
Research and Evaluation Activities in USDA

From the Food, Nutrition, and Consumer Services' Center for Nutrition Policy and Promotion

The Center for Nutrition Policy and Promotion (CNPP) has several new and several ongoing projects of interest to the nutrition community.

Adapting the Food Guide Pyramid for Young Children

CNPP seeks to improve young children's diets by adapting and translating dietary guidance into dietary practice. Thus, CNPP is adapting the Food Guide Pyramid for children 2 to 6 years old and developing food guide-based nutrition messages and materials to support child nutrition education efforts.

The Food Guide Pyramid was designed to help healthy Americans 2 years of age and over implement the *Dietary Guidelines for Americans*, which serve as the basis for Federal nutrition policy and food guidance. Children from 2 to 6 years old were selected as the target audience for adapting the Food Guide Pyramid for the following reasons: (1) Children have unique nutrient needs and requirements and undergo significant growth and developmental changes; (2) research indicates that early food experiences are crucial to food acceptance patterns, food preferences, and food intake regulation throughout life; (3) the U.S. Department of Agriculture (USDA) receives numerous requests for information about feeding young children, particularly guidance about appropriate serving sizes; and (4) USDA

is committed to improving the nutritional status of children, including those served by the Child and Adult Care Food Program (CACFP). Furthermore, only 1 percent of children 2 to 9 years of age meet all Food Guide Pyramid recommendations.

CNPP is managing the project in two phases: Development of the technical information (Phase I) and the communication plan for adaptation (Phase II). Phase I includes a number of activities:

- Reviewing the goals and objectives of the current food guide and adapting them for the special needs of young children, their parents, and caregivers;
- examining food selections and typical portion sizes reported for young children in food consumption surveys to determine if currently recommended food patterns based on the Pyramid can reliably meet the established goals and objectives;
- incorporating data on the nutritional quality of child care meals and snacks from the Food and Nutrition Service's Early Childhood and Child Care Study; and
- conducting a series of in-depth discussions with nutrition educators to get input on behavioral and developmental considerations that are important in feeding young children.

Phase II consists of CNPP working with a contractor on three major communications activities:

- Designing, conducting, analyzing, and interpreting a qualitative consumer research study based on results of technical research provided by CNPP, including recommendations for prototype nutrition products and materials;
- pretesting prototype nutrition promotion messages and materials; and
- developing a communications plan outline for adapting the Food Guide Pyramid for the target audience.

September 1998 is the projected completion date for the project.

USDA's Food Guide: Updating the Research Base

The Food Guide Pyramid graphic illustrates what constitutes a healthful diet and conveys the importance of balance, moderation, and consumption of a variety of foods. The research base for USDA's food guidance system provides the scientific underpinning of USDA's consumer food guidance information, providing documentation that its recommended food selection patterns can meet the Guide's established nutritional objectives. The research base for the Food Guide was developed from USDA's 1977-78 Nationwide Food Consumption Survey and was recently updated using food composition and food consumption data from the 1989-91 Continuing Survey of Food Intakes by Individuals (CSFII).

Food group composites are based on the relative frequency of selection of specific foods within the food group (e.g., vegetables) or subgroup (e.g., dark-green leafy) regardless of their preparation with fat and added sugars. The 1989-91 CSFII was used to update the composites. Nutrient profiles using 1991 nutrient data were developed based on the weighted consumption of foods within each food group and subgroup. Food Guide Pyramid patterns for 1,600 calories, 2,200 calories, and 2,800 calories were created using the revised composites. Effects of changes in food selection between 1977 and 1991 on food group nutrient profiles were assessed to determine if Food Guide Pyramid recommendations continue to meet nutrient objectives such as the Recommended Dietary Allowances. An administrative report is being prepared.

The Dietary Guidelines for Americans

The *Dietary Guidelines for Americans*, first released in 1980 and revised in 1985, 1990, and 1995, are published jointly by the U.S. Departments of Agriculture (USDA) and Health and Human Services (DHHS). The Dietary Guidelines provide the basis for Federal nutrition policy and nutrition education activities. Nutrition and health professionals actively promote these Guidelines to focus Americans' attention. The Dietary Guidelines bulletin advises healthy Americans, ages 2 years and over, about food choices that promote health and prevent disease. The bulletin is based on the recommendations of a Dietary Guidelines Advisory Committee (DGAC)—a panel of nationally recognized nutrition and health experts.

In early 1998, USDA and DHHS will appoint a DGAC to review the 1995 Guidelines and recommend changes that reflect new scientific evidence on diet

and health relationships and new information on the usefulness of the earlier editions to professionals and the public. The committee will hold three to four meetings open to the public during 1998-99 and receive written comments about the Guidelines from the public. The committee will issue its recommendations to the Secretaries of USDA and DHHS in a report to be published late in 1999 or early in the year 2000. The two Departments will then review the DGAC report and jointly release the fifth edition of the Dietary Guidelines in the year 2000.

