

MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION
SCHOOL FOOD SERVICES
SCHOOL MEALS INITIATIVE FOR HEALTHY CHILDREN

On June 13, 1995, the USDA published the final rule on its School Meals Initiative for Healthy Children. Starting with **the 1996-97 School Year**, LEAs were to serve meals (lunches and breakfasts) that comply with the recommendations of the Dietary Guidelines for Americans. The applicable dietary guidelines are:

- a) Eat a variety of foods;
- b) Limit total fat to 30 percent of calories;
- c) Limit saturated fat to less than 10 percent of calories;
- d) Choose a diet low in cholesterol;
- e) Choose a diet with plenty of vegetables, fruits, and grain products; and
- f) Use salt and sodium in moderation.

To ensure that meals served fully comply with the dietary guidelines, the following compliance measures have been set:

- a) Lunches must provide one-third of the Recommended Dietary Allowances (RDA) of protein, calcium, iron, vitamin A and vitamin C, by specific age/grade groups; with breakfasts providing one-fourth of the RDA for the same by specific age groups;
- b) Meals will provide specific mealtime energy allowances/calories for children based upon certain age or grade groups;
- c) A limit on the percent of calories from total fat to 30 percent based upon the actual number of calories offered;
- d) A limit on the percent of calories from saturated fat to less than 10 percent based on the actual number of calories offered;
- e) A reduction in the levels of sodium and cholesterol;
- f) An increase in the level of dietary fiber.

Meals will be measured for compliance over a school week. A school week is considered a normal school week of five consecutive days; however, to accommodate shortened weeks and other scheduling needs, the period can be a minimum of three consecutive days and a maximum of seven consecutive days.

Production and menu records shall be maintained to demonstrate that the required number of food components and food items or menu items are offered on a given day. Records must include sufficient

information to evaluate the menu's contribution to required nutrition standards and the appropriate levels of nutrients and calories.

At this time regulations provide four alternative menu planning methods for LEAs to use to meet requirements and the appropriate nutrient and calorie levels. The four planning alternatives are: 1) Nutrient Standard Menu Planning (NSMP); 2) Assisted Nutrient Standard Menu Planning (ANSMP); 3) Enhanced Food-Based Menu Planning; and 4) Traditional Food Based Menu Planning.

Nutrient Standard Menu Planning

Nutrient Standard Menu Planning (NSMP) is a method to develop menus based upon an analysis for nutrients in the menu items and food items offered over a school week to determine if specific levels for a set of key nutrients and calories were met. LEAs choosing NSMP must conduct nutrient analysis on all menu items or foods offered as part of the reimbursable meal.

In Planning Menus Under NSMP, LEAs must plan to provide minimum calorie and nutrient levels for school lunches and breakfasts for specific **grade groups** or, at the LEA option, plan to provide minimum calorie and nutrient levels for school lunches and breakfasts for specific **age groups**. The accompanying charts provide the minimum calorie and nutrient levels necessary for both the specific grade or age groups. The actual minimum calorie and nutrient levels required will vary depending upon the grouping used, age, or grade.

Standardized Recipes Under NSMP must be developed and followed. A standardized recipe is one that was tested to provide an established yield and quantity through the use of ingredients that remain constant in both measurement and preparation.

A Reimbursable Lunch Under NSMP must consist of a minimum of three items. One menu item must be an entree (a single food or a combination of foods that is offered as the main course), a fluid milk as a beverage, and one other item. All menu items or foods offered as part of the reimbursable meal will count toward meeting requirements, except foods identified as "foods of minimal nutritional value," unless offered as part of a menu item in a reimbursable meal.

Under The Offer Versus Serve Provision for Lunch, LEAs must offer students at least three menu items as described. Senior high school students must select at least two menu items; one menu item must be the entree. When more than three menu items are offered, students may refuse only two items. Again, the entree must be selected. At the discretion of the LEA, students below the senior high level may also participate in offer versus serve.

A Reimbursable Breakfast Under NSMP must consist of a minimum of three menu items. One menu item must be fluid milk served as a beverage or on cereal or both.

Under The Offer Versus Serve Provision for Breakfast, LEAs must offer students at least three menu items. Students must select at least two menu items. A maximum of only one menu item can be refused.

LEAs Are Encouraged To Provide A Variety Of Foods and offer a selection of menu items and foods from which children may make choices.

Software Used Has To Have Been Evaluated and approved by the USDA Food and Nutrition Service (FNS). Nutrient analysis will be based upon calorie/nutrient information provided in the Child Nutrition Database.

