The Summer Food Service Program

Food That's In When School is Out!

2012 Nutrition Guidance for Sponsors

United States Department of Agriculture
Food and Nutrition Service

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Revised January 2012

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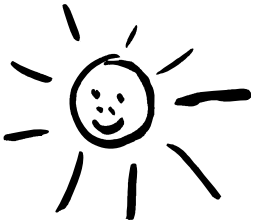


Introduction

"*Summer Food Service Program for Children: 2012 Nutrition Guidance for Sponsors*" has been developed to help sponsors identify their food service responsibilities. This guide offers menu planning and nutrition guidance along with sample menus of breakfasts, lunches and snacks. Also included are food service record-keeping requirements, food buying and storage information, and guidance in the areas of food safety and sanitation. This guide is primarily for use by sponsors who prepare meals on-site or in central kitchens for participating children.

The goal of the Summer Food Service Program (SFSP) is to serve nutritious breakfasts, lunches, suppers, and snacks to children. All meals served must meet meal pattern requirements. Meal patterns ensure that children receive well-balanced meals and establish the minimum portions for each meal component that must be served to each child in order for the participating sponsor to receive reimbursement for a meal.

The reader may notice that this edition of the SFSP Nutrition Guidance recommends a more conservative approach to some food safety practices than the 2005 Food Code in order to accommodate food preparation in non-institutional settings such as park and recreation sites. This guide also references information found in the USDA Food Safety and Inspection Service Food Safety Education Staff materials for food preparation in non-institutional settings **Keep in mind you should first be familiar with and follow your State and local public health requirements and your State Agency policies and procedures.**

Dietary Guidelines For Americans

The Dietary Guidelines for Americans are for Americans 2 years of age and older. The guidelines promote health and may reduce the risk of developing certain chronic diseases through diet and physical activity. They can help SFSP sponsors achieve the goals of the Healthy People 2020 National Health Promotion and Disease Prevention Objectives.

To review or download a copy of the guidelines, go to: http://www.healthierus.gov/dietaryguidelines/.

Dietary Guidelines Fact Sheets provide helpful tips that may help you as you develop your menu for the summer. You can download or print a copy of the fact sheets at: http://teamnutrition.usda.gov/Resources/dgfactsheet_hsm.html.

Eating Habits Begin Early

Children can learn healthy eating habits when they are young. Offering healthy meals and snacks through the SFSP provides the energy children need for active lives and helps them to learn healthy habits that may last for a lifetime. The summer food service setting offers an opportunity to impact children's lives positively. If possible, taking time to provide nutrition and physical education during meals, snacks, or at play can serve to begin a lifestyle of healthy eating and physical activity.

PART I — MENU PLANNING

Stick to the Basics: Meal Pattern Requirements

In this section, you will find information on:

- Meal pattern requirements for the meals you serve;
- Ways to add variety to your menus;
- Foods and their nutrient contributions;
- How to make substitutions for children with special needs;
- Serving vegetarian meals; and
- What to do about food allergies.

The SFSP meal patterns allow sponsors to serve meals that meet a child's nutritional needs, are appetizing to children, and are consistent with the *Dietary Guidelines for Americans*. Meal pattern requirements assist the menu planner in providing well-balanced, nutritious meals that supply the kinds and amounts of foods that help children meet their nutrient and energy needs. The chart on the following page shows the required food components for breakfast, lunch or supper, and snacks, with the minimum required serving sizes. Because teenagers have greater food needs, sponsors may serve larger portions to older children.

All food components (menu items) that make up the reimbursable meal should be served to each child all at the same time (plated together). In certain cases, SFSP sponsors may be approved by the State Agency to serve meals that meet the meal pattern requirements of other Child Nutrition Programs, such as the Child and Adult Care Food Program (CACFP). This may be helpful in situations where the sponsor would like to serve smaller meals to younger children. SFSP sponsors that serve meals prepared in schools participating in the National School Lunch Program (NSLP) may be approved by the State Agency to substitute the meal requirements outlined in the NSLP and School Breakfast Program regulations for the SFSP meal pattern requirements. Refer to the SFSP Administrative Guidance for Sponsors for more details, or contact the State Agency that administers the SFSP in your State.

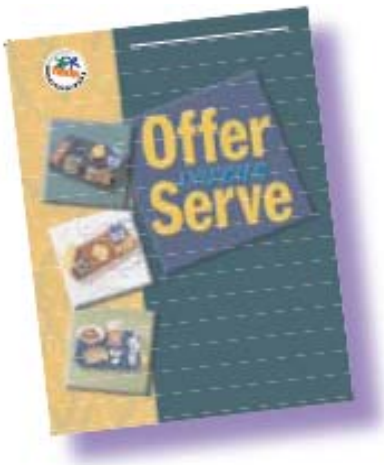
SFSP sponsors have the option of utilizing offer versus serve (OVS) which permits a child to refuse one or more items that the child does not intend to eat. OVS helps to reduce plate waste by giving children greater flexibility to select only the foods they intend to eat. It allows the child to decline one or two meal items at lunch or supper or one item at breakfast if the child does not intend to eat the particular offered meal item. OVS may not be used for snacks. Reimbursements for program meals served under the OVS must not be reduced because children choose not to take all components of the meals that are offered.

To meet program requirements for lunch or supper under the SFSP meal pattern, the child must be offered five food items from the four food components in at least the minimum serving size for the appropriate age group. Children must select three or four of the five food items offered. At breakfast, a minimum of three required food items in specific quantities must be offered. Students must select two of the three required food items offered to meet OVS requirements.

To meet program requirements for lunch under the NSLP's Traditional Food-Based menu planning and the Enhanced Food-Based menu planning, the child must be offered five food items from the four food components in at least the minimum serving size for the appropriate age/grade group. Students must select three or four of the five items offered as defined by the food service. At breakfast, a minimum of four required food items in specific quantities must be offered. Students must select three of the four items offered to meet OVS requirements.

To meet program requirements for lunch under the Nutrient Standard Menu Planning (NSMP), at least three menu items must be offered to include an entrée, side dish, and milk in the planned portion sizes. If three menu items are offered, the child must take the entrée and can only decline one item. If more than three menu items are offered, the child must take the entrée but can only decline up to two items. For breakfast, three menu items must be offered in the planned portion sizes and the students may decline one menu item.

If SFA's would like more specific and detailed information on *Offer Versus Serve* and menu planning, you can download information from *http://teamnutrition.usda.gov/Resources/offer_v_serve.html*.



Summer Food Service Program Meal Patterns

Food Components	Breakfast (Select foods from all 3 components)	Lunch or Supper (Select foods from all 4 components)	Snack (Choose 2 of the 4 components)
Milk			
Milk, fluid	1 cup (8 fl oz)	1 cup (8 fl oz)	1 cup (8 fl oz)
Vegetables and/or Fruits[1]			
Vegetable(s) and/or fruit(s)	½ cup	3/4 cup total	3/4 cup
or			
50% strength or higher vegetable or fruit juice or an equivalent quantity of any combination of vegetable(s), fruit(s), and juice. However, 50% strength juice is not recommended as double the quantity is needed to meet the fruit/vegetable component.	½ cup (4 fl oz)		3/4 cup (6 fl oz)
Grains and Breads[2]			
Bread	1 slice	1 slice	1 slice
or			
Cornbread, biscuits, rolls, muffins, etc.	1 serving	1 serving	1 serving
or			
Cold dry cereal	3/4 cup or 1 oz	3/4 cup or 1 oz	3/4 cup or 1 oz
or			
Cooked pasta or noodle product	½ cup	½ cup	½ cup
or			
Cooked cereal or cereal grains or an equivalent quantity of any combination of grains/breads	½ cup	½ cup	½ cup
Meat and Meat Alternates	(Optional)		
Lean meat or poultry or fish[3]	1 oz	2 oz	1 oz
or			
Cheese	1 oz	2 oz	1 oz
or			
Eggs	1/2 large egg	1 large egg	1/2 large egg
or			
Alternate Protein Product	1 oz	2 oz	1 oz
or			
Cooked dry beans or peas	¼ cup	½ cup	¼ cup
or			
Peanut butter or soynut butter or other nut or seed butters	2 tbsp	4 tbsp	2 tbsp
or			
Peanuts or soynuts or tree nuts or seeds[4]	1 oz	1 oz= 50%	1 oz
or			
Yogurt[5]	4 oz or ½ cup	8 oz or 1 cup	4 oz or ½ cup
or			
An equivalent quantity of any combination of the above meat/meat alternates			

For the purpose of this table, a cup means a standard measuring cup. Indicated endnotes can be found on the next page.

Endnotes

1. For lunch or supper, serve two or more kinds of vegetable(s) and/or fruit(s) or a combination of both. For all meals, fruit or vegetable juice may be 50% strength or higher, however 50% strength juice is not recommended as a double quantity is needed to meet the fruit/vegetable component. For snack, juice cannot be served when milk is the only other snack component.

2. Breads and grains must be made from whole-grain or enriched meal or flour. Cereal must be whole-grain or enriched or fortified.

3. A serving consists of the edible portion of cooked lean meat or poultry or fish.

4. Nuts and seeds may meet only one-half of the total meat/meat alternate serving and must be combined with another meat/meat alternate to fulfill the lunch or supper requirement.

5. Yogurt may be plain or flavored, unsweetened or sweetened.

Components and Nutrient Contributions

Meat and Meat Alternates

Meal Components	Examples	Nutrients
Meat, fish, poultry, and eggs	Beef, chicken, fish, ham, pork, turkey, and eggs	Protein, iron, phosphorus, potassium, B vitamins, and zinc; also contain fat, saturated fat, and cholesterol
Cheese	Swiss, ricotta, part-skim mozzarella, cottage cheese, American cheese, cheddar, and other cheeses	Protein, calcium, phosphorus vitamins A and B-12; also contain fat, saturated fat, and cholesterol
Dry beans and peas (Can also count as a vegetable, but not in the same meal.)	Lentils, navy beans, black beans, lima beans, kidney beans, pinto beans, black-eyed peas, refried beans, chickpeas, and soy beans	Protein, iron, complex carbohydrates, potassium, dietary fiber, magnesium, phosphorus, and folate
*Peanut butter and other nut butters **Nuts and seeds	Peanut butter, almond and other nut butters Walnuts, peanuts, almonds, soy nuts, other nuts, and seeds	Protein, dietary fiber, vitamin E, copper, magnesium, phosphorus, and niacin; also contain fat
Yogurt	Commercially produced yogurt, plain or flavored, unsweetened or sweetened	Protein, carbohydrate, calcium, phosphorus, potassium, and vitamin A
Alternate Protein Product (APP)	APP is what is mixed/made into such food items as ground beef patties, meat loaf, tuna salad, chicken nuggets, pizza toppings, etc.	Protein, and other nutrients vary depending on the type of APP used

* **Caution**: Children under 4 years of age are at the highest risk of choking. Young children should not be fed spoonfuls or chunks of peanut butter or other nut butters. Instead, USDA recommends that peanut butter and nut butters be spread thinly on bread or crackers.

** Nuts and/or seeds should be served to all children in a prepared food and be ground or finely chopped. (See additional information on choking risks in the Reference Section on page 140.)

Menu Ideas to Increase Variety

- Try whole-grain pita bread sandwiches or "pita pockets" stuffed with tuna, lettuce, and tomato, or chicken salad with celery and carrots. Make a vegetarian whole-grain pita pocket with favorite veggies, chickpeas, and plain yogurt.
- Serve peanut butter with apple chunks on whole wheat bread.
- Serve lean meats, skinless poultry, and lower fat cheeses.
- Try an ethnic favorite: taco, gyro, pirogue, or calzone.
- Mix ground beef with ground turkey for hamburgers or taco filling.
- Make a whole-grain submarine sandwich with roast turkey or ham and cheese.
- Try lentils or navy beans in a soup.

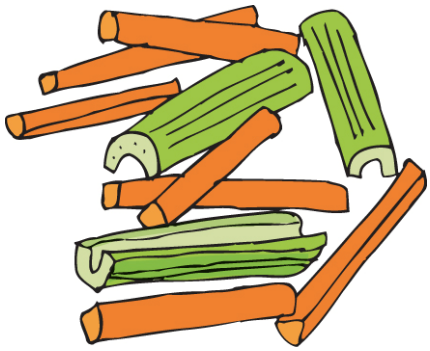
Vegetables

Meal Components	Examples	Nutrients
Vegetables (dark green, deep yellow)	Broccoli, carrots, collard greens, green pepper, kale, pumpkin, spinach, sweet potato, winter squash	Vitamins A and C, fiber, iron, vitamin B-6, folate, potassium, dietary fiber, magnesium, and riboflavin
Vegetables (starchy)	Potatoes, black-eyed peas, corn, lima beans, green peas	Complex carbohydrate, fiber, iron, folate, vitamin C, potassium, and magnesium
Vegetables (other)	Cabbage, cauliflower, celery, cucumbers, green beans, lettuce, okra, onions, summer squash, tomatoes, vegetable juice, zucchini	Dietary fiber, vitamin C, folate, potassium, and magnesium
Dry beans and peas (can also count as a meat alternate, but not in the same meal.)	Black beans, chickpeas, kidney beans, lentils, navy beans, peas, pinto beans, soy beans	Protein, complex carbohydrate (starch and dietary fiber), iron, magnesium, phosphorus, potassium and folate

Menu Ideas to Increase Variety

- Top baked potatoes with broccoli and cheese.
- Dip raw carrots and cauliflower in lowfat/fat-free yogurt dip or lowfat/fat-free salad dressing.
- Encourage children to try vegetables such as eggplant, yellow squash, turnips, and spaghetti squash.
- Use spinach and other greens for salads.
- Serve seasonal fresh vegetables.

Caution must be used when giving raw vegetables to young children because of the risk of choking. (See additional information on choking risks in the Reference Section on page 140.) Vegetables provide good flavor and texture variety to the menu.

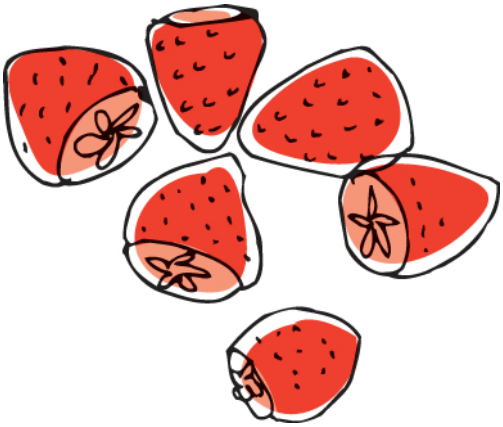


Fruits

Meal Components	Examples	Nutrients
Citrus fruits, melon, berries	Oranges, grapefruit, citrus juices, cantaloupe, watermelon, strawberries	Carbohydrate, dietary fiber, potassium, folate, and vitamin C; deep yellow fruit source of vitamin A
Other fruit	Apple, apricot, banana, cherries, fruit juice, grapes, peach, pear, pineapple, plum, prunes, raisins	Carbohydrate, dietary fiber, potassium, vitamin C; deep yellow fruit source of vitamin A

Menu Ideas to Increase Variety

- Serve fresh, ripe fruits when they are in season, such as cantaloupe, peaches, watermelon, strawberries, plums, pears, and grape halves.
- Offer canned fruits packed in light syrup or in natural juices, such as fruit cocktail, peaches, and pears.
- Buy frozen mixed fruit and add fresh banana slices.
- Choose a fruit to top a dessert like pudding or gelatin.
- Try using an orange glaze on chicken breasts.
- Introduce unfamiliar fruits such as kiwi, papaya, mango, apricots, dates, and figs.

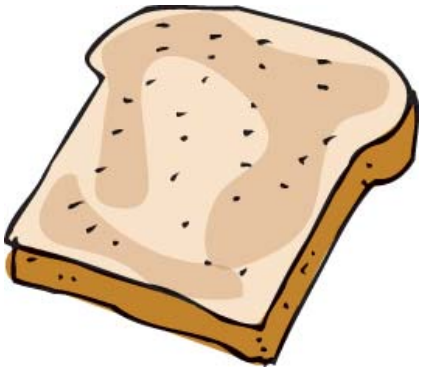


Grains and Breads

Meal Components	Examples	Nutrients
Enriched breads, cereals, pasta	Bagels, cornbread, grits, crackers, pasta, corn muffins, noodles, pita bread, ready-to-eat cereal, white bread, rolls	Source of complex carbohydrate (starch), thiamin, riboflavin, niacin, iron; some contain added fat
Whole-grain breads, cereal, pasta	Brown rice, corn tortillas, oatmeal, whole-grain rye bread, whole-grain ready-to-eat cereal, whole-wheat pasta, crackers, bread, rolls	Source of complex carbohydrate (starch and dietary fiber), copper, iron, magnesium, phosphorus, thiamin, riboflavin, niacin; some contain added fat

Menu Ideas to Increase Variety

- Use a variety of breads (preferably whole-grain breads) such as pita pockets, pizza crust, focaccia bread, bagels, corn bread, tortillas, and English muffins.
- Use round crackers, rye crackers, soda crackers, and whole-wheat squares.
- Substitute unsweetened, whole-grain ready-to-eat cereal for croutons in a salad or in place of crackers with soup.
- Pastas now come in different colors and flavors: tomato, spinach, and whole wheat. Try different pasta types such as macaroni, twists, spaghetti, or rigatoni in a cold pasta salad.
- Add smaller pastas such as macaroni, alphabet letters, and small shells in soups.
- For a change, try brown rice or whole-wheat pasta. Try brown rice stuffing in baked green peppers or tomatoes and whole-wheat macaroni in macaroni and cheese.
- Add whole-grain flour or oatmeal when making cookies or other baked treats.
- Use whole grains in mixed dishes, such as barley in vegetable soup or stews and bulgur wheat in casseroles or a stir-fry.



Milk

Meal Components	Examples	Nutrients
Milk, fluid	Pasteurized, unflavored or flavored whole milk, reduced-fat milk, low-fat milk, fat-free milk, buttermilk, lactose-reduced milk, acidophilus milk	Calcium, protein, riboflavin, phosphorus, carbohydrate, potassium, vitamins B-12 and A, and if fortified, Vitamin D; most contain fat, saturated fat, and cholesterol

Menu Ideas to Increase Variety

- Offer only whole milk to children between the ages of 1-2. Only offer fat-free or low-fat milk to children ages 2 and above.
- Offer tastes of fat-free milk, before introducing it to the menu.
- For children who require it, serve alternative types of milk (a reduced-lactose milk or acidophilus) if available.
- Try shelf-stable (UHT or ultra high temperature) milk, too!

Facts About Meal Pattern Requirements

Meat and Meat Alternates

- Must be served at lunch and supper.
- May be served as part of the snack.
- May be served as additional items at breakfast.
- Include a serving of cooked lean meat (beef, pork, lamb, veal), poultry, fish, cheese, cooked dry beans or peas, eggs, alternate protein product, peanut butter or other nut or seed butters (almond, sesame, sunflower), or nuts or seeds, yogurt, or any combination.
- Serve the meat/meat alternate as the entree (main dish) or as part of the main entree and in one other menu item.

Nuts and seeds may fulfill:

- all of the meat/meat alternate requirement for the snack; and
- up to one-half of the required portion for lunch or supper.

Nuts and seeds must be combined with another meat/meat alternate to fulfill the lunch or supper requirement. For determining combinations, 1 ounce of nuts or seeds is equal to l ounce of cooked lean meat, poultry, or fish. The nuts and seeds that may be used as a meat alternate include peanuts, soy nuts, tree nuts (almonds, walnuts, and pecans), and seeds (sunflower, sesame, and pumpkin).

Caution: Children under 4 are at the highest risk of choking. USDA recommends that nuts and/or seeds only be served to them ground or finely chopped in a prepared food. Refer to page 140 in the Reference Section for more information on choking risks.

Yogurt is very popular with children. It has a smooth texture, and can be flavored for children's tastes. Low-fat or fat-free plain yogurt may be used as a topping on potatoes (instead of butter or sour cream). Flavored yogurt goes well with fruit and fresh vegetables at meals. Plain, flavored, or sweetened yogurt, made with low-fat or fat-free milk, provides additional sources of calcium. Commercially prepared yogurt may be served as a meat/meat alternate.

For breakfast and snack you may serve 4 oz (weight) or ½ cup (volume) of plain, sweetened or flavored yogurt to equal 1 ounce of the meat/meat alternate component. For lunch and supper you may serve 8 oz. (weight) or 1 cup (volume) yogurt to equal 2 ounces of the meat/meat alternate component. For younger children, 2 ounces (weight) or ¼ cup (volume) fulfills the equivalent of ½ ounce of the meat/meat alternate requirement. Homemade yogurt, frozen yogurt or

other yogurt flavored products (i.e., yogurt bars, yogurt-covered fruit and/or nuts) or similar products may not be credited. (Fruit-flavored yogurt is credited equally as plain or sweetened yogurt.)

Question: Is the fruit flavoring within yogurt creditable towards the fruit component?

Answer: No, the fruit within yogurt whether blended, mixed, or presented on top cannot be credited towards the fruit requirement. It is considered part of the creditable yogurt. Extra fruit provided, as a separate component, i.e. fresh strawberries, canned peaches, or banana slices can count towards the fruit component.

Vegetables and/or Fruits, as a food group, provide most of the vitamin C and a large share of the vitamin A in meals as well as dietary fiber and carbohydrates for long-lasting energy.

- At breakfast, a serving of fruit or vegetable or a serving of fruit or vegetable juice is required. Breakfast is a good time to serve foods containing vitamin C, such as citrus fruits and juices, like oranges or grapefruit. Other foods containing vitamin C are tomatoes, strawberries, and cantaloupe.
- Consider using dried fruits, such as dried apricots, raisins, and prunes, to provide variety in menus. (Look for the "Sources of Nutrients" chart in the Reference Section that suggests foods containing vitamin A, vitamin C, and iron).
- For lunch and supper, serve two or more kinds of vegetables and/or fruits at each meal. Up to one-half of the total requirements may be met with fruit or vegetable juice. For variety, serve fruit or vegetable juices, fruits, or vegetables for midmorning and mid-afternoon snacks.
- Cooked vegetables means a serving of drained cooked vegetables.
- Cooked or canned fruit means a serving of fruit and the juice it's packed in.
- Thawed frozen fruit includes fruit with the thawed juice.
- Select canned fruits that are packed in fruit juice, water, light syrup, or natural juices.
- Juice may not be served for a snack if milk is the only other component served.

- Juice drinks with at least 50-percent-strength juice are permitted but discouraged because double the volume is needed to meet Program requirements. Some examples might include grape drinks or juice bars. Beverages containing less than 50-percent-strength juice, such as fruit punches, ades, or drinks made with fruit-flavored powders and syrups, do not meet program requirements.

Try not to serve juice to meet the fruit/vegetable requirement too many times throughout the week. It may fill up the children and take the place of foods that provide other needed nutrients.

Examples of Full-Strength Juices:

Apple	Pineapple
Grape	Prune
Grapefruit	Tangerine
Grapefruit-Orange	Tomato
Orange	Vegetable

Any blend or combinations of these full-strength juices meet Program requirements.

Grains/Breads must be whole-grain or enriched or made from whole-grain or enriched flour or meal, or if it is a cereal, the product must be whole-grain, enriched or fortified. Bran and germ are credited the same as whole-grain or enriched meal or flour. Grains/breads provide carbohydrates, some B vitamins (thiamin, riboflavin, and niacin), minerals (such as iron), protein, and calories. Whole-grain products supply additional vitamins, minerals, dietary fiber, and a variety of tastes and textures.

- At breakfast, choose from a serving of whole-grain or enriched breads, biscuits, rolls, or muffins or a serving of whole-grain, enriched or fortified cereal, or a combination of both.

- For midmorning and mid-afternoon snacks, try serving whole-grain or enriched bread; whole-grain, enriched, or fortified cereal; cooked whole-grain or enriched rice, bulgur, or macaroni; cornbread, biscuits, rolls, muffins, crackers, or cookies made of whole-grain or enriched meal or flour. Hot breads, such as rolls, biscuits, cornbread, or muffins, or raisin bread add variety and appeal as well as nutrients.

- At lunch or supper, choose from a serving of: whole-grain or enriched bread, or cooked whole-grain or enriched rice, bulgur, or cornbread; or whole-grain or enriched noodles, macaroni, or other pasta products. An equivalent serving of grains/breads made from whole-grain or enriched meal or flour may be substituted.

For more information, look at the Grains and Breads Chart in the Reference Section.

Reminders:

- Non-sweet snack products such as hard pretzels, hard bread sticks, and chips made from whole-grain or enriched meal or flour can be used to meet the bread requirement.
- Grain-based sweet snack foods should not be served as part of a snack more than twice a week.
- Some bread items or their accompaniments may contain more sugar, fat, or salt than others. Keep this in mind when considering how often to serve them. Read the "Nutrition Facts" panel on food labels to compare products.

Milk

- At breakfast or for snacks, milk can be served as a beverage, on cereal, or as a beverage and on cereal. At lunch or supper, milk must be served as a beverage in accordance with SFSP meal pattern requirements.
- Use additional milk (fluid, evaporated, or fat-free dry milk) to prepare soups, casseroles, puddings, bakery items, or other baked or cooked products to add calcium and improve the nutritional quality of the meal.

Crediting *Foods*

Summer Food Service Program sponsors can use the *Food Buying Guide for Child Nutrition Programs* located on internet at: http://teamnutrition.usda.gov/Resources/foodbuyinguide.html. This guide contains a wealth of information that will help with crediting foods and can assist with planning meals and purchasing foods that meet the requirements of the Summer Food Service Program. Additional information on how to use the *Food Buying Guide* can be found in the Part II: Nutrition Services section, of this guidance.

