

Flavoring



By Flavor

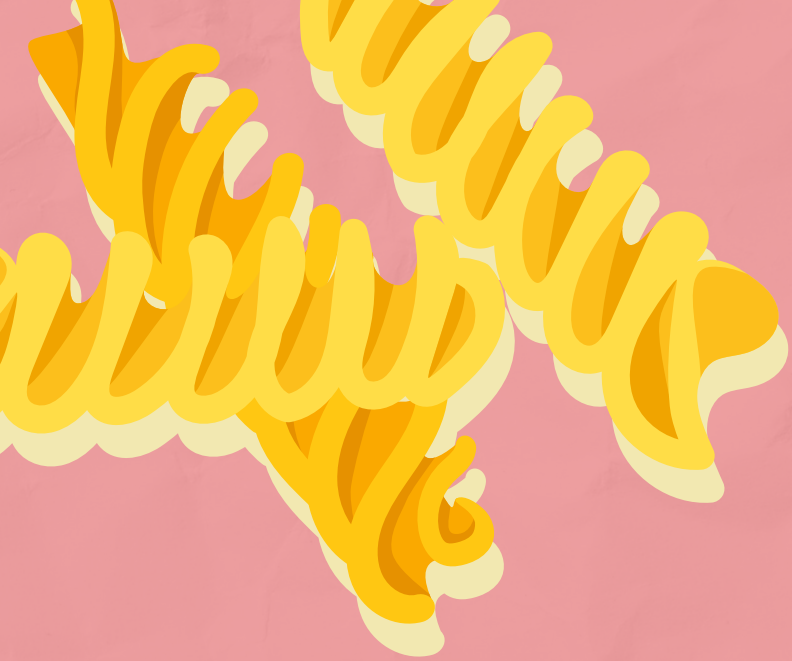
Herbs & Spices

Italian	Basil, Oregano, Thyme, Rosemary, Garlic, Chili Flakes, Parsley
Latin	Cilantro, Oregano, Chili Powder, Chili Flakes, Cumin
Asian	Garlic, Ginger, Cilantro, Chili Flakes
Indian	Garlic, Ginger, Coriander, Chili Flakes, Chili Powder
French	Rosemary, Thyme, Coriander, Dill, Parsley
Mediterranean	Parsley, Dill, Mint, Oregano, Basil, Paprika, Chives

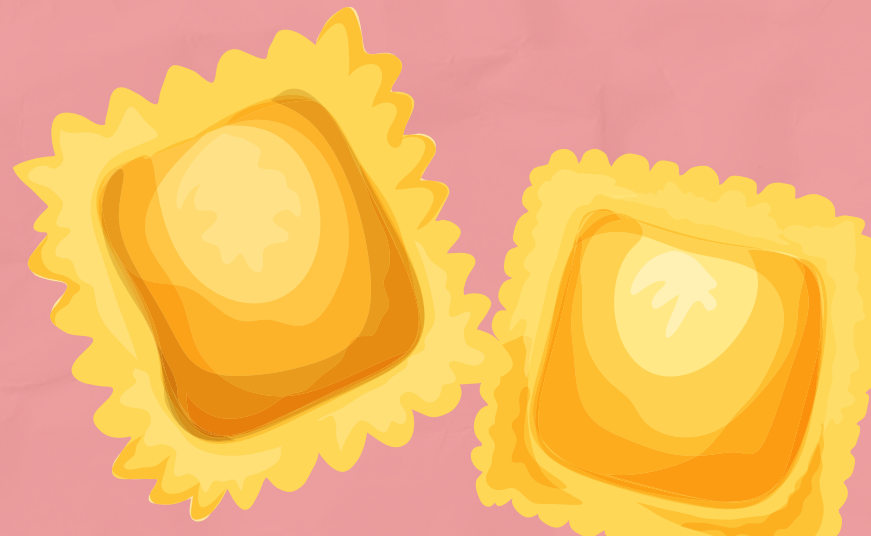
By Food

Herbs & Spices

Eggs	Dill, Paprika, Parsley
Peas	Dill, Parsley, Mint
Potatoes	Dill, Parsley, Chili Flakes, Rosemary, Thyme, Chives
Corn	Garlic, Cilantro, Chili Flakes, Chili Powder
Beans	Garlic, Cilantro, Chili Powder, Parsley, Cumin, Basil, Oregano, Thyme, Rosemary
Carrots	Coriander, Dill, Thyme, Rosemary, Ginger
Meats	Rosemary, Thyme, Oregano, Coriander, Chili Powder
Poultry	Rosemary, Thyme, Basil, Oregano, Chili Powder, Parsley, Cilantro



GRAIN EQUIVALENTS



Serving Grains in the CACFP

Steps to Serving Grains in the CACFP

1

Grains served at one meal or snack every day must be whole grain-rich. To confirm a food item is whole-grain rich, use the chart on page 23.

