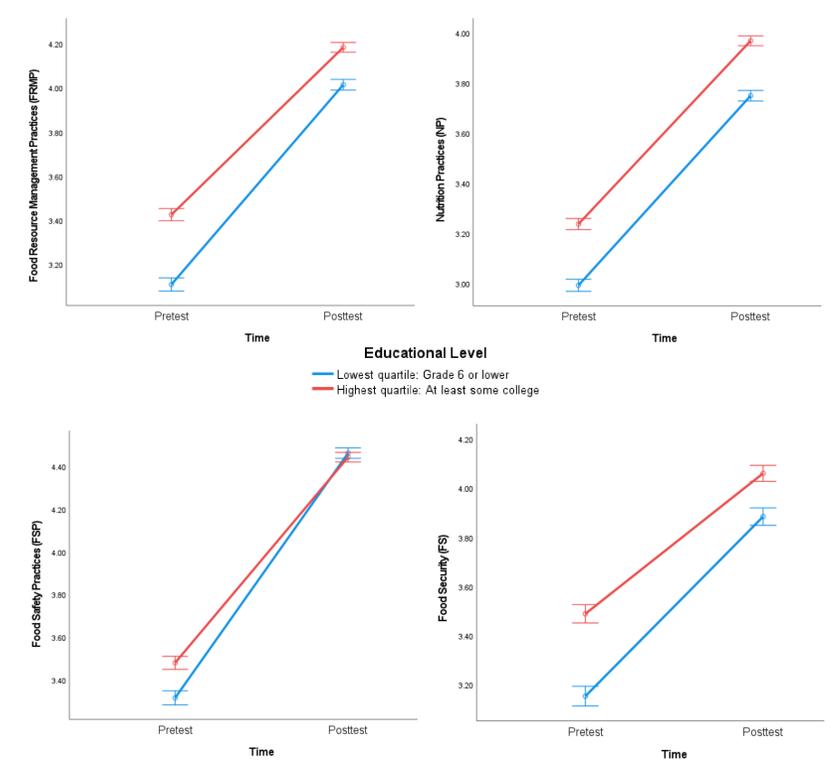
## Analysis

Paired sample t-tests were used to examine participant outcomes at pretest and posttest. To examine the association between demographic characteristics and improvement in NP, FRMP, FSP and FS, we ran repeated measures ANOVA to compare within-subject means across demographic characteristics, comparing participants in the highest and lowest quartiles.

Estimated Marginal Means of Food Resource Management Practices (FRMP), Nutrition Practices (NP), Food Safety Practices (NP), and Food Security (FS) by lowest and highest Federal Poverty Level (FPL)



Estimated Marginal Means of Food Resource Management Practices (FRMP), Nutrition Practices (NP), Food Safety Practices (NP), and Food Security (FS) by lowest and highest Educational Level



## Results

EFNEP participation was associated with improvements in NP, FRMP, FSP, and FS ( $P < .001$ ). Participants in the highest income and education quartiles started and ended with higher pre- and post-test mean scores in NP and FRMP ( $p < .001$ ). However, being in the lowest 25% FPL was associated with more improvement in NP, FRMP, and FS ( $P < .001$ ). Being in the lowest 25% of educational attainment was associated with more improvement in FRMP, FSP, and FS ( $P < .001$ ). Across most variables EFNEP participation was associated with a narrowed outcome gap between lowest and highest quartiles.

## Conclusion

Findings indicate that CA EFNEP is effective in improving the health outcomes of its most vulnerable participants. Further research is needed to examine the association between EFNEP outcomes and participant food security status, using multiple food security indicators. This research supports SNEB Nutrition Educator Competencies 9.1 and 10.1.