

173-4-05.1

Methods for determining nutritional adequacy.

The provider shall offer a menu to consumers that is nutritionally adequate as determined by nutrient analysis, menu patterns, or a combination of both. "Nutrient analysis" means a process by which food, beverage, and supplement intake are evaluated for nutrient content over a specific period of time that is based upon standard references for nutrients in the component foods. "Menu pattern" means a menu-planning tool used to identify the types and amounts of foods that are recommended to meet specific nutritional requirements. Of these options, the preferred method is to determine nutritional adequacy by means of nutrient analysis.

DRI Nutrient-Value Requirements (for Nutrient-Analysis Method)

<u>LEADER NUTRIENTS</u>	<u>TARGET VALUES</u>	<u>COMPLIANCE RANGES</u>
<u>Calories</u>	<u>700 calories</u>	<u>600-800 calories</u>
<u>Protein</u>	<u>19 gm</u>	<u>No less than 18 gm</u>
<u>Fat</u>	<u>20 gm</u>	<u>No more than 25 gm</u>
<u>Vitamin A</u>	<u>275 µg</u>	<u>No less than 210 µg</u>
<u>Vitamin B6</u>	<u>0.53 mg</u>	<u>No less than 0.5 mg</u>
<u>Vitamin B12</u>	<u>0.8 µg</u>	<u>No less than 0.7 µg</u>
<u>Vitamin C</u>	<u>28 mg</u>	<u>No less than 24 mg</u>
<u>Vitamin D</u>	<u>200 iu</u>	<u>No less than 175 iu</u>
<u>Calcium</u>	<u>400 mg</u>	<u>No less than 360 mg</u>
<u>Magnesium</u>	<u>125 mg</u>	<u>No less than 110 mg</u>
<u>Zinc</u>	<u>3.1 mg</u>	<u>No less than 2.75 mg</u>
<u>Sodium</u>	<u>500 mg</u>	<u>No more than 1100 mg</u>
<u>Potassium</u>	<u>1,567 mg</u>	<u>No less than 1000 mg</u>
<u>Fiber</u>	<u>9 gm</u>	<u>No less than 6 gm</u>

(A) Nutrient-analysis method: The provider shall only determine the nutritional adequacy of a meal by means of nutrient analysis if the provider complies with the following:

- (1) Software: The provider's nutrient-analysis software has been approved by the LD of the AAA with which the provider has entered into a provider agreement to provide a meal service;

(2) Compliance ranges:

(a) Per-meal: Unless the provider uses the option in paragraph (A)(2)(b) of this rule on menu averaging, each meal shall fall within the compliance ranges for the adjusted DRI nutrient-value requirements established by the "DRI Nutrient-Value Requirements" table of this rule. The target values for each leader nutrient are based upon one meal per day (one-third of the DRI) for the average older population served by the nutrition program, except for the sodium compliance ranges, which are based on the "Dietary Guidelines for Americans." When serving three meals to a consumer in one day, the target values and compliance ranges are tripled (one hundred per cent of the DRI).

(b) Menu averaging: The provider using the nutrient analysis option shall meet the compliance ranges for leader nutrients in the daily menu or as averaged based on the week's menu for ten out of the fourteen leader nutrients, so long as one of the ten leader nutrients is vitamin B12.

Menu Pattern (for Menu-Pattern Method)

<u>FOOD TYPES</u>	<u>BREAKFAST or BRUNCH</u>	<u>LUNCH or DINNER</u>
<u>Meat or meat alternate</u>	<u>1-2 servings</u>	<u>2-3 servings</u>
<u>Vegetables or fruits</u>	<u>2 servings</u>	<u>3 servings</u>
<u>Bread or bread alternate</u>	<u>2 servings</u>	<u>2 servings</u>
<u>Milk or milk alternate</u>	<u>1 serving</u>	<u>1 serving</u>
<u>Desserts</u>	<u>Optional</u>	<u>Optional</u>
<u>Fat</u>	<u>Optional</u>	<u>Optional</u>
<u>Accompaniments (e.g., condiments, sauces, spreads)</u>	<u>Optional</u>	<u>Optional</u>
<u>Beverages (e.g., water, coffee, tea)</u>	<u>Optional</u>	<u>Optional</u>

(B) Menu-pattern method: The provider may use the menu-pattern method instead of the nutrient-analysis method that ODA recommends, but only if the provider uses the menu pattern in the "Menu Pattern" table of this rule:

(1) Double classification: Although the provider has the option to classify some individual food items as belonging to one food type or another in the "Menu

Pattern" table of this rule, the provider may only classify a single serving of any individual food item in any single meal as part of one type. For example, although the provider may classify a serving of dried beans as either a meat alternate or vegetable, the provider may not classify dried beans as both a serving of a meat alternate and a vegetable in the same meal. Also, although the provider may classify cheese as either a serving of a meat alternate or a serving of a milk alternate, the provider may not classify cheese as both a serving of a meat alternate and a milk alternate in the same meal.