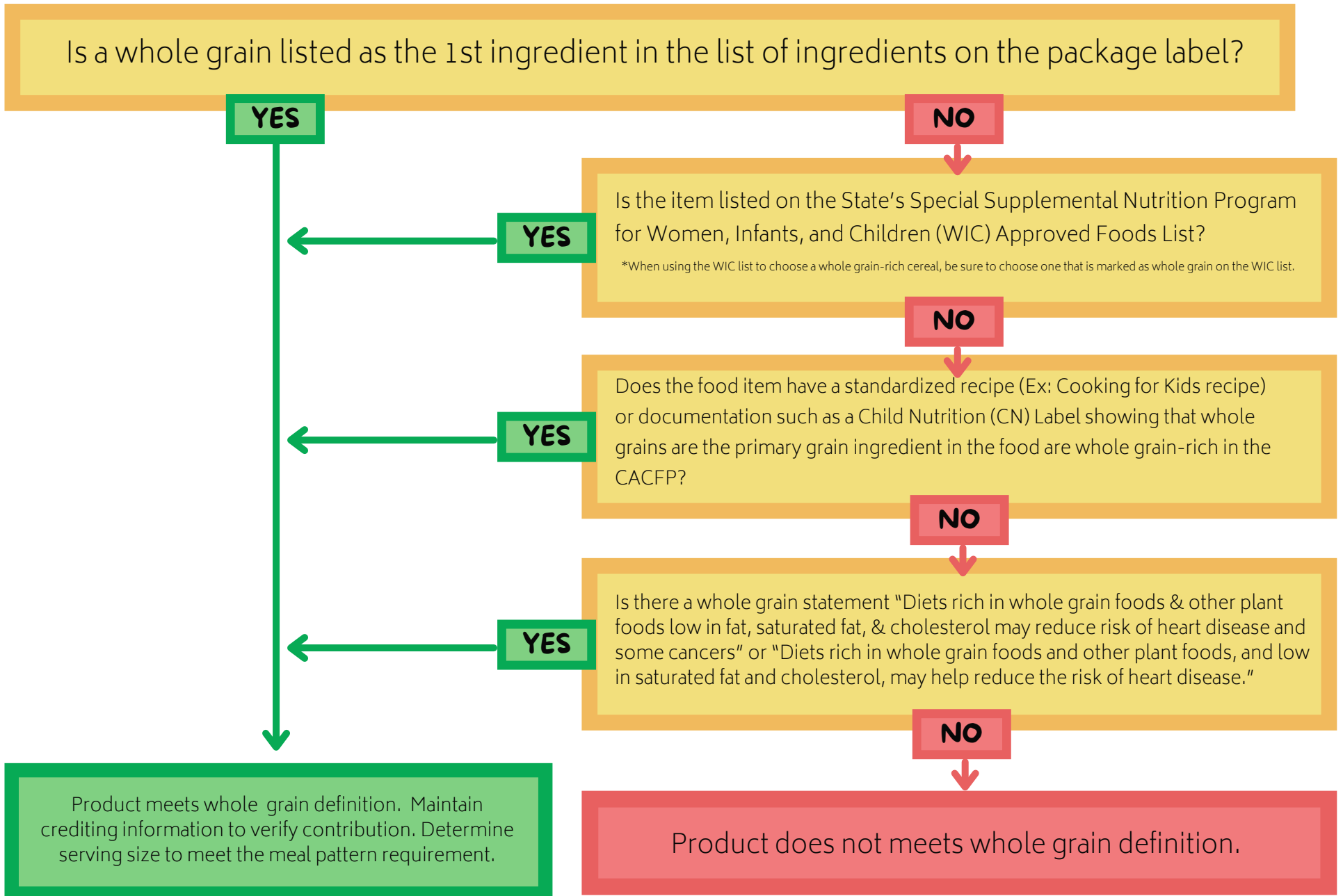
2

Once you have confirmed that your food item is whole grain-rich, next you will determine how much of the food item you need to serve. One of the easiest ways is to use the Grains Measuring Chart for the CACFP*. This can be found on page 24.

