



Agricultural Experiment Station Station (AES)

“EFNEP Related Research, Program Evaluation and Outreach”

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The Expanded Food and Nutrition Education Program (EFNEP) was established by Congress in 1968 to assist low-income audiences in acquiring the knowledge, skills, attitudes, and changed behaviors necessary for nutritionally sound diets. The goal of the USDA multi-state project, “EFNEP Related Research, Program Evaluation and Outreach,” is to verify the validity of current approaches and/or develop new approaches for evaluating the EFNEP. In participation with this project, Professor Liang’s research team will develop methodologies to test and evaluate qualitative, quantitative, and biomarker measures for use with EFNEP audiences.

In 1969, the primary nutritional problems of EFNEP’s participants were energy inadequacy and vitamin and mineral deficiencies which resulted in growth deficits. However, current nutritional problems of limited-resource families include energy excess, resulting in overweight and obesity, and early development of chronic diseases. Further, the science of nutrition has revealed new diet-disease relationships, national dietary guidelines continue to evolve, and new food choice behaviors emerge as more food is purchased and consumed away from home. Given these significant societal changes, the methods EFNEP currently uses to evaluate dietary quality and program impact need to be reexamined and new approaches for evaluating the EFNEP may need to be developed.

This USDA multi-state research project has the following objectives:

1. Complete a thorough review of the literature to identify all existing valid and reliable methods appropriate for measuring dietary quality among EFNEP participants and develop qualitative and quantitative criteria to use in the evaluation and selection of the best dietary quality assessment(s) for EFNEP, considering sensitivity to change and burden on the participants.
2. Through qualitative, quantitative, and biomarker research, test the most promising of these measures for use with EFNEP audiences, evaluate them using the criteria in Objective 1, and select the best measure(s).
3. To determine which quality of life constructs are affected by EFNEP for both participants and paraprofessionals.



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About Dr. Lily R. Liang



Dr. Lily R. Liang is an associate professor in the Department of Computer Science and Information Technology at the University of the District of Columbia. She received her doctorate degree in Computer Science and Engineering from the University of Nevada in 2004. Dr. Liang's research interests include bioinformatics, data mining, machine intelligence, fuzzy logic and digital image processing. Currently, she has several funded research projects and is collaborating with professionals in biology, health and nutrition to develop data mining techniques in these areas. Her most recent award is from the National Science Foundation on a project involving workforce development in information assurance. She has published a number of conference and journal papers and has made presentations at national and international conferences.

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