(2) Meat or meat alternates:

- (a) The provider shall not serve high-fat and high-sodium processed meats (e.g., hot dogs, bologna, or sausage) more than twice per month.
- (b) The provider may serve egg whites or low-cholesterol egg substitutes, but shall not serve more than one egg yolk per meal.
- (c) The provider shall serve a variety of meat and meat alternates to help meet the DRI requirements for protein, iron, vitamin B6, vitamin B12, and zinc.
- (d) The provider may serve meatless meals that contain eggs; dried beans, peas, or lentil soups; tofu-based products; or vegetarian entrées so long as the meals meet the DRI requirements for protein.
- (e) When planning a meal under the menu-pattern method, the provider may use the guidelines in the "Serving Sizes for Meat and Meat Alternates" table to this rule to determine one serving of meat or meat alternate.

Serving Sizes for Meat and Meat Alternates

<u>FOOD</u>	<u>SERVING SIZE</u>
<u>Cooked, lean meat, poultry, or fish</u>	<u>1 ounce, which is equivalent to 7 grams of protein</u>
<u>Cheese or processed cheese (if the processed cheese are pasteurized and nutritionally equivalent to cheese) (low-fat preferred)</u>	<u>1 ounce</u>
<u>Egg</u>	<u>1</u>
<u>Cooked, dried beans, peas, or lentils</u>	<u>1/2 cup</u>
<u>Peanut butter</u>	<u>2 tablespoons</u>
<u>Cottage cheese, low-fat</u>	<u>1/4 cup</u>

<u>Tofu</u>	<u>1/2 cup</u>
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(3) Vegetables and fruits:

- (a) Throughout each week, the provider shall serve a variety of fruits and vegetables, especially dark-green, orange, red, and legume items.
- (b) The provider shall consider all full-strength vegetable juices and all full-strength, unsweetened fruit juices to be vegetables and fruits.
- (c) The provider shall prefer usage of vitamin-fortified juices, low-sodium vegetable juice, or sodium-reduced tomato juice over other juices.
- (d) The provider shall consider one-half cup of cooked, dried beans, peas, or lentils; one-half cup of full-strength (i.e., one hundred per cent) sodium-reduced vegetable juice; or, one cup of raw, leafy vegetables as one serving of vegetables.
- (e) The provider shall consider a serving of soup, stew, casserole, or other combination dish a serving of a vegetable only if the soup, stew, casserole, or other combination dish contains at least one-half cup of vegetables per serving.
- (f) The provider shall prefer to use sodium-reduced soup base and tomato products over other soup bases and tomato products.
- (g) The provider shall not serve sauerkraut more than once per month, or twice per month if one occurrence of sauerkraut is as an ingredient in another food item.
- (h) The provider shall not consider rice, spaghetti, macaroni, or noodles to be a vegetable.
- (i) The provider shall consider a medium-sized apple, an orange, a pear, or a small banana; one-half cup of full-strength fruit juice; one-half cup of cranberry juice drink; or, one fourth of a cup of dried fruit to be one serving of fruit.
- (j) The provider shall consider a menu item to be a serving of fruit if one serving of the item contains at least one-half cup of fruit (e.g., fruit cobbler).
- (k) The provider shall only consider fresh fruit, frozen fruit, or canned fruit (packed in its own juice, with light syrup, or without sugar) to be fruit.

(4) Bread or bread alternates:

- (a) The provider shall prefer to serve a variety of enriched whole-grain bread products.
- (b) The provider shall not consider starchy vegetables (e.g., potatoes, sweet potatoes, corn, yams, and plantains) to be a serving of bread or a bread alternate.
- (c) The provider shall not consider breading on meat (or a meat alternate) or on vegetables to be a serving of bread or a bread alternate.
- (d) When planning a meal under the menu-pattern method, the provider may use the guidelines in the "Serving Sizes for Breads and Bread Alternates" table to this rule to determine one serving of bread or bread alternate.

Serving Sizes for Breads and Bread Alternates

<u>FOOD</u>	<u>SERVING SIZE</u>
<u>Animal crackers</u>	<u>8 crackers</u>
<u>Angel food cake</u>	<u>1/12 of cake or 2 ounces</u>
<u>Bagel</u>	<u>1 ounce or one half of a large bagel</u>
<u>Biscuit</u>	<u>One 2.5 inch diameter biscuit</u>
<u>Bread</u>	<u>1 slice</u>
<u>Bread dressing/stuffing</u>	<u>1/2 cup</u>
<u>Cake (unfrosted)</u>	<u>One 2-inch square or one ounce</u>
<u>Cooked cereal</u>	<u>1/2 cup</u>
<u>Crackers</u>	<u>4-6 crackers</u>
<u>English muffin</u>	<u>1/2 muffin</u>
<u>French toast</u>	<u>1 slice</u>
<u>Ginger snaps</u>	<u>3 snaps</u>
<u>Graham crackers</u>	<u>3 crackers that are 2.5-inch squares</u>
<u>Muffin, roll</u>	<u>1 ounce</u>
<u>Pancake</u>	<u>4-inch diameter, 1/4-inch thick</u>