*Other ways to determine how much of an item you need to serve during meals or snacks includes using the Food Buying Guide for Child Nutrition Programs and the Calculation Method. For more information on other methods please visit:

<https://www.fns.usda.gov/tn/calculating-ounce-equivalents-grains-cacfp>.

Step 1: Determining Whole Grain Creditability



Step 2: Determining Whole Grain Equalivancy

Using the Grains Measuring Chart

The Grains Measuring Chart tells you how much of a grain item you need to serve to meet 1/2 oz grain equivalent. To use this chart:

1. Find the grain item you want to serve.
2. Check if the chart lists a size or weight by the name of the grain.

If the chart:

Lists a weight for the grain, such as at least 56 grams, then use the Nutrition Facts label for the item you want to serve to make sure it weighs the same, or more than, the grain on the chart.

Does not list a weight or size for the grain, then you do not need to check the size or weight of the product before using the chart.

Lists a size for the grain, such as about 1 1/4" by 1 1/2", then check if the item is the same size, or larger than, this amount.

(U.S. Department of Agriculture, 2019)

Item and Size	1/2 oz eq=
Bagel (entire bagel) at least 56 grams	1/4 bagel or 14 grams
Bagel, Mini (entire bagel) at least 28 grams	1/2 bagel or 14 grams
Biscuit at least 28 grams	1/2 biscuit or 14 grams
Bread (whole grain-rich or enriched) at least 28 grams	1/2 slice or 14 grams
Bun or Roll (entire bun or roll) at least 28 grams	1/2 bun/roll or 14 grams
Cereal Grains (barley, bulgur, quinoa, etc.)	1/4 cup cooked or 14 grams dry
Cereal, Ready-to-Eat: Flakes or Rounds	1/2 cup or 14 grams
Cereal, Ready-to-Eat: Granola	1/8 cup or 14 grams
Cereal, Ready-to-Eat: Puffed	3/4 cup or 14 grams
Corn Muffin at least 34 grams	1/2 muffin or 17 grams
Cracker, Animal (about 1 1/2" by 1")	8 crackers or 14 grams
Cracker, Bear-Shaped, Sweet (about 1" by 1/2")	12 crackers (~1/4 cup) or 14 grams
Cracker, Cheese, Square, Savory (about 1" by 1")	10 crackers or 11 grams
Cracker, Fish -Shaped, Savory (3/4 by 1/2")	21 crackers (~1/4 cup) or 11 grams
Cracker, Graham (about 5" by 2 1/2")	1 cracker or 14 grams
Cracker, Round, Savory (about 1 3/4" across)	4 crackers or 11 grams
Cracker, Saltine (about 2" by 2")	4 crackers or 11 grams
Cracker, Thin Wheat, Square, Savory (1 1/4" by 1 1/4")	6 crackers or 11 grams
Cracker, Woven, Wheat, Square, (1 1/2" by 1 1/2")	3 crackers or 11 grams
Croissant at least 34 grams	1/2 croissant or 17 grams

Step 2: Determining Whole Grain Equalivancy

Using the Grains Measuring Chart

The Grains Measuring Chart tells you how much of a grain item you need to serve to meet 1/2 oz grain equivalent. To use this chart:

1. Find the grain item you want to serve.
2. Check if the chart lists a size or weight by the name of the grain.

If the chart:

Lists a weight for the grain, such as at least 56 grams, then use the Nutrition Facts label for the item you want to serve to make sure it weighs the same, or more than, the grain on the chart.

Does not list a weight or size for the grain, then you do not need to check the size or weight of the product before using the chart.

Lists a size for the grain, such as about 1 1/4" by 1 1/2", then check if the item is the same size, or larger than, this amount.