Product Formulation

School Foodservice Directors may use the Road to SMI Success– A Guide for School Foodservice Directors, located on internet at: http://www.fns.usda.gov/TN/Resources/roadtosuccess.html. This guide contains a sample product formulation template for meat/meat alternate products and a reviewer's checklist. The template is meant to demonstrate what kind of information is necessary in documenting meal pattern requirements and requires adaptation to accommodate other types of products. The checklist is used by the school foodservice personnel to determine if the completed product formulation statements are acceptable for documenting meal pattern requirements.

The Food and Nutrition Service does not review or approve product formulation statements.

Serve Other Foods: Add Variety to Meals

In addition to the foods required in the meal patterns for children, "other foods" may be served at meals to help improve acceptability and to satisfy children's appetites. Other foods provide additional energy, and, if wisely chosen, increase the variety of nutrients offered.

For example, you may serve small amounts of honey, jam, jellies, and syrup to add flavor and variety to pancakes, toast, English muffins, etc. Items such as mayonnaise, salad dressings, margarine, and oils should be used sparingly.

Additional foods served as desserts at lunch and supper help to meet the calorie needs of growing children by supplying extra food energy and other important nutrients. Baked products made from whole-grain or enriched flour supply additional amounts of iron and some B vitamins. Desserts made with milk, such as puddings, provide calcium along with other nutrients.

Remember, too, that "other foods" are often a source of hidden fat, sugar and salt. Be aware and limit the frequency and the amounts you serve of foods such as chips, ice cream, and pastries.

Meal Substitutions for Children with Special Needs

A child with a disability that restricts his or her diet is entitled to receive special meals, when that need is supported by a statement signed by a licensed physician. However, sponsors are not expected to make accommodations that are so expensive or difficult that they would cause the sponsor undue hardship. In most cases, children with disabilities can be accommodated with little extra expense or difficulty. A statement from the child's physician is required to ensure that the substitutions in foods meet nutrition standards that are medically appropriate for that child, and to justify that the modified meal is reimbursable. The physician's statement must identify:

- the child's disability and an explanation of why the disability restricts the child's diet;
- the major life activity affected by the disability; and
- the food or foods to be omitted from the child's diet, and the food or choice of foods that must be substituted.

Food substitutions may be made, at a sponsor's discretion, for an individual child who does not have a disability, but who is medically certified as having a special medical or dietary need. Such determinations are only made on a case-by-case basis and must be supported by a statement that indicates which foods to avoid and to substitute. This type of statement must be signed by a recognized medical authority (e.g., physician, physician assistant, nurse practitioner, or registered nurse) or other health professional specified by the State agency.

Vegetarian Meals

Sponsors are not required to make food substitutions based solely on a parent or child's personal preferences regarding a healthful diet. For parents concerned about religious food restrictions or preparing vegetarian meals, the meal pattern currently allows for flexibility and menu management if personal preference is given in advance.

Food Allergies and Intolerances

A food allergy is an abnormal response of the body's defense – the immune system – to an otherwise harmless food. Although any food may cause an allergic reaction, six foods are responsible for most of these reactions in children. These foods are peanuts, eggs, milk, tree nuts, soy, and wheat.

Food intolerance is an adverse food-induced reaction that does not involve the body's immune system. Lactose intolerance is one example of food intolerance. A person with lactose intolerance lacks an enzyme that is needed to digest milk sugar. When that person eats milk and milk products, gas, bloating, and abdominal pain may occur. Sponsors are not required to make food substitutions for a person with food intolerances, as food intolerances are not considered disabilities. However, food substitutions may be made, at a sponsor's discretion, for an individual

child who is medically certified as having a special medical or dietary need such as food intolerance. Such determinations are only made on a case-by-case basis and must be supported by a statement signed by a recognized medical authority that indicates which foods to avoid and to substitute.

When in a physician's assessment food allergies may result in severe, life-threatening reactions (anaphylactic reactions), the child would meet the definition of "having a disability", and the food service personnel must make the substitutions prescribed by a licensed physician.

Make It Fun: Summer Menu Planning

In this section, you will find tips on:

- How to plan your menus;
- How to create a cycle menu;
- How to calculate serving sizes and costs;
- How to check your budget, inventory and labor;
- Sample summer menus; and
- Healthy snacks and easy salad ideas.

Good menu planning for summertime involves several food service considerations. Most importantly, the menu should meet a child's nutritional needs. Children's preferences, recipes, serving location, food costs, food safety and handling, equipment, and labor must be considered, too.

Planning menus means thinking about what foods to serve together. A healthful diet offers a variety of foods, is low in saturated fat and cholesterol, and moderate in total fat, salt and sugar. Moderation means offering foods with caution as to the number of times used.

Be practical. If food is to be served outdoors or delivered to a playground or campsite, make the menu practical and appealing. Consider the location, delivery of food, and ways to keep food safe to eat.

How to Plan A Summer Lunch Menu

Begin with the main dish or entree: consider a source of protein from the meat or meat alternate group. Sometimes, grains, vegetables, or fruits may be part of the main dish, such as a taco, burrito, or chef's salad. Choose a combination of a fruit and a vegetable that go together. Include whole-grain bread that is rich in fiber. Add low-fat or fat-free milk as the beverage.

Be sure the meal offers a variety of colors, textures, and tastes; considers children's "likes and dislikes"; and meets SFSP's meal pattern requirements. Consider Dietary Guidelines recommendations for obtaining adequate nutrients within calorie needs, limiting saturated and *trans* fat, added sugars, and sodium and increasing the use of whole-grains, fresh fruits, vegetables, and lowfat or fat-free milk and milk products. Use the Summer Menu Checklist in this section to evaluate menus.

If you have on-site cooking facilities, use standardized recipes, when available. A standardized recipe is a recipe that gives the same good results every time. Think about preparation time, labor, equipment, delivery, and costs. Consider extra needs and resources, such as ice, straws, and garbage bags.

Cycle Menus

Plan your menus in advance. One way to do this is to develop a cycle menu. A cycle menu is a set of planned menus that are repeated in the same order for a period of time, usually 2, 3 or 4 weeks. The menu is different every day during the cycle. A cycle menu offers variety and is flexible to allow for substitutions. It is the master plan of meal planning.

Adjust cycle menus as follows:

- Replace foods not available.
- Observe birthdays and other special occasions.
- Introduce new foods and try new recipes.
- Take advantage of seasonal foods or best buys.
- Use leftovers wisely.
- Consider food acceptability.

When planning your menus include a schedule for food purchases, cost control, food preparation time and delivery.

Calculate Serving Sizes and Costs

Calculate serving sizes and food cost by following these steps:

1. Select recipes.
2. Determine the serving size.
3. Determine how many meals to prepare.
4. Adjust the recipes for number of servings.
5. Calculate the amount of food needed for the total number of meals.
6. Estimate the total food cost.

Check the Budget

Compare the estimated cost of the menu with the food budget. If this cost is too high for the food budget, replace some of the foods in the menu with less costly ones.

Check the Inventory

Based on the estimated amounts of foods needed to prepare the menus, determine the amount of food you have on hand in your storeroom and refrigerators. Decide which foods you need to purchase.

Check Labor And Equipment

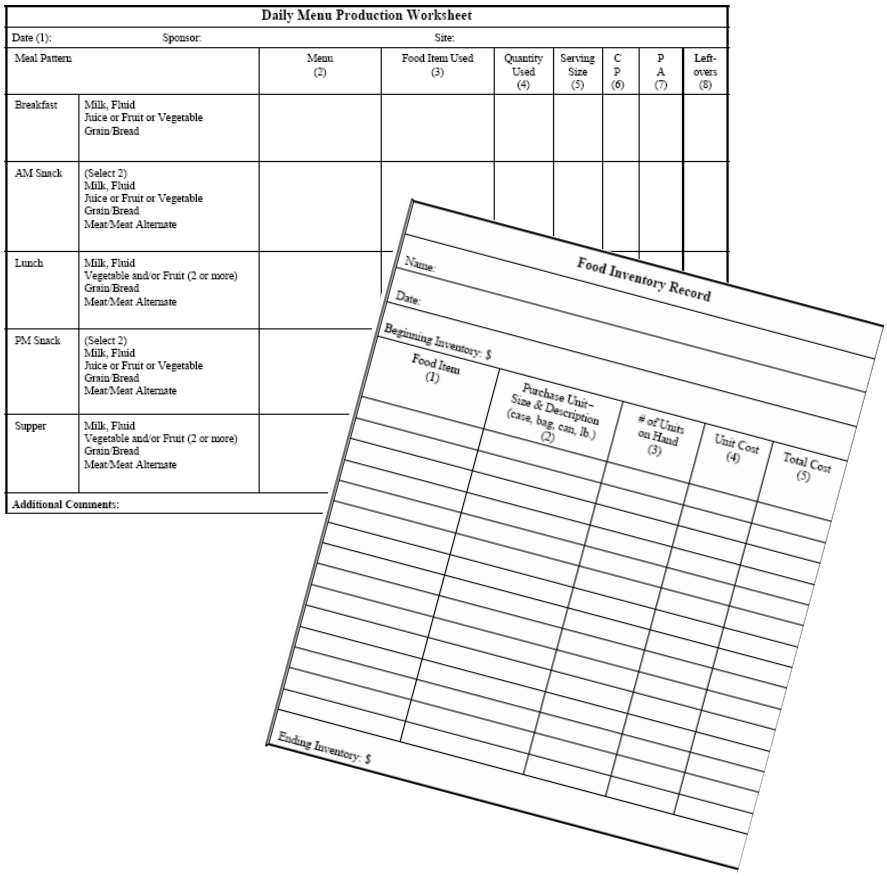
Schedule production time, equipment usage, and develop work schedules. Do not over-schedule or under-schedule!

Worksheets

Worksheets can assist with keeping records organized. They can be used to help:

- Record menus on a worksheet.
- Maintain food inventory control sheets.

See sample worksheets in the Reference Section of this guide.



Daily Menu Production Worksheet

Date (1): Sponsor: Site:

Meal Pattern		Menu (2)	Food Item Used (3)	Quantity Used (4)	Serving Size (5)	C P (6)	P A (7)	Left-overs (8)
Breakfast	Milk, Fluid Juice or Fruit or Vegetable Grain/Bread							
AM Snack	(Select 2) Milk, Fluid Juice or Fruit or Vegetable Grain/Bread Meat/Meat Alternate							
Lunch	Milk, Fluid Vegetable and/or Fruit (2 or more) Grain/Bread Meat/Meat Alternate							
PM Snack	(Select 2) Milk, Fluid Juice or Fruit or Vegetable Grain/Bread Meat/Meat Alternate							
Supper	Milk, Fluid Vegetable and/or Fruit (2 or more) Grain/Bread Meat/Meat Alternate							

Additional Comments:

Food Inventory Record

Name:

Date:

Beginning Inventory: $

Food Item (1)	Purchase Unit–Size & Description (case, bag, can, lb.) (2)	# of Units on Hand (3)	Unit Cost (4)	Total Cost (5)

Ending Inventory: $

Summer Menu Checklist

Evaluate menus on a weekly and monthly basis.

		Yes	No
1.	Have you included all food components in the minimum portion sizes as specified by the USDA?	____	____
2.	Have you varied foods from day to day and week to week?	____	____
3.	Are foods containing vitamin A, vitamin C, and iron offered frequently?	____	____
4.	Do meals include a variety of foods with a balance of color, texture, shape, flavor, and temperature?	____	____
5.	Have you included fresh fruits and vegetables often, as well as whole-grain or enriched bread or fortified cereal products?	____	____
6.	Have you included "other foods" to satisfy the appetites and to help meet the nutritional needs of the children?	____	____
7.	Have you considered the children's likes and dislikes, cultural, and ethnic practices?	____	____
8.	Have you chosen foods lower in saturated and *trans* fats?	____	____
9.	Have you chosen foods with minimal added sugars?	____	____
10.	Have you chosen foods lower in salt (sodium)?	____	____

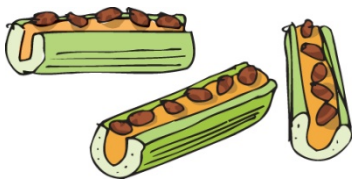
Sample Summer Menus

The following is a sample 6-day cycle menu. You may change any of the meals shown, rearrange the order, or make substitutions within a meal. Be sure each new menu offers the food components that the SFSP meal pattern requires.

Note the variety of foods, lower fat selections, and culturally diverse menu suggestions. These sample menus are primarily for on-site preparation. Some suggestions or variations of the suggestions can be used for off-site service at playgrounds or campsites.

	Day 1	Day 2
Breakfast	Whole Wheat English Muffin –25 gm or 0.9 oz with 1 Tbsp Jelly* Fruit Cup - ½ cup Fat-free Milk - 1 cup (8 fl oz)	Ready-to-Eat Cereal – ¾ cup Canned Sliced Pears - ½ cup Fat-free Milk - 1 cup (8 fl oz)
Snack	100% Grape Juice - ¾ cup "Ants on a Log" (*Celery Sticks ½ cup, with Peanut Butter – 2 Tbsp and *raisins – 2 Tbsp)	Soft Pretzel – 25 gm or 0.9 oz 100% Orange Juice - ¾ cup (6 fl oz)
Lunch/Supper	Chicken Nuggets - 2 oz with BBQ Sauce or Honey* - 1 Tbsp Peas and carrots - ½ cup Whole Wheat Dinner Roll – 25 gm or 0.9 oz Apple Slices - ¼ cup Fat-free Milk - 1 cup (8 fl oz)	Turkey Burger (cooked, 2 oz) on Whole Wheat Roll – 25 gm or 0.9 oz Lettuce and Tomato (optional) Baked Potato Wedges - ½ cup Green Beans - ¼ cup Fat-free Chocolate Milk - 1 cup (8 fl oz)

*Other foods added; not required to meet meal pattern requirements or creditable toward requirements.

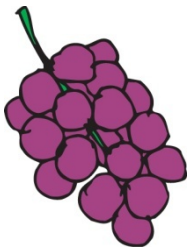


	Day 3	Day 4
Breakfast	Bagel – 25 gm or 0.9 oz with Fat-free Cream Cheese* – 1 Tbsp Orange slices – ½ cup Fat-free Milk – 1 cup (8 fl oz)	Whole-Grain Granola Cereal with Raisins* (3/4 cup or 1 oz) Fresh Banana slices – ½ cup Fat-free Milk – 1 cup (8 fl oz)
Snack	Fat-free Raspberry Yogurt – 4 oz or ½ cup Low-fat Granola Bar, Plain – 50 gm or 1.8 oz Water*	Tortilla Triangles – 25 gm or 0.9 oz (with Cheese slice – 1 oz) Cherry Tomato Halves* – ½ cup Water*
Lunch/Supper	Submarine Sandwich (Hoagie) (Lean Ham – ½ oz, Turkey – ½ oz Low-fat/fat-free Cheese – 1 oz Lettuce and Tomato – ¼ cup Italian Hoagie Roll – 25 gm or 0.9 oz Watermelon Cubes – ½ cup Fat-free Milk – 1 cup (8 fl oz) *Low-fat/fat-free Vanilla Pudding	Tuna Chef's Salad Tuna – 2 oz. Lettuce, Tomato, Broccoli, Celery, Cucumbers – ¾ cup Pumpernickel Roll – 25 gm or 0.9 oz Fat-free Milk – 1 cup (8 fl oz) Ranch dressing* - 1 Tbsp

*Other foods added; not required to meet meal pattern requirements or creditable toward requirements

	Day 5	Day 6
Breakfast	Blueberry Muffin – 50 gm or 1.8 oz Sliced Peaches- ½ cup Fat-free Milk – 1 cup (8 fl oz)	Waffle – 31 gm or 1.1 oz with Light Maple Syrup* – 1 Tbsp Blueberries - ½ cup Fat-free Milk – 1 cup (8 fl oz)
Snack	Raw Vegetable Medley - ¾ cup Broccoli, Carrot Sticks, Celery Sticks and Cherry Tomatoes Hummus - ½ cup Water*	Fresh Fruit Cup - ¾ cup Fat-free Milk - 1 cup (8 fl oz)
Lunch/Supper	Mexican Pizza – 1 (Corn Tortilla – 25 gm or 0.9 oz, 1/8 cup of Tomato Sauce*, ¼ cup of Refried Beans and low-fat/fat-free Cheddar Cheese – 1 oz)Garden Salad – ½ cup Pineapple Tidbits – ¼ cup Fat-free Milk - 1 cup (8 fl oz)	Chicken Pita pocket (2 oz lean Chicken, Whole Wheat Pita Bread –25 gm or 0.9 oz, Lettuce and Tomato – ¼ cup) Coleslaw – ½ cup Grape Halves* – ½ cup Fat-free Milk - 1 cup (8 fl oz)

*Other foods added; not required to meet meal pattern requirements or creditable toward requirements.



Healthy Snack Ideas

Kids like to eat finger foods because they are easy to handle, have different shapes, colors, and sizes, and are fun to pick up and explore. They can be dipped in a sauce, offer new tastes, and enable children to learn about new choices.

Choose snack foods that are lower in total fat, saturated fat, *trans* fat and added sugars. Make use of fresh, frozen, and canned fruits and vegetables. Offer a selection of sauces and dips for children to choose. Use items from the following food groups when planning snacks:

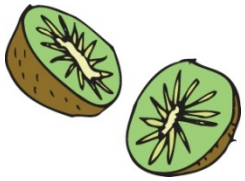
Meat or Meat Alternates

Low-fat/fat-free Cheese cubes/sticks
Almond butter
Low-fat/fat-free Yogurt
Peanut butter
Turkey rollups

Vegetables (light steaming or cooking may increase acceptability of some of the following)

Asparagus spears
Carrot coins
Carrot sticks
Cauliflower
Celery sticks
Cucumber
Broccoli
Cabbage wedges
Corn
Green pepper sticks
Snap peas
Mushrooms
Snow peas
Peas
Yellow squash slices
Radishes
Cherry tomatoes
Sweet potato cubes
Tomato wedges
Turnip sticks
Zucchini sticks

Fruits



Fresh fruit wedges such as peach, watermelon, plum, pineapple, and cantaloupe
Pitted prunes
Berries (in season) such as blueberries, raspberries, and strawberries
Cherries, pitted
Dried fruits (such as apricots, cherries, cranberries, prunes, and raisins)
Kiwi slices
Nectarines
Papaya
Banana slices
Grape halves
Honeydew cubes
Tangelos
Tangerine sections
Melon balls
Mango slices

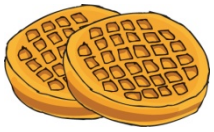
100% Full-Strength Juices

Apple	Pineapple
Grape	Prune
Grapefruit	Tangerine
Grapefruit-orange	Tomato
Orange	Vegetable

Any blend or combination of 100% juice is acceptable.
Note: Juice drinks with at least 50-percent-strength juice are permitted but discouraged because double the volume is needed to meet Program requirements.

Grains and Breads (Whole-grain or enriched)

Pita bread triangles	English muffin cubes
Crackers (all varieties)	Cheese or French toast strips
	Croutons
Graham crackers	Oyster crackers
Bread cubes	Pizza sticks
Bagel bites	Waffle squares
Cereals, dry (any variety)	Tortilla pieces
Low-fat Granola	Wafers
Whole-grain cereals	Rice cakes
Baked tortilla chips	Popcorn (air-popped)



Dips and Sauces

Low-fat/fat-free Yogurt dip	Fruit-based dip
Salsa and refried bean dip	Low-fat/fat-free Cheese, melted
Sweet and sour sauce	Cucumber sauce
Barbecue sauce	Hummus

Caution: Children under 4 years old are at the highest risk of choking on food and remain at high risk until they can chew better. Items such as whole grapes, hot dogs, and hard raw vegetables should be sliced or diced for children to swallow more easily.

Easy Salad Ideas

Give children a choice of low-fat dressings in which to dip their carrot, celery, cucumber, and zucchini sticks.

- Vary the look of your pasta salads with a combination of pastas: wagon wheels, shells, twists, and elbows, all in the same salad!

- Instead of pasta salad, try a brown rice or barley salad.

- To save time in making pasta salad, use thawed frozen vegetables. (There's no need to cook; they're blanched already).

- Try an antipasto lunch. Arrange on a small plate: chunks of tuna, wedge of hard cooked egg, slices of beet, halved cherry tomatoes, cooked green beans, cooked potato slices. Include a small cup with low-fat or fat-free Italian dressing.

- Add color and extra vitamins to coleslaw with red cabbage (as well as white), green pepper dices, and grated carrot.

Salad Dressings

If you do not have packets of ready-made salad dressing to offer, some easy ways to prepare salad dressing are offered below!

- Make a quick Russian dressing with low-fat/fat-free mayonnaise and catsup, and serve it over cut-up lettuce.

- Use lemon juice instead of vinegar when making a homemade Italian dressing. It tastes less harsh to children.

- Make a quick and tasty French dressing in the blender with tomato soup, onion, sugar, vinegar, and oil.

- Bottled low-fat coleslaw dressing makes a great-tasting white French dressing.

- Make a quick ranch dressing: 1 cup each of low-fat/fat-free mayonnaise, low-fat/fat-free yogurt, low-fat buttermilk; flavor with oregano and dried parsley.

- Make a honey dressing for pieces of fruit or to drizzle over a fruit salad: mix low-fat/fat-free yogurt and honey, and add orange juice concentrate for flavor.

Create Happy Times: The Eating Environment

In this section, you will find information on:

- how to make mealtime at your site a pleasant experience;
- the importance of nutrition education for the children; and
- tips on fun nutrition education activities.

A pleasant eating environment is another important key to healthy eating. Bringing children and foods together in a happy meal setting is as important as what children should eat. Pleasant eating experiences form habits and attitudes that can last a lifetime.

Making Mealtime A Happy Time

Encourage good experiences with food and eating by:

- Allowing children to take their own time to eat within meal service time requirements. Let them follow their own "time clock". Eating in a hurry may spoil the pleasure of eating.
- Not forcing children to eat. They can be picky eaters.
- Offering a variety of foods in different ways.

The Physical Environment

If you are serving food inside a building:

- Make sure the room or setup is attractive and clean.
- Use bright colors and decorations that children like.
- Offer good lighting and proper air circulation.
- Provide chairs, tables, dishes, glasses, plastic ware, and serving utensils that are appropriate for children.
- Arrange food on plates and garnish serving lines to make meals attractive.
- Avoid delays so children do not have to wait.
- Have children help set up the food service and help clean up after eating.

If you are serving food outdoors:

- Be sure food is safe to eat by providing ice or refrigeration for cold foods, and warmers for hot foods.
- If you are transporting food to outdoor sites, look into using refrigerated trucks and/or warmers. Proper temperature maintenance is necessary and must be accommodated if food is to be transported. For more information, refer to the section on Food Safety, beginning on page 69.
- It's important to check food on delivery for proper temperatures. Make sure thermometers are available to check on food. Keep hot food at 139 °F or above and cold food at 40 °F or below.
- Remember, nutrition is important but extra "other foods" can be served that provide additional energy on a hot day, such as ice-cold fruit pops or ice milk treats.

A Healthy Atmosphere

- Provide a quiet time just before meals so that mealtime can be relaxed.
- Encourage a friendly atmosphere. Display posters and messages that promote healthy eating and encourage physical activity.
- Talk about foods, the colors, the shapes, the sizes, and where they come from.
- Encourage children to talk about their food experiences—how the food tastes and smells.
- Allow enough time for children to eat and experience healthy eating within meal service time requirements.
- Offer nutrition education activities.

Nutrition Education

Nutrition education is learning about foods and how they are important to health. Nutrition education is an important part of serving meals to children participating in SFSP. Encourage your staff to provide a variety of activities to help children learn about healthy eating behaviors.

Nutrition knowledge helps children:

- Adopt healthy eating habits;
- Develop positive attitudes toward nutritious meals;
- Learn to accept a wide variety of foods;
- Establish good food habits early in life; and
- Share and socialize in group eating situations.

Promote Nutrition Education Activities

The teaching of nutrition principles is most effective when you combine concepts with other learning activities. Learning is reinforced when children have an opportunity to practice what you teach them.

Introducing new foods to children can be an educational experience. Foods, like a bright orange, a rosy apple, or a bright green pepper, can be an introduction to new colors, different shapes, textures, and smells for younger children. A child may reject a food simply because it is unfamiliar. Seeing, touching, tasting new foods, and preparing familiar foods in a different way, can lead to better acceptance. Organize tasting parties to offer children a taste-test of new food items.

Activities:

Sponsor a Nutrition and Physical Activity Fair: Show children the connection between nutrition and physical activity with a fair. Set up booths that host nutrition and physical activity related games that will encourage them to try new foods, new physical activities, and that will show them how important the two are for good health.

Focus on MyPlate: *MyPlate* is a great resource that can be incorporated into your program. Visit www.ChooseMyPlate.gov to download or order the available lesson plans and use them to make nutrition fun for your participants.

Go Fish! Give students practice in sorting foods into groups by playing a game of Go Fish with food cards. Duplicate food illustrations from the CD-ROM included with the MyPyramid for Kids Classroom Materials and cut into cards (http://teamnutrition.usda.gov/Resources/mypyramidclassroom.html). Put students into groups of four and distribute 30 cards to each group. The dealer deals out four cards to each student in the group and places the rest of the deck in the middle. Each group is now ready to play. The first student asks the student sitting to his left if he/she has a fruit. If the student has a fruit, the second student gives the card to the first student and the first student places the matched pair on the table. The second student who gave up the card picks up a card from the middle. He/she then asks the student to his/her left if they have a vegetable. If the student does not have a vegetable, the student says "go fish" and the student who asked for the card, will pick a card from the middle. The students continue to take turns and ask questions until all the pairs are found. The student with the most pairs wins.

