

subgroups were established based on nutritional similarities among foods, similar uses of the foods in meals, and consumer perceptions of the foods as similar. The food intake patterns, then, included the types of foods Americans most commonly eat, grouped in familiar ways, but with the amounts from each food group and subgroup modified to represent healthful proportions. To determine these proportions, nutrient profiles were calculated for each food group and subgroup by using a weighted average of the nutrients supplied by the foods in that group, with weights based on nationwide consumption of the food items. The nutrient profiles were used to determine the amount that the Pyramid should include from each group or subgroup in order to meet the nutritional goals at various calorie levels. Nutrient profiles were calculated by using forms of each food in the group with the lowest fat content and without added sugars. Additional fat and added sugars for each food intake pattern were calculated and listed separately from the food groups, in amounts to meet energy and nutrient goals for the pattern. This permitted individuals to select some foods containing additional fats or sugars, such as whole milk, sweetened cereals, or cookies, or to use the additional fats and sugars in food preparation.

When the Food Guide Pyramid was released in 1992, its accompanying consumer booklet focused on three food intake patterns, at 1600, 2200, and 2800 calories, to illustrate diets spanning the range of numbers of servings recommended. These three patterns covered average energy needs of many age/gender groups as suggested by the 1989 RDA. Adjustments to those patterns were suggested for young children, who require fewer calories, and for teens and young adults for whom higher amounts of calcium were recommended. Technical reports on development of the Pyramid described analyses of food intake patterns at additional calorie levels, ranging from 1200 to 3200 calories. (See bibliography of technical publications at www.cnpp.usda.gov/pyramid-update.)

Proposed revisions to the daily food intake patterns are based on the same philosophical goals that were used in developing the original Pyramid—including the goals to represent a total diet that is both *adequate* and *moderate*, as well as to reflect current food consumption choices in determining nutrient sources. The data sources for the revision were the most current versions available at the time the analysis was conducted. They include the IOM Dietary Reference Intakes

released between 1997 and 2002 and the *2000 Dietary Guidelines for Americans*, for setting nutritional goals, and the USDA Continuing Survey of Food Intakes by Individuals 1994–96, for food consumption information. CNPP is presently analyzing data from the 1999–2000 National Health and Nutritional Examination Survey, released in August 2002 by the Department of Health and Human Services, to corroborate the adequacy of the proposed food intake patterns.

IV. Daily Food Intake Patterns

Daily Food Intake Patterns identify the types and variety of foods suggested for Americans to eat for health, and the general proportions in which these foods should be eaten. Individuals with higher energy needs would eat more from all food groups than would those with lower energy needs. Therefore, the daily intakes are presented as food patterns at a number of energy levels. These are provided in Table 1. Each pattern identifies specific amounts of foods from each food group and subgroup for an individual whose needs match that energy level. To ensure that foods of this variety and proportion will meet nutrient needs, the total nutrients from all foods in each food intake pattern are compared with specific nutrient goals.

The nutrient goals for the proposed Daily Food Intake Patterns shown in Table 1 were set to meet new nutritional standards, including the year 2000 *Dietary Guidelines for Americans* and the IOM Dietary Reference Intakes for vitamins, minerals, and macronutrients released between 1997 and 2002. The specific targeted energy levels and nutritional goals for each proposed food pattern, using these current reference standards, are provided in Table 2 and Table 3. The specific goals for each food pattern were set to meet the nutritional needs of the age and gender group(s) whose average energy needs approximately matched the energy level of the pattern.

With the prevalence of overweight and obesity rising, and with a predominantly sedentary population, it is of utmost importance to select suggested energy levels for each age/gender group that will not overestimate needs. Therefore, the decision was made to create food patterns for each age/gender group appropriate for several levels of physical activity. The pattern for each group at the lowest energy level, appropriate for sedentary individuals, was used as the target pattern to compare with the nutrient goals for that age/gender group. Both target patterns used for comparison with

nutritional goals and suggested patterns for more physically active individuals are provided in Table 2. The food patterns at the higher energy levels will also meet nutrient goals, and will provide more food for an active individual's energy needs.

To determine if each food intake pattern meets its nutrient goals, CNPP calculated the overall nutrient content of each pattern. For these calculations, nutrient profiles for each food group were revised based on the most recent data available on food consumption patterns of Americans. Nutrient profiles are weighted averages of the nutrient content of foods in each food group or subgroup. Weights are based on consumption by Americans of various foods in the group. Nutrient profiles for a reference amount (e.g., ½ cup or 1 ounce) of each food group and subgroup are provided in Table 4. Based on these nutrient profiles and the proposed daily intakes from each food group and subgroup, the total nutrients in each pattern were determined and compared to the nutritional goals set for that pattern. The nutrients in each pattern and comparison with goals are provided in Table 5.

The following Tables are available for review and comment at www.cnpp.usda.gov/pyramid-update:

1. *Proposed Daily Food Intake Patterns*. This document lists the daily amounts of food from each group and subgroup in proposed food patterns at multiple energy levels.

2. *Energy Levels for Proposed Food Intake Patterns*. This document lists the target and suggested energy levels for the food intake patterns (shown in Table 1) for various age/gender groups, based on Estimated Energy Requirements set by the IOM. Target patterns are designed for sedentary individuals of reference body size within various age/gender groups and are used in determining the nutrient adequacy of each pattern. Higher suggested food pattern energy levels are also presented for individuals in each age/gender group who are “low active” or “active” according to the IOM definitions.

3. *Nutritional Goals for Proposed Daily Food Intake Patterns*. This document lists the nutritional goals for each proposed food intake pattern. These goals include targets for vitamins, minerals, and macronutrients and acceptable intake ranges for macronutrients for various age/gender groups. Goals were set based on Dietary Reference Intakes reports for various vitamins, minerals, and macronutrients that have been released by the IOM from 1997 to 2002; on quantitative recommendations in the year 2000