Item and Size	1/2 oz eq=
English Muffin at least 56 grams	1/4 muffin or 14 grams
French Toast Stick at least 18 grams	2 sticks or 35 grams
Grits	1/4 cup cooked or 14 grams dry
Melba Toast (about 3 1/2" by 1 1/2")	2 pieces or 11 grams
Muffin and Quick Bread at least 55 grams	1/2 muffin/slice or 28 grams
Oatmeal	1/4 cup cooked or 14 grams dry
Pancake at least 34 grams	1/2 pancake or 17 grams
Pasta (whole grain-rich or enriched, all shapes)	1/4 cup cooked or 14 grams dry
Pita Bread/Round at least 56 grams	1/4 pita or 14 grams
Popcorn	1 1/2 cups or 14 grams
Pretzel, Hard, Mini-Twist (about 1 1/4" by 1 1/2")	7 twists (~1/3 cup) or 11 grams
Pretzel, Hard, Thin Stick (about 2 1/2" long)	16 sticks or 11 grams
Pretzel, Soft at least 56 grams*	1/4 pretzel or 14 grams
Rice (all types)	1/4 cup cooked or 14 grams dry
Rice Cake at least 8 grams	1 1/2 cakes or 11 grams
Rice Cake, Mini (about 1 3/4" across)	7 cakes or 11 grams
Taco or Tostada Shell, Hard at least 14 grams	1 shell or 14 grams
Tortilla, Soft, Corn (about 5 1/2")	3/4 tortilla or 14 grams
Tortilla, Soft, Flour (about 6")	1/2 tortilla or 14 grams
Tortilla, Soft, Flour (about 8")	1/4 tortilla or 14 grams
Waffle at least 34 grams	1/2 waffle or 17 grams

ORDERING

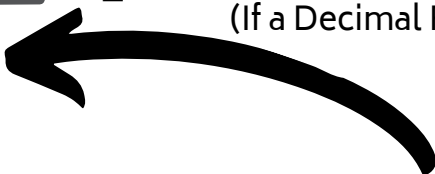
The USDA Food Buying Guide (FBG) is the best tool to use to help determine the right amount and type of food to buy for your program. The FBG can also be used to determine the specific contribution each food makes toward the meal pattern requirements.

The Food Buying Guide is available as an online tool, Mobile App, and downloadable PDF.

<https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs>

General Procedure: How much do I need to purchase?

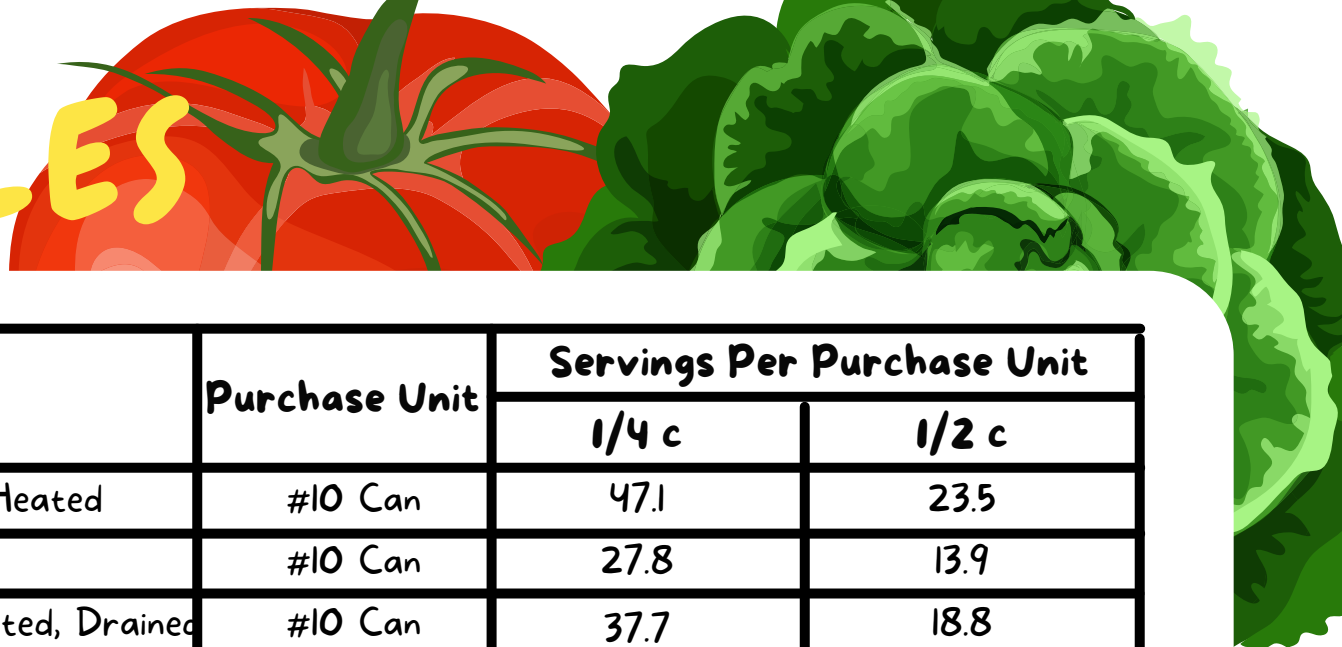
Divide the number of servings you need by the number of servings you will get from one purchase unit (pound, can, etc.). Remember, this can also be done by using the FBG Online Calculator.