Eat Smart. Play Hard.™: Make learning about nutrition and physical activity an adventure they will never forget by incorporating Eat Smart. Play Hard.™ materials and activities into the day. Activity sheets, lesson plans, and comics are just a few of the resources available. Materials can

be downloaded from
http://teamnutrition.usda.gov/Resources/eatsmartadditionalresources.html.

What's the Mystery Food? Place the child's hand in a paper bag containing a fruit or vegetable and ask him or her to identify it. If he or she cannot identify it, select several children to peek into the bag and provide clues.

Food Match: Ask the children to name as many vegetables as they can that are green…purple…yellow, or start with the letter A, etc.

Involve children in preparing meals and snacks:

- Have children measure ingredients with kitchen measuring cups and spoons.
- Teach children the origin of foods and the events that lead up to serving a meal.
- Allow children to help serve the meal to their peers.
- Plant a garden, inside or out, or create an edible landscape with herbs.

Field Trips: Children can learn many things from field trips. They can discover how food is produced, prepared, and sold. If possible, plan excursions to a farm, market, grocery store, dairy, or bakery. After the trip, have children role-play to recall what they learned. Promote other recreational activities such as food drawings, stories, puppet plays with food characters, songs, and games to help children develop wholesome attitudes toward nutritious foods.

Show What You Know: Menu Promotions

In this section, you will find information on:

- How to “merchandise” your meals; and
- A few interesting “theme” menus.

Introducing New Recipes

New recipes should be introduced gradually, so consider trying one per week. Try a new recipe at snack time – a time for "something extra", a time of surprises. Always have an alternate choice so no one feels left out if he or she doesn't care to try the new item.

Merchandising Meals

Advertise: put up posters and pictures to illustrate what is currently being served.

Dress in costume for an occasion or special activity.

Go ethnic all the way! Surround the meal with "go withs" that are commonly accepted: i.e., tacos with refried beans and rice.

Let a specific day of the week be "New Recipe Day": something to look forward to....

Serve lunch in a paper bag. Spread out a few blankets and let each child sit where he/she chooses, like at a picnic.

Talk about a new food beforehand: a little education goes a long way. How were the foods grown? Where were they grown? How do the foods look when they are raw? Compare it to another food that is already familiar. What makes it nutritious? What are other names for this food (or dish)? Why is it called what it is? From what culture did it originate? In what culture is it found today?

Try Something New: Jazz Up Your Meals

In this section, you will learn:

- Ways to add variety to your menus; and
- About the importance of physical activity.

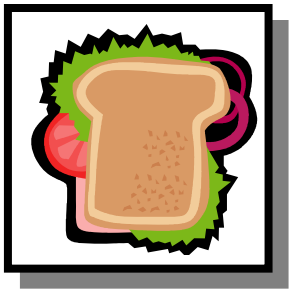
Children's eating habits begin young. We know that tastes are learned habits and are acquired at an early age. Let's help give children a healthy start.

Background

Many Americans consume more calories than they need without meeting recommended intakes for a number of nutrients. Each food group provides a wide array of nutrients in substantial amounts therefore, it is important to include all food groups in the daily diet. The SFSP can assist children in consuming a variety of nutrient-dense foods and beverages from within the basic food groups while choosing foods that limit the intake of saturated and *trans* fats, cholesterol, added sugars, and salt. Nutrient-dense foods are those foods that provide a significant amount of vitamins and minerals (micronutrients) and relatively few calories.

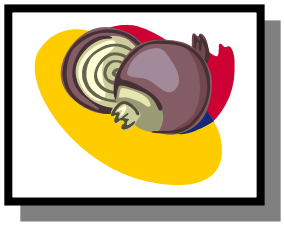
Calcium, potassium, fiber, magnesium, and vitamin E are nutrients that have been found to be low in the dietary intakes of some children and adolescents.

Tips for Adding Nutrients to Meals

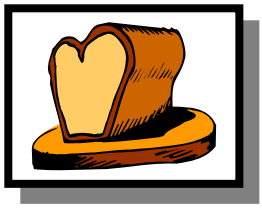


- Serve a variety of vegetables, fruits, meats and beans, milk and milk products, and grains (especially whole grains) with little or no saturated fat, *trans* fat, cholesterol or added sugar.
- Low intakes of calcium are often the result of low intakes of milk and milk products.
- Most Americans need to increase their potassium intake. Some potassium-rich foods include baked white or sweet potatoes, cooked greens (such as spinach), many dried fruits, cooked dry beans, and cantaloupe.
- Low intakes of fiber are often the result of low intakes of whole grains, fruits, and vegetables. Choosing a variety of fruits, vegetables and whole grains will help to provide an adequate amount of fiber in a child's diet.
- Magnesium intake can be increased by consuming fruits and vegetables. Some sources include almonds, spinach, black beans, oat bran, and brown rice.
- Specific vitamin E-rich foods need to be included in the eating pattern to meet the recommended intake of vitamin E. Foods that can help increase vitamin E intake include fortified ready-to-eat cereals, tomato sauce, raw avocado, olive oil, sardines, and peanut butter.
- When possible, use low-fat forms of foods in each group and forms free of added sugars. Keep in mind that products labeled as low-fat are not necessarily low in calories. Always read the nutrition facts label.

- Serve nutrient-dense foods which are lower in calories and high in vitamins and minerals and limit foodshigh in saturated fat, *trans* fat, cholesterol, sodium, and added sugars.
- Serve a variety of pasta, rice, breads, and cereals with little or no added saturated fat and *trans* fat and a moderate or low amount of added sugars.
- Serve fresh fruits for naturally sweet desserts.
- Buy fruits in season for better prices and tastier produce.



- Serve fresh fruits higher in fiber, such as those with edible skins-like apples, pears, nectarines, peaches, and those with edible seeds; like berries and bananas.
- Serve a variety of vegetables. Choose vegetables from each of the five vegetable subgroups (dark green, orange, legumes [dry beans], starchy, and other vegetables).
- Serve vegetables high in fiber such as cooked dry beans, broccoli, tomatoes, leafy greens, potatoes with skin, and carrots.
- Serve raw vegetable salads and raw vegetables for snacks.
- Season vegetables with herbs for taste appeal.
- Offer and serve whole grain products with meals.
- Remember that whole grains cannot be identified by the color of the food. Read the Nutrition Facts Label on foods so you can choose grain products high in fiber and low in saturated fat and sodium. For example, look for one of the following ingredients first on the label ingredient list: whole wheat, whole oats, whole rye, brown rice, whole grain corn, graham flour, bulgur, cracked wheat, and oatmeal.



  - In main and side dishes, include a variety of enriched rice, macaroni, noodles, and other pasta products. Introduce brown rice and whole-wheat pasta to the menu to increase fiber content.
  - When preparing a dish, try increasing the proportion of whole grains to other ingredients by substituting whole-wheat flour for all or part of the white flour in recipes. For example, when making muffins, quick breads, biscuits, or pizza crusts substitute ½ whole-wheat flour for white flour. When making cakes, substitute ¼ whole-wheat flour for white flour.
  - Add grains such as pre-cooked rice and oats to ground beef in meat loaf and similar casseroles. Use bulgur to thicken soups.
  - Introduce children to whole-wheat bread by serving sandwiches with one slice of whole-wheat bread and one slice of white bread.
  - When introducing whole grains, try starting with 10-percent whole-grain flour or grains in recipes you make. Gradually increase the amount each time the recipe is prepared as children learn to accept this healthy food choice.

- Offer low-fat or fat-free milk and milk products to children 2 years of age or older.
- Replace whole milk in baking with low-fat, fat-free, buttermilk, or reconstituted fat-free dry milk.
- Use the food label to select products that are lowest in saturated fat, *trans* fats and cholesterol.
- Read the nutrition facts label when purchasing foods and select foods that have less sodium over foods that have higher levels of sodium.
- Foods with added salt include cured and processed meats; cheeses; ready-to-eat snacks; prepared frozen entrees and dinners; packaged mixes; canned soups; salad dressings and pickles. If serving these foods, check the sodium content and select foods that have less sodium.

- For dessert, make chocolate or butterscotch pudding with fat-free or low-fat milk.
- Offer children portion sizes according to SFSP meal pattern requirements.

Physical Activity

Encourage children to take part in vigorous activities and join them whenever possible. Children need at least 60 minutes per day of moderate physical activity. It's important to encourage children to get in the habit of being physically active at a young age. Physical activity helps children have fun and:

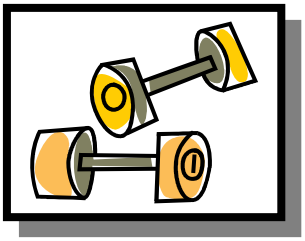
- Maintain a healthy weight;
- Develop strong muscles, a healthy heart and lungs;
- Strengthen bones;
- Develop motor skills, balance, and coordination;
- Develop positive attitudes; and
- Improve self esteem.

Tips for Promoting Physical Activity

Regular physical activity is important to maintaining health. Physical activity burns calories, helps with weight control, and reduces the risk of certain chronic diseases including high blood pressure, stroke, coronary artery disease, type 2 diabetes and osteoporosis later in life. An inactive lifestyle increases the risk of overweight and obesity as well as many chronic diseases. While physical activity is not an SFSP requirement, it is important that children be provided a healthy environment. If activities are part of your SFSP, keep children moving. They should get regular physical activity to balance the calories from the foods they eat.

Children can be physically active by:

- Turning up the music and dancing;
- Lifting and throwing balls to use muscles;
- Taking the stairs, both up and down; or
- Swimming or playing basketball.



Question: How much physical activity should children get?

Answer: The Dietary Guidelines for Americans recommends at least 60 minutes each day.

Questions and Answers

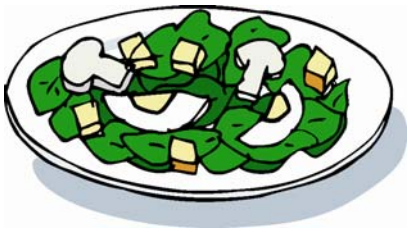
1. What are the *Dietary Guidelines*?

The *Dietary Guidelines* are the cornerstone of federal nutrition policy and education. They are based on what experts have determined to be the best scientific knowledge about diet, physical activity and other issues related to what we should eat and how much physical activity we need.

The *Dietary Guidelines* answer the questions, "What should Americans eat?, How should we prepare our food to keep it safe and wholesome?, and How should we be active to be healthy?" The *Dietary Guidelines* are designed to help Americans choose diets that will meet nutrient requirements, promote health, support active lives and reduce risks of chronic disease.

2. What can I do to lower the amount of fat in the meals I serve to the children?

There are many things you can do while preparing meals. For instance, you can bake or broil instead of frying; you can drain fat off meats before serving, or try combining beans with meat for variety. Serve fresh fruits and vegetables, or steam, bake or boil them until they're crisp or "al dente" (cooked but still firm). Limit your use of solid or saturated fats such as butter and hard or stick margarine. Use vegetable oils (canola, olive, safflower, corn, sunflower, sesame seed) as a substitute, and use herbs and spices for flavor. Use whole grain breads and other breads such as pita bread, bagels, muffins, and pancakes more often instead of higher fat items such as croissants, doughnuts, and sweet rolls. Choose most often snack foods that are lower in total fat, saturated fat, *trans* fat, and added sugars. Further, offer low-fat or fat-free milk to children over two years of age, as a beverage, and replace whole milk with low-fat, buttermilk or reconstituted fat-free dry milk during food preparation.



3. What is a meal pattern requirement?

A meal pattern requirement is a listing of food components and serving sizes you are required to serve the children in the SFSP. Each component in each meal must be present in order for you to receive reimbursement for that meal. However, School Food Authorities may use Offer Versus Serve (OVS) meal service and meals will be fully reimbursed if all food components are made available, but the child has declined a certain number of items. When the meal pattern requirements are followed, not only do you receive proper reimbursement, but also the child eating the meal receives a well-balanced, nutritious meal that supplies the kinds and amounts of foods that will meet their nutrient and energy needs. You can find the SFSP Meal Pattern Requirements beginning on page 9 of this guidance.

4. I have a few children in my Program that need special meals. What should I do?

Sometimes children have a disability or life-threatening food allergy that prevents them from eating the same foods as the other children. Such children are entitled to receive modified meals from the Program. You are required to provide those modified meals, provided the preparation of those meals does not cause your organization undue hardship. For children with disabilities and life threatening food allergies that require specially prepared meals, you should receive and have on file a physician's statement. This statement, as a minimum, should outline the child's disability or allergy, the major life activity affected by the disability or allergy, and the food or foods that should be omitted or substituted. This statement should also be signed by the licensed physician.

5. I keep hearing about "cycle menus" – what are they, and how do I set one up?

A cycle menu is a set of planned daily menus that are repeated in the same order for a period of time—usually 2, 3, or 4 weeks. The menu is different every day during the cycle. A cycle menu offers you variety and flexibility. Some of the things you can do to adjust a cycle menu is to replace foods that are not available; observe holidays and other special occasions; introduce new foods or try new recipes; take advantage of seasonal foods or good buys, and use leftovers. A sample cycle menu can be found on page 28 of this guidance.

6. How can I make mealtime more "fun" for the children I serve?

There are a lot of things you can do to make the eating experience a more pleasant one. The first thing to know is the children themselves. Each child reacts differently to different foods, and eats in his or her own way. Remember to never force a child to eat, and to give them enough time to eat. The environment you provide is important: a clean area with bright colors, age-appropriate seating, tables and utensils, and presenting attractive meals at the proper temperatures helps. Giving the children quiet time before meals and having them help clean up afterwards can also help children have a positive meal experience.

7. How can I "market" my meals to the children?

You can do all sorts of things to make the children look forward to the meal service! Advertise the meal with posters and pictures or dress in costumes for a special occasion or activity. Adding "go-with" food items to standard menus or serving ethnic foods are ways to spice up a meal, as well as an opportunity for an educational lesson. Serving a familiar food in a new way, or serving the meal in a different setting can also make mealtime fun! There are additional ideas for promoting your meals beginning on page 38 of this guidance.

PART II — NUTRITION SERVICES

Hire With Care: Food Service Staff

In this section, you will find information on:

- How to hire and manage the staff necessary to run your food service; and
- What you should do to prepare and train those staff members.

Selecting Staff

Sponsors who prepare meals on-site or in a central kitchen are responsible for choosing staff, including a food service manager, food production staff and general kitchen help. The number of food service employees will depend on the number and type of meals prepared. The following staffing schedule is provided as a guide for a program serving lunches and snacks.

Number of Meals	Hours of Labor	Staff Needs
up to 50	6 to 8	1 full-time employee
51 to 100	8 to 10	1 full-time employee* 1 part-time employee**
101 to 200	12 to 20	2 full-time employees* 1 part-time employee**
201 to 300	20 to 24	3 full-time employees* 1 part-time employee**

*These full-time employees can be scheduled for only the hours they are needed and may
not be required to work an 8-hour day.
**These part-time employees may be optional or as needed, based on menu requirements.

The range of hours for labor varies based on the skills of the food service employees and the convenience foods used in the menus. If the sites serve breakfast, add 1 hour of labor for each 50 breakfasts prepared. Sites require less time for labor when serving snacks than when serving breakfast or lunch.

- Determine the number of staff you will need. The type of employee and the amount of experience will vary with the duties each will perform.
- For the position of food service managers, consider someone with a

food production or nutrition background with food service experience.

- Use qualified volunteers, such as parents or supervisory adults, to help you operate the program. These individuals may offer help during the service of the food and supervising the children while they eat. Parent involvement should be encouraged. Parents often see their involvement as a benefit too!
- All food service employees should meet the health standards set by local and State health authorities.

Training Staff

Once you have selected your food service staff, you must train them in Program operations. Introduce staff to each other and help them to understand:

- The goals of SFSP;
- The meal pattern requirements;
- The importance of preparing nutritious meals that meet the *Dietary Guidelines for Americans;*
- The food safety rules and sanitation guidelines;
- Operation of food service equipment; and
- Development and following standardized recipes.

***Note: No site may operate until your staff has attended a SFSP operations training session.**

Develop a job description for each food service position. Job descriptions identify duties and responsibilities for each position. A sample position description for a cook is provided in the Reference Section.

Food production employees will have food preparation duties and must be shown how to fill out the necessary records. They must know how to use recipes and meet the necessary meal pattern requirements. It is also important that staff be able to recognize complete meals and food safety guidelines. Other personnel will have food service or cleanup duties and responsibilities. Write down the requirements of the job and go over the schedule of activities.

Offer training on a formal or informal basis. Have regular meetings. Get input from your staff on an on-going basis. Encourage new ideas on how to improve the current menu, food production, and food service areas. Ask employees what they would like to see to make their jobs better.

Training Resources

Contact the State SFSP administering agency for training materials promoting nutrition education, food safety information, recipes, etc. Video packages are available for group training or self-study. Check the Information Resources list provided in the Reference Section on page 142.

Getting Organized: Food Purchasing and Receiving

In this section, you will find information on:

- How much to buy;
- When and where to buy your food;
- How to use the Food Buying Guide; and
- How to receive food from vendors.

Getting the most for the food dollar takes careful planning and buying. Careful use of food buying power will not only help control your food costs, but will also reduce waste and help upgrade the quality of meals.

Success in food buying depends on getting good-quality foods in the proper quantities at the best possible prices. The proper quantities of foods to buy depends on the number of children eating at the site, the menus and recipes you use, the amount and kind of storage space available, inventory on hand, perishability of the food, and the length of time the order covers. In addition to this guide, request a copy of USDA's *Food Buying Guide for Child Nutrition Programs* from your State SFSP administering agency or Team Nutrition.

How Much To Buy

- Review the cycle menu.
- Determine the recipes to use.
- Calculate the quantities of food you need to meet meal pattern portions.
- Compile the "grocery list" of foods and quantities you will need to buy.
- Check your inventory to determine what is on hand and subtract that from the list of foods to purchase.
- Keep in mind the size of the storage facilities and buy only the quantities of food that you can store properly.
- Buy only the products you need.

When To Buy Food

The following guidelines can help you decide when to buy each type of food.

- Buy bread, milk, and produce every day or every 2 days if storage allows.

- Buy perishable foods, such as meat, fish, poultry, and frozen foods, in quantities that can be stored in the refrigerator and freezer. Check the Approximate Storage Life in Days of Refrigerated Foods and Frozen Foods Chart for length of time to keep perishables in the refrigerator or freezer in the Food Safety Section of this guide.

- Buy canned foods and staples monthly or twice a month if dry storage is available.

You will find Buying Calendars for Fresh Fruits and Fresh Vegetables featured in the Reference Section of this guide.

Where To Buy Foods

Consider where to buy foods:

- Find out which food companies (suppliers) in your area offer foods that will help you meet the recommendations of the Dietary Guidelines (i.e., lowfat and fat-free milk and milk products, foods low in saturated fat and *trans* fat content, etc.), can supply foods you will use frequently, and will provide the services you require (prompt and frequent delivery, credit, discounts).

- Buy from suppliers who provide the best quality foods at the most reasonable prices.

- Follow a strict code of business ethics when you purchase foods for the Program. Know what the food suppliers expect, and let them know what you expect of them.

To help you decide what to buy:

- Read the label and be familiar with nutrients and ingredients.

- Buy federally inspected meats and poultry.

- Purchase only pasteurized lowfat and fat-free milk and milk products that meet State and local standards.

- Purchase bread and bread products that are properly wrapped or kept in paper-lined containers with covers to keep them fresh and wholesome. Check dates on packages of bread and bread products to be sure that they are fresh.

- Purchase frozen foods that have been kept frozen solid. Do not accept delivery of frozen foods that are, or have been, thawed or partially thawed.

- Purchase perishable foods that have been kept under refrigeration.

Developing Food Specifications

When preparing food on a large scale and procurement is needed, a food specification will need to be developed. A food specification is a detailed or specific list of the desired characteristics of a food product. How you plan to use the food determines both the form and quality that you should buy. Consider the product's style, size, count, container, and packing medium. Also, buy seasonally and locally to help keep food costs lower, e.g., farmers markets. You should:

- Provide the supplier with clear specifications for each food item ordered.
- Upon delivery of the order, check to see that the food meets the specifications and is in good condition.

For further guidance on procurement, contact your State Agency.

Specification Criteria

- Name of product or Standard of Identity
- Grade, brand, type
- Size of container
- Unit size
- Description
- Delivery requirements
- Sanitation conditions expected
- Provisions fair to seller and protective to buyer
- Tolerance level accepted
- Estimated product usage
- Condition of the product

Sample Specification Bid

Peaches, Cling

Purchase Unit: Number 10 can, 6 cans per case

Style: Halves, Slices

Type: Yellow, Cling

Grade: U.S. Grade B (Choice)

Count: 36-54 Halves

Packing Medium: Light Syrup

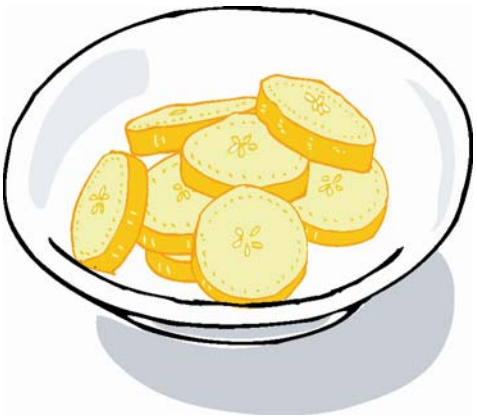
Net Weight: 108 ounces

Drained Weight: 66½ ounces

Yellow cling peaches should have reasonably uniform color that is practically free from any brown color due to oxidation. They should be reasonably uniform in size and symmetry and be reasonably free from defects such as blemished, broken, crushed units, and peel. Units should be reasonably tender and have texture typical of properly ripened fruits, not more than slight fraying.

Watch for: Off-color or wide-color variation. Excessive variation in size, symmetry, and thickness. Discoloration, excessive softness, or hard units. Crushed or broken pieces, presence of excessive loose pits, stems, and leaves.

For more in-depth information and a detailed guide to writing food specifications, you can download *Choice Plus: A Reference Guide for Foods and Ingredients* from the National Food Service Management Institute (NFSMI). For contact information, see the Information Resources list in the Reference Section on page 142. Document available online http://www.nfsmi.org/documentLibraryFiles/PDF/20080201030612.pdf.



How To Use The Food Buying Guide

USDA's *Food Buying Guide for Child Nutrition Programs, (*PA-1331), has been designed to help determine quantities of food to purchase for use in preparing meals for children.

Use the *Food Buying Guide* and the following steps to determine how much food to buy:

1. Determine the serving size and the total number of servings needed for each food item as follows:

   For *meat, poultry, fish or cheese,* multiply the number of servings times the serving size (in ounces) to get total ounces needed.

   For *vegetables and fruits*, the *Food Buying Guide* lists amounts to buy based on ¼ cup servings. Therefore, to calculate the amount to purchase, convert your serving size to the number of ¼ cup servings. This is done by dividing the serving size by ¼ and then multiplying the result by the number of servings to get the total number of ¼ cup-servings needed. See examples below.

2. Divide the amount needed (total ounces of meat or total number of ¼ cup servings of the vegetable or fruit) by the number of servings per purchase unit (from column 3 of the *Food Buying Guide* for the food you want to use).

$$\frac{\text{Amount needed}}{\text{Number of servings per purchase unit}}$$

Example A: Canned-Sliced Cling Peaches, fruit and juice

1. Serving size: ½ cup fruit and juice
   Number of servings: 50

2. Calculate the number of ¼ cup servings:
   ½ ÷ ¼ = 2 x 50 = 100 ¼ cup servings

3. $\frac{\text{Amount needed (no. of ¼ cup servings)}}{\text{Servings per purchase unit}}$ = 100 ÷ 50.0* = 2.0 #10 cans

   * Servings per purchase unit is the number of servings of canned cling peaches with fruit and juice per #10 can = 50.0.

Example B: Carrot Sticks

1. Serving size: ¼ cup
   Number of servings: 50

2. No conversion is needed because the serving size is ¼ cup.

3. $\frac{\text{Amount needed (no. of ¼ cup servings)}}{\text{Servings per purchase unit}}$ = 50 ÷ 10.3* = 4.85 or 5 lbs.

   * Servings per purchase unit is the number of servings of fresh carrots per pound = 10.3.

Example C: Ground Beef, fresh or frozen, no more than 20% fat

1. Serving size: 2 oz, cooked
   Number of servings: 50

2. Number of servings x serving size = total ounces needed
   50 servings x 2 ounces =100 ounces

3. $\frac{\text{Amount needed (total ounces)}}{\text{Servings per purchase unit}}$ = 100 ÷ 11.8* = 8.5 pounds

   * Servings per purchase unit is the number of 1 oz. servings of ground beef per pound = 11.8.

Additional information about calculating how much to purchase can be found on pages 1-49 through 1-66 of the *Food Buying Guide for Child Nutrition Programs*.

Receiving Food

When receiving food deliveries from vendors, use the following guidelines:

- Confirm vendor name, date and time of delivery, as well as driver's identification (ID) before accepting delivery. If driver's name is different than what is indicated on the delivery schedule, contact the vendor immediately.

- When the delivery truck arrives, make sure that it looks and smells clean, and is equipped with the proper food storage equipment. Check the interior temperature of refrigerated trucks.

- Examine all food upon delivery to be sure it is not spoiled, dirty, infested with insects, or opened.

- Do not accept foods that fail to meet your food specifications.

- Do not accept foods that are not on the order form or are in poor condition. Make sure the order form indicates the food items for the menu(s), the correct number of meals or food items, and the date and time of delivery.

- Check the temperature of all refrigerated and frozen foods to ensure that they are within proper ranges.

- All perishable foods (milk, eggs, cheese, fresh meats, poultry, fish, lunch meats, etc.) should have either an expiration date or a "sell by" date on the packaging.

