Appendix E-3: USDA Food Pattern Modeling Analyses

The 2010 Dietary Guidelines Advisory Committee (DGAC) identified specific questions that they felt could best be addressed through a food pattern modeling approach, using the USDA food patterns and the modeling process developed to address similar requests by the 2005 DGAC.

Twelve modeling analyses were completed and provided as reports to four DGAC subcommittees. The food pattern modeling analyses conducted for the DGAC are listed below. Full reports for each analysis are available online at www.dietaryguidelines.gov.

E3.1 Adequacy of the USDA Food Patterns. How well do the USDA food patterns, using updated food intake and nutrient data, meet IOM and potential DG 2010 nutrient recommendations?

E3.2 Realigning Vegetable Subgroups. What revisions to the vegetable subgroups may help to highlight vegetables of importance and allow recommendations for intake levels that are achievable, without compromising the nutrient adequacy of the patterns?

E3.3 Vegetarian Food Patterns. How well do plant-based or vegetarian food patterns, adapted from the USDA food patterns, meet IOM and potential DG 2010 nutrient recommendations?

E3.4 Starchy Vegetables. How do the nutrients provided by the starchy vegetable subgroup compare with those provided by grains and those provided by other vegetable subgroups? How would nutrient adequacy of the patterns be affected by considering starchy vegetables as a replacement for some grains rather than as a vegetable subgroup?

E3.5 “Typical Choices” Food Patterns. What is the impact on caloric and nutrient intake if the USDA food patterns are followed but typical rather than nutrient-dense food choices are made?

E3.6 Milk Group and Alternatives. What is the impact on nutrient adequacy (1) if no milk or milk products were consumed, (2) if calcium was obtained from nondairy sources or fortified foods, and (3) if more fluid milk and less cheese were consumed?

E3.7 Replacing all Non-Whole Grains with Whole Grains. What is the impact on intake of folate and other nutrients if all recommended grain amounts are selected as whole grains rather than half whole and half nonwhole grains?

E3.8 Cholesterol. What is the impact on food choices and overall nutrient adequacy of limiting cholesterol to less than 200 mg per day?

E3.9 Reducing Cholesterol-Raising Fatty Acids. What is the impact on food choices and overall nutrient adequacy of limiting cholesterol-raising (CR) fatty acids to less than 7% of total calories and to less than 5% of total calories, with CR fatty acids operationalized as total saturated fatty acids minus stearic acid?

E3.10 Seafood. What is the impact on nutrient adequacy of increasing seafood in the USDA food patterns to (1) 4 ounces per week of seafood high in n-3 fatty acids, (2) 8 ounces per week of seafood in proportions currently consumed, and (3) 12 ounces per week of seafood low in n-3 fatty acids?
E3.11 **Sodium.** What would the sodium levels of the USDA food patterns be (1) using current patterns, (2) using “typical choices” patterns, and (3) using only low sodium and no-salt-added foods?

E3.12 **Potassium.** What are the potassium levels in the USDA food patterns, in comparison to current consumptions and DASH diet levels, in absolute amounts, adjusted for energy intake, and as a ratio of sodium to potassium? How would potassium levels of the USDA food pattern change if current levels of coffee and tea intake were included?