$$\frac{\text{Total \# of Servings Needed}}{\text{Number of Servings You Will Get From One Unit}} = \text{Number Units Needed to Purchase (If a Decimal Round Up)}$$


Pages 29-33 can be used as a quick reference to identify the number of servings you will get from one unit for some of the most common foods used in the CACFP.

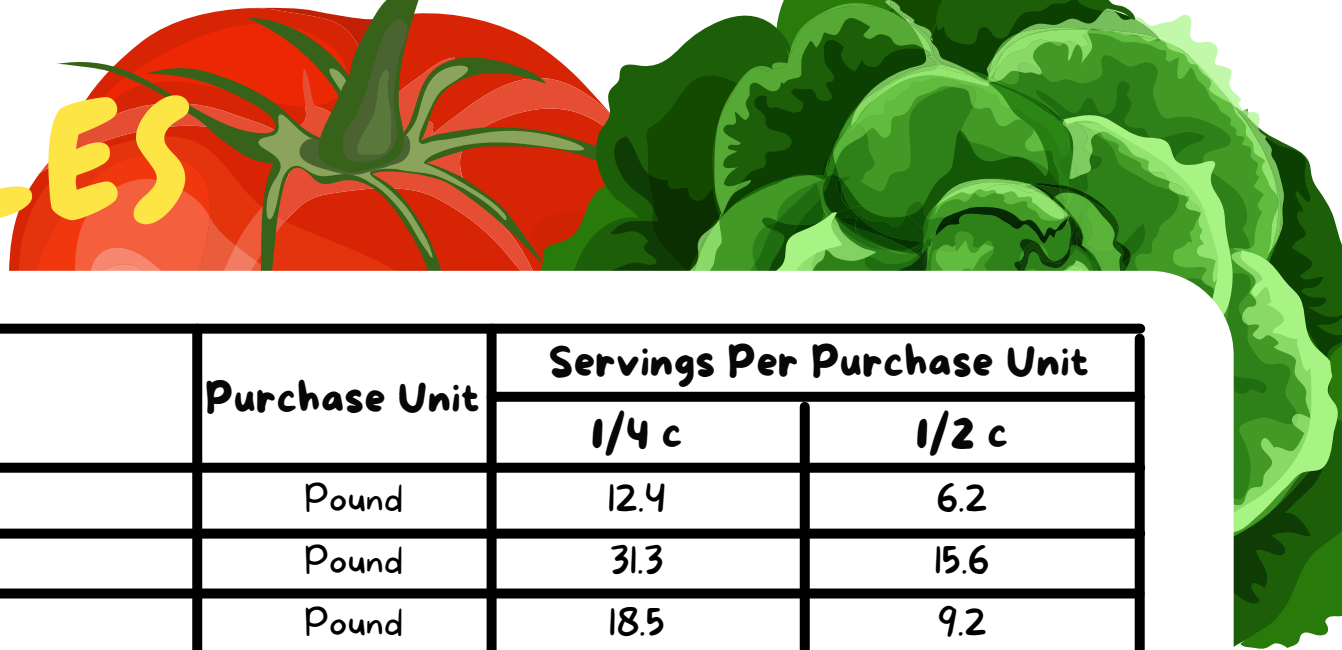
This reference guide does not replace the FBG.