Assisted Nutrient Standard Menu Planning

LEAs Without The Capability To Conduct Nutrient Standard Menu Planning may choose an alternate planning method which uses menu cycles developed by other sources. This alternate planning method is called Assisted Nutrient Standard Menu Planning (ANSMP). Under ANSMP, LEAs may utilize menu cycles that have been especially developed to meet NSMP standards. Other sources may include other LEAs, consultants, etc. In addition, recipes, food product specifications, and preparation techniques must also be developed to ensure that the menu items and foods offered conform to the nutrient analysis determinations of the menu cycle.

Calorie And Nutrient Levels required under ANSMP are the same as required under NSMP.

Reimbursable Lunch/Breakfast And Offer Versus Serve Requirements are the same as apply under NSMP.

Food Based Menu Planning - Enhanced or Traditional

Under Enhanced and Traditional Food Based Menu Planning, LEAs must offer a certain number of food components in specified quantities. See accompanying charts. In reviewing the charts, please note that the same calorie and nutrient levels are required under Food Based Menu Planning that are required under NSMP and ANSMP. LEAs using Traditional Food Based Menu Planning may not count grain-based desserts as meeting part of the grains/breads requirement.

A Reimbursable Lunch Under Food Based must consist of five required items: meat/meat alternate, vegetables and fruits (two servings), grains/breads, and milk.

Under The Offer Versus Serve Provision for Lunch, LEAs must offer its students all five required food items. Senior high school students are permitted to decline up to two of the five required items. At the discretion of the LEA, students below the senior high level may be permitted to decline one or two of the required five food items.

A Reimbursable Breakfast Under Food Based Menu Planning must consist of four required food items: a serving of milk served as a beverage, on cereal, or both; a serving of fruit or vegetable or both, or full

strength fruit or vegetable juice; and two servings of grains/breads or meat/meat alternate or one serving from each.

Under The Offer Versus Serve Provision for Breakfast, LEAs must offer its students all four required food items. At the discretion of the LEA, students may be allowed to refuse one food item.

NOTE: Though LEAs using Enhanced or Traditional Food Based Menu Planning are not required to conduct nutrient analysis on the menus served, the meals served must still meet the calorie and nutrient levels as required by USDA. During on-site reviews the State agency is required to conduct the nutrient analysis of the menus served during the review period to determine if the nutrition standards are being met.

Grade Groups For Nutrient Standard, Assisted Nutrient Standard, and Enhanced Food Based Menu Planning School Lunch

MINIMUM REQUIREMENTS FOR NUTRIENT AND CALORIE LEVELS FOR SCHOOL LUNCH (School week averages)

Grade Groupings

Nutrients and Energy Allowances	Preschool	Grades K-6	Grades 7-12	Option for Grades K-3
Energy Allowance (calories)	517	664	825	633
Total fat	¹	¹	¹	¹
Saturated fat	²	²	²	²
Protein (g)	7	10	16	9
Calcium (mg)	267	286	400	267
Iron (mg)	3.3	3.5	4.5	3.3
Vitamin A (RE)	150	224	300	200
Vitamin C (mg)	14	15	18	15
Cholesterol (mg) ³	100	100	100	100
Fiber (g) ³	3	4	7	4
Sodium (mg) ³	1350	1350	1350	1350

¹ Total fat not to exceed 30 percent of calories over a school week.

² Saturated fat to be less than 10 percent of calories over a school week.

³ State Guidance

Optional Age Groups For Nutrient Standard and Assisted Nutrient Standard School Lunch

OPTIONAL MINIMUM NUTRIENT AND CALORIE LEVELS FOR SCHOOL LUNCH (School week averages)

Age Groupings

Nutrients and Energy Allowances	Ages 3-6	Ages 7-10	Ages 11-13	Ages 14 and above
Energy Allowances(calories)	558	667	783	846
Total fat	¹	¹	¹	¹
Saturated fat	²	²	²	²
Protein (g)	7.3	9.3	15.0	16.7
Calcium (mg)	267	267	400	400
Iron (mg)	3.3	3.3	4.5	4.5
Vitamin A (RE)	158	233	300	300
Vitamin C (mg)	14.6	15.0	16.7	19.2
Cholesterol (mg) ³	100	100	100	100
Fiber (g) ³	3	5	6	7
Sodium (mg) ³	1350	1350	1350	1350

¹ Total fat not to exceed 30 percent of calories over a school week.

