

SAES ANNUAL REPORT

Multistate Project NC 2169: *EFNEP Related Research, Program Evaluation, and Outreach*

Date of Annual Meeting: October 9-11, 2014

Period the Report Covers: October 2013 to September 2014

Participant List:

- Adler, Audrey, Rutgers University
- Auld, Garry, Colorado State University
- Baker, Susan, Colorado Cooperative Extension
- Barale, Karen, Washington State University
- Betts, Nancy, Oklahoma State University
- Blake, Stephanie, USDA/NIFA
- Boeckner, Linda, Nebraska Cooperative Extension
- Forsythe, Hazel, University of Kentucky
- Fuller, Serena, Arkansas Cooperative Extension
- Kahn, Tarana via telephone, Clemson University
- Lambea, Marie Carmen via telephone, Ohio Cooperative Extension
- Misner, Scottie, University of Arizona
- Olsen, Beth via telephone, University of Wisconsin
- Palmer-Keenan, Debra, Rutgers University
- Procter, Sandy, Kansas State University
- Spears, Karen, University of Nevada
- Townsend, Marilyn, California Cooperative Extension
- Walsh, Jennifer, University of Florida
- Wardlaw, Mary Kay via telephone, University of Wyoming
- Weatherspoon, Dave, Michigan State University
- Wilhelm, Mari, University of Arizona
- Wilson, Mary, Nevada Cooperative Extension
- Yerxa, Kate, Maine Cooperative Extension

Brief Summary of Minutes of Annual Meeting

Advisor reports:

- Blake provided an update on NIFA personnel change and upcoming NIFA opportunities
- Hamernik's report read by Betts about mid-course review in 2015 and due dates for reports. The impact reports will now be written by a science writer. All were encouraged to work with their Ag Experiment Stations to explore funding opportunities.

Work Group Updates:

- Barale discussed the progress for the Food Resource Management Behavior Checklist item testing.
- Auld reported on Gills research examining the validity and reliability of paraprofessional's expertise in conducting the EFNEP 24-hr recall.
- Weatherspoon discussed the components needed to conduct the Cost-Benefit analysis particularly focused on physical measurement issues and financial inputs.
- Auld presented an update of the focus groups conducted to examining quality of life. 14 focus groups completed with 12 transcribed and coded and 2 additional planned. Findings will be used to tailor an instrument for measuring quality of life among EFNEP participants.
- Walsh discussed the national EFNEP Food Safety, Security and Physical Activity workgroups and Yerxa discussed the Food Resource Management workgroup

Planning for year:

- Blake obtained approval to extend the deadline for validated Behavioral Checklist Items from January 2015 to August 2015. The Quality of Life workgroup is at a point where the findings from the focus groups are essential to further advancement. Therefore, it was determined that both NC 2169 work groups would move forward on the validation of the Behavior Checklist items. In addition, manuscripts for publication of from completed work were discussed.

2015 Meetings and Leadership:

- **Virtual Mid-Year Meeting:** April 10, 2015; 8-11 PT, 9-12 MT, 10-1 CT, and 11-2 ET
- **Annual Meeting:** October 14-17, 2015, Portland, Maine
- **Revised timeline for checklist revision:**
 - Provide an additional 6 months for a revised checklist questions. (January 2015 to August 1, 2015),
 - March 2015 – Update given at EFNEP Coordinator Meeting
 - By August 1, 2015: Initial set of questions for each domain will be provided to the federal level
 - August 1, 2015 to January 1, 2016 will be time for additional testing,
 - By October 1, 2016 (FY17) will be the roll out for the revised checklist

Leadership:

- Garry Auld and Nancy Betts will continue as NC2169 co-directors
- Jennifer Walsh and Karen Barale will serve as co-chairs for the DAB group, and Linda Boeckner will be the note taker for the group.
- Kate Yerxa and Sandy Proctor will serve as co-chairs for the QoL group.

Accomplishments

Activities, short-term outcomes & outputs (all are part of milestone 1, October 2013-September 2014):

Objective 1. To test the validity and reliability of the EFNEP 24HDR methods. To test the validity and reliability of the EFNEP 24HDR methods.

- Completed survey regarding methods of conducting 24-hr dietary recalls
- Began comparison of EFNEP paraprofessional-conducted 24-hr dietary recalls with RD-conducted 24 hr dietary recalls of the same groups of EFNEP participants
 - Outputs: Determination of whether the findings of paraprofessional 24 hr recalls are similar to those of Registered Dietitians using the same methods

Objective 2. To identify and/or develop valid behavior checklist survey items that assess diet quality, nutrition-related behavior, and food resource management related behaviors due to EFNEP participation.

- **Dietary Quality & nutrition-related behavior**
 - Identified consistent concepts found in the curricula most widely used to teach diet quality and nutrition-related behavior. Outside experts prioritized the Dietary Guidelines most critical to teach EFNEP adult participants
 - Outputs: Identification of items for the EFNEP Food Behavior Checklist that will demonstrate changes from the program leading to improved health
- **Food Resource Management**
 - Identified the consistent concepts found in the curricula most widely used to teach food resource management. Outside experts ranked 43 questions addressing the concepts and selected 20 Food Behavior Checklist questions for testing.
 - Began cognitive interviews of EFNEP participants to determine their understanding of the concepts and developed preliminary themes
 - Outputs: Identification of items for the EFNEP Food Behavior Checklist that will demonstrate changes from the program leading to improved resource management

Objective 3. To determine if EFNEP participation influences Quality of Life (QoL) and if improved QoL is associated with sustained positive behavior changes

- Completed 12 focus groups across nine states and analysis is underway
- Began analysis of 58 telephone interviews of EFNEP paraprofessionals, professionals and community partners.
 - Output: basis for development of an instrument to provide quantitative evidence of EFNEP's impact on improving quality of life.