VEGETABLES



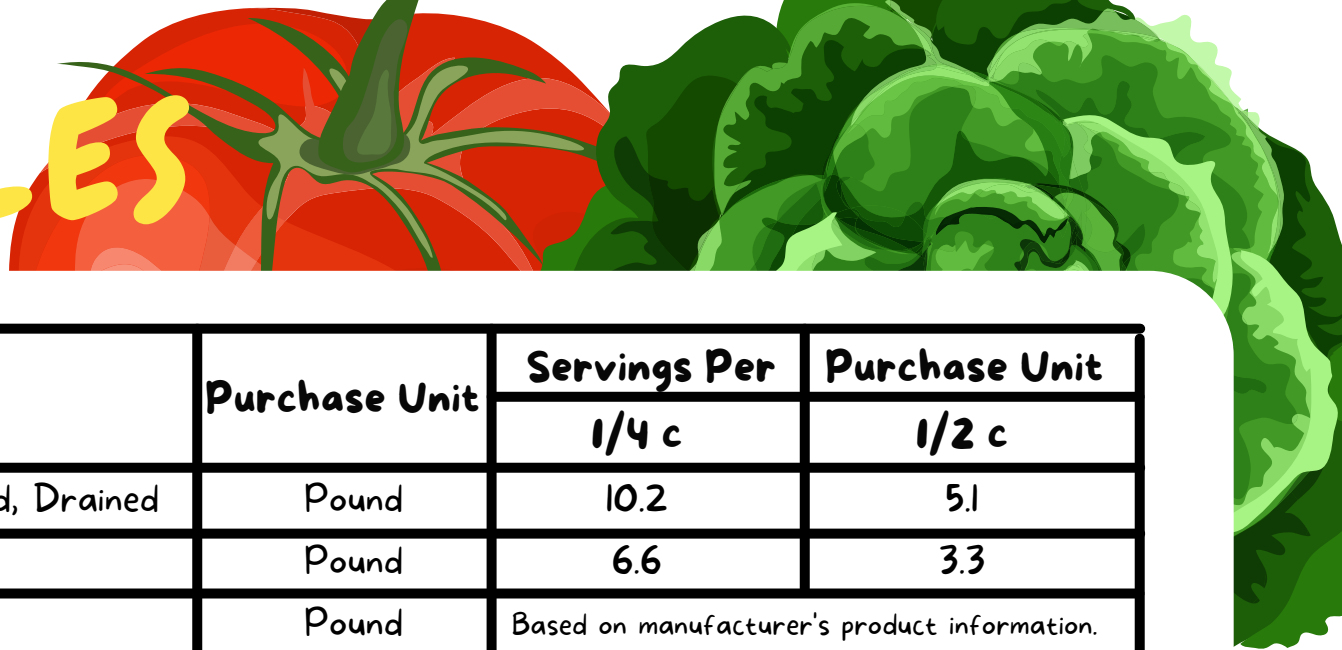
Item	Purchase Unit	Servings Per Purchase Unit	
		1/4 c	1/2 c
Beans, Baked in Sauce, Vegetarian, Heated	#10 Can	47.1	23.5
Beans, Black, Dry, Canned, Heated	#10 Can	27.8	13.9
Beans, Black-eyed Peas, Canned, Heated, Drained	#10 Can	37.7	18.8
Beans, Green, Canned, Cut, Drained, Heated	#10 Can	45.3	22.6
Beans, Pinto, Canned, Heated, Drained	#10 Can	37.2	18.6
Beans, Refried, Canned, Heated	#10 Can	49.6	24.8
Broccoli, Fresh, RAW, Florets	Pound	28.8	14.4
Broccoli, Frozen, Chopped, Cooked, Drained	Pound	9.6	4.8
Cabbage, Green, Shredded, RAW	Pound	27	13.5
Cabbage, Red, Shredded, RAW	Pound	22.8	11.4
Carrots, Baby, RAW	Pound	12.9	6.4
Carrots, Frozen, Sliced, Cooked, Drained	Pound	9.8	4.9
Cauliflower, Fresh, Florets, RAW	Pound	18.3	9.1
Celery, Sticks, RAW, 1/2 inch x 4 inch	Pound	14	7
Corn, Frozen, Whole Kernel, Cooked	Pound	11	5.5
Corn, Whole Kernel, Heated, Canned, Drained	#10 Can	39.6	19.8