    - If the food has an expiration date, do not accept the food if the date has passed.
    - If the food has a "sell by" date, check it to make sure that you will be able to use the product in a timely manner.

- Make sure that frozen foods are in airtight, moisture-proof wrappings.

- Do not accept foods that have been thawed and refrozen. Signs of this are large ice crystals, large areas of ice, water, or excessive ice in containers.

- Do not accept frozen foods that have started to thaw.

- Do not accept cans that have any of the following: no labels, swollen sides or ends, flawed seals or seams, dents or rust.

- Do not accept dairy, bakery and other foods delivered in flats or crates that are dirty.

- If applicable, check the manufacturer's "use by" or "best before" dates for non-perishable items to ensure that you will be able to use the products within a reasonable amount of time.

For additional information on receiving, refer to NFSMI – Standard Operating Procedures:
http://sop.nfsmi.org/HACCPBasedSOPs/ReceivingDeliveries.pdf.

Set the Standard: Food Service Quality

In this section, you will find information on:

- how to prepare foods;
- menu production records;
- how to work with quantity recipes; and
- common measures and portion control.

Food Production

Serving acceptable and nutritious foods depends not only on good planning, selection, and storage, but also on good food preparation using standardized recipes whenever possible. Determine how much food to prepare by (1) examining the menu (which shows the kinds of foods to prepare and the serving size of each), (2) determining the total number of children you will serve, and (3) becoming familiar with food yields (the number of servings you can obtain from a purchase unit). Charts in the Reference Section provide information on serving sizes, yield of servings, and yield of selected foods.

Tips for Food Preparation

- Wash fresh fruits and vegetables with water (no soap) and use a brush if necessary to remove soil. Trim carefully to conserve nutritive value. Remove damaged leaves, bruised spots, peels, and inedible parts. Use a sharp blade when trimming, cutting, or shredding to avoid further bruising and loss of nutrients.
- Steam or cook vegetables in small batches for best quality. Cook until tender-crisp, avoid over cooking, using as little water as possible to help retain vitamins and minerals.
- Add only a small amount of salt, if any, to water or to foods when cooking. Do not add salt when cooking pasta or rice.
- Cook potatoes in their skins to help retain their nutritive value.
- Trim visible fat from meats and meat products.
- Cook cereals and cereal grains according to cooking directions.
- There is no need to rinse or drain the cereals or cereal grains such as rice after cooking.
- Use seasonings sparingly. Think of children's tastes and preferences.
- Follow standardized recipes exactly. Measure and weigh ingredients precisely and follow procedures carefully. This includes using equipment, time, and temperature as specified in the recipe.
- Serve portion sizes as specified in the recipes and menus. Use correct serving utensils to portion foods. Make sure portion sizes follow meal pattern requirements

Menu Production Records

The SFSP regulations require sponsors to maintain records of participation and preparation or ordering of meals to demonstrate that the appropriate number of meals was ordered and that justify all costs and meals claimed. These should include records of: meal counts taken daily at each site; program operating costs, including food and other costs; program administrative costs, including labor and supplies; and funds accruing to

the program.

Some States also require sponsors to maintain production records, which include detailed information about how food was purchased and the specific amounts of foods prepared and served. This is an additional State requirement that requires FNS Regional Office review and approval. Contact your State agency to determine whether production records are required.

Using Standardized Recipes

A standardized recipe is a recipe that gives the same good results every time. It specifically describes the amount of ingredients and the method of preparation needed to produce a consistently high-quality product. A sample standardized recipe is included in the Reference Section. It specifies number of portions and sizes of serving utensils for correct portions.

Contact your State agency for copies of recipes for use in the Program. Other recipes from associations, the food industry, and reliable cookbooks may provide variations for you to use from time to time.

How To Use Quantity Recipes

To use quantity recipes properly, follow these steps:

1. Read the entire recipe carefully before beginning preparation and follow directions exactly.

2. Adjust the food quantities in the recipe to provide the number of servings you require.

3. Determine the amount of food needed for preparing the recipe. (Refer to the section on *How To Use the Food Buying Guide.*)

4. Collect the necessary utensils and ingredients.

5. Weigh and measure ingredients accurately. Weigh ingredients whenever possible since weighing is more accurate. If you must measure ingredients, use standard measuring equipment.

6. Follow directions carefully for combining ingredients and cooking the product. Note that quantity recipes may take more time to prepare, for example, if you need to thaw a large amount of frozen meat.

7. Serve portion size according to recipe. Also, make sure portion sizes served follow meal pattern requirements.

For more information, refer to:
USDA Recipes for Schools (http://nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=115.).
USDA Child Care Recipes (http://nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=114.).

Abbreviations Used in Recipes

AP----as purchased	qt----quart
EP----edible portion	gal---gallon
Cyl---cylinder	oz----ounce
pkg---package	fl oz--fluid ounce
tsp---teaspoon	No.----number
Tbsp--tablespoon	wt----weight
lb----pound	incl--including
pt----pint	excl--excluding

Equivalent Measures

1 tablespoon	= 3 teaspoons	1 cup	= 16 tablespoons
1/8 cup	= 2 tablespoons or 1 fluid ounce	1/2 pint	= 1 cup or 8 fluid ounces
1/4 cup	= 4 tablespoons	1 pint	= 2 cups
1/3 cup	= 5 1/3 tablespoons	1 quart	= 4 cups
3/8 cup	= 6 tablespoons	1 gallon	= 4 quarts
1/2 cup	= 8 tablespoons	1 peck	= 8 quarts (dry)
2/3 cup	= 10 2/3 tablespoons	1 bushel	= 4 pecks
3/4 cup	= 12 tablespoons	1 pound	= 16 ounces

Portion Control

- Serve each meal as a unit.
- Serve all of the required food items in the proper amounts.
- Use proper serving utensils (Example: a #16 scoop makes a 1/4 cup serving).
- Train employees to recognize proper portion sizes.
- Provide a sample plate containing the proper amounts of food as an appealing example.

Measures for

Scoops, ladles, and serving spoons of standard sizes provide

dependable measures and help serve food quickly.

Scoops

The number of the scoop indicates the number of scoopfuls required to make 1 quart. The following table shows the level measure of each scoop in cups or tablespoons:

Scoop No.	Level Measure
6	2/3 cup
8	½ cup
10	3/8 cup
12	1/3 cup
16	¼ cup
20	3 1/3 tablespoons
24	2 2/3 tablespoons
30	2 tablespoons
40	1 2/3 tablespoons

Use scoops for portioning such foods as drop cookies, muffins, meat patties, and some vegetables and salads.

Ladles

Use ladles to serve soups, stews, sauces, and other similar products. The following sizes of ladles are most often used for serving meals:

Number on Ladle	Approximate Measure
1 fluid ounce	1/8 cup
2 ounces	¼ cup
4 ounces	½ cup
6 ounces	¾ cup
8 ounces	1 cup
12 ounces	1½ cups

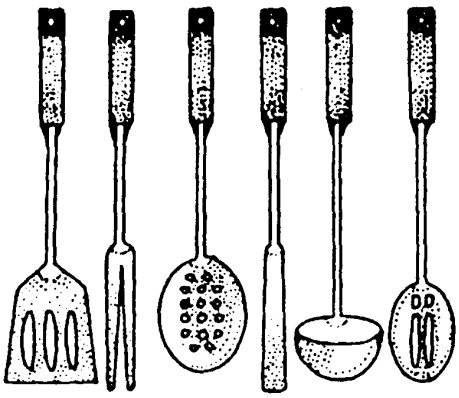
Serving Spoons

You could use a serving spoon (solid or perforated) instead of a scoop. Since these spoons are not identified by number, you must measure or weigh the quantity of food from the various sizes of spoons you use in order to obtain the approximate serving size you need. You may want to keep a list of the amount of food each size spoon holds as an aid for the staff serving the food.

Food Service

Even when food is ready to serve, food service staff must continue their efforts to maintain food quality and avoid food contamination.

- Maintain foods at proper temperatures before and during service. Hot foods must be 139 °F or above and cold foods must be at 40 °F or below. Use food thermometers to determine temperatures.
- Use correct serving utensils to get the correct portion size. Be consistent in portion sizes.
- Serve meals as a unit with only one meal served per child.
- Keep an accurate count of the number of children and adults you serve.
- Encourage a pleasant eating environment that will support mealtime as a learning experience.



Keep Food Fresh: Food Storage

In this section, you will find tips on:

- how to properly store your food; and
- how to keep food inventory records.

Storage Facilities

Good storage facilities – dry, frozen, and refrigerated – help keep food safe, fresh, and appetizing. Food products must be in excellent condition when they arrive at the receiving area. They must be kept that way as you store, prepare, and serve them.

Food must be kept dry and stored off the floor in dry storage areas. Cold refrigerated or frozen storage must maintain proper temperatures.

Guidelines for Proper Storage

- Examine all food upon delivery to be sure it is not spoiled, dirty, infested with insects or opened. Do not accept or use cans with bulges or without labels. Do not accept frozen foods that have started to thaw. Send these items back.

- Store all food off the floor on clean racks, dollies, or other clean surfaces. Pallets and dollies should be at least 6 inches off the floor to permit cleaning under them.

- Keep storage rooms clean, sanitary, and free from rodent infestations. Clean on a rotating schedule to ensure that regular cleaning is done on a consistent basis.

- Protect foods such as flour, cereals, cornmeal, sugar, dry beans, and dry peas from rodents and insects by storing them in tightly covered containers.

- Use foods on a "first-in, first-out" basis. Arrange foods so that older supplies will be used first. Label shelves if necessary.

Food Inventory Records

Keep accurate and up-to-date inventory records which include:

- date the food was ordered
- name of the supplier
- date received
- condition on arrival
- price paid
- amount left

These records are helpful in planning future food purchases and menus. Records on the cost of food are important for documenting the

non-profit foodservice and that all costs are allowable.

A sample inventory form is provided in the Reference Section of this guide. Use this form as a guide for determining the value of foods used during a reporting period. This may be obtained by taking a physical count of foods on hand (closing inventory), obtaining the value of these foods from invoices, and calculating the total value of food on hand.

Quantity x Unit Cost = Total Value

Take an inventory of any stock you have on hand at the beginning of Program operations as "beginning inventory." Beginning inventory of a given period should be the same as the ending inventory of the preceding period.

Cost of food used is the beginning inventory plus food received, minus the ending inventory. The dollar value of food received is obtained from the receipts or invoices for the reporting period.

Drive Dirt and Germs Out: Food Sanitation

In this section, you will find information on:

- some common sense rules on food sanitation; and
- tips on dishwashing, cleaning, and sanitizing.

Sanitation ensures a safe and clean environment for serving food to children. Proper cleaning can reduce the risk of foodborne illness.

Food Sanitation Rules

Follow these rules:

- **Wash hands** thoroughly with soap and warm running water for 20 seconds before handling food or utensils. **Wash hands** after each visit to the restroom, eating, touching the face or other body parts, blowing the nose (these also apply to children).

- **Wash hands** and **sanitize** utensils, cutting boards, and work surfaces thoroughly after each contact with raw eggs, fish, meats, and poultry. **Sanitize** between use for raw and cooked, or use separate plates or equipment (See page 67 for how to sanitize).

- Thoroughly rinse with water all fresh fruits and vegetables before cooking or serving. Do not use soap, as it can leave residue.

- Properly **clean** and **sanitize** serving and cooking utensils, and equipment.

- Handle serving utensils and plates without touching the eating surface.

- Use disposable plastic gloves, as required by local health codes. Use gloves for only one task and throw away – for example, if you touch other equipment, or handle money, etc.

- Keep hands off face and hair. Wash hands if touched.

- Wear clean uniforms and hair restraints.

- Food service staff with open cuts, sores, colds, or other communicable diseases should not prepare or serve food.

- Properly **clean** and **sanitize** all food preparation and service areas; wipe up spilled food immediately.

- Empty garbage cans daily. They should be kept tightly covered and thoroughly cleaned. Use plastic or paper liners.

- Meet health standards set by your State and local health department.

Cleanup

Give careful attention to cleanup procedures following food preparation and service. If you use disposable ware (dishes, trays, utensils, glasses, etc.), promptly and carefully remove the disposable items from the site. If you use permanent ware, you must make sure to wash and sanitize them after each use.

Dishwashing Procedures

Whether washing dishes by hand or by machine, minimum procedures include the following:

- Scrape and pre-rinse before washing.
- Wash with detergent solution in hot water.
    - If washing by hand, temperature should not be less than 110 °F or the temperature specified on the cleaning agent manufacturer's label.
    - If washing by machine, temperature should be between 150-165 °F, depending on the type of machine.
- Rinse with clear, hot water between 120 °F to 139 °F.
- Sanitize with a final rinse of at least 171 °F for 30 seconds or a final rinse containing a chemical sanitizing agent.
- Air dry on a clean rack.
- Store in a clean area, protected from contamination.

Cleaning and Sanitizing

In addition to the cleanup of disposable or permanent ware, you must properly clean and sanitize food preparation and service areas (equipment, floors, etc.). A cleaning schedule should be part of the overall work schedule to assure that the site is cleaned regularly. If serving meals outdoors, clean picnic tables, serving tables, or cover with disposable table cloths.

What's the difference between cleaning and sanitizing? Cleaning is removing food, grease, sauces, dirt and dust, etc., from a surface generally with a detergent and water. **Sanitizing** is the reduction of bacteria and viruses that may be on a surface with a special solution. Household bleach is a sanitizer that is inexpensive and is approved by your local health department. Make sure to sanitize food preparation areas, tables, countertops, cutting boards, drying racks, and sinks.

How to Sanitize

1. **Mix 1.5 teaspoons to 1 tablespoon** (do not exceed 1 tablespoon) of bleach to one gallon of **warm** water. Label mixture in a spray bottle. For maximum effectiveness, mix fresh bleach solution every day. Any leftover solution should be discarded at the end of the day.

2. Clean surface with warm soapy water.

3. Rinse with water.

4. Spray with sanitizing solution and wipe with paper towel(s).

5. Air dry (no need to rinse off the sanitizing solution).

For more information on cleaning and sanitizing, refer to the Reference Section. Additional resources include:

Serving it Safe http://teamnutrition.usda.gov/Resources/serving_safe.html.

Food Safety for Summer Food Service http://nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=73.

Take Precautions: Food Safety

In this section, you will find information on:

- the importance of food safety;
- safe food temperatures;
- food borne illnesses and E. coli; and
- cooking with microwave ovens.

Importance of Food Safety

What is food borne illness? Food borne illness is sickness that is caused by certain forms of bacteria and other disease agents that are present in our environment. Food handling errors made in food service institutions or at home may also cause food borne illness. Safe food is food that has little risk of causing food borne illness (food poisoning). Be sure to thoroughly clean hands, food contact surfaces, and fruits and vegetables. Meat and poultry should not be washed or rinsed. Some foods require special care to be sure they are safe to eat: eggs, meats, poultry, fish, shellfish, milk products, and fresh fruits and vegetables. Young children are at high risk of food borne illness so be especially careful to prepare and serve foods using food safety precautions.

Recent outbreaks of food borne illness have caused several children to get sick and even die from food containing *E. coli* bacteria. Read the *E. Coli Report* contained in this section. In general, children, pregnant women, the elderly, and those who have chronic illnesses, or compromised immune systems are most at risk for developing food borne illness. Proper food handling and cooking is the best way to prevent this from happening in your summer food service setting. It is also important to have a date marking system in place. A sample Standard Operating Procedure (SOP) for date marking ready-to-eat, potentially hazardous foods can be found in the Reference Section. If you suspect cases of food borne illness at your SFSP site(s), follow the procedures outlined in the Reference Section.

Keep Food Safe

Food borne illness is caused by bacteria that multiply rapidly within the Danger Zone (40 °F to 139 °F). It is important to keep food safe, that is, to keep the internal temperature of cooked foods that will be served hot at 139 °F or above. Foods served cold should be kept at 40 °F or below.

The cooking temperature depends on the food item (see page 79 for information on internal temperatures). Microwave heating requires the temperature to be 165 °F or higher. As soon as possible, but no longer than 2 hours after cooking, refrigerate (40 °F or less) leftovers in pans 2" deep or less to halt the growth of most, but not all, of the bacteria that may have contaminated the food after cooking. Never let perishable food remain any longer than necessary in the danger zone (40 °F to 139 °F). Freezing food at 0 °F or less can stop bacterial growth but will not kill

bacteria that are already there. Reheat foods at or above 165 °F to kill the bacteria.

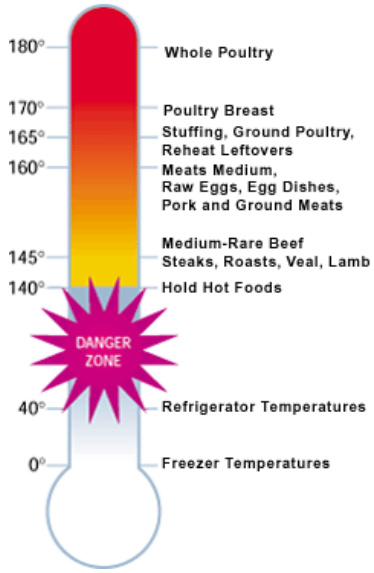
To prevent food contamination, be sure that everything that touches food during preparation and service is clean. Fresh fruits and vegetables also need to be clean. Wash fresh produce under cold running tap water to remove any lingering dirt. If there is a firm surface, such as on apples or potatoes, the surface can be scrubbed with a brush. Cut away any damaged or bruised areas. Meat and poultry should not be washed or rinsed. Use food thermometers while cooking, holding, and serving food. Also, place appliance thermometers in the refrigerator and oven.

Using a Food Thermometer

Using a food thermometer is the only sure way to tell if the food has reached a high enough temperature to destroy harmful bacteria. Always check the temperature of foods to make sure that they are thoroughly cooked (see page 72 for minimum temperatures).

- Use a metal-stemmed, numerically scaled thermometer, accurate to plus or minus 2 °F.
- Sanitize the thermometer before each use with a sanitizing solution (see page 67).
- Check the food temperature in several places, especially in the thickest parts.
- To avoid getting a false reading, be careful not to let the thermometer touch the pan, bone, fat or gristle.
- For poultry, insert the tip into the thick part of the thigh next to the body.

Below is a graphic of the temperature danger zone. For additional information, visit http://www.fsis.usda.gov/Fact_Sheets/Basics_for_Handling_Food_Safely/index.asp. An additional graphic can be found in the Reference Section.



Tips to Keep Your Food Safe

- Never serve unpasteurized juices, unpasteurized milk, fresh bean sprouts, or foods containing raw eggs.
- Clean food contact surfaces and fruits and vegetables.
- Separate raw, cooked, and ready-to-eat foods. Chill perishable food promptly and defrost food properly.
    - Defrost in the refrigerator, in cold water, or in the microwave. Never defrost food at room temperature! Food thawed in cold water or in the microwave should be cooked immediately. For more information, visit www.fightbac.org.
- Cook meat, poultry, fish, and shellfish until completely done. The internal temperature should be 165 °F, except for poultry (breast -170 °F; whole bird -180 °F).

- Heat leftovers to an internal temperature of 165 °F. Use leftovers only once, and then throw any remaining food away.
- Reheat sauces, soups, marinades, and gravies to a rolling boil.
- Wash your hands and the children's hands often – for 20 seconds with warm, soapy water (count to 30).
- Store raw meat, poultry, eggs, fish, and shellfish in containers on the bottom shelf of the refrigerator and away from other foods. Do not prepare these foods on the same surface that you use to prepare other foods.
- Never leave raw or cooked meat, poultry, eggs, dairy products, fish, or shellfish out at room temperature for more than 2 hours, 1 hour if air temperature is above 90 °F.
- Keep cold foods cold (at or below 40 °F) and hot foods hot (at or above 139 °F). Test temperatures with an instant-read thermometer.
- If you're not sure that food has been prepared, served, or stored safely, throw it out.

For more information, contact USDA's Meat and Poultry Hotline, 1-888-MPHotline (1-888-674-6854), or FDA's Food Information Line, 1-888-SAFE FOOD. You can also visit www.fsis.usda.gov/Food_Safety_Education/index.asp and www.fightbac.org.

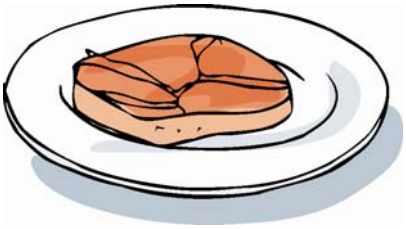
Minimum Safe Internal Temperatures for Hot Foods

Product	Internal Temperature
Poultry, stuffing, stuffed meats, stuffed pasta, casseroles, leftovers	165 ºF for 15 seconds
Pork, bacon	145 ºF for 15 seconds
Injected meats	155 ºF for 15 seconds
Ground or flaked meats including hamburger, ground pork, flaked fish (patties or sticks), sausage, gyros	155 ºF for 15 seconds*
Beef and pork roasts	145 ºF for 4 minutes*
Ham (a cured pork roast)	145 ºF for 4 minutes
Beef steaks, veal, lamb, commercially raised game animals	145 ºF for 15 seconds
Fish	145 ºF for 15 seconds
Shell eggs for immediate service	145 ºF for 15 seconds
Any potentially hazardous food cooked in a microwave oven	165 ºF for 15 seconds; Hold covered for 2 minutes after cooking to obtain temperature equilibrium
Fruits and vegetables to be served hot	139 ºF or above
Leftovers to be reheated (example: leftover spaghetti with meat sauce)	165 ºF for 15 seconds; Let food stand for 2 minutes after cooking
Convenience products that include a potentially hazardous food, such as hamburger patties, chicken nuggets, burritos, and pizza	165 ºF for 15 seconds
Ready-to-eat food taken from a commercially processed, hermetically sealed container or from an intact package (examples: hot dogs, chicken nuggets)	135 ºF (15 seconds)

*For alternative times and temperatures, see the FDA Food Code 2005 http://www.cfsan.fda.gov.

Do not serve wild game in FNS Child Nutrition Programs.
Wild game is not allowed for use in FNS Child Nutrition Programs.

Source: USDA Food and Nutrition Service with the National Food Service Management Institute. (2009). *Serving it safe trainer's guide (3rd ed)*. University, MS: Author.



Common Foodborne Illness from Bacteria

Clostridium Perfringens	**Cause**: From undercooked, leftover, or poorly cooled meat products, bacteria grow in the danger zone when food is left out at room temperature or food is reheated and served again. **Symptoms**: In 8 to 24 hours, diarrhea and gas pains, ending within 1 day.
Salmonella	**Cause:** Poor hand washing practices after using the bathroom; undercooked poultry or raw eggs; use of improperly sanitized utensils used previously on raw meat, poultry, or other foods. **Symptoms:** In 12 to 36 hours, diarrhea, fever, and vomiting, ending in 2 to 7 days.
Staphylococcus Aureus (Staph)	**Cause:** Usually from food handlers who are sick. They may sneeze or cough or have skin infections that come in contact with food. **Symptoms**: Within 2 to 8 hours after eating, vomiting and diarrhea lasting about 1 to 2 days.
Campylobacter Jejuni	**Cause:** Drinking untreated or unpasteurized milk; or eating raw or undercooked meat, poultry, or shellfish; or pets become infected and spread it to others. **Symptoms:** In 2 to 5 days, severe, even bloody diarrhea, cramping, fever, and headache lasting 2 to 7 days.
Clostridium Botulinum	**Cause:** From dented cans, loose jar lids, poorly processed canned foods. **Symptoms**: Within 12 to 48 hours, the nervous system reacts (double vision, difficulty speaking, swallowing, droopy eyelids). **Can be fatal if not treated.**

E. Coli Report

According to USDA's Food Safety and Inspection Service (FSIS):

- Children under the age of 5 are particularly susceptible to *E. coli 0157:H7* bacteria.
- While the bacteria can be spread through food, it can also be transmitted by person-to-person contact. Adults or children with diarrhea caused by *E. coli 0157:H7*, can easily spread the illness to others. It only takes a few *E. coli 0157:H7* bacteria to make people sick.
- *E. coli 0157:H7* has been most frequently linked to improperly cooked ground beef, but it has also been found in a variety of other foods including unpasteurized milk, unpasteurized apple cider and vegetables. It has also been traced to a variety of sites other than restaurants.
- Approximately 5 percent of those who become ill as a result of *E. coli 0157:H7*, especially children, progress to a life-threatening blood disorder called hemolytic uremic syndrome (HUS). About 15 percent of these patients die or suffer chronic kidney failure.

From USDA/FSIS, Food Safety Education Branch

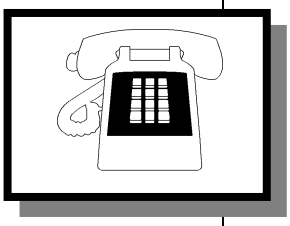
What You Can Do

One symptom of *E. coli 0157:H7* food poisoning is bloody diarrhea. The Centers for Disease Control and Prevention (CDC) notes that young children and their playmates that are not toilet trained are especially likely to spread the infection. Medical treatment for the child is necessary. Consult the health department for advice on preventing the spread of infection if a child develops bloody diarrhea.

Proper hand washing procedures for both food preparers and children are extremely important. **For children:** careful hand washing with soap and warm water for 20 seconds will reduce the risk of spreading the infection. **For young children, frequent supervised hand washing with soap is particularly important. Children should always wash their hands before eating.**

For food preparers: wash your hands with warm soapy water for 20 seconds (count to 30) before you handle food or food utensils. Wash your hands after handling or preparing food, especially after handling raw meat, poultry, fish, shellfish, or eggs. Right after you prepare these raw foods, clean the utensils and surfaces you used with hot soapy water. Replace cutting boards once they have become worn or develop hard-to-clean grooves. Wash raw fruits and vegetables under running water before eating. Use a vegetable brush to remove surface dirt if necessary. Always wash your hands after using the restroom.