² Saturated fat to be less than 10 percent of calories over a school week.

³ State Guidance

Grade Groups For Nutrient Standard, Assisted Nutrient Standard, and Enhanced Food Based Menu Planning School Breakfast

MINIMUM REQUIREMENTS FOR NUTRIENT AND CALORIE LEVELS FOR SCHOOL BREAKFAST (School week averages)

Grade Groupings

Nutrients and Energy Allowances	Preschool	Grades K-12	Option for Grades 7-12
Energy Allowances (calories)	388	554	618
Total Fat	1	1	1
Total Saturated Fat	2	2	2
Protein (g)	5	10	12
Calcium (mg)	200	257	300
Iron (mg)	2.5	3.0	3.4
Vitamin A (RE)	113	197	225
Vitamin C (mg)	11	13	14
Cholesterol (mg) ³	75	75	75
Fiber (g) ³	2	4	5
Sodium (mg) ³	1000	1000	1000

¹ Total fat not to exceed 30 percent of calories over a school week.

² Saturated fat to be less than 10 percent of calories over a school week.

³ State Guidance

Age Groups For Nutrient Standard and Assisted Nutrient Standard School Breakfast

OPTIONAL MINIMUM NUTRIENT AND CALORIE LEVELS FOR SCHOOL BREAKFAST (School week averages)

Age Groupings

Nutrients and Energy Allowances	Ages 3-6	Ages 7-10	Ages 11-13	Ages 14 and above
Energy Allowances (calories)	419	500	588	625
Total Fat	1	1	1	1
Saturated Fat	2	2	2	2
Protein (g)	5.50	7.00	11.25	12.50
Calcium (mg)	200	200	300	300
Iron (mg)	2.5	2.5	3.4	3.4
Vitamin A (RE)	119	175	225	225
Vitamin C (mg)	11.00	11.25	12.50	14.40
Cholesterol (mg) ³	75	75	75	75
Fiber (g) ³	2	3	4	5
Sodium (mg) ³	1000	1000	1000	1000

¹ Total fat not to exceed 30 percent of calories over a school week.

² Saturated fat to be less than 10 percent of calories over a school week.

³ State Guidance

Grade Groups For Traditional Food Based Menu Planning School Lunch

MINIMUM REQUIREMENTS FOR NUTRIENT AND CALORIE LEVELS FOR SCHOOL LUNCH (School week averages)

Nutrients and Energy Allowances	Preschool	Grades K-3	Grades 4-12	Option for Grades 7-12
Energy Allowance (calories)	517	633	785	825
Total fat	¹	¹	¹	¹
Total saturated fat	²	²	²	²
Protein (g)	7	9	15	16
Calcium (mg)	267	267	370	400
Iron (mg)	3.3	3.3	4.2	4.5
Vitamin A (RE)	150	200	285	300
Vitamin C (mg)	14	15	17	18
³ Cholesterol (mg)	100	100	100	100
³ Fiber (g)	3	4	6	7
³ Sodium (mg)	1350	1350	1350	1350

¹ Total fat not to exceed 30 percent of calories over a school week.

² Saturated fat to be less than 10 percent of calories over a school week.

³ State Guidance

Grade Groups For Traditional Food Based Menu Planning School Breakfast

MINIMUM REQUIREMENTS FOR NUTRIENT AND CALORIE LEVELS FOR SCHOOL BREAKFAST (School week averages)

Nutrients and Energy Allowances	Preschool	Grades K-12
Energy Allowances (calories)	388	554
Total fat	¹	¹
Total saturated fat	²	²
Protein (g)	5	10
Calcium (mg)	200	257
Iron (mg)	2.5	3.0
Vitamin A (RE)	113	197
Vitamin C (mg)	11	13
³ Cholesterol (mg)	75	75
³ Fiber (g)	2	4
³ Sodium (mg)	1000	1000

¹ Total fat not to exceed 30 percent of calories over a school week.

² Saturated fat to be less than 10 percent of calories over a school week.