<u>Pasta, noodles, or rice</u>	<u>1/2 cup</u>
<u>Pita</u>	<u>One 4-inch diameter or 1/2 6-inch diameter</u>
<u>Pudding (sugar free)</u>	<u>1/2 cup or 4 ounces</u>
<u>Quick bread</u>	<u>One 2-inch square</u>
<u>Ready-to-eat cereal, fortified</u>	<u>1 cup or 1 ounce</u>
<u>Sandwich bun</u>	<u>1 small bun or 1/2 large bun</u>
<u>Tortilla</u>	<u>1 6-inch diameter tortilla</u>
<u>Vanilla wafers</u>	<u>5 wafers</u>
<u>Waffle</u>	<u>One 4-inch square</u>

(5) Milk or milk alternates:

- (a) The provider shall prefer to use fat-free milk, low-fat milk (i.e., milk with no more than one per cent fat content), or fortified soy beverages.
- (b) The provider shall not consider calcium-fortified juice to be both a serving of fruit and a serving of milk in the same meal.
- (c) The provider shall not consider cheeses or tofu to be both a serving of meat alternate and a serving of milk alternative in the same meal.
- (d) When planning a meal under the menu-pattern method, the provider may use the guidelines in the "Serving Sizes for Milk and Milk Alternates" table to this rule to determine one serving of milk or milk alternate.

Serving Sizes for Milk and Milk Alternates

<u>FOOD</u>	<u>SERVING SIZE</u>
<u>Fat-free (skim) or 1% milk, buttermilk, or chocolate milk fortified with vitamins A and D</u>	<u>8 ounces</u>
<u>Lactose-reduces or lactose-free milk</u>	<u>8 ounces</u>
<u>Yogurt, low-fat, fortified with vitamins A and D</u>	<u>6 ounces or 3/4 cup</u>
<u>Soy beverage or rice beverage enriched with calcium and vitamins A and D</u>	<u>8 ounces</u>

<u>Tofu</u>	<u>1/2 cup</u>
<u>Hard, natural cheese (prefer low-fat)</u>	<u>1.5 ounces</u>
<u>Processed cheese (prefer low-fat)</u>	<u>2 ounces</u>
<u>Juice fortified with calcium and vitamin D</u>	<u>8 ounces</u>

(6) Desserts (if provided in meal):

- (a) The provider shall prefer to serve healthier desserts that include fruit, whole grains, low-fat products, and/or products with limited sugar content and avoid products that contain trans fats.
- (b) The provider shall consider one-half cup of fruit and one-half cup of simple dessert (e.g., sugar-free pudding and frozen yogurt) to be a serving of dessert.
- (c) The provider shall prefer to serve fresh, frozen, or canned fruits that are packed in juice or light syrup as a dessert item in addition to the serving of fruit that may be provided as another part of the meal.
- (d) The provider shall prefer to not serve cakes, single-crust pies, cobblers, and cookies more than twice per week and shall avoid products that contain trans fats.
- (e) When planning a meal under the menu-pattern method, the provider may use the guidelines in the "Serving Sizes for Breads and Bread Alternates" table to this rule to determine one serving of dessert.

(7) Fats (if provided in meal):

- (a) The provider shall consider one teaspoon of fortified, soft margarine; mayonnaise; or vegetable oil; or one tablespoon of salad dressing to be a serving of fat.
- (b) The provider shall not serve more than two servings of fats and oils in a meal. Fat used as an ingredient in a menu item is not counted as a serving of fat.

(8) Accompaniments (if provided in meal):

- (a) Condiments: The provider shall prefer to serve mustard, ketchup, tartar sauce, or other traditional accompaniments with a meal item.
- (b) Seasonings:

- (i) When the provider prepares a meal, the meal must comply with the sodium limits in the federal dietary reference intakes and "Dietary Guidelines for Americans."
 - (ii) A provider shall not seek Older Americans Act funds from the AAA as a reimbursement for any costs it incurs to purchase salt shakers or salt packets for use by a consumer as an accompaniment to a meal. A provider may use other funding sources to supply salt seasonings as an accompaniment to a meal. Consumers may bring their own salt for seasoning their food.
 - (iii) The provider shall prefer to provide herbal or granulated seasonings, instead of salt, for use by a consumer as an accompaniment to a meal.
- (9) Beverages (if provided in meal): Although serving a beverage is optional and may not be purchased with Older Americans Act funds, the provider may serve water, coffee, or tea with meals to maintain proper hydration.

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R.C. 119.032 review dates:

Certification

Date

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Rule Amplifies: 173.392; Sections 336 and 339 of the Older Americans Act of 1965, 79 Stat. 210, 42 U.S.C. 3001, as amended in 2006

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