

Beyond Nutrient Assessment: Psychosocial Influences on Dietary Intake

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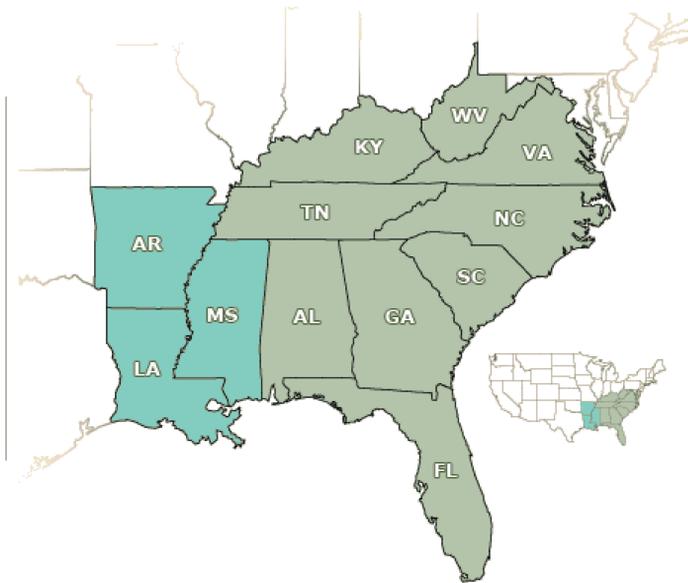
BEYOND NUTRIENT ASSESSMENT: Assessing Behavioral Factors Influencing Dietary Intake

The design and funding of nutrition interventions are increasingly requiring assessment not only of current dietary intake but also assessment of nutrition behavioral factors such as intent to act, self-efficacy, and other psychological influences. This study presents WillTry, a new instrument to assess factors affecting willingness to try new foods in rural populations. Parents describe their perceptions of their children's and their own willingness to try new foods and in what settings. Older children were also asked to answer the 18-item questionnaire. Visual and verbal descriptions of new foods were also provided. Respondents are asked to describe a current level of pickiness and their overall diet quality. This instrument was developed following community assessment workshops using the Comprehensive Participatory Planning and Evaluation (CPPE) model for community based participatory research (CBPR). Rural community members gave unwillingness to try new foods as an underlying root problem in improving nutrition in the Lower Mississippi Delta region, a medically underserved population with much higher rates of nutritionally responsive diseases. This and other instruments promise a better understanding of dietary behaviors through greater community participation in the planning, designing, and evaluation of nutrition interventions and social marketing to promote better health through nutrition in high risk populations.

Background:

The Lower Mississippi Delta region is in the center of the United States and is contiguous to the Mississippi River in its southern one-third. This region lies in the heart of the area often termed the Stroke Belt because of the very high prevalence of hypertension and its disabling and often fatal complication, stroke. The Lower Mississippi Delta Nutrition Intervention Research Initiative (Delta NTRI) was established by the U. S. Congress to improve health and well-being through nutrition research and intervention research methodology, more specifically through community based participatory research (CBPR) approach. This process began with local community meetings held for community residents to define their major nutrition problems, to identify underlying root causes of these problems and to rate the priority of addressing these problems. Poor choice of foods, lack of nutrition knowledge, and lack of physical activity were the top three chosen in two of the three communities. One underlying root cause for poor food choices was the unwillingness of young people to try new foods. From these qualitative CPPE Workshops, effort has begun to develop instruments that better qualify and assess nutrition behaviors such as unwillingness to try new foods, sometimes termed neophobia.

Lower Mississippi Delta Region includes Arkansas, Louisiana, and Mississippi



Methods:

From the literature review, a modification of the Pliner and Holden's (1992) Food Neophobia Scale was tested by a community resident interviewing approximately 30 parents. Revisions were made and a second round of interviews were done using the revised instrument in each of the three research communities. This second round of interviews were done under the approval of the University of Arkansas for Medical Sciences Institutional Review Board.

The final instrument has 29 items, answered either on a four-point Likert scale (22 items), Yes or No (2 items), or Demographic Fill-in-the blank (5 items). The Likert scale used a set of smiley faces to coordinate numerical values assigned to the four points.

Written descriptions were prepared for the specific food items used in this study. Pictures were added in the second testing to further assist the respondents. In this version, attempts were made to include some foods known to be readily available in the region (olives) and some foods not readily available in the rural communities (star fruit). Different foods could be used if the intent of an intervention is to promote a certain group or type of foods, such as fruits or vegetables with high phytochemical content.



Results:

The settings in which new foods are offered are more important than previously thought. Rural people are highly selective in where and by whom dishes are prepared, even at church functions. Parents felt comfortable describing their children's willingness to try new foods, whether their child was a "picky" eater, whether they ate a good diet, and other items. Interest was expressed in the colorful photographs of the foods. Older children appeared eager to talk about their perceptions of the foods.

WILLTRY Questionnaire

Four responses are provided for the following 2 questions. Please select the one that best describes you or your child.

	Picky eater (eat only a few favorite foods)	Will eat most foods (few/certain foods you won't eat)	Will eat anything offered	Not Certain
Which of these best describes you?				
Which of these best describes your child?				

There are 4 possible responses for the following questions. Please answer the following questions first for yourself and then for your child.

	Yes = 5	May be = 3	No = 1	Not Certain	
1. Would you or your child be willing to taste a new food if offered?					
	You				
	Child				

Conclusions:

Assessing the willingness of a study population to try new foods is a qualitative step in designing food interventions that result in behavioral change and go beyond nutrient assessment and beyond nutrition knowledge improvement.

Reactions of potential participants to food items can assist in designing more effective feeding studies and health promotion campaigns. While traditional nutrient assessment is valuable in baseline and final measurements of a study, additional qualitative instruments can provide insight into nutrition behaviors such as intent to act, whether the food component of an intervention is seen as difficult or easy to do, food allergies, food preferences and aversions, and other psychosocial influences.

Plum
 A fruit, the round or oval smooth-skinned edible soft fruit containing a flattened pit



Artichoke
 A vegetable; flowers that resemble thistles; can be eaten after cooking



Hummus
 a dip made with mashed beans, spices, olive oil, lemon juice, and garlic; combined into a thick paste