³ State Guidance

ENHANCED FOOD BASED MENU PLANNING

School Lunch

MINIMUM QUANTITIES FOR ENHANCED MEAL PATTERN LUNCH					
Meal Component	Required				Option for
	Ages 1-2	Preschool	Grades K-6	Grades 7-12	Grades K-3
Milk (fluid- as a beverage)	6 fl. oz.	6 fl. oz.	8 fl. oz.	8 fl. oz.	8 fl. oz.
Meat or Meat Alternate (quantity of the edible portion as served)					
Lean meat, poultry or fish	1 oz.	1 1/2 oz.	2 oz.	2 oz.	1 1/2 oz.
Cheese	1 oz.	1 1/2 oz.	2 oz.	2 oz.	1 1/2 oz.
Large egg	1/2	3/4	1	1	3/4
Cooked dry beans or peas	1/4 cup	3/8 cup	1/2 cup	1/2 cup	3/8 cup
Peanut butter or other nut or seed butters	2 Tbsp.	3 Tbsp.	4 Tbsp.	4 Tbsp.	3 Tbsp.
Yogurt, plain or flavored, unsweetened or sweetened	4 oz. or 1/2 cup	6 oz. or 3/4 cup	8 oz. or 1 cup	8 oz. or 1 cup	6 oz. or 3/4 cup
The following may be used to meet no more than 50% of the requirement and must be used in combination with any of the above:					
Peanuts, soynuts, tree nuts, or seeds, as listed in program guidance, or an equivalent quantity of any combination of the above meat/meat alternate (1 ounce of nuts/seeds = 1 ounce of cooked lean meat, poultry or fish)	1/2 oz. = 50 %	3/4 oz. = 50%	1 oz. = 50%	1 oz. = 50%	3/4 oz. = 50%
Vegetable/Fruits (2 or more servings of vegetables or fruits or both)	1/2 cup	1/2 cup	3/4 cup plus additional 1/2 cup over a week ¹	1 cup	3/4 cup
Grains/Breads Must be enriched or whole grain					
A serving is a slice of bread or an equivalent serving of biscuits, rolls, etc., or 1/2 cup of cooked rice, macaroni, noodles, other pasta products or cereal grains	5 servings per week ¹ minimum of 1/2 per day	8 servings per week ¹ minimum of 1/2 per day	12 servings per week ¹ minimum of 1 per day ²	15 servings per week ¹ minimum of 1 per day ²	10 servings per week ¹ minimum of 1 per day ²

¹ For the purposes of this chart, a week equals five days.

²Up to one grains/breads serving per day may be a dessert.

ENHANCED FOOD BASED MENU PLANNING

SCHOOL BREAKFAST

SELECT ONE SERVING FROM EACH OF THE FOLLOWING COMPONENTS OR TWO FROM ONE COMPONENT:

MINIMUM QUANTITIES REQUIRED FOR ENHANCED MEAL PATTERN BREAKFAST				
Meal Component	Required			Option for
	Ages 1-2	Preschool	Grades K-12	Grades 7-12
Milk (fluid- as a beverage or on cereal or both)	1/2 cup	3/4 cup	8 fl. oz.	8 fl. oz.
Juice/Fruit/Vegetable Fruit and/or vegetable; of full strength fruit juice or vegetable juice	1/4 cup	1/2 cup	1/2 cup	1/2 cup

¹No more than 1 ounce of nuts and/or seeds may be served in any one meal.

Grains/Breads One of the following or an equivalent combination:				
Whole-grain or enriched bread	1/2 slice	1/2 slice	1 slice	1 slice
Whole-grain or enriched biscuit, roll, muffin, etc.	1/2 serving	1/2 serving	1 serving	1 serving
Whole-grain, enriched or fortified cereal	1/4 cup or 1/3 oz.	1/3 cup or 1/2 oz.	3/4 cup or 1 oz.	3/4 cup or 1 oz <u>Plus</u> an additional serving of one of the Grains/Breads above
Meat or Meat Alternate				
Meat/poultry or fish	1/2 oz.	1/2 oz.	1 oz.	1 oz.
Cheese	1/2 oz.	1/2 oz.	1 oz.	1 oz.
Egg (large)	1/2	1/2	1/2	1/2
Peanut butter or other nut or seed butters	1 Tbsp.	1 Tbsp.	2 Tbsp.	2 Tbsp.
Cooked dry beans and peas	2 Tbsp.	2 Tbsp.	4 Tbsp.	4 Tbsp.
Yogurt, plain or flavored, unsweetened or sweetened	2 oz. or 1/4 cup	2 oz. or 1/4 cup	4 oz. or 1/2 cup	4 oz. or 1/2 cup
Nut and/or seeds (as listed in program guidance) ¹	1/2 oz.	1/2 oz	1 oz.	1 oz.