The Dietary Guidance Working Group

The Dietary Guidance Working Group (DGWG) was established on January 2, 1986, under the Subcommittee for Human Nutrition of the Research and Education Committee, Secretary's Policy and Coordination Council. The Working Group was formed to help agencies meet the objectives of legislation related to dietary guidance and USDA's food and nutrition policy. Eight USDA agencies are represented; DHHS has a liaison member. Title III of the National Nutrition Monitoring and Related Research Act of 1990 calls for the Secretaries of Agriculture and Health and Human Services to publish the *Dietary Guidelines for Americans* at least every 5 years and for the Secretaries to review and approve dietary guidance for the general population prior to its release. The purpose of these actions is to ensure that Federal dietary guidance is consistent with the *Dietary Guidelines for Americans* or based on new medical or scientific knowledge determined to be valid by the Secretaries.

In 1994, USDA and DHHS signed a Memorandum of Understanding to formalize the review process. The Working

Group reviewed 15 draft publications produced by the two Departments in fiscal year 1997 and discussed special topics at monthly meetings: "DGWG Philosophy of Nutrition Educators for Writers," "Thinking Beyond the Printed Page," and "The Dietary Guidelines Alliance," which includes background information on the formation of the Alliance and results of the consumer research used to develop its publication "Reaching Consumers with Meaningful Health Messages—A Handbook for Nutrition and Food Communicators." The Alliance was formed to promote consumer awareness and use of the Dietary Guidelines and is a coalition of representatives from the food industry, health organizations, and government.

Expenditures on Children by Families, 1997

Each year since 1960, USDA has published a report that provides estimates of annual expenditures on children from birth through age 17. USDA estimates are used to set State child support guidelines and foster care payments. This newest report presents the 1997 estimates for husband-wife and single-parent families using data from the 1990-92 Consumer Expenditure Survey, updated using the Consumer Price Index.

For husband-wife families, child-rearing expenses are provided for three income groups and for single-parent families, for two income groups. To adjust, in part, for price differentials and varying expenditure patterns, estimates are also provided for husband-wife families in urban areas in the West, Northeast, South, and Midwest; rural areas throughout the United States; and the United States overall. For single-parent families, estimates are provided for the overall United States only. Expenditures on children are estimated for the major

budgetary components: Housing, food, transportation, clothing, health care, child care and education, and miscellaneous goods and services.

For the overall United States, annual child-rearing expense estimates are between \$8,060 and \$9,170 for a child in a two-child, married-couple family in the middle-income group. Housing and food account for the largest proportion of total child-rearing expenses. Expenditures are lower for younger children and higher for older children. More is spent on an only child, and less is spent on a child in a family with three or more children.

Healthy Eating Index

To examine how well the American diet conforms to recommended healthful eating patterns, the USDA developed the Healthy Eating Index (HEI) in 1989-90 to provide a measure of overall diet quality. The Index, based on different aspects of a healthful diet, provides an overview of foods people are eating, the amount of variety in the diet, and compliance with specific dietary guidelines recommendations. Ten dietary components are gauged: The degree to which a person's diet conforms to USDA's Food Guide Pyramid serving recommendations for the grains, vegetables, fruits, milk, and meat food groups; total fat and saturated fat consumption; total cholesterol and sodium intakes; and variety in the diet.

The HEI is calculated from 1994-96 data from the Continuing Survey of Food Intakes by Individuals. HEI scores for the overall population and for socio-demographic groups are now available.

Thrifty Food Plan

The Thrifty Food Plan (TFP) serves as a national standard for a nutritious diet at practically the lowest possible cost. It is one of the four official USDA food plans (the others being the Low-Cost Plan, Moderate-Cost Plan, and Liberal Plan) and is used as the basis for food stamp allotments. The plan specifies the types and quantities of foods that people in 12 age-gender groups could consume to have a nutritious diet at a minimal cost. The last revision of the TFP market basket was in 1983. Since then, dietary guidelines, food consumption patterns, nutrient composition data, and food prices have changed.

The TFP market basket is being revised to account for the most current knowledge of nutritional needs. The 1989 Recommended Dietary Allowances (RDAs), the 1995 *Dietary Guidelines for Americans*, and the Food Guide Pyramid food group serving recommendations provide the basis for the revised TFP dietary standards. This revision of the TFP is the first one to incorporate Food Guide Pyramid serving recommendations. Data used for the revision are from the 1989-91 Continuing Survey of Food Intakes by Individuals and various national price data bases. The cost of the revision was set not to exceed the average real cost of the TFP for 1989-91. This cost was used to ascertain whether, and how, a household could have a nutritious diet. Results of the TFP revision should be available in 1998.