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food pantries across seven Illinois rural and urban counties.

Outcome Measures and Analysis: The initial draft of the NEFPAT was pilot-tested by four trained professionals at nine food pantries. After modifications, five food pantry experts evaluated each section and the overall NEFPAT on content validity using a standardized scale of 1-4 (1='Not Relevant' to 4='Extremely Relevant'). Two teams of two professionals each independently assessed three food pantries to determine inter-rater reliability.

Results: Pilot-tests indicated the NEFPAT was positively appraised, requiring 20-30 minutes for completion, and testers recommended technical modifications. The NEFPAT's six objectives and the overall tool were rated as content valid by all experts, with an average section rating of 3.85 ± 0.10 . Intra-class correlation coefficients for inter-rater reliability ranged from 0.91-0.95 across the two teams of professionals.

Conclusions and Implications: The NEFPAT is a content valid instrument with high inter-rater reliability that can be used to quickly assess the nutrition environment in diverse food pantries. The NEFPAT provides quantitative baseline data for field staff, allowing them to strategically choose effective interventions to improve the food pantry environment.

Funding: USDA

O39 Association Between Food Insecurity and Nutritional Status of Indiana Food Pantry Users

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Background: Food pantries may be used by the low-resource populations to aid maintenance of food security and dietary intake. Yet, the nutritional status of this group is not well characterized.

Objective: The purpose of this study was to evaluate the association between food insecurity, Healthy Eating Index (HEI) total and component scores, nutrients and food group intake of adult Indiana pantry users (21-80 y, n = 285).

Study Design: Participants (≥ 21 y) were recruited from food pantries in eight rural and low income counties in Indiana and interviewed for characteristics, food security (US Household Food Security Survey Module), and dietary intake (Automated Self-Administered 24 Hour Recall, National Cancer Institute, Rockville, MD).

Results: Results from adjusted multiple linear regression models showed that food security was not associated with HEI total score ($P = 0.94$); however, food-secure adults had an estimated 262.9 mg higher Potassium ($P = 0.04$), 0.3 mg higher Riboflavin ($P = 0.002$), and 1.3 μg higher vitamin D ($P = 0.01$) intake, compared with food-insecure adults. Results from non-parametric analyses showed a higher HEI component score for greens and beans in food-secure adults than food-insecure adults ($P = 0.02$).

The average intake of fiber, Calcium, Magnesium, Folate, vitamin A, vitamin E, and vitamin D did not meet the Estimated Average Requirement.

Conclusions and Implications: The significant association between food insecurity and lower intake of Potassium, Riboflavin, and vitamin D along with dietary gaps for many other nutrients suggest that food pantries have potential to improve the nutritional status of these vulnerable groups through access to foods, nutrition education and other interventions.

Funding: NIFA

O40 Pantry Use Predicts Food Security Among Rural, Midwestern Emergency Food Pantry Users

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Objective: Food pantries provide food at no cost and with minimal restrictions and requirements; thus, pantry clients represent a highly food insecure subgroup of the population that receive sufficient resources from formal food assistance programs. The relationship between pantry use and food security (FS) is unclear; increased pantry use may indicate more severe food insecurity or serve as a cushion to prevent food insecurity. We hypothesized that pantry use is associated with FS status among pantry users.

Study Design, Setting, Participants: Participants (n=424) were recruited at a single time point from September-November 2014 from a multistate sample of 24 Midwestern, rural food pantries.

Outcome Measures and Analysis: Participants completed a characteristics survey that included the 18-item U.S. Household Food Security Survey Module. Multiple linear regression models with adult FS score as the outcome variable and the number of pantries visited and frequency of pantry visits as the main predictor variables, adjusted for confounders, determined associations between pantry use and FS scores.

Results: Visiting one food pantry in the last 12 months was associated with a lower FS score ($\beta = -0.8$ $p < 0.01$), indicating better FS, compared with visiting more than one pantry. Employment status, age and income were also associated with FS score. Frequency of pantry visits was not associated with FS.

Conclusions and Implications: Visiting one compared to multiple pantries may be associated with improved FS among rural, Midwestern pantry users. To minimize the need for visiting multiple pantries, future interventions

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should consider improving service, client relationships with pantry staff/volunteers, the quantity and quality of foods offered, and access to ancillary and external resources.

Funding: NIFA

O41 Food Security Score is Associated with BMI Among Indiana SNAP-Ed Eligible Adults

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Objective: Food insecurity is associated with overweight and obesity among low-income women. The Supplemental Nutrition Assistance Program-Education (SNAP-Ed) aims to improve the diet quality and health of low-income populations; however, little research exists describing body mass index (BMI) among the SNAP-Ed eligible population by food security status. The objective of this study was to determine whether BMI varies by food security status in a sample of Indiana SNAP-Ed eligible adult participants.

Study Design, Setting, Participants: SNAP-Ed eligible adults age ≥ 18 y ($n = 261$) from 31 Indiana counties were recruited to participate in this cross-sectional study from August 2015 to May 2016.

Outcome Measures and Analysis: Baseline food security score (0-10) was assigned for household adults using the 10-item United States Household Food Security Survey. Baseline weight and height was measured by trained paraprofessionals and used to calculate BMI. A generalized linear regression model was used to estimate the association of food security score with BMI.

Results: Participant mean food security score was 4.2 ± 3.0 and mean BMI was 24.1 ± 7.4 (mean $\pm$ SD). Mean BMI was significantly associated with food insecurity score ($\beta = 0.33$; $p = 0.02$) meaning that BMI increased as food insecurity increased among Indiana SNAP-Ed eligible adults.

Conclusions and Implications: Improved food security may be an important factor in assisting SNAP-Ed eligible adults achieve and maintain a healthy BMI, a recommendation of the Dietary Guidelines for Americans 2015-2020.

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O42 Discourse Analysis-A Potential Analytical Technique for Nutrition Research

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Objective: This presentation provides an introduction to discourse analysis, with a case example, to explain the technique and applications in nutrition research.

Target Audience: Nutrition researchers.

Theory, Prior Research, Rationale: A common form of qualitative data analysis in nutrition research is basic inductive, which aims to condense data, establish links to research questions and identify themes. This approach is not designed to capture nuance in displays of emotions, cadence, tone, word choice, or body language, thus limiting nutrition researchers' potential understanding of a participant's experience to only stated and transcribed words. Discourse analysis, a novel form of analysis in nutrition research allows for investigation of the meaning behind participants' words, enabling nuance in investigation of such things as culture and gender norms that might influence word choice or speech patterns. Food insecurity, which refers to food insufficiency related to income is often measured to reflect a household, however, recent research suggests that men and women in similar situations often report severity of food insecurity differently.

Description: Applying discourse analysis to a sample of transcripts from a larger study investigating differences in the experience of food insecurity between partners within a household we contrast the findings to findings drawn using a basic inductive approach.

Evaluation: The case demonstrates how discourse analysis enables researchers to draw deeper meaning from displays of emotion and how it is better for depicting the differences in meaning making that might occur between men and women in reported severity of food insecurity.

Conclusions and Implications: This case example demonstrates the practical application of discourse analysis to community nutrition research.

Funding: None

O43 Consumer Nutrition Guidance: From Pyramid to Plate and Beyond

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Objective: Encourage healthy food and beverage choices with consumer messages and tools that evolve over time with the science of the Dietary Guidelines for Americans and insights from consumer research.

Target Audience: Nutrition educators, health professionals, and Federal staff.

Rationale: The Dietary Guidelines for Americans is written for use by nutrition educators, health professionals and policy makers. Its translation into understandable, actionable consumer messages and guidance is critical to help communicate effectively with the public.