USDA is committed to ongoing modernizing and improving of the Federal inspection systems for meat and poultry, while the Food and Drug Administration (FDA) has responsibility for seafood inspections and safety. However, since foods are not sterile and need to be handled with care at all links in the food safety chain; your help is needed to assure food safety.



Federal Government Food Safety Hotlines

Questions about food safety and sanitation?

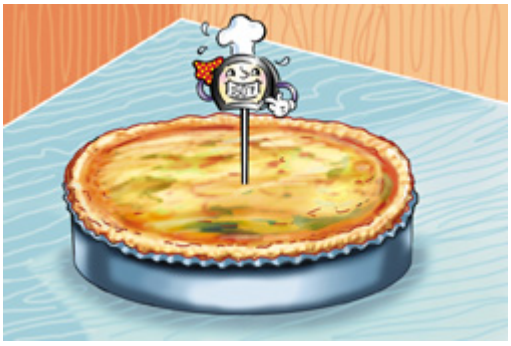
For inquiries about meat and poultry:
Call **USDA's Meat and Poultry Hotline** at
1-888-MPHotline (1-888-674-6854)
TTY: 1-800-256-7072
10 a.m. to 4 p.m. weekdays, Eastern Time
(Recorded food safety messages are available 24 hours a day)
website:
http://www.fsis.usda.gov/Food_Safety_Education/USDA_Meat_&_Poultry_Hotline/index.asp Questions via e-mail:
mphotline.fsis@usda.gov
For inquiries about seafood, food safety, nutrition, labeling, additives, and biotechnology:
Call: Food and Drug Administration,
Center for Food Safety and Applied Nutrition
Outreach Information Center
1-888-SAFEFOOD (1-888-723-3366)
10 a.m. to 4 p.m. weekdays, Eastern Time
(Recorded informational messages are available 24 hours a day)
website: www.cfsan.fda.gov
Other sources of food safety information:
www.FoodSafety.gov, www.FightBac.org

Microwave Cooking

Some summer food service sponsors are making use of microwave cooking in kitchens. Microwave ovens heat the surfaces of food quickly, but leave food with "cold spots" that could support the growth of harmful bacteria. It is recommended that large cuts of meat **not** be prepared in the microwave.

It is important to become familiar with the manufacturer's information so that food cooks thoroughly and evenly in the microwave. In addition, follow these microwave safety tips:

- Cover food to hold in moisture, cook evenly, and keep microwave clean.
- If microwave does not have a turntable, stir food several times during heating.
- Allow food cooked in the microwave to stand covered for 2 minutes after heating.
- Check the internal temperature of food in several places to verify that food has reached a safe internal temperature of 165 °F in all parts of food.



Approximate Storage Life in Days of Refrigerated Foods

The information in this chart is intended as guidelines. Harvesting techniques, manufacturing processes, transportation and distribution conditions, the nature of the food, and storage temperature and conditions may impact storage life.

Item	32-35 ºF	35-45 ºF	45-55 ºF	Remarks
Apples, red Delicious, Washington[d, h, o]	---	7 – 21	---	
Bacon, slab slice[d, h]	---	7	---	
Bananas, green[a, p]	---	---	---	7-10 @ 56 ºF
Bananas, ripe[a, p]	---	---	---	3-4 @ 56-58 ºF
Beef, ground[d, j]	---	1 – 2	---	
Berries, strawberries[d]	---	1 – 2	---	
Berries, blueberries[d]	---	1 – 2	---	
Bologna[d]	---	3 – 5	---	
Broccoli[d]	---	3 – 5	---	
Brussel sprouts[a]	21 – 35	---	---	
Butter[h]	---	7 – 14	---	
Cabbage, early[d]	---	3 – 5	---	
Cabbage, late[d]	---	3 – 5	---	
Cantaloupe, hard ripe[d, h, q]	---	7	---	
Cantaloupe, full slip[d, h]	---	7	---	
Carrots, mature topped[a, r]	120 – 150	---	---	
Catsup, foil pouch[a, s]	---	365	270	
Cauliflower[d, r]	---	7	---	
Celery[d, h]	---	7 – 14	---	
Cheese, Cheddar[a, b]	365	---	---	
Cheese, Cheddar, shredded[a, b]	180	---	---	
Cheese, Cheddar, reduced fat loaves[b]	150	---	---	
Cheese, Cheddar, reduced fat shredded[b]	150	---	---	
Cheese, cottage[h]	---	5	---	
Cheese, Cream[i]	---	7	---	
Cheese, Mozzarella, loaves[b]	---	---	---	365 @ 20 ºF
Cheese, Mozzarella, lite & shredded[b]	---	---	---	150 @ 20 ºF
Cheese, process, American, loaves[b]	365	---	---	

Reference: Choice Plus: Food Safety Supplement http://www.nfsmi.org/documentLibraryFiles/PDF/20080206043207.pdf.

Approximate Storage Life in Days of Refrigerated Foods

The information in this chart is intended as guidelines. Harvesting techniques, manufacturing processes, transportation and distribution conditions, the nature of the food, and storage temperature and conditions may impact storage life.

Item	32-35 ºF	35-45 ºF	45-55 ºF	Remarks
Cheese, process, American, sliced[a, b, i]	180	---	---	
Cheese, process, American, shredded[b]	150	---	---	
Cheese, Parmesan[h]	---	60	---	
Cheese, blend, slices[b]	210	---	---	
Cheese, blend, loaves[b]	270	---	---	
Cucumbers[d]	---	7	---	
Dip, sour cream, commercially made[d]	---	14	---	
Dressing, French[a]	---	---	90	
Eggs, fresh in shell[h]	---	14 – 21	---	
Frankfurters, bulk pack[h]	---	4 – 5	---	
Grapes[h]	---	3 – 5	---	
Ham, boneless, cooked[d, h, i]	---	7	---	
Ham, smoked[d, i]	---	7	---	
Honeydew melon[h]	---	7	---	
Jams, jellies, preserves, cup[a, s]	---	---	180	
Jams, jellies, preserves, foil pouch[a, s]	---	---	365	
Lettuce, Iceberg, wrapped[a]	21 – 42	---	---	
Lettuce, Iceberg, naked[a]	14 – 21	---	---	
Lettuce, Iceberg, table ready[a]	5 – 7	---	---	
Lettuce, Romaine[h]	5 – 7	---	---	
Lemons[h]	---	3 – 5	---	
Margarine[a]	90	60	---	
Milk, buttermilk[d, t]	---	7 – 14	---	
Milk, chocolate flavored[a, t]	10	---	---	
Milk, cream, light or half & half, UHT processed[d]	---	21 – 28	---	
Milk, cream heavy or whipping[d]	---	7	---	
Milk, fluid pasteurized[i, t]	---	5 – 7	---	
Milk, ice cream or shake mix[a, t]	10	---	---	

Reference: Choice Plus: Food Safety Supplement
http://www.nfsmi.org/documentLibraryFiles/PDF/20080206043207.pdf.

Approximate Storage Life in Days of Refrigerated Foods (continued)

The information in this chart is intended as guidelines. Harvesting techniques, manufacturing processes, transportation and distribution conditions, the nature of the food, and storage temperature and conditions may impact storage life.

Item	32-35 ºF	35-45 ºF	45-55 ºF	Remarks
Onions, green[a]	10	---	---	
Oranges, CA, AZ[h]	---	3 – 5	---	
Oranges, FL, TX[h]	---	3 – 5	---	
Oranges, Temple, tangelo[h]	---	3 – 5	---	
Orange juice[d]	---	7	---	
Parsley[a]	30 – 60	---	---	
Pears[a, h, u]	---	3 – 5	---	
Peppers, sweet[d]	---	7	---	
Plums[h]	---	3 – 5	---	
Potatoes, sweet[a, v]	---	---	---	90-120 days @ 50-60 ºF
Radishes, poly bag[h]	---	7 – 14	---	
Salad dressing, all[a]	180	120	90	
Sour cream[h]	---	14 – 21	---	
Spinach[h]	---	3 – 5	---	
Squash, Fall, Winter, Hubbard[a, w]	---	---	180	
Squash, Summer[a]	---	---	10 – 14	
Tangerines[h]	---	3 – 5	---	
Tomatoes, mature green[a]	---	---	---	14-21 days @ 55-60 ºF
Tomatoes, pink[d]	---	3 – 5	---	
Tomatoes, firm ripe[h]	---	1 – 2	---	
Tomatoes, full color[h]	---	1 – 2	---	
Watermelon[d, h]	---	7	---	
Whipped topping, aerosol can[d]	---	21	---	
Whipped topping prepared from mix[d, h]	---	3	---	
Whipped topping purchased frozen & thawed[d, h]	---	14	---	
Yogurt, plain or fruit flavored[h]	---	7 – 10	---	

Reference: Choice Plus: Food Safety Supplement
http://www.nfsmi.org/documentLibraryFiles/PDF/20080206043207.pdf.

[a]TM 38-400/NAVSUP PUB 572/AFMAN 23-210 MCO 4450. 14/DLAM 4145.12. *Joint Service Manual for Storage and Materials Handling* (Section IV, Subsistence. 5-17). In *Perishable Subsistence, Chilled and Frozen Storage*. (n.d.). Washington, DC: Department of Defense.
[b]USDA/AMS (1998). *Best If Used by Date for Commodities*. (Based on DOD 4145. 19-R-1). Washington, DC.
[c]Penner, Karen P. (1990). *Cupboard Approximate Storage Times*. Manhattan, KS: Kansas State University.
[d]Penner, Karen P. (1990). *Refrigerator/Freezer Approximate Storage Times*. Manhattan, KS: Kansas State University.
[e]Will harden at high temperature, mold at low temperature.

[f]Garlitz, Carol J., Boor, K., and York, G.K. (1990). *Freezer Storage: Quality for Now and Later*. University of California Cooperative Extension Service Publication 21472.
[g]Garlitz, Carol J., Boor, K., and York, G.K. (1990). *Cupboard Storage: Quality for Now and Later*. University of California Cooperative Extension Service Publication 21473.
[h]Garlitz, Carol J., Boor, K., and York, G.K. (1990). *Refrigerator Storage: Quality for Now and Later*. University of California Cooperative Extension Service Publication 21474.
[i]National Food Service Management Institute. (2000). *Inventory Management for Child Nutrition Programs*. University, MS: Author.
[j]Serve Safe Course Book. (1999). Chicago: National Restaurant Association Educational Foundation.
[k]Fialkow, Gail. (n.d.) *Canned Good Shelf Life and Stamped Code Decoder*. Retrieved April 18, 2002, from http://www.y2kkitchen.com/html/can-can-code-decoder.html.
[l]Highly susceptible to damage by moisture.
[m]Humidity above 90% will cause caking. (Caked salt is useable.)
[n]Cream-style soups break down when frozen but are not spoiled.
[o]The length of time apples can be held successfully in cold storage at 32 to 35 ºF will vary with the variety and with the district or state where grown, as well as with their condition when harvested. Controlled atmosphere can extend storage life an additional 2 to 4 months.
[p]Temperature below 56 to 58 ºF causes chill injury.
[q]Chill damage will result if stored at lower temperature than indicated.
[r]This item keeps better unwashed.
[s]Keeping time in dry storage (above 55 ºF) is less than 3 months.
[t]Imperfect seals will reduce shelf life.
[u]If stored at 30 to 31 ºF immediately after harvest the shelf life is as follows: Anjou – 4 to 6 month, Bartlett and Comice – 2 to 3 months, Bosc – 3 to 4 months. If Anjou, Bartlett, Comice and Bosc Pears are stored in polyethylene liners, the shelf life can be extended an additional 1 to 2 months.
[v]Chill injury if stored below 50 ºF.
[w]Cold sensitive below 50 ºF.

Frozen Food Storage

The information in this chart is intended as guidelines. Harvesting techniques, manufacturing processes, transportation and distribution conditions, the nature of the food, and storage temperature and conditions may impact storage life.

Item	Approximate storage life in months from date of pack to consumption
Apple slices[d]	8 to 12
Apple juice concentrate[d, f]	12
Apricots[f]	12
Bacon, slab sliced non-vacuum pack[j]	1/2
Beans, green[d]	8 to 12
Beef, ground bulk[d, j]	3 to 4
Beef, ground patties[b, i]	4
Beef, roast[j]	6 to 9
Blackberries[d]	8 to 12
Blackberry/Raspberry puree[b]	18
Blueberries[d]	8 to 12
Bologna[j]	2 weeks
Bread dough[d, f]	1
Bread, baked yeast[d]	2
Broccoli[f]	8
Brussel sprouts[f]	8
Burritos[a]	9
Butter[f]	6 to 9
Cakes, all types frosted[d]	1
Cakes, all types unfrosted[f]	1
Carrots[d]	8 to 12
Cauliflower[d]	8 to 12
Cherries, dark and sweet pitted[f]	12
Cheese, pizza blend, shredded[d]	6 to 8
Chicken nuggets or patties[f, i]	3
Chicken, cooked, diced[f]	3
Chicken parts, cooked, breaded[f]	3
Chicken leg quarters[b]	8
Chicken, cut up[b]	8
Cookie dough[d]	3
Corn[f]	8
Corn on the cob[f]	8

Reference: Choice Plus: Food Safety Supplement
http://www.nfsmi.org/documentLibraryFiles/PDF/20080206043207.pdf.

Frozen Food Storage (continued)

The information in this chart is intended as guidelines. Harvesting techniques, manufacturing processes, transportation and distribution conditions, the nature of the food, and storage temperature and conditions may impact storage life.

Item	Approximate storage life in months from date of pack to consumption
Egg roll[a]	6
Eggs, whole including table grade[a, b, d, f, i]	12
Egg whites[a, d, f]	12
Egg yolks, sugar or salt added[a, d, f]	12
Enchiladas[a]	9
Fish fillets – lean: cod, haddock, flounder[j]	3 to 6
Fish sticks and portions[f]	12
Frankfurters, bulk pack[j]	2 weeks
Grape juice concentrate[d, f]	12
Grapefruit juice concentrate[d, f]	12
Grapefruit – orange concentrate[d, f]	12
Grapefruit sections[d]	4 to 6
Greens, leafy[f]	8
Hams[j]	2 weeks
Ice cream or sherbet[f]	2
Ice cream, novelties[f]	2
Lemonade, concentrated[a]	24
Margarine[d, f]	12
Okra[f]	8
Onion rings, french fried and raw[f]	8
Orange juice concentrate[d, f]	12
Orange juice single service carton[b]	9
Peaches[f]	12
Peaches, individual cup[f]	12
Peas, black eyed[f]	8
Peas, green[f]	8
Peas and carrots[f]	8
Pepperoni[a]	12
Peppers[f]	8
Pies, fruit filled, unbaked[d]	2 to 4
Pies, fruit filled, baked[c]	6 to 8
Pineapple juice concentrate[d, f]	12

Reference: Choice Plus: Food Safety Supplement http://www.nfsmi.org/documentLibraryFiles/PDF/20080206043207.pdf.

Frozen Food Storage (continued)

The information in this chart is intended as guidelines. Harvesting techniques, manufacturing processes, transportation and distribution conditions, the nature of the food, and storage temperature and conditions may impact storage life.

Item	Approximate storage life in months from date of pack to consumption
Pizza[a]	6
Pizza shells[a]	6
Pork, barbecued[a]	12
Pork cutlets, boneless restructured[a]	9
Pork chops[d]	3 to 4
Pork, diced or sliced [a]	9
Pork, ground[j]	2
Potatoes, french fries[f]	8
Potatoes, hash browns[f]	8
Ravioli[a]	6
Salmon nuggets[b]	6
Sausage, pork, bulk style[b]	3
Sausage, pork patties[d]	1 to 2
Sausage, precooked, polish or Italian[a]	9
Sausage, pork and beef, precooked[a]	9
Sausage, smoked[d]	1 to 2
Spinach, chopped[f]	8
Squash, summer and fall[f]	8
Strawberries[d]	8 to 12
Succotash[f]	8
Tortillas, corn or wheat[a]	12
Turkey, boneless, cooked[f]	3
Turkey, boneless, raw[a, d]	6
Turkey, ground[b]	3
Turkey, whole ready to cook[a, b]	9
Vegetables, mixed[f]	8
Waffles[d]	1

Reference: Choice Plus: Food Safety Supplement http://www.nfsmi.org/documentLibraryFiles/PDF/20080206043207.pdf.

[a]TM 38-400/NAVSUP PUB 572/AFMAN 23-210 MCO 4450. 14/DLAM 4145.12. *Joint Service Manual for Storage and Materials Handling* (Section IV, Subsistence. 5-17). In *Perishable Subsistence, Chilled and Frozen Storage*. (n.d.). Washington, DC: Department of Defense.
[b]USDA/AMS (1998). *Best If Used by Date for Commodities*. (Based on DOD 4145. 19-R-1). Washington, DC.
[c]Penner, Karen P. (1990). *Cupboard Approximate Storage Times*. Manhattan, KS: Kansas State University.
[d]Penner, Karen P. (1990). *Refrigerator/Freezer Approximate Storage Times*. Manhattan, KS: Kansas State University.
[e]Will harden at high temperature, mold at low temperature.
[f]Garlitz, Carol J., Boor, K., and York, G.K. (1990). *Freezer Storage: Quality for Now and Later*. University of California Cooperative Extension Service Publication 21472.

[g]Garlitz, Carol J., Boor, K., and York, G.K. (1990). *Cupboard Storage: Quality for Now and Later*. University of California Cooperative Extension Service Publication 21473.
[h]Garlitz, Carol J., Boor, K., and York, G.K. (1990). *Refrigerator Storage: Quality for Now and Later*. University of California Cooperative Extension Service Publication 21474.
[i]National Food Service Management Institute. (2000). *Inventory Management for Child Nutrition Programs*. University, MS: Author.
[j]Serve Safe Course Book. (1999). Chicago: National Restaurant Association Educational Foundation.
[k]Fialkow, Gail. (n.d.) *Canned Good Shelf Life and Stamped Code Decoder*. Retrieved April 18, 2002, from http://www.y2kkitchen.com/html/can-can-code-decoder.html.
[l]Highly susceptible to damage by moisture.
[m]Humidity above 90% will cause caking. (Caked salt is useable.)
[n]Cream-style soups break down when frozen but are not spoiled.
[o]The length of time apples can be held successfully in cold storage at 32 to 35 ºF will vary with the variety and with the district or state where grown, as well as with their condition when harvested. Controlled atmosphere can extend storage life an additional 2 to 4 months.
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[v]Chill injury if stored below 50 ºF.
[w]Cold sensitive below 50 ºF.

Keep These Food Safety Rules in Mind

- Keep hot foods HOT! (Keep food at 139 °F or above). Maintain proper holding temperatures of 139 °F or above.
- Keep cold foods COLD! (Refrigerate or chill food at 40 °F or below)
- Keep frozen food in a freezer at 0 °F or lower.
- Be sure thermometers are available and use them properly.
- Cook potentially hazardous foods to proper internal temperatures. Use a meat thermometer.
- Do not partially cook food one day and complete cooking the next day.
- Prepare sandwiches and salads with a minimum amount of handling. Follow local health regulations for using disposable plastic gloves.
- Promptly refrigerate or freeze leftovers. Divide large quantities into smaller containers or use shallow pans, and cover loosely for quick cooling. Once cooled, tightly cover and date leftovers.
- Reheat leftovers to at least 165 °F.
- Thaw poultry and meat in a refrigerator and not on counters. Refreeze only if ice crystals are still present.
- Do not let perishable food remain at room temperature between 40 °F and 139 °F any longer than possible.
- Keep meals and milk not being served at the time in the refrigerator or cooler at a temperature of 40 °F or below. Hot meals should be in a warming unit or insulated box at a holding temperature of 139 °F or more.
- Empty garbage cans daily. They should be kept tightly covered and thoroughly cleaned. Use plastic or paper liners.
- Remember that you cannot determine food safety by sight, taste, odor, or smell. If there is *any* doubt, throw the food away.
- Follow instructions exactly on how to use and clean kitchen equipment.
- Train food service employees on the safe use of all types of equipment and on personal hygiene.
- Keep a fire extinguisher and first-aid kit handy and instruct all personnel in their use.

FOOD SAFETY CHECKLIST

Date_____Observer_____

Directions: Use this checklist daily. Determine areas in your operations requiring corrective action. Record corrective action taken and keep completed records in a notebook for future reference.

PERSONAL HYGIENE	Yes	No	Corrective Action
• Employees wear clean and proper uniform including shoes.	☐	☐	_____
• Effective hair restraints are properly worn.		☐	☐
_____			
• Fingernails are short, unpolished, and clean (no artificial nails).	☐	☐	_____
• Jewelry is limited to a plain ring, such as wedding band and a watch and no bracelets.	☐	☐	_____
• Hands are washed properly, frequently, and at appropriate times.	☐	☐	_____
• Burns, wounds, sores or scabs, or splints and water-proof bandages on hands are bandaged and completely covered with a foodservice glove while handling food.	☐	☐	_____
• Eating, drinking, chewing gum, smoking, or using tobacco is allowed only in designated areas away from preparation, service, storage, and ware washing areas.	☐	☐	_____
• Employees use disposable tissues when coughing or sneezing and then immediately wash hands.	☐	☐	_____
• Employees appear in good health.	☐	☐	_____
• Hand sinks are unobstructed, operational, and clean.	☐	☐	_____
• Hand sinks are stocked with soap, disposable towels, and warm water.	☐	☐	_____
• A handwashing reminder sign is posted.	☐	☐	_____
• Employee restrooms are operational and clean.	☐	☐	_____

FOOD PREPARATION	Yes	No	Corrective Action
• All food stored or prepared in facility is from approved sources.	☐	☐	_____
• Food equipment utensils, and food contact surfaces are properly washed, rinsed, and sanitized before every use.	☐	☐	_____
• Frozen food is thawed under refrigeration, cooked to proper temperature from frozen state, or in cold running water.	☐	☐	_____
• Thawed food is not refrozen.	☐	☐	_____
• Preparation is planned so ingredients are kept out of the temperature danger zone to the extent possible.	☐	☐	_____
• Food is tasted using the proper procedure.	☐	☐	_____
• Procedures are in place to prevent cross-contamination.	☐	☐	_____
• Food is handled with suitable utensils, such as single use gloves or tongs.	☐	☐	_____

Food Safety Checklist, continued

Action	Yes	No	Corrective
• Food is prepared in small batches to limit the time it is in the temperature danger zone.	☐	☐	_____
• Clean reusable towels are used only for sanitizing equipment and surfaces and not for drying hands, utensils, or floor.	☐	☐	_____
• Food is cooked to the required safe internal temperature for the appropriate time. The temperature is tested with a calibrated food thermometer.	☐	☐	_____
• The internal temperature of food being cooked is monitored and documented.	☐	☐	_____

HOT HOLDING	Yes	No	Corrective Action
• Hot holding unit is clean.	☐	☐	_____
• Food is heated to the required safe internal temperature before placing in hot holding. Hot holding units are not used to reheat potentially hazardous foods.	☐	☐	_____
• Hot holding unit is pre-heated before hot food is placed in unit.	☐	☐	_____
• Temperature of hot food being held is at or above 135 ^{o}F.	☐	☐	_____
• Food is protected from contamination.	☐	☐	_____

COLD HOLDING	Yes	No	Corrective Action
• Refrigerators are kept clean and organized.	☐	☐	_____
• Temperature of cold food being held is at or below 41 ^{o}F.	☐	☐	_____
• Food is protected from contamination.	☐	☐	_____

REFRIGERATOR, FREEZER, AND MILK COOLER	Yes	No	Corrective Action
• Thermometers are available and accurate.	☐	☐	_____
• Temperature is appropriate for pieces of equipment.	☐	☐	_____
• Food is stored 6 inches off floor or in walk-in cooling equipment.	☐	☐	_____
• Refrigerator and freezer units are clean and neat.	☐	☐	_____
• Proper chilling procedures are used.	☐	☐	_____
• All food is properly wrapped, labeled, and dated.	☐	☐	_____
• The FIFO (First In, First Out) method of inventory management is used.	☐	☐	_____
• Ambient air temperature of all refrigerators and freezers is monitored and documented at the beginning and end of each shift.	☐	☐	_____

Food Safety Checklist, continued

FOOD STORAGE AND DRY STORAGE	Yes	No	Corrective Action
• Temperatures of dry storage area is between 50 °F and 70 °F or State public health department requirement.	☐	☐	_____
• All food and paper supplies are stored 6 to 8 inches off the floor.	☐	☐	_____
• All food is labeled with name and received date.	☐	☐	_____
• Open bags of food are stored in containers with tight fitting lids and labeled with common name.	☐	☐	_____
• The FIFO (First In, First Out) method of inventory management is used.	☐	☐	_____
• There are no bulging or leaking canned goods.	☐	☐	_____
• Food is protected from contamination.	☐	☐	_____
• All food surfaces are clean.	☐	☐	_____
• Chemicals are clearly labeled and stored away from food and food-related supplies.	☐	☐	_____
• There is a regular cleaning schedule for all food surfaces.	☐	☐	_____
• Food is stored in original container or a food grade container.	☐	☐	_____

CLEANING AND SANITIZING	Yes	No	Corrective Action
• Three-compartment sink is properly set up for ware washing.	☐	☐	_____
• Dishmachine is working properly (such as gauges and chemicals are at recommended levels).	☐	☐	_____
• Water is clean and free of grease and food particles.	☐	☐	_____
• Water temperatures are correct for wash and rinse.	☐	☐	_____
• If heat sanitizing, the utensils are allowed to remain immersed in 171 °F water for 30 seconds.	☐	☐	_____
• If using a chemical sanitizer, it is mixed correctly and a sanitizer strip is used to test chemical concentration.	☐	☐	_____
• Smallware and utensils are allowed to air dry.	☐	☐	_____
• Wiping cloths are stored in sanitizing solution while in use.	☐	☐	_____

UTENSILS AND EQUIPMENT	Yes	No	Corrective Action
• All small equipment and utensils, including cutting boards and knives, are cleaned and sanitized between uses.	☐	☐	_____
• Small equipment and utensils are washed, sanitized, and air-dried.	☐	☐	_____
• Work surfaces and utensils are clean.	☐	☐	_____
• Work surfaces are cleaned and sanitized between uses.	☐	☐	_____

Food Safety Checklist, continued

	Yes	No	Corrective Action
• Thermometers are cleaned and sanitized after each use.	☐	☐	_____
• Thermometers are calibrated on a routine basis.	☐	☐	_____
• Can opener is clean.	☐	☐	_____
• Drawers and racks are clean.	☐	☐	_____
• Clean utensils are handled in a manner to prevent contamination of areas that will be in direct contact with food or a person's mouth.	☐	☐	_____

LARGE EQUIPMENT	Yes	No	Corrective Action
• Food slicer is clean.	☐	☐	_____
• Food slicer is broken down, cleaned, and sanitized before and after every use.	☐	☐	_____
• Boxes, containers, and recyclables are removed from site.	☐	☐	_____
• Loading dock and area around dumpsters are clean and odor-free.	☐	☐	_____
• Exhaust hood and filters are clean.	☐	☐	_____

GARBAGE STORAGE AND DISPOSAL	Yes	No	Corrective Action
• Kitchen garbage cans are clean and kept covered.	☐	☐	_____
• Garbage cans are emptied as necessary.	☐	☐	_____
• Boxes and containers are removed from site.	☐	☐	_____
• Loading dock and area around dumpster are clean.	☐	☐	_____
• Dumpsters are clean.	☐	☐	_____

PEST CONTROL	Yes	No	Corrective Action
• Outside doors have screens, are well-sealed, and are equipped with a self-closing device.	☐	☐	_____
• No evidence of pests is present.	☐	☐	_____
• There is a regular schedule of pest control by a licensed pest control operator.	☐	☐	_____

Source: National Food Service Management Institute. (2009). *Serving it safe training resource*. University, MS: Author. http://www.nfsmi.org/documentlibraryfiles/PDF/20100204085529.pdf

Questions and Answers

1. **I have to hire staff to operate the kitchen. What are some of the things I have to take into consideration?**

   Before you hire your meal service staff, you will have to first determine the number and the type of meals you will be serving and consider the budget amount you will have at your disposal. From there, you can determine how many staff you need to hire. Take into consideration their experience, and don't be afraid to utilize qualified volunteers in your operations. Also make sure they meet health standards outlined by your local and State authorities. Once you have selected your food service employees, ensure they understand, as a minimum, the goals of the SFSP, the meal pattern requirements, the importance of serving meals that meet the Dietary Guidelines and food safety and sanitation rules. Refer to page 47 for more information. You can contact your State administering agency for training resources.

