

Foreword

Social science studies of intervention programs strive for true experimental designs, but often cannot reach this standard after national program implementation due to ethical concern over withholding benefits. The WIC Nutrition Education Demonstration Study used an elegant design that achieves randomization without the withholding of WIC program benefits from the control group. It demonstrates a design approach that could be replicated in future studies of WIC and other programs.

However, nutrition education is a complex intervention that is often tailored to the needs of the specific client. In many WIC sites, the results of the nutrition risk assessment required for WIC certification are considered by the local WIC staff in selecting and tailoring nutrition education to the client's needs. In the innovative interventions included in the prenatal demonstrations, the participating women themselves had a strong influence on the content of the education they received from the interactive kiosks or facilitated group discussions.

In this context, the knowledge assessment tool used in this study has significant limitations that should be recognized by all readers. First, since the assessment tool focuses on knowledge, it would not detect changes in behavior, attitude or advances through the stages that precede behavioral change. Further, as a predefined test of fixed scope, it would not assess changes in knowledge in areas not covered by the test. Two examples help clarify these limitations.

Consider a case where the nutrition education for the prenatal WIC participant focuses on the health benefits of breastfeeding and breastfeeding techniques. Even if the participant had been only vaguely considering breastfeeding, and later successfully breastfeeds for six months, the assessment tool used in this demonstration might find no change in nutrition knowledge, as it did not cover knowledge of breastfeeding.

Consider a second case where a pregnant woman enters WIC knowing how much milk and dairy products she should consume during pregnancy, but is only occasionally consuming dairy products. If the WIC nutrition education intervention is tailored to this aspect of her needs, it could result in an increase in knowledge about acceptable ways to consume a variety of well-tolerated dairy foods, and a considerably improved diet. However, neither the increase in this type of knowledge nor the improved behavior would have been detected. In order to effectively compare knowledge gains resulting from the innovative and traditional interventions, a standard assessment tool was developed and administered to all groups of women. This tool was tested for reliability and validity and did a good job at assessing knowledge in specific areas. However, as previously indicated, the prenatal participants strongly influenced the content of the nutrition education they received.

Because of this influence, the content of nutrition education varied across sites, decreasing the ability of the standard assessment tool to detect changes in knowledge that might be attributed to the educational interventions used in this study. We hope that readers will neither take the findings of this study as a comprehensive assessment of WIC nutrition education nor lose sight of this study's contribution to WIC evaluation methodology. Further, this study provides useful information about implementing the types of innovative interventions selected for the demonstration.

Jay Hirschman, M.P.H., C.N.S.
Director, Special Nutrition Staff
Office of Analysis, Nutrition and Evaluation
USDA Food and Nutrition Service

The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.)

Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write: USDA, Director, Office of Adjudication, 1400 Independence Avenue, SW, Washington, DC 20250-9410; or call (866) 632-9992 (Toll-free Customer Service), (800) 877-8339 (Local or Federal relay), or (866) 377-8642 (Relay voice users) or (800) 845-6136 (Spanish Federal-relay). USDA is an equal opportunity provider and employer.