TRADITIONAL FOOD BASED MENU PLANNING

School Lunch

MINIMUM QUANTITIES FOR TRADITIONAL MEAL PATTERN LUNCH					
Meal Component	Required				Option for
	Preschool		Grades K-3	Grades 4-12	Grades 7-12
	Ages 1-2 Group I	Ages 3-4 Group II	Ages 5-8 Group III	Ages 9 & Older Group IV	Ages 12 & Older Group V
Milk (fluid- as a beverage)	6 fl. oz.	6 fl. oz.	8 fl. oz.	8 fl. oz.	8 fl. oz.
Meat or Meat Alternate (quantity of the edible portion as served)					
Lean meat, poultry or fish	1 oz.	1 1/2 oz.	1 1/2 oz.	2 oz.	3 oz.
Cheese	1 oz.	1 1/2 oz.	1 1/2 oz.	2 oz.	3 oz.
Large egg	1/2	3/4	3/4	1	1 1/2
Cooked dry beans or peas	1/4 cup	3/8 cup	3/8 cup	1/2 cup	3/4 cup
Peanut butter or other nut or seed butters	2 Tbsp.	3 Tbsp.	3 Tbsp.	4 Tbsp.	6 Tbsp.
Yogurt, plain or flavored, unsweetened or sweetened	4 oz. or 1/2 cup	6 oz. or 3/4 cup	6 oz. or 3/4 cup	8 oz. or 1 cup	12 oz. or 1 1/2 cup
The following may be used to meet no more than 50% of the requirement and must be used in combination with any of the above:					
Peanuts, soynuts, tree nuts, or seeds, as listed in program guidance, or an equivalent quantity of any combination of the above meat/meat alternate (1 ounce of nuts/seeds = 1 ounce of cooked lean meat, poultry, or fish)	1/2 oz. = 50 %	3/4 oz. = 50%	3/4 oz. = 50%	1 oz. = 50%	1 1/2 oz. = 50%
Vegetables/Fruits (2 or more servings of vegetables or fruits or both)	1/2 cup	1/2 cup	1/2 cup	3/4 cup	3/4 cup
Grains/Breads Must be enriched or whole grain					
A serving is a slice of bread or an equivalent serving of biscuits, rolls, etc., or 1/2 cup of cooked rice, macaroni, noodles, other pasta products or cereal grains	5 servings per week ¹ minimum of 1/2 per day	8 servings per week ¹ minimum of 1 per day	8 servings per week ¹ minimum of 1 per day	8 servings per week ¹ minimum of 1 per day	10 servings per week ¹ minimum of 1 per day

Traditional Food Based Menu Planning

School Breakfast

MINIMUM QUANTITIES FOR TRADITIONAL MEAL PATTERN BREAKFAST			
	Minimum quantities required for		
	Ages 1-2	Ages 3, 4, and 5	Grades K-12
Meal Component			
Milk (fluid - as a beverage, on cereal or both)	4 fl. oz. or 1/2 cup	6 fl. oz. or 3/4 cup	8 fl. oz. or 1 cup
Juice/Fruit/Vegetable Fruit and/or vegetable; or full strength fruit juice or vegetable juice	1/4 cup	1/2 cup	1/2 cup

SELECT ONE SERVINGS FROM EACH OF THE FOLLOWING COMPONENTS
OR TWO FROM ONE COMPONENTS:

Grains/Breads One of the following or an equivalent combination: Whole grain or enriched bread Whole grain or enriched biscuit/roll, muffin, etc. Whole grain, enriched or fortified cereal	1/2 slice 1/2 serving 1/4 cup or 1/3 oz.	1/2 slice 1/2 serving 1/3 cup or 1/2 oz.	1 slice 1 serving 3/4 cup or 1 oz.
Meat or Meat Alternates: Meat/poultry or fish Cheese Egg (large) Peanut butter or other nut or seed butters Cooked dry beans and peas Yogurt, plain or flavored, unsweetened or sweetened Nut and/or seeds (as listed in program guidance) ¹	1/2 oz. 1/2 oz. 1/2 1 Tbsp 2 Tbsp 2 oz. or 1/4 cup 1/2 oz.	1/2 oz. 1/2 oz. 1/2 1 Tbsp 2 Tbsp 2 oz. or 1/4 cup 1/2 oz.	1 oz. 1 oz. 1/2 2 Tbsp 4 Tbsp 4 oz. or 1/2 cup 1 oz.

¹ No more than 1 oz. of nuts and/or seeds may be served in any one meal.