2. **I want to get the most for my food dollar. How can I accomplish that?**

   Careful planning and buying are the keys to getting the most from your food dollar. Getting good quality food in the proper amounts at the best possible price is what it's all about! Buy food from suppliers who provide the best quality product and offer food that will help you meet the Dietary Guidelines, and at a reasonable price. When deciding what to buy read the labels carefully, buy federally inspected meats and poultry, check packaging and expiration dates, purchase only pasteurized milk and milk products and juice and make sure perishable foods have been kept under refrigeration and that frozen food has been kept frozen. Review your cycle menu to see what recipes you'll use and the items needed. Check your inventory and be sure to follow a grocery list when you make your purchases. USDA's *Food Buying Guide for Child Nutrition Programs* will help you determine the quantities of food to purchase.

3. **Do you have any tips on how to prepare quality meals for the children?**

   How you prepare your food plays a big part in serving nutritious and acceptable meals. When using standardized recipes, follow them exactly. When preparing fresh fruits and vegetables, wash

them in water and carefully trim away any bruised or inedible spots. Steam or cook in small batches to retain most of their vitamins and minerals. Trim visible fat from meats when preparing them for cooking. Don't overcook cereals and grains, and don't over-season foods: remember children's taste buds are more sensitive than adults'.

4. How can I determine how much food to give to a child?

By using scoops, ladles, and serving spoons of standard sizes, you can provide dependable measures of food items which will ensure the children are getting the proper amount of food as outlined in the SFSP meal pattern requirements. Scoops can be used for portioning such foods as drop cookies, muffins, meat patties and also some ready to eat vegetables and salads. Use ladles to serve soups, stews, sauces and other similar products. Serving spoons can be used instead of a scoop. However, you must measure or weigh the quantity of food from the various sizes of spoons you use in order to determine the serving size you need. Further, train your kitchen staff to recognize and use the proper serving size spoons, scoops and ladles and provide a sample plate containing the proper amounts of foods for that day's meal service. Keep in mind that each child should be served a complete meal that contains the necessary food components to make up a reimbursable meal.

5. How should I store the foods I purchase?

Proper storage will keep the foods you buy safe, fresh, and appetizing. Check the condition of all foods once they reach your receiving area, and store them in the proper environment. Dry foods must be stored in a dry area, off of the floor, and refrigerated/frozen foods must be stored in refrigerators or freezers under the proper temperatures. It is important to keep all food storage areas orderly, clean, sanitary, and free from rodent or insect infestation, and to rotate your foods on a "first-in, first out" basis. Keeping inventory records will also help you in knowing what foods you have on hand, what you'll need to buy, as well as tracking food costs.

6. I want to be sure I maintain a clean kitchen. How can I accomplish this?

Proper sanitation will go a long way in preventing or reducing the risk of food borne illnesses. Washing hands thoroughly with warm, soapy water before handling foods or utensils is absolutely necessary. You should wash and sanitize all dishes, utensils, equipment and work surfaces. Wearing clean uniforms and hairnets,

using disposable gloves, and adhering to local and state health codes are important things to keep in mind. Be sure to immediately clean up any spilled foods, and empty garbage cans daily. Make sure those cans have covers and are lined with plastic or paper.

7. Do I need to be concerned with food safety?

Yes! It is extremely important for you to take every precaution against food borne illness, a sickness spread by bacteria growing in food that has not been properly handled. Food stored, cooked, held, or handled at improper temperatures allow bacteria to grow to dangerous levels. The best way to combat food borne illness is to make sure foods are stored, handled, and cooked at the right temperature, and making sure cold foods are kept cold (at or below 40 °F), and that hot foods are kept hot (at 139 °F or above). Never let perishable foods remain in the danger zone temperature (40 °F to 139 °F) any longer than necessary. Ensure that all food preparation surfaces and utensils are clean at all times, and use food thermometers to check foods when cooking, handling, and serving food. USDA has a Meat and Poultry Hotline (1-888-674-6854) that you can call to get more information on food safety. The Food and Drug Administration also has a hotline with food safety information, which is handled by the Center for Food Safety and Applied Nutrition: 1-888-SAFEFOOD (1-888-723-3366).

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MyPlate

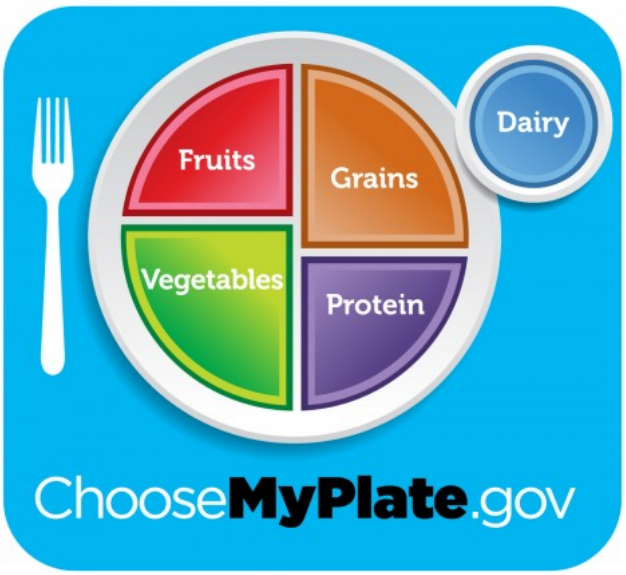
MyPlate Food Guidance System

The U.S. Department of Agriculture has packaged recommendations from the 2010 *Dietary Guidelines for Americans* into the *MyPlate* Food Guidance System. USDA's new *MyPlate* food guidance system is comprised of the new *MyPlate* symbol and other materials to help Americans make healthy food choices and to be active every day. *MyPlate* was designed to provide many options to help Americans make healthy food choices and to be active every day. The recommendations in *MyPlate* are for the general public over 2 years of age. *MyPlate* is not a therapeutic diet for any specific health condition. Individuals with a chronic health condition should consult with a health care provider to determine what dietary pattern is appropriate for them.

Archived *MyPyramid* for Kids posters and lesson plans are still available for use. They can be accessed at the *MyPlate* website. These resources help remind kids to be physically active every day, or most days, and to make healthy food choices.

For more detailed information about *MyPlate*, as well as promotional materials, go to choosemyplate.gov.

Reference: www.choosemyplate.gov



SFSP Meal Pattern – Points to Remember

Keep in mind the following points when you plan menus to meet meal pattern requirements and the Dietary Guidelines recommendations.

Meat and Meat Alternates

- For menu variety, serve:
  - Meat and cheese in combination (1 ounce of meat and 1 ounce of cheese - 2 ounces total).
  - Dried beans or peas (Remember: do not count for vegetable **and** meat alternate in the same meal).
  - Peanut butter or other nut butters, such as almond butter. (It is not recommended to use only peanut butter to meet the meat/meat alternate requirement for lunch or supper since a sandwich made with 4 Tbsp. of peanut butter is usually too thick and difficult for children to consume.)

- Nuts and seeds may fulfill:
  - full requirement for the snack, but
  - no more than one-half of the requirement for lunch or supper.

  Note: Children under 4 are at the highest risk of choking. USDA recommends that nuts and/or seeds be served to them ground or finely chopped in a prepared food. Refer to page 140 in the Reference Section

- Yogurt may be served as a meat/meat alternate component. For breakfast and snack you may serve 4 oz. (weight) or ½ cup (volume) of plain, sweetened or flavored yogurt to equal 1 ounce of the meat/meat alternate component. For lunch and supper you may serve 8 oz. (weight) or 1 cup (volume) yogurt to equal 2 ounces of the meat/meat alternate component. Do not use homemade yogurt, as it may present food safety dangers. Frozen yogurt or other yogurt-flavored snack products are not considered yogurt and therefore do not meet the requirements.

Fruits and Vegetables

- Use juice with at least 50% strength for breakfast. Juice drinks with at least 50-percent-strength juice may be used for snack and lunch, but children must be served double the volume of these drinks to meet the requirement.

- Fruit-flavored drinks, ades, or punches contain less than 50 percent-strength juice. These types of beverages may be served as an "other food" but are not credited toward meeting the fruit/vegetable requirement.

- Juice may not be served as part of the snack when milk is the only other component.

- Juice or syrup from canned fruit does not count as fruit juice.
- Use a different combination of two or more servings of fruits and/or vegetables for lunch. Include various forms such as raw or cooked, fresh, frozen, canned in juices, or dried.
- Do not serve two forms of the same fruit or vegetable in the same meal. Example: An orange and orange juice, or an apple and applesauce are combinations that should not be used. **Serve a variety of vegetables and fruits to ensure a nutritionally well-balanced meal.**
- Small amounts (less than 1/8 cup) of onions, pickles, relish, catsup, jams or jellies, or other condiments may be added for flavor or garnish as "other foods". These do not count toward fruit/vegetable requirement.

Grains and Breads

- Use grains/breads that are whole-grain or enriched or made from whole-grain or enriched flour or meal or, if it is a cereal it must be whole-grain, enriched, or fortified. Read labels on commercial products to guide you. Bran and germ are credited the same as whole-grain or enriched flour and/or meal.
- Use macaroni or noodle products (cooked) made with enriched or whole-grain flour. Program regulations allow enriched macaroni products that have been fortified with protein to be counted to meet either a grain/bread or meat/meat alternate requirement but not as both in the same meal.
- Piecrust used as part of the main dish (i.e., for meat turnovers or meat pies) is allowed as a bread item.
- When made from whole-grain or enriched meal or flour, sweet foods such as toaster pastries, coffee cake, doughnuts, sweet rolls, cookies, or cakes can be used to meet the bread requirement as specified in the Grains and Breads Chart below. Grain-based sweet snack foods should not be served as part of a snack more than twice a week. **Note: Formulated grain-fruit products are allowed only for school districts participating in the SFSP under the National School Breakfast/Lunch Program.**
- Non-sweet snack products such as hard pretzels, hard bread sticks, and chips made from enriched or whole-grain meal or flour can be used to meet the grain/bread requirement.

Grains and Breads

GROUP A	MINIMUM SERVING SIZE FOR GROUP A
• Bread type coating • Bread sticks (hard) • Chow mein noodles • Crackers (saltines and snack crackers) • Croutons • Pretzels (hard) • Stuffing (dry) Note: weights apply to bread in stuffing	1 serving = 20 gm or 0.7 oz ¾ serving = 15 gm or 0.5 oz ½ serving = 10 gm or 0.4 oz ¼ serving = 5 gm or 0.2 oz
GROUP B	**MINIMUM SERVING SIZE FOR GROUP B**
• Bagels • Batter type coating • Biscuits • Breads (white, wheat, whole wheat, French, Italian) • Buns (hamburger and hotdog) • Crackers (graham crackers - all shapes, animal crackers) • Egg roll skins • English muffins • Pita bread (white, wheat, whole wheat) • Pizza crust • Pretzels (soft) • Rolls (white, wheat, whole wheat, potato) • Tortillas (wheat or corn) • Tortilla chips (wheat or corn) • Taco shells	1 serving = 25 gm or 0.9 oz ¾ serving = 19 gm or 0.7 oz ½ serving = 13 gm or 0.5 oz ¼ serving = 6 gm or 0.2 oz
GROUP C [1]	**MINIMUM SERVING SIZE FOR GROUP C**
• Cookies [2] (plain) • Cornbread • Corn muffins • Croissants • Pancakes • Pie crust (dessert pies [2], fruit turnovers [3], and meat/meat alternate pies) • Waffles	1 serving = 31 gm or 1.1 oz ¾ serving = 23 gm or 0.8 oz ½ serving = 16 gm or 0.6 oz ¼ serving = 8 gm or 0.3 oz

[1] Some of the following foods, or their accompaniments may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

[2] Allowed only for desserts under the enhanced food-based menu planning alternative specified in §210.10 and supplements (snacks) served under the NSLP, SFSP, and CACFP.

[3] Allowed for desserts under the enhanced food-based menu planning alternative specified in §210.10 and supplements (snacks) served under the NSLP, SFSP, and CACFP, and for breakfasts served under the SBP, SFSP and CACFP.

GROUP D	MINIMUM SERVING SIZE FOR GROUP D
• Doughnuts [3] (cake and yeast raised, unfrosted) • Granola bars [3] (plain) • Muffins (all, except corn) • Sweet roll [3] (unfrosted) • Toaster pastry [3] (unfrosted)	1 serving = 50 gm or 1.8 oz ¾ serving = 38 gm or 1.3 oz ½ serving = 25 gm or 0.9 oz ¼ serving = 13 gm or 0.5 oz
GROUP E	**MINIMUM SERVING SIZE FOR GROUP E**
• Cookies [2] (with nuts, raisins, chocolate pieces and/or fruit purees) • Doughnuts [3] (cake and yeast raised, frosted or glazed) • French toast • Grain fruit bars [3] • Granola bars [3] (with nuts, raisins, chocolate pieces and/or fruit) • Sweet rolls [3] (frosted) • Toaster pastry [3] (frosted)	1 serving = 63 gm or 2.2 oz ¾ serving = 47 gm or 1.7 oz ½ serving = 31 gm or 1.1 oz ¼ serving = 16 gm or 0.6 oz
GROUP F	**MINIMUM SERVING SIZE FOR GROUP F**
• Cake [2] (plain, unfrosted) • Coffee cake [3]	1 serving = 75 gm or 2.7 oz ¾ serving = 56 gm or 2 oz ½ serving = 38 gm or 1.3 oz ¼ serving = 19 gm or 0.7 oz
GROUP G	**MINIMUM SERVING SIZE FOR GROUP G**
• Brownies [2] (plain) • Cake [2] (all varieties, frosted)	1 serving = 115 gm or 4 oz ¾ serving = 86 gm or 3 oz ½ serving = 58 gm or 2 oz ¼ serving = 29 gm or 1 oz
GROUP H	**MINIMUM SERVING SIZE FOR GROUP H**
• Barley • Breakfast cereals (cooked) [4] • Bulgur or cracked wheat • Macaroni (all shapes) • Noodles (all varieties) • Pasta (all shapes) • Ravioli (noodle only) • Rice (enriched white or brown)	1 serving = ½ cup cooked (or 25 gm dry)
GROUP I	**MINIMUM SERVING SIZE FOR GROUP I**
• Ready to eat breakfast cereal (cold dry) [4]	1 serving = ¾ cup or 1 oz, whichever is less

[4] Refer to program regulations for the appropriate serving size for supplements served to children aged 1 through 5 in the NSLP; breakfasts served under the SBP; and meals served to children ages 1 through 5 and adult participants in the CACFP. Breakfast cereals are traditionally served as a breakfast menu item but may be served in meals other than breakfast.

How to Read Food Labels

Nutrition labels, called "Nutrition Facts", appear on almost all food products. You may not see them on institutional packs. Foods packaged in large size containers for food service are currently exempt. Inserts or fact sheet information may be provided.

The Nutrition Facts label gives standard serving sizes for adults. Be aware that the amounts would have to be adjusted for child size portions, according to meal pattern minimum quantity requirements. Therefore the number of servings and the number of calories per serving along with the number of calories from fat would be similarly adjusted.

Nutrient information on the Nutrition Facts label includes: total calories, calories from fat, total fat, saturated fat, *trans* fat, cholesterol, sodium, total carbohydrate, including dietary fiber and sugars, and protein based on an established serving size. "Daily Values" in percents are based on an adult's daily intake of 2,000 calories. Keep in mind that the average energy allowance for children 6 through 12 years old is about 2,600 calories per day.

Included on the label are percentages of Vitamins A and C, calcium and iron. Again these are based on daily requirements for adults, not children.

The Food Label at a Glance

The food label carries an up-to-date, easy to use nutrition information guide, required on almost all packaged foods. The guide serves as a key to help in planning a healthy diet.

Sources of Nutrients

Plan menus to include good sources of nutrients.

*Note: These serving sizes may not coincide with the SFSP serving sizes.

Food Sources of Vitamin A

Food sources of vitamin A ranked by International Units (IU). All foods listed are ≥ 20% (1000 IU (of the Daily Value (DV)) of 5000 IU for vitamin A. The DVs are used on the Nutrition Facts Label and are based on a 2,000 Calorie diet.

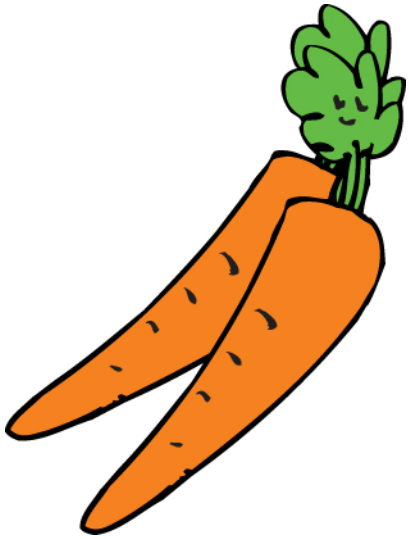
Food Item	Serving Size*	Vitamin A (IU)
Sweet potato, cooked, baked in skin	1 potato (146 grams)	28,058
Sweet potato, cooked, boiled, without skin	1 potato (156 grams)	24,554
Carrots, frozen, cooked, drained	½ cup	12,137
Sweet potato, canned, vacuum pack	½ cup	10,179
Pumpkin, canned	¼ cup	9,532
Kale, cooked, drained	½ cup	8,854
Carrots, canned, drained	½ cup	8,154
Collards, cooked, boiled, drained	½ cup	7,709
Carrots, raw	½ cup	6,620
Dandelion greens, cooked, boiled, drained	½ cup	5,207
Vegetables, mixed, canned, drained	¼ cup	4,746
Spinach, cooked, boiled, drained	¼ cup	4,717
Mustard greens, cooked, boiled, drained	½ cup	4,426
Cabbage, Chinese (pak-choi), cooked, boiled, drained	½ cup	3,612
Turnip greens, cooked, boiled, drained	¼ cup	2,745
Cantaloupe, raw	½ cup	2,706
Squash, winter, all varieties, cooked, baked	¼ cup	2,677
Cantaloupe, raw	1/8 melon	2,334
Lettuce, green leaf, raw	½ cup	2,074
Apricots, canned juice pack, with skin, solids and liquids	½ cup	2,063
Soup, bean with ham, canned	½ cup	1,976

Food Sources of Vitamin A (Continued)

Food Item	Serving Size*	Vitamin A (IU)
Vegetable juice cocktail, canned	4 fl. oz.	1,885

Peas, green, frozen, cooked, drained	½ cup	1,680
Lettuce, cos or romaine, raw	½ cup	1,626
Apricots, canned, heavy syrup pack, solids and liquids	½ cup	1,587
Broccoli, cooked, boiled, drained	½ cup	1,535
Grapefruit, raw, pink and red	½ grapefruit	1,415
Spinach, raw	½ cup	1,407
Plums, canned purple, juice pack, solids and liquids	½ cup	1272
Apricots, dried, sulfured, uncooked	10 halves	1,261
Peppers, sweet, red, raw	¼ cup	1,167
Tangerines (mandarin oranges), canned, light syrup pack	½ cup	1,059

Reference: Adapted from the Agricultural Research Service (ARS) Nutrient Database for Standard Reference, Release 17.



Food Sources of Vitamin C

All foods in this list contain 8 milligrams (mg) or more of vitamin C.

Food Item	Serving Size*	Vitamin C (mg)
Peppers, sweet, red, raw	¼ cup	71
Oranges, raw, all commercial varieties	1 medium	70
Peaches, frozen, sliced, sweetened	¼ cup	59
Peppers, sweet, red, cooked, boiled, drained	¼ cup	58
Strawberries, frozen, sweetened, sliced	½ cup	53
Strawberries, raw	½ cup	49
Papayas, raw	¼ papaya	47
Cranberry juice cocktail, bottled	4 fl. oz.	45
Kohlrabi, cooked, boiled, drained	½ cup	45
Orange juice, canned, unsweetened	4 fl. oz.	43
Orange juice, chilled, includes from concentrate	4 fl. oz.	41
Broccoli, frozen, chopped, boiled	½ cup	37
Kiwi fruit (Chinese gooseberries), fresh	½ medium	35
Vegetable juice cocktail, canned	4 fl. oz.	34
Tomato soup, canned, prepared with equal amount of water	½ cup	33
Peppers, sweet, green, raw	¼ cup	30
Melons, cantaloupe, raw	½ cup	29
Sweet potato, cooked, baked in skin	1 potato	29
Melons, honeydew, raw	1/8 melon	28
Kale, cooked, boiled, drained	½ cup	27
Peppers, hot chili, green, raw	¼ pepper	27
Melons, cantaloupe, raw	1/8 melon	25
Peppers, sweet, green, cooked, boiled, drained	¼ cup	25

Food Sources of Vitamin C (Continued)

Food Item	Serving Size*	Vitamin C (mg)
Watermelon, raw	1 wedge (10 oz)	23
Asparagus, frozen, cooked, boiled	½ cup	22
Cabbage, Chinese (pak-choi), cooked, boiled	¼ cup	22
Collards, frozen, chopped, boiled	½ cup	22
Tangerines (mandarin oranges), raw	1 tangerine	22
Tomato juice, canned	4 fl. oz.	22
Raspberries, frozen, red, sweetened	½ cup	21
Broccoli, raw	¼ cup	20
Grapefruit, raw, white	¼ grapefruit	20
Turnip greens, frozen, cooked, boiled	½ cup	20
Potatoes, white, flesh and skin, baked	1 potato (7 oz)	19
Brussels sprouts, frozen, cooked, boiled	¼ cup	18
Mustard greens, cooked, boiled	½ cup	18
Turnip greens, frozen, cooked, boiled	½ cup	18
Peppers, hot chili, red, raw	¼ pepper	16
Asparagus, frozen, cooked, boiled	4 spears	15
Cabbage, cooked, boiled	½ cup	15
Melons, honeydew, raw	½ cup	15
Soybeans, green, cooked, boiled	½ cup	15
Spinach, canned, drained solids	¼ cup	15
Cauliflower, frozen, cooked, boiled	¼ cup	14
Grapefruit sections, canned, light syrup pack, sol. & liquid	¼ cup	14
Pineapple, raw, all varieties	¼ cup	14
Pineapple juice, canned, unsweetened	4 fl. oz.	13

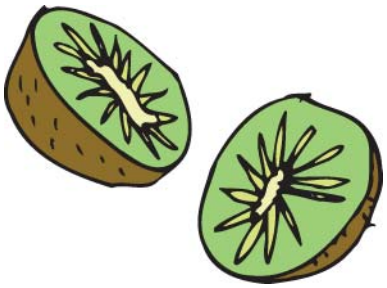
Food Sources of Vitamin C (Continued)

Food Item	Serving Size*	Vitamin C (mg)
Tomato products, canned, puree	¼ cup	13
Cauliflower, raw	¼ cup	12
Mangos, raw	¼ cup	12
Pineapple, canned, juice pack, solids and liquids	½ cup	12
Potato salad, school-prepared	½ cup	12
Tangerines (mandarin oranges), canned	¼ cup	12
Lima beans, immature seeds, frozen, cooked	½ cup	11
Potatoes, white, mashed, dehydrated, prepared from flakes without milk, whole milk and butter added	½ cup	11
Potatoes, white, mashed, school-prepared	½ cup	11
Sweet potato, canned, syrup pack, drained solids	½ cup	11
Tomatoes, red, ripe, raw, chopped	½ cup	11
Banana	Medium	10
Cabbage, red, raw	¼ cup	10
Coleslaw, school-prepared	¼ cup	10
Dandelion greens, cooked, boiled, drained	½ cup	10
Pimento, canned	1 tbsp.	10
Potatoes, hash-brown, school-prepared	½ cup	10
Squash, summer, all varieties, raw	½ cup	10
Squash, winter, all varieties, cooked, baked	½ cup	10
Carambola (starfruit), raw	¼ cup	9
Corn, sweet, yellow, canned	½ cup	9
Grapes, red or green (such as Thompson seedless), raw	½ cup	9
Sauerkraut, solid and liquid	¼ cup	9

Food Sources of Vitamin C (Continued)

Food Item	Serving Size*	Vitamin C (mg)
Tomato products, canned, sauce	½ cup	9
Tomatoes, cherry, red, ripe, raw	4 cherry tomatoes	9
Lemon juice, canned or bottled	2 tbsp.	8
Peas, green, canned, regular pack	½ cup	8
Peas, green, frozen, cooked, boiled	¼ cup	8
Potato wedges, frozen, commodity	½ cup	8
Refried beans, canned (includes commodity)	½ cup	8
Rutabagas, cooked, boiled	¼ cup	8

Reference: Adapted from the Agricultural Research Service (ARS) Nutrient Database for Standard Reference, Release 17.



