lunch program. These items were aggregated into 52 food groups based on the primary ingredient and the percent of calories from fat. For example, there were two beef categories: high-fat and low-fat beef; two poultry categories; etc.

Food costs were estimated from ingredient cost data obtained in the 1993 School Lunch and Breakfast Cost Study and recipes for school lunch items. The recipes were necessary for two reasons: aggregation of ingredient costs to costs of food served, and for estimating the change in usage of the various agricultural commodities.

The USDA Economic Research Service (ERS) developed a computer

model incorporating the above data to assist in estimating the possible range of market impacts from the changes in the June 10, 1994 proposed rule. For the current analysis, this model was extended to reflect the food component crediting used in food-based menu planning. Crediting for each of the 52 food groups towards the four food components of the existing NSLP meal pattern was estimated by FNS using information contained in the "Food Buying Guide for Child Nutrition Programs." This extended model was then used to determine the average NSLP crediting of the NSLP meals included in the SNDA data.

Findings

Table 1 shows in abbreviated form the current meal pattern requirements for NSLP for grades K–12. For consistency with the proposed regulation the current "Bread or Bread Alternate" component will be referred to as "Grains/Breads" as proposed. This table is accompanied in program guidance with the recommendation that "portions be adjusted by age/grade group to better meet the food and nutritional needs of children according to their ages * * *. If portions are not adjusted, the Group IV portions are the portions to serve all children."

TABLE 1.—SCHOOL LUNCH MEAL PATTERNS FOR GRADES K–12 (ABBREVIATED)

		Minimum quantities		Recommended quantities
Food components	Food items	Grades K–3, ages 5–8 (group III)	Grades 4–12, age 9 and over (group IV)	Grades 7–12, age 12 and over (group V)
Meat/Meat Alternate	Lean meat, poultry, or fish, or cheese, or equivalent from eggs, cooked dried beans or peas, peanut butter or other nut or seed butters or certain other alternates.	1.5 oz	2 oz	3 oz.
Vegetables/Fruits	2 or more servings of vegetables or fruits or both to total	.5 cups	.75 cups	.75 cups.
Grains/Breads	Servings of grains/breads of which a minimum or 1 per day must be enriched or whole-grain.		8 per week	
Milk (as a beverage)	Fluid whole milk, and fluid unflavored lowfat milk, skim milk, or buttermilk.	8 fl.oz	8 fl.oz	8 fl.oz.

Table 2 shows the findings derived from the School Nutrition Dietary Assessment Study (SNDA) data for each of the four required food components in the units used for the school meal patterns. These SNDA data show that, on average, NSLP meals served for grades K–12 exceed the existing minimum meal pattern requirements for meat/meat alternates; grains/breads; and vegetables/fruits. The average for fluid milk is slightly below the 8 fluid ounce minimum (7.5 fl. oz.), which is expected due to NSLP offer versus serve (OVS) rules. The proposed rule maintains the current meal pattern requirements for offering 8 fluid ounces of milk as a beverage.

TABLE 2.—AVERAGE AMOUNT OF EACH POTENTIALLY CREDITABLE FOOD COMPONENT AS FOUND IN SCHOOL YEAR 1991–92

Food component	Esti- mated aver- age amount in NSLP meals, school year 1991– 92
Meat/Meat Alternate (oz.) Vegetables/Fruits (cups)	2.8 1.0
Grains/Breads (servings)	2.5
Milk (as a beverage) (oz.)	7.5

Using the extended school meals model, the average cost of each food component was estimated. Under both the existing meal pattern system and the proposed food-based menu system, the oldest age/highest grade group always requires the largest quantity of food from each food component. Tables 3 and 4 compare the SNDA findings on meals served by food component to the largest quantities of the meal pattern requirements currently in place (Table 3) and as proposed (Table 4).

These tables show that within the existing reimbursement structure, schools already provide meals which, on average:

• For Meat/meat alternate, exceed the oldest age/grade minimums of both the current and proposed rules.

• For Vegetables/fruits, exceed the minimum of the current meal pattern for the oldest age/grade group, and are on average equal to the minimum for the oldest age/grade group of the proposed rule.

• For Grains/breads, exceed the minimum of the current meal pattern for the oldest age/grade group, and are on average about 0.5 servings per day less than the minimum for the oldest age/grade group of the proposed rule.

The proposed grains/breads minimum for the largest group of NSLP participants, grades K–6, is 12 servings per week, compared to the proposed 15 servings per week for grades 7–12. When weighted by historical student participation, the overall weighted average proposed minimum for grains/ breads is equal to about 2.6 servings per day. Therefore, the current NSLP meals serve only slightly less (0.1 servings per day) than the proposed weighted