Objective 4. To investigate EFNEP outcomes that indicate cost benefit and cost effectiveness of the program to participants and communities.

- Developed a cost reporting form, collected data from state programs on indirect costs, developed methods for examining health indicators as a method for estimating benefits vs costs of health education
 - Output: identification of economic evidence of benefits to EFNEP based on physical indicative of improved health

Impacts:

- Identification of differences in expert-conducted 24-hour dietary recalls and those conducted by well-trained EFNEP paraprofessionals will result in developing EFNEP dietary assessment of higher validity and precision
- Determination of most important educational concepts in the EFNEP curricula and how well these are understood by EFNEP participants will provide an evidence-base for Food Behavior Checklist items that can assist in evaluating improvements made from EFNEP education
- Ability to quantify whether/to what degree EFNEP participation improves quality of life will provide additional justification for the value of the program
- Cost-benefit analysis will provide an indication of whether the program costs are made up for by

reductions in health care costs.

Publications (list in separate sections)

Peer-reviewed Journals:

- **Auld, G.,** Baker, S., Bauer, L., Koszewski, W., Procter, S., Steger, M. EFNEP's Impact on the Quality of Life of its Participants and Educators. *J Nutr Educ Behav*, 2013, 45:482-489.
- Wardlaw MK, Baker S. Long-term evaluation of EFNEP and SNAP-Ed. *Forum Family Consumer Sci*, 2013, 17: <http://www.ncsu.edu/ffci/publications/2012/v17-n2-2012-summer-fall/index-v17-n2-december-2012.php>
- Scholl, J. (2013, Fall). A century of graduate research productivity in Extension family and consumer sciences. *Journal of Family and Consumer Sciences*, 105(4), 23-28.
- Koszewski WM, Hlavacek M, Yerxa K, Procter SB, Auld G, Baker S, Misner S. Positive Quality of Life Factors Identified from EFNEP Participant Stories. *Journal of Extension*. 2014;52(4). <http://www.joe.org/joe/2014august/a7.php>.
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Posters:

- Wardlaw MK. NC1169 AES Multistate Research Project EFNEP Related Research, Program Evaluation, and Outreach, EFNEP Coordinator's Conference, Washington DC, March 2013.
- Infante, N. Impact of EFNEP on the quality of life of program participants and paraprofessional educators, EFNEP Coordinator's Conference, Washington DC, March 2013.
- Murray E. Assessing validity of the behavior checklist questions for evaluating nutrition behavior change in adults EFNEP participants, EFNEP Coordinator's Conference, Washington DC, March 2013.
- Gills S. An Evaluation of the Use of a 24-Hour Recall as a Measure of Change in Nutrient Intake in Participants in the Expanded Food and Nutrition Education Program (EFNEP), EFNEP Coordinator's Conference, Washington DC, March 2013.
- Luick, BR, and Guenther, PM. The quality of diets reported by Expanded Food and Nutrition Education Program participants in the Mountain Region in 2011 when exiting the program was higher than when entering. *FASEB Journal* 28:273.8, 2014.
- Barale, K. *Food Resource Management: An Evaluation of Measures of Behavior Change for EFNEP Participants*. Poster at National EFNEP Coordinators' Meeting, Washington DC, February, 2014.
- Auld, G, Baker, S, Barale, K, Franck, K, Gills, S, Wardlaw, MK, Walsh, J. *EFNEP Evaluation: Reaching for the Gold*. Presented twice as concurrent sessions at National EFNEP Coordinators' Meeting, Washington, DC, February, 2014.
- Dawahare, M, Walters, J, and Forsythe, H. *Use of the twenty-four hour recall with EFNEP groups*. Poster at 2013 University of Kentucky Graduate Student Research Symposium.

Student theses and/or dissertations:

- Monahan, B. (2013). Economic Evaluation of the Eat Well Nutrition Education Program, University of Maine, Master Thesis.
- Winden E. (2013). Assessing the availability and access to healthy foods in Tulsa, Oklahoma, Oklahoma State University, MS Thesis.

Curricula and Educational Materials

Scholl, J, and Paster, A. *National EFNEP Research Database*.

<http://www.libraries.psu.edu/psul/lifesciences/agnic/EFNEP/EFNEPdatabase.html>. Searchable database for studies related to 4-H and EFNEP has been updated. Searches can be done by keyword or author. Some studies

go back prior to EFNEP starting, as far as 1922, to capture early extension research on obesity.

Funding (include grants and contracts)

- Colorado State University College of Health and Human Sciences, \$50,000, 2013-2015, Expanded Food and Nutrition Education Program (EFNEP) Related Research: Assessment of EFNEP Methods to Evaluate Dietary Quality and Nutrition, Auld, G (PD), Baker, S.
- University of Wyoming AES, \$3.600, 2013, Expanded Food and Nutrition Education Program (EFNEP) Related Research, Wardlaw, MK
- Oklahoma State University, \$20,000, 2012-2014, Expanded Food and Nutrition Education Program (EFNEP) Related Research, Betts, N.M.
- USDA, \$856,250, 2014-2016, Western Region Nutrition Education and Obesity Prevention Center of Excellence, Baker, S. Barale, K., Auld, G.