Food Sources of Iron

All foods in this list contain 0.8 mg or more of iron.

Food Item	Serving Size*	Iron (Mg)
Soybeans, mature cooked, boiled	½ cup	4.4
Beans, baked, canned, with pork and tomato sauce	½ cup	4.0

Beans, white, mature seeds, canned	½ cup	4.0
Beef, liver, cooked	2 oz	3.5
Molasses, blackstrap	1 tbsp	3.5
Lentils, mature seeds, cooked, boiled	½ cup	3.3
Spinach, cooked, drained	½ cup	3.2
Beans, kidney, red, mature seeds, cooked	½ cup	2.6
Chickpeas (garbanzo beans), mature seeds, cooked	½ cup	2.4
Soybeans, green, cooked	½ cup	2.3
Beans, navy, mature seeds, cooked	½ cup	2.2
Lima beans, large, mature seed, dried, cooked	½ cup	2.2
Cake, gingerbread, from recipe	1 piece	2.1
Refried beans, canned (includes USDA commodity)	½ cup	2.0
Cereals ready-to-eat	1 cup	2 -22
Beans, great northern, mature seeds, cooked	½ cup	1.9
Potato, baked, flesh and skin	1 medium	1.9
Rolls, hard (includes Kaiser)	1 roll	1.9
Beans, black, mature seeds, cooked	½ cup	1.8
Beans, pinto, mature seeds, cooked boiled	½ cup	1.8
Beef, chuck, blade roast, braised	2 oz	1.8
Lima beans, immature seeds, frozen, baby or fordhook, cooked	½ cup	1.8
Biscuits, plain or buttermilk, prepared from recipe	2-1/2” biscuit	1.7
Cherries, sour, red, canned, water pack, solids and liquids (includes USDA commodity)	½ cup	1.7
Sauerkraut, canned, solids and liquids	½ cup	1.7
Bread, cornbread, from recipe, made with low-fat milk	1 piece	1.6
Bread, pita, white, enriched	6-1/2” pita	1.6
Peas, green, cooked	½ cup	1.6
Turnip greens, frozen, cooked, boiled	½ cup	1.6

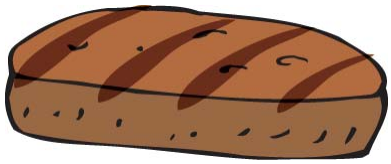
Food Sources of Iron (Continued)

Food Item	Serving Size*	Iron (Mg)
Beans, baked, canned, plain or vegetarian	½ cup	1.5
Beef, round bottom round, braised	2 oz	1.5
Beets, canned	½ cup	1.5
Beef, ground, 80% lean meat/ 20% fat, patty, broiled	2 oz	1.4
Pizza, cheese, regular crust, frozen	1 serving	1.4
Rolls, hamburger or hotdog, plain	1 roll	1.4
Asparagus, canned, drained solids	4 spears	1.3
Noodles, egg, cooked, enriched	½ cup	1.3
Peas, split, mature seeds, cooked	½ cup	1.3
Turkey, all classes, dark meat, roasted	2 oz	1.3
Cowpeas, common (black-eyed, crowder, southern), mature seeds, canned	½ cup	1.2
Collards, cooked	½ cup	1.1
Pizza, meat and vegetable, regular crust, frozen	1 serving	1.1
Pork, fresh, shoulder, arm picnic, braised	2 oz	1.1
Sweet potato, canned	½ cup	1.1
Tomato products, canned, puree	¼ cup	1.1
Tortillas, read-to-bake or fry, flour	1 tortilla	1.1
Fish fillet, battered or breaded, and fried	2 oz	1.0
Fish, tuna salad	½ cup	1.0
Muffins, corn, dry mix, prepared	1 muffin	1.0
Plums, canned, purple, heavy syrup pack, solids and liquids	½ cup	1.0
Rice, white, long-grain or regular, parboiled, enriched	½ cup	1.0
Tomato products, canned, paste	2 tbsp	1.0
Tomato sauce for pasta, spaghetti/marinara, ready-to serve	½ cup	1.0
Turkey, ground, cooked	2 oz	1.0
Bread, mixed-grain (includes whole-grain, 7-grain)	1 slice	0.9
Bread, pumpernickel	1 slice	0.9
Bread, rye	1 slice	0.9
Bread, white, commercially prepared (includes soft bread crumbs)	1 slice	0.9
Bread, whole-wheat, commercially prepared	1 slice	0.9
Brussels sprouts, cooked, boiled,	½ cup	0.9
Chicken, broilers or fryers, breast, roasted	½ breast	0.9

Food Sources of Iron (Continued)

Food Item	Serving Size*	Iron (Mg)
Crackers, matzo, plain	1 matzo	0.9
Fish, tuna, light canned in water, drained	2 oz	0.9
Macaroni, cooked, enriched	½ cup	0.9
Muffins, blueberry, commercially prepared	1 muffin	0.9
Rolls, dinner, plain, commercially prepared	1 roll	0.9
Spaghetti, cooked, enriched	½ cup	0.9
Tomatoes, red, ripe, canned, stewed	¼ cup	0.9
Tomato soup, canned, prepared with equal volume water	½ cup	0.9
Turkey roast, boneless, light and dark meat, roasted	1 oz light and 1 oz dark	0.9
Vegetables, mixed canned	½ cup	0.9
Bread, wheat (includes wheat berry)	1 slice	0.8
Chicken, broilers or fryers, dark meat, meat only, roasted	2 oz	0.8
Fish, catfish, channel, cooked, breaded and fried	2 oz	0.8
Fish, haddock, cooked	2 oz	0.8
Frankfurter, chicken or beef	1 frank	0.8
Potato salad, school-prepared	½ cup	0.8
Raspberries, frozen, red, sweetened	½ cup	0.8
Strawberries, frozen, sweetened, sliced	½ cup	0.8
Sweet potato, cooked, baked	1 medium	0.8
Spaghetti, whole-wheat, cooked	½ cup	0.7

Reference: Adapted from the Agricultural Research Service (ARS) Nutrient Database for Standard Reference, Release 17.



Food Sources of Calcium

All foods listed in this chart are ≥ 20% (200 milligrams) of the Daily Value (DV) of 1000 milligrams (mg) for calcium. The DVs are used on the Food and Drug Administration's Nutrition Facts Label and is based on a 2000 calorie diet. A food that contains 200 mg. or more of calcium contributes a substantial amount of calcium to the diet and is used here to define a good source.

Food Item	Serving Size*	Calcium (Mg)
Yogurt, plain, skim milk	8-oz container	452
Yogurt, plain, low fat	8-oz container	415
Yogurt, fruit, low fat	8-oz container	345
Cheese, ricotta, part skim milk	½ cup	335
Milk, nonfat, fluid	1 cup	306
Milk, fluid, 2% milkfat	1 cup	285
Milk, whole, 3.25% milkfat	1 cup	276
Yogurt, plain, whole milk	8-oz container	275
Cheese, ricotta, whole milk	½ cup	255
Cheese, includes cheddar, mozzarella (part-skim), muenster and provolone	1 oz	204 - 214
Cereal, ready-to-eat, fortified	1 oz	236 - 1043

Other Food Sources of Calcium

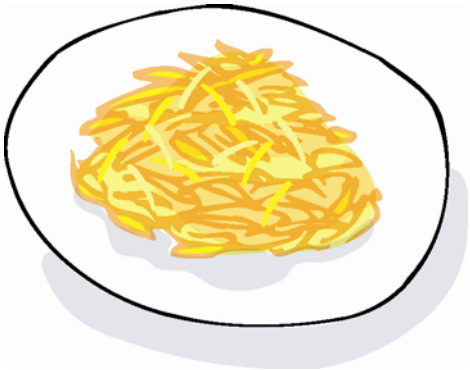
All foods listed in this chart contain less than 200 milligrams of calcium. When these foods are used in combination with foods high in calcium and/or other foods in this list, they can assist in reaching the nutrition standard for calcium.

Food Item	Serving Size*	Calcium (Mg)
Collards, frozen, chopped, cooked boiled, drained	½ cup	179
Cornbread, prepared from recipe, made with low fat (2%) milk	1 piece (2 oz)	162
Spinach, frozen, boiled, cooked, drained	½ cup	146
Soybeans, green, cooked, boiled, drained	½ cup	131
Seeds, sesame butter, tahini,	2 tbsp	128
Turnip greens, frozen, cooked, boiled, drained	½ cup	125
Fish, salmon, pink, canned, solids with bone and liquid	2 oz	119
Cowpeas (Blackeyes), immature seeds (not dried) cooked, boiled, drained	½ cup	106

Other Food Sources of Calcium (Continued)

Food Item	Serving Size*	Calcium (Mg)
Frozen yogurt, soft-serve	½ cup	103
Cereal, oats, instant, fortified, plain, prepared with water	1 packet	99
English muffins, plain, enriched, with calcium propionate	1 muffin	99
Beans, white, mature seeds, canned	½ cup	91
Kale, frozen, cooked, boiled, drained	½ cup	90
Okra, frozen, cooked, boiled, drained	½ cup	89
Soybeans, mature, cooked, boiled	½ cup	88
Ice cream, vanilla	½ cup	84
Cabbage, Chinese (pak-choi), cooked, boiled, drained	½ cup	79
Cheese, processed, American	1 oz	78
Waffles, plain, frozen, ready-to-eat	1 waffle (33 g)	77
Fish, ocean perch, Atlantic, cooked, dry heat	2 oz	76
Cereal, cream of wheat, regular, cooked with water	2/3 cup	75
Beans, baked, canned, with pork and tomato sauce	½ cup	71
Dandelion greens, cooked, boiled, drained	½ cup	71
Cheese, cottage, creamed	½ cup	70
Nuts, almonds	1 oz (24 nuts)	70

Reference: Adapted from the Agricultural Research Service (ARS) Nutrient Database for Standard Reference, Release 17.



Serving Sizes and Yields for Vegetables

This chart features some commonly used vegetables. This is a snapshot of the information that can be found for all meal components in the USDA Food Buying Guide for Child Nutrition Programs. The information in the Food Buying Guide can assist you in menu planning and purchasing.

Vegetable	Size and Count	Serving Size and Yield
Carrot Sticks	Specify U.S. #1 carrots with 1-1/8 in. medium diameter - about 7½ in. length, 6 per pound, various bag sizes available (1, 2, 5, 10, 25, and 50 pound bags.)	1 stick is 4 in. long and ½ in. wide. 3 sticks = ¼ cup
Cauliflower	Specify in cartons of 18-24 pounds, or wire-bound crates of 45-50 pounds.	1 medium head = about 6 cups florets
Celery Sticks	Specify 2, 2½, or 3 dozen per crate. Crates weigh 60-70 pounds net.	1 stick is 4 in. long and ½ in. wide. 3 sticks = ¼ cup
Cucumber Sticks	Specify 2 in. minimum diameter. This information will be stamped on the basket. Cucumbers will vary from 2 in. to 2½ in. in diameter and are about 7½ in. long.	1 stick is 3 in. long and ¾ in. wide. 3 sticks (pared or unpared) = ¼ cup
Lettuce, Head (Iceberg)	Specify 2 dozen heads, weight of 40-48 pounds.	¼ cup raw, shredded vegetable OR ¼ cup raw vegetable pieces
Lettuce, Leaf	Specify 2 dozen heads, weight 18 pounds.	¼ cup raw vegetable pieces
Olives, Ripe	Large	8 olives = ¼ cup
Pickles, Dill	Specify large size, 4 to 4¾ in. long, 22 to 39 count per gallon.	1/3 pickle = ¼ cup
Pickles, Sweet	Specify small size, 2¾ to 3½ in. long, 52 to 99 count per gallon.	1 pickle = ¼ cup
Radishes	Specify U.S. #1, ½ in. diameter minimum, without tops, small size, 45 radishes per pound.	7 small radishes = ¼ cup
Tomato	Specify large or extra large, 30 pound net per container. Tomato is 2 ½ in. x 2 ¾ in. diameter; sliced 1/8 inch.	4 slices, 1/8 in. thick = ¼ cup
Slices	Specify small or medium tomatoes, 2 1/8 in. to 2 ¼ in. diameter.	5 slices, 1/8 in. thick = ¼ cup
Cherry	Specify standard size, (California or Arizona) or size 125 (Texas).	3 tomatoes = about ¼ cup

For more information, refer to the USDA *Food Buying Guide for Child Nutrition Programs* http://teamnutrition.usda.gov/Resources/foodbuyingguide.html.

Note: Sponsors/sites that prepare meals for a smaller number of children might find the third column (Serving Size and Yield) more appropriate for the size of their program, rather than initially referring to the second column (Size and Count).

Serving Sizes and Yields for Fruits

This chart features some commonly used vegetables. This is a snapshot of the information that can be found for all meal components in the USDA Food Buying Guide for Child Nutrition Programs. The information in the Food Buying Guide can assist you in menu planning and purchasing.

Fruit	Size and Count	Serving Size and Yield*
Apples	Specify size: 125-138 count, whole, or 100 count, whole.	¼ raw, unpeeled apple = about ¼ cup 1/5 raw, unpeeled apple = about ¼ cup
Bananas	Purchase by fingers, institutional pack, 150 per case, three to four bananas per pound.	1 banana = 3/8 cup
Blueberries	Specify U.S. #1, sold in pints, fresh. 1 pint AP = about 2 2/3 cups EP.	¼ cup measure
Strawberries	Specify U.S. #1, minimum diameter ¾ in, sold in quarts and pints.	½ cup measure
Cantaloupe	Specify size 18, 5 in. diameter, approximately 30 oz. per melon.	1/10 medium melon = ¼ cup
Grapes	Specify variety desired.	
With seeds		6 grapes = about ¼ cup; 12 grapes = ½ cup
Seedless		7 grapes = about ¼ cup; 14 grapes = ½ cup
Nectarines	Specify size 88 (2 ¼ in. diameter) approximately 4 per pound.	1 nectarine = about ½ cup
Medium size	Specify size 56 and 64 (2 ¾ in. diameter).	1 nectarine = about ¾ cup
Oranges	Specify size 138 or 113 (California or Arizona) or size 125 (Florida or Texas).	1 orange (size 113/125) = about 5/8 cup 1 orange (size 138) = about ½ cup
Peaches	Specify size 84 (2 1/8 in. diameter - box may state 2 to 2¼ in. diameter); approximately 3½ to 4 peaches per pound.	1 peach = about 3/8 cup
Medium size	Specify size 60 to 64 (2½ in. diameter); approximately 3 per pound.	1 peach = about 2/3 cup

Serving Sizes and Yields for Fruits (continued)

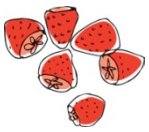
Fruit	Size and Count	Serving Size and Yield*
Pears	Specify size 150 (2¼ to 2 3/8) in. diameter.	1 pear = about ½ cup
Medium size	Specify size 120; approximately 3 per pound.	1 pear = about ¾ cup
Plums	Specify size 45 and 50 (2 in. diameter).	1 plum = about ½ cup
Medium size	Specify size 60 and 65.	1 plum = about 3/8 cup
Raisins	Specify bulk purchase or individual packages.	Yield of Bulk: 1.3 to 1.5 ounce package = ¼ cup 1 lb. = 12.6-¼ cup servings
Tangerine	Specify size 120 count.	1 tangerine = about 3/8 cup
Watermelon	Specify average size, melons will average about 27 pounds.	¼ cup fruit or ¼ cup diced fruit without rind

* Any serving size may be planned. For simplicity, this table of serving sizes and yields for vegetables and fruits provides ¼ cup servings of vegetables and a variety of cup servings of fruits.

Note:
Sponsors/sites that prepare meals for a smaller number of children might find the third column (Serving Size and Yield) more appropriate for the size of their program, rather than initially referring to the second column (Size and Count).

Where sizes are specified for fruits, they indicate numbers of fruit in the box. The larger the number, the smaller the fruit. Any fruit that is larger than that specified may be used.

For more information, refer to the USDA *Food Buying Guide for Child Nutrition Programs*
http://teamnutrition.usda.gov/Resources/foodbuyingguide.html.



Buying Calendar for Fresh Vegetables and Fruits

The items featured in the two charts highlight the vegetables and fruits that are "in season" during specific months when the SFSP may be in operation. Fresh vegetables are fruits may be less expensive and freshest when they are brought during these particular months.

Fresh Vegetables

May	June	July	August
Asparagus Beets Cabbage Carrots Celery Lettuce Onions Peas Potatoes Spinach Sweet corn Tomatoes	Carrots Celery Cucumbers Green beans Lettuce Onions Peppers Potatoes Squash Sweet corn Tomatoes	Cabbage Carrots Celery Cucumbers Eggplant Green beans Lettuce Lima beans Okra Onions Peppers Potatoes Squash Sweet corn Tomatoes	Cabbage Celery Cucumbers Eggplant Green beans Lettuce Okra Onions Peppers Potatoes Squash Sweet corn Tomatoes

Fresh Fruits

May	June	July	August
Avocados Cherries Grapefruits Lemons Navel Oranges Valencia Oranges Winter Pears	Apricots Avocados Bushberries Cantaloupes Cherries Figs Honeydew Melons Lemons Nectarines Peaches Plums Strawberries Valencia Oranges Watermelons	Apricots Avocado Bushberries Cantaloupe Grapefruits Honeydew Melons Lemons Nectarines Peaches Pears Plums Strawberries Valencia Oranges Watermelons	Avocado Cantaloupes Figs Grapes Grapefruits Honeydew Melons Lemons Nectarines Peaches Pears Plums Valencia Oranges Watermelons

Sample Position Description

Job Title: Cook	Effective Date:
Purpose of the Position:	Prepares, seasons, and cooks soups, meats, vegetables, desserts, and other foods for consumption by children and some adults.

Responsibilities:	% Time
1. Reads from menu and recipes to estimate food requirements and orders food from supplier or procures it from storage.	____ %
2. Prepares food according to food safety requirements, and records temperatures of equipment and food at time of service. Reinforces the practice of frequent hand-washing and takes steps to prevent cross-contamination.	____ %
3. Adjusts thermostat controls to regulate temperature of ovens, broilers, grills, roasters, and/or steam kettles.	____ %
4. Measures and mixes ingredients according to recipe, using variety of kitchen utensils and equipment, such as blenders, mixers, grinders, slicers, and tenderizers, to prepare soups, salads, gravies, desserts, sauces, and casseroles.	____ %
5. Bakes, roasts, broils, or steams meats, fish, vegetables, and other foods.	____ %
6. Adds seasoning to food during mixing or cooking, according to standardized recipes.	____ %
7. Observes and tests food being cooked by tasting, smelling, and taking the internal temperature of food to determine that it is cooked.	____ %
8. Carves meat, portions food on serving plates, and adds gravies, sauces, and garnishes to food orders.	____ %
9. May supervise other cooks and kitchen employees.	____ %
10. May wash, peel, cut, and shred vegetables and fruits to prepare them for use.	____ %
11. May bake bread, rolls, cakes, and pastry.	____ %
12. Keeps accurate records of amounts used.	____ %
13. Clean up as necessary.	____ %

What is a Standardized Recipe?

A standardized recipe provides a list of measured ingredients and set of directions for preparation and service. These are necessary to prepare menu items of consistent quality, portion size, and nutritive value. A sample can be found below. Additional information can be found in *Measuring Success with Standardized Recipes* http://www.nfsmi.org/ResourceOverview.aspx?ID=88.

Toasted Cheese and Tomato Sandwich

Ingredients	24 Servings		48 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched white bread, sliced (at least 0.9 oz each) OR Enriched wheat bread, sliced (at least 0.9 oz each)		24 slices OR 24 slices		48 slices OR 48 slices	1. On half-sheet pans (13" x 18" x 1") which have been lightly coated with pan release spray, place half the bread slices 6 per pan. For 24 servings, use 2 pans. For 48 servings, use 4 pans.
Reduced fat processed American cheese, sliced, 1 oz slices	1 lb 8 oz	24 slices (1 oz each)	3 lb	48 slices (1 oz each)	2. Top each slice of bread with 1 oz (1 slice) of cheese, 1 ½ oz (1 slice) of tomato, and another 1 oz (1 slice) of cheese. Cover with remaining bread slices.
*Fresh tomatoes, 1 ¾ oz slices	1 lb 5 oz	12 slices (1 ¾ oz each)	2 lb 10 oz	24 slices (1 ¾ oz each)	
					3. Bake until lightly browned: Conventional oven: 400° F for 15-20 minutes Convection oven: 350° F for 10-15 minutes CCP: Hold for hot service at 135° F or higher. 4. Cut each sandwich in half diagonally. Serve immediately. 5. Portion is ½ sandwich.

Serving: ½ sandwich provides 1 oz of cheese, ⅛ cup of vegetable, and 1 slice of bread.

Yield: 24 servings: 24 half sandwiches
Yield: 48 servings: 48 half sandwiches

Reference: USDA Recipes for Child Care
http://teamnutrition.usda.gov/Resources/childcare_recipes.html

Food Service Equipment Needs				
Equipment	Number of Children			
	1 - 50	51 - 100	101 - 200	201 - 300
Range with ventilating hood	1 range with oven; 30” domestic or 30” – 36” commercial (2 burners)	1 range with oven 30” – 36” commercial (4 burners)	1 range with oven 30” – 36” commercial (2 if over 150 children) (6 burners)	2 ranges with ovens 30” – 36” commercial or 1 range w/oven 60" or larger commercial (8 burners)
Refrigerator with shelves	single section domestic 18 cu. ft. or commercial reach-in 20-25 cu. ft.	double section commercial reach-in 40-50 cu. ft.	double section commercial reach-in 50-60 cu. ft. or 64 sq. ft. (8 ft. x 8 ft.) walk-in	triple section commercial reach-in 60-75 cu. ft. or 64 sq. ft. (8 ft. x 8 ft.) walk-in
Freezer	same as refrigerator	same as refrigerator	same as refrigerator	same as refrigerator
Work Tables (Allow 4 linear ft./worker). Use countertops as tables	1 table	2 tables	3 tables	4 tables
Sink with separate hand sink	1 sink - 3 compartments	1 sink - 3 compartments	1 sink - 3 compartments	1 sink - 3 compartments

If the site will serve over 100 children, the following equipment is recommended to supplement the minimum items listed above:

- Steam equipment (kettle, steamer)
- Hot food holding cabinet
- Convection oven
- Microwave oven
- Electric food slicer
- Mixer with attachments (vegetable slicer/shredder, meat and food chopper)

Cleaning and Sanitizing Smallware and Large Equipment

Smallware

How should smallware be cleaned and sanitized?

Smallware is a collective term used to include dishes, flatware, preparation and serving utensils, measuring devices, cooking pots and pans, and small equipment that can be moved to the three - compartment sink or dishwasher for cleaning and sanitizing. Follow State public health department regulations on how to clean and sanitize smallware. The information below is general guidance.

All surfaces that come in contact with food must be clean and sanitized. To **clean** a surface means to remove visible food particles—what can be seen on the surface. To **sanitize** a surface means to use either a chemical or heat to reduce the number of microorganisms or other contaminants to a level that is not harmful. The first step is cleaning; the second step is sanitizing.

Select from Two Methods of Sanitizing

1. Chemical sanitizing can be accomplished by immersing an object in, or wiping it down with, a sanitizing solution and allowing the solution to remain in contact with the surface for a specified amount of time. Use only EPA-approved (Environmental Protection Agency) chemical sanitizers for food-contact surfaces. A household bleach can be used as a sanitizer only if the label indicates it is EPA registered. ***Mix, test, and use the sanitizing solution as recommended by the State and local public health department. Refer to the manufacturer's directions for specific mixing, storing, and first aid instructions.***

USE A SANITIZER TEST KIT

A test kit designed for a specific sanitizer should be used to check the concentration of the sanitizing solution. A foodservice supplier who sells sanitizers may also have the test kits for each type of sanitizer. Mix, use, and test the sanitizing solution as recommended by the State and local public health department. Refer to the manufacturer's directions for specific mixing, storing, and first aid instructions. When a sanitizing solution is exposed to air, detergent, and food particles, the solution becomes less effective. Sanitizing solutions should be tested frequently.

The three most common chemical sanitizers are:

- **Chlorine** – This sanitizer is the most commonly used and is the cheapest. It is effective in hard water, but is inactivated by hot water above 120 °F. Chlorine bleach solutions must be tested regularly and changed as necessary to ensure that the solution is working to sanitize. Using too much chlorine in a solution can pit stainless steel and aluminum surfaces, while using too little will not sanitize the surface.
- **Iodine** – Iodine is more expensive and less effective than chlorine. However, an iodine sanitizing solution is not as quickly inactivated by food particles as a chlorine solution.
- **Quaternary ammonium compounds (Quats)** – The sanitizer is not as quickly inactivated by food particles as a chlorine solution, is non-corrosive to metal surfaces, and non-irritating to skin. It leaves a film on surfaces and does not kill certain types of microorganisms.

2. Heat sanitizing involves exposing equipment to high heat for an adequate length of time. This may be done *manually* by immersing equipment into water maintained at a temperature of 171 °F to 195 °F for at least 30 seconds. In a *dishwashing machine*, a good rule of thumb is to wash at 150 °F and rinse at 180 °F. But remember, temperature may vary depending on the type of machine used and requirements of the State and local public health department.

Thermometers and heat-sensitive tapes and labels are available for determining whether adequate sanitation temperatures have been achieved.

Chlorine Sanitizing Solution for Equipment, Food-Contact Surfaces, and Utensils

Rule-of-thumb mixtures for chlorine sanitizing solutions

50 PPM solution for immersion: 1 tablespoon (1/2 fluid ounce) 5% chlorine commercial bleach mixed with four gallons of water. The solution should be in contact with the surface to be sanitized for seven seconds at temperatures between 75 °F and 115 °F. Be aware that very hot water may prevent chlorine bleach from sanitizing. **This sanitizing solution can be used to sanitize a food thermometer after every use. For details on using, cleaning, and sanitizing food thermometers refer to http://www.nfsmi.org/documentLibraryFiles/PDF/20080219125946.pdf.**

100 PPM solution: 1 tablespoon (1/2 fluid ounce) 5% chlorine commercial bleach mixed with two gallons of water

200 PPM solution: 1 tablespoon (1/2 fluid ounce) 5% chlorine commercial bleach mixed with one gallon of water

Use the manufacturer's label directions for specific information on mixing, storing, and first aid. Test with a test kit.

Sanitize Smallware in a Three-Compartment Sink

- To properly clean and sanitize smallware, the kitchen must have a sink with at least *three separate compartments* for manually cleaning, rinsing, and sanitizing, or a mechanical dishwasher that functions properly. If your facility has different equipment, please contact your State or local public health department regarding proper procedures for sanitizing smallware.
- There should be a separate area for scraping and rinsing food and debris into a garbage container or disposal before washing and a separate drain board for clean and soiled items.

Manually Sanitize Smallware in a Three-Compartment Sink

Step 1: Clean and sanitize sinks that will be used for washing and sanitizing smallware.

Step 2: Scrape and rinse food into garbage container or disposal. Pre-soak items, such as flatware, as necessary. Then…

In the first sink, immerse and **Wash** the smallware in a clean detergent solution at 110 ºF or the temperature specified on the cleaning agent manufacturer's label instructions. Use a brush or a cloth to loosen and remove any remaining visible food particles.

In the second sink, Rinse using clear, clean hot water (110 °F) to remove all traces of food, debris, and detergent.

In the third sink, Sanitize.
CHEMICAL: Immerse the clean items in a chemical sanitizing solution at the appropriate temperature for the correct amount of time. Be sure all surfaces of the clean items are covered with hot water or the sanitizing solution. Follow manufacturer's label directions for mixing the sanitizing solution and using the required contact time for sanitizing. Check the concentration of the chemical sanitizer at regular intervals using a test kit. Be aware that hot water inactivates some chemical sanitizers, so read and correctly follow the manufacturer's directions for using the chemical. Always read the Material Safety Data Sheet before using a chemical.

or

HEAT: Immerse or spray rinse clean items in hot water at 171 °F to 195 °F for at least 30 seconds. Some State public health department codes require a temperature of 180 °F.

> **While you wash, rinse, and sanitize . . .** If soapsuds disappear in the first compartment or remain in the second, the water temperature cools, or water in any compartment becomes dirty with food particles or cloudy from grease, empty the compartment and refill it.

Step 3: Air dry all items on a drain board. Wiping can re-contaminate equipment and can remove the sanitizing solution from the surfaces before it has finished working.

Step 4: Store. Make certain all smallware is dry in order to avoid retaining moisture that fosters bacterial growth.

Sanitize Smallware in a Mechanical Dishwasher

When sanitizing smallware (dishes, trays, flatware, glasses) in a dishwasher, follow the manufacturer's procedures. Check the temperature of the water in the wash and rinse cycle.

Wash at 150 °F, Rinse at 180 °F

The temperature may vary depending on the type of dishwashing machine used and requirements of the State and local public health department.

Check Dishwasher Temperatures

Although dishwashers have temperature gauges for each compartment, it is useful to confirm that the gauge is accurate using another type of thermometer. There are two types of thermometers that can be used to confirm the accuracy of dishwasher thermometer gauges.

- Waterproof maximum/minimum-registering thermometer
- Self-adhering temperature-sensitive label

A **waterproof maximum/minimum-registering thermometer** is a type of thermometer that is placed in a dish rack to go through the dishwasher cycle with soiled trays and flatware. It is set to register the highest temperature of the cycle to confirm that the required temperature is reached in a sanitizing rinse cycle.

Another tool for checking the temperature is a **self-adhering temperature-sensitive label.** This type of sensor attaches to the surface of a clean dish/tray and changes color to record the dishware surface temperature during dishwashing. Labels are available for various temperatures. For example, to determine whether the temperature in the final sanitizing rinse of a dishwasher reaches 180 °F, a single temperature 180 °F label could be attached to a clean tray to go through the cycle. When the temperature has been reached, the label changes color. The label can be removed from the tray at the end of the dishwasher cycle and placed in a log to document temperature.

Before using or purchasing either of these types of thermometers to confirm the temperature in a dishwasher, check with the State and local public health department on what is recommended. Be knowledgeable about the correct use of each thermometer to decide which one best meets the needs of the foodservice operation.

Large equipment

How should large equipment be cleaned and sanitized?

To keep large or in-place equipment free of harmful levels of bacteria or other contaminants, it is necessary to clean and sanitize all surfaces that will come into contact with food. This is especially important after any possible contamination such as slicing a deli meat on a slicer or mixing a meat salad in a mixer.

Wash, rinse, and sanitize tables, stoves, sinks, slicers, choppers, mixers, and large cooking utensils after each use. This rule also applies to equipment used to clean other food contact surfaces.

Scrub surfaces on standing equipment, such as cutting boards, with a detergent solution and a stiff-bristled nylon brush. Then rinse in clear, clean water, and sanitize solution after every use. For the use and care of wooden cutting boards, surfaces, or utensils, follow State and local public health department recommendations. Synthetic cutting boards can be sanitized in a three-compartment sink or in a dishwasher, depending on their size. Follow State and local public health department recommendations.

Use the Chemical Method to Sanitize Equipment

Using Sanitizer—Immerse or wipe down with commercial sanitizer. Follow manufacturers label instructions for mixing and using the sanitizer. Use a test kit to test for correct concentration. Always read the Material Safety Data Sheet before using a chemical.

Follow the Steps to Sanitize In-Place Equipment

Read and follow the manufacturer's directions for cleaning and sanitizing the piece of equipment. Follow the general steps described below.

Step 1: Unplug electrically powered equipment, such as meat slicers and mixers.

Step 2: Remove loose food particles and scraps.

Step 3: Wash, rinse, and sanitize any removable parts using the manual immersion method.

Step 4: Wash the remaining food-contact surfaces and rinse with clean water. Wipe down with a chemical sanitizing solution mixed according to the manufacturer's directions.

Step 5: Clean surfaces that do not come in contact with food using a clean wiping cloth. Allow all parts to air dry before reassembling. Clean the wiping cloth before and during use by rinsing it in a sanitizing solution.

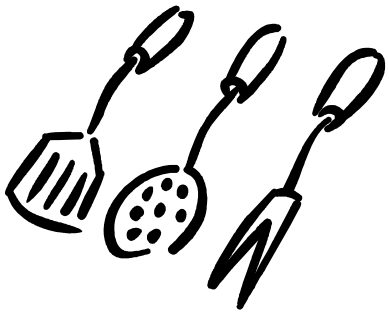
Step 6: Re-sanitize the external food-contact surfaces of the parts that were handled when the equipment was reassembled.

CAUTION:

All equipment should be kept clean and sanitized. Although some equipment is not used for food preparation, all equipment that has any contact with food should be cleaned and sanitized on a routine basis. Follow manufacturer's directions to clean and sanitize proof cabinets, shelf racks, dish dollies, dish and tray dispensers, pan racks, bakery racks, food holding equipment, equipment used to transport foods, and ice machines. Remember to keep all food preparation equipment and utensils free from dirt, dust, and other forms of contaminations.

Reference:

USDA Food and Nutrition Service with the National Food Service Management Institute. (2009). *Serving it safe trainer's guide (*3rd ed*)*. University, MS: Author. For more information, visit http://www.nfsmi.org/documentlibraryfiles/PDF/20091028020533.pdf.



Food Inventory Record

Name:

Date:

Beginning Inventory: $

Food Item (1)	Purchase Unit - Size & Description (case, bag, can, lb.) (2)	# of Units on Hand (3)	Unit Cost (4)	Total Cost (5)

Ending Inventory: $

Food Inventory Record Instructions

The value of the beginning inventory is determined by taking a physical count before the food service operation begins. The value of the beginning inventory thereafter is the same as the ending inventory for the previous month.

A complete physical inventory of all purchased foods, commodities, and supplies on hand should be taken at the end of the tracking period.

For ease in taking a physical count of foods in storage, arrange the items according to food groups in the storage area and arrange each group in alphabetical order, for example, canned fruits and fruit juices - apples, apricots, etc. Store food in cases, boxes, or other containers marked with the date received and cost per unit to facilitate the taking of inventories.

Column 1. Enter the name of the food item, such as asparagus, green beans, or mayonnaise.

Column 2. Enter the size pack, such as 6/#10 case, #50 bag, or #10 can. If different size containers of the same food item are on hand, use a separate line for each size and a separate line for each different unit cost of the same size pack.

Column 3. Enter the number of units (of the size shown in column 2) found on hand from actual count.

Column 4. Enter the unit cost for the size unit shown in column 2 (use the unit cost written on package or unit).

Column 5. Obtain the total cost by multiplying the number of units (column 3) by the unit cost (column 4) and enter in column 5. Add column 5 (total cost) on all pages for the inventory at the end of the month. This total is the value of the ending inventory, and becomes the beginning inventory for the following month.

Date Marking Ready-to-Eat, Potentially Hazardous Food

(Sample SOP)

PURPOSE: To ensure appropriate rotation of ready-to-eat food to prevent or reduce foodborne illness from *Listeria monocytogenes.*

SCOPE: This procedure applies to foodservice employees who prepare, store, or serve food.

KEY WORDS: Ready-to-Eat Food, Potentially Hazardous Food, Date Marking, Cross-Contamination

INSTRUCTIONS:

1. Train foodservice employees on using the procedures in this SOP. The best practice for a date marking system would be to include a label with the product name, the day or date, and time it is prepared or opened. Examples of how to indicate when the food is prepared or opened include:
   - Labeling food with a calendar date, such as "cut cantaloupe, 5/26/08, 8:00 a.m.,"
   - Identifying the day of the week, such as "cut cantaloupe, Monday, 8:00 a.m.," or
   - Using color-coded marks or tags, such as cut cantaloupe, blue dot, 8:00 a.m. means "cut on Monday at 8:00 a.m."
2. Follow State or local health department requirements.
3. Label ready-to-eat, potentially hazardous foods that are prepared on-site and held for more than 24 hours.
4. Label any processed, ready-to-eat, potentially hazardous foods when opened, if they are to be held for more than 24 hours.
5. Refrigerate all ready-to-eat, potentially hazardous foods at 40 ºF or below.
6. Serve or discard refrigerated, ready-to-eat, potentially hazardous foods within 7 days.
7. Indicate with a separate label the date prepared, the date frozen, and the date thawed of any refrigerated, ready-to-eat, potentially hazardous foods.
8. Calculate the 7-day time period by counting only the days that the food is under refrigeration. For example:
   - On Monday, 8/1/08, lasagna is cooked, properly cooled, and refrigerated with a label that reads, "Lasagna, Cooked, 8/1/08."
   - On Tuesday, 8/2/08, the lasagna is frozen with a second label that reads, "Frozen, 8/2/08." Two labels now appear on the lasagna. Since the lasagna was held under refrigeration from Monday, 8/1/08 – Tuesday, 8/2/08, only 1 day is counted towards the 7-day time period.

Date Marking Ready-to-Eat, Potentially Hazardous Food, continued

(Sample SOP)

INSTRUCTIONS, continued:

- On Tuesday 8/16/08 the lasagna is pulled out of the freezer. A third label is placed on the lasagna that reads, "Thawed, 8/16/08." All three labels now appear on the lasagna. The lasagna must be served or discarded within 6 days.

MONITORING:

A designated employee will check refrigerators daily to verify that foods are date marked and that foods exceeding the 7-day time period are not being used or stored.

CORRECTIVE ACTION:

1. Retrain any foodservice employee found not following the procedures in this SOP.
2. Foods that are not date marked or that exceed the 7-day time period will be discarded.

VERIFICATION AND RECORD KEEPING:

The foodservice manager will complete the Food Safety Checklist daily. The Food Safety Checklist is to be kept on file for a minimum of 1 year.

DATE IMPLEMENTED: _____ BY: _____

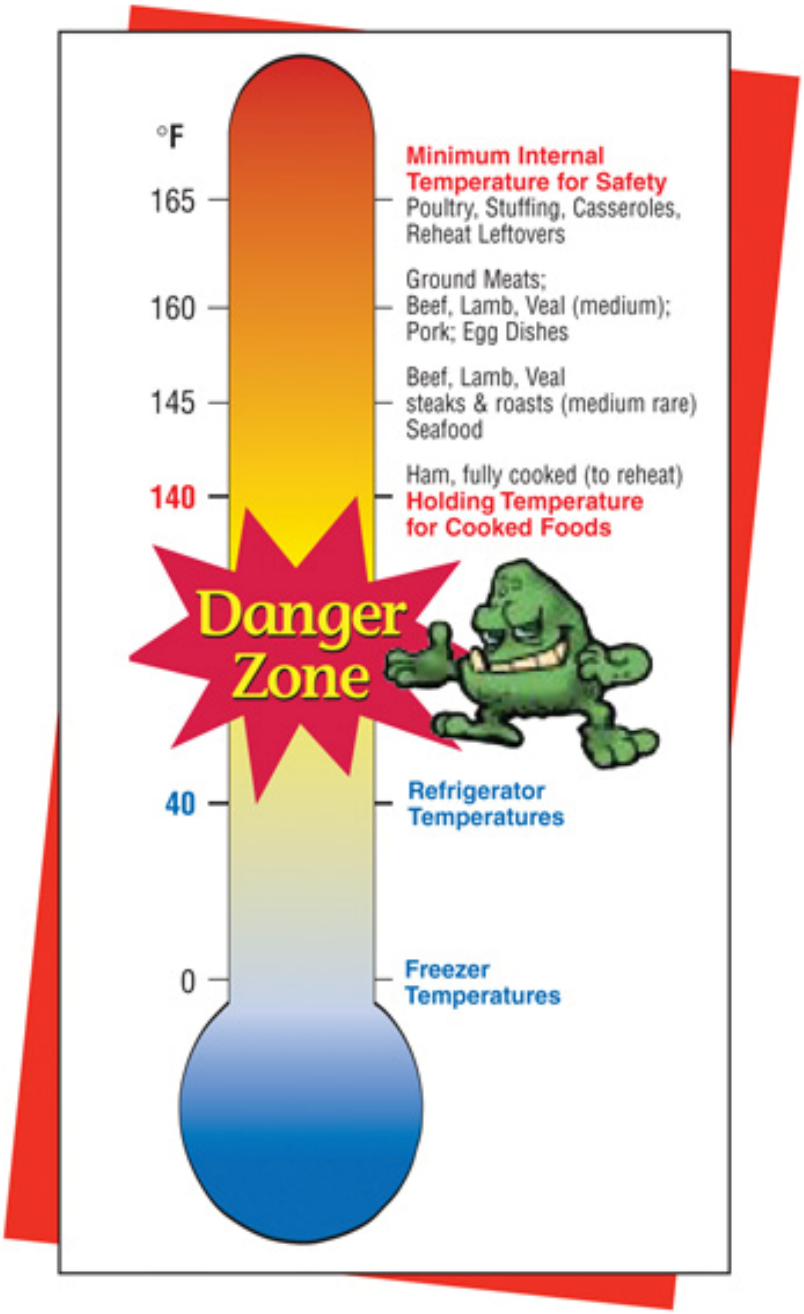
DATE REVIEWED: _____ BY: _____

DATE REVISED: _____ BY: _____

Reference:

Additional Standard Operating Procedures (SOPs) is available online http://sop.nfsmi.org/HACCPBasedSOPs.php.

Keep in mind you should first be familiar with and follow your State and local public health requirements and your State Agency policies and procedures.



DAILY TEMPERATURE FORM – INTERNAL FOOD TEMPERATURES

Date	Food Item	Time/ Temperature/ Initials	Time/ Temperature/ Initials	Time/ Temperature/ Initials

Source: National Food Service Management Institute. (2009). *Serving it safe training resource, Appendix 3*. University, MS: Author.

STORAGE TEMPERATURE FORM

Date	Food Item	Time/ Temperature/ Initials	Time/ Temperature/ Initials	Time/ Temperature/ Initials

Source: National Food Service Management Institute. (2009). *Serving it safe training resource, Appendix 4*. University, MS: Author.

If You Suspect Foodborne Illness

Unfortunately, there may be a time when despite the best of intentions, a child may become ill due to bacteria in the food he or she eats. Here are some guidelines to follow if a child is suspected to be suffering from a foodborne illness.

- Get the following information:
  - name(s) of the child(ren);
  - name of parent or guardian;
  - parent's or guardian's telephone number;
  - when the child ate last (the date and the time);
  - what the child ate last (include everything eaten);
  - whether anything tasted bad when it was eaten; and
  - what time the child began to feel ill, including the symptoms.

- Include information on the food item(s) involved. Seal and keep all leftovers of the suspected food(s) and mark "DO NOT USE."

- Call the local or State Health Department and inform them of the incident. They will direct you on what to do with the child and the suspected food(s).

Choking Risks

Keep in mind that young children — especially ages 2 to 3 years — are at risk of choking on food. They remain at risk until they can chew and swallow better by about age 4. *Always supervise children during meals and snacks.*

Foods that may cause choking include...

- Hot dogs
- Nuts and seeds
- Raw carrots
- Raisins
- Chunks of meat
- Peanut butter (spoonfuls)
- Whole grapes
- Marshmallows
- Round or hard candy
- Chips
- Popcorn
- Pretzels
- Raw celery
- Cherries with pits
- Large pieces of fruit with skin

Some foods can be offered if you change the form. For example,

1) Cut hot dogs lengthwise into thin strips.
2) Steam carrots or celery until slightly soft, then cut into sticks.
3) Cut grapes or cherries into small pieces.

RESOURCE SECTION

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Information Resources

NFSMI
(800) 321-3054

The **National Food Service Management Institute (NFSMI)**, located at the University of Mississippi, is committed to improving the operation and quality of all Child Nutrition Programs, including children served in SFSP. This is accomplished through staff development programs, training experiences, educational materials, and a national satellite network. The Institute is funded through USDA's Food and Nutrition Service.

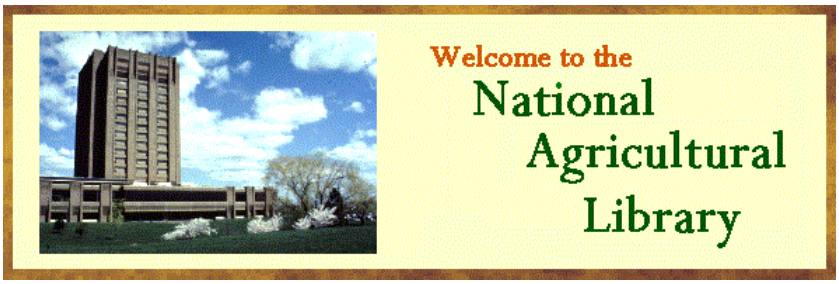
For information on food service, food preparation, meeting the Dietary Guidelines, or available videos and training packages, contact the NFSMI's clearinghouse at 800-321-3054, or write:

National Food Service Management Institute
University of Mississippi
P.O. Drawer 188
University, MS 38677
Website: www.nfsmi.org

FNIC
(301) 504-5719

The **Food and Nutrition Information Center (FNIC)** is located at USDA's National Agricultural Library in Beltsville, Maryland. USDA program participants may borrow summer food service reference materials, videos, and training materials free of charge. Sample nutrition education and training materials are available at FNIC. Food labeling material is also available. On-line bibliographies are offered to assist with research. For more information, you can call or write:

USDA/NAL/FNIC
10301 Baltimore Boulevard, Room 105
Beltsville, MD 20705
Phone: (301) 504-5719
TTY: (301) 504-6856
Website: http://fnic.nal.usda.gov



Nutrition.gov Additional on-line information geared toward consumers can be found at www.Nutrition.gov, which provides easy, on-line access to government information on food and human nutrition for consumers.

NIFA **USDA National Institute of Food and Agriculture (NIFA)** offers contacts for State extension services for information and possible SFSP partnering opportunities. NIFA replaced the former Cooperative State Research, Education, and Extension Service (CSREES).
Website: www.csrees.usda.gov/qlinks/partners/state_partners.html

NCEMCH **The National Center for Education in Maternal and Child Health (NCEMCH)** offers publications on nutrition, maternal health, child health, and children with special health care needs.

National Center for Education in Maternal and Child Health
2115 Wisconsin Avenue, NW
Suite 601
Washington, DC 20007
Phone: (202) 784-9770
Website: www.ncemch.org
Maternal and Child Health Virtual Library: www.mchlibrary.info

Other Resources

Contact your State's administering agency for assistance in obtaining any of the following publications:

FightBAC – Partnership for Food Safety Education. Online at www.fightbac.org.

Food Buying Guide for Child Nutrition Programs, USDA/FNS, PA 1331, Revised, Printed March 2002.

Food Safety for Summer Food Service Programs, National Food Service Management Institute, 2003. Available online at http://nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=73

HACCP-Based Standard Operating Procedures (SOPs), National Food Service Management Institute, 2005. Available online at http://sop.nfsmi.org/HACCPBasedSOPs.php.

Is It Done Yet? – Food safety program to promote the use of food thermometers when cooking all meat and poultry products. Online at www.fsis.usda.gov/Is_It_Done_Yet/index.asp.

MyPlate website, online at http://choosemyplate.gov.

Nutrition and Your Health: Dietary Guidelines for Americans, 2005, Sixth Edition, USDA and Department of Health and Human Services, 2000. Online at http://www.health.gov/dietaryguidelines/dga2005/document/.

Serving It Safe: A Manager's Tool Kit, USDA/Food and Nutrition Service, FCS-295, Revised June 2003. Available online at http://teamnutrition.usda.gov/Resources/serving_safe.html.

Summer Food Service Program website, online at www.summerfood.usda.gov.

The Food Code, U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration, 2009. Available online at http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodCode/FoodCode2009/default.htm.

The Healthy School Meals Resource System provides information to people working with the USDA's Child Nutrition Programs. Online at http://healthymeals.nal.usda.gov.

Thermy – a national campaign to promote the use of food thermometers. Available online at www.fsis.usda.gov/Food_Safety_Education/Thermy/index.asp.

USDA, Food Safety and Inspection Service. Consumer Education information and publications are available online at www.fsis.usda.gov.

USDA Recipes for Child Care, available online at http://teamnutrition.usda.gov/Resources/childcare_recipes.html.

USDA Recipes for Schools, available online at http://teamnutrition.usda.gov/Resources/usda_recipes.html.

Food and Nutrition Service Regional Offices

Mid-Atlantic Regional Office
Mercer Corporate Park
300 Corporate Boulevard
Robbinsville, NJ 08691-1518
(609) 259-5025

Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Puerto Rico, Virginia, Virgin Islands, West Virginia

Midwest Regional Office
77 West Jackson Boulevard
20th Floor
Chicago, IL 60604-3507
(312) 353-6664

Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

Mountain Plains Regional Office
1244 Speer Boulevard
Suite 903
Denver, CO 80204-3581
(303) 844-0354

Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, Wyoming

Northeast Regional Office
10 Causeway Street
Room 501
Boston, MA 02222-1069
(617) 565-6370

Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont

Southeast Regional Office
61 Forsyth Street SW
Room 8T36
Atlanta, GA 30303-3427
(404) 562-1801/1802

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

Southwest Regional Office
1100 Commerce Street
Room 555
Dallas, TX 75242-9800
(214) 290-9925

Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Western Regional Office
90 Seventh Street
Suite 10-100
San Francisco, CA 94103
(415) 705-1310

Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Washington, Guam Trust Territories, Commonwealth of the Northern Mariana Islands, American Samoa