VEGETABLES



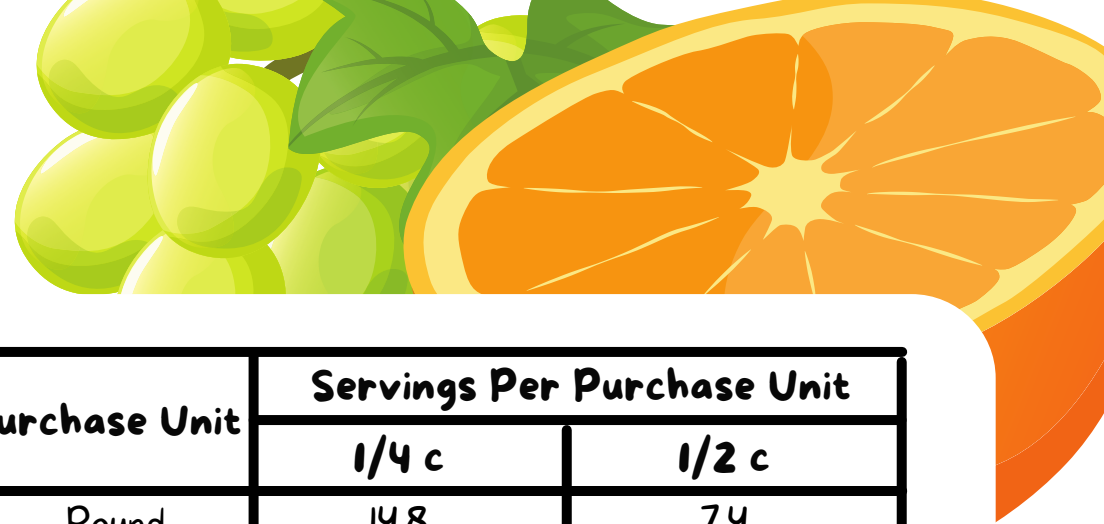
Item	Purchase Unit	Servings Per Purchase Unit	
		1/4 c	1/2 c
Cucumbers, Unpeeled, Sliced, RAW	Pound	12.4	6.2
Lettuce, Romaine, Untrimmed	Pound	31.3	15.6
Mushrooms, Fresh, RAW, Sliced	Pound	18.5	9.2
Onions, Chopped, RAW, All Sizes, Whole	Pound	9.3	4.6
Peas & Carrots, Frozen, Cooked, Drained	Pound	10.9	5.4
Peas, Black-eyed, Canned, Heated, Drained	#10 Can	37.7	18.8
Peas, Green, Frozen, Cooked, Drained	Pound	9.5	4.7
Peppers, Bell, Red or Orange, Whole, Strips	Pound	14.7	7.3
Peppers, Green, RAW, Diced	Pound	9.7	4.8
Potatoes, Diced, Frozen, Precooked, Cooked	Pound	8.9	4.4
Potatoes, Fries, Crinkle Cut, Frozen, Cooked	Pound	16.2	8.1
Salad Mix, Romaine/Spinach, w/color	Pound	36	18
Salsa, Canned	#10 Can	49.3	24.6
Spinach, Fresh Leaves	Pound	25.6	12.8
Squash, Butternut, Cubed, Cooked, Drained	Pound	7.5	3.7
Squash, Yellow, Fresh, Sliced, Cooked, Drained	Pound	8.4	4.2

VEGETABLES



Item	Purchase Unit	Servings Per	
		1/4 c	1/2 c
Squash, Zucchini, Fresh, Sliced, Cooked, Drained	Pound	10.2	5.1
Sweet Potato, Fresh, Whole, Baked	Pound	6.6	3.3
Sweet Potato, Fries	Pound	Based on manufacturer's product information.	
Sweet Potato, Tots	Pound	Based on manufacturer's product information.	
Tomato Paste	#10 Can	192	96
Tomato Sauce, Canned	#10 Can	50.7	25.3
Tomato, Spaghetti Sauce, Meatless, Heated	#10 Can	47.9	23.9
Tomatoes, Canned, Crushed, Heated, Veg & Juice	#10 Can	46.6	23.3
Tomatoes, Canned, Diced, Heated, Veg & Juice	#10 Can	49.2	24.6
Tomatoes, Fresh, Cherry	Pound	12.1	6
Tomatoes, Fresh, Whole, All Sizes	Pound	7.6	3.8
Vegetables, Mixed, Frozen, Cooked, Drained	Pound	8.1	4

FRUIT



Item	Purchase Unit	Servings Per Purchase Unit	
		1/4 c	1/2 c
Apples, Fresh, Small, Unpeeled	Pound	14.8	7.4
Applesauce, Canned	#10 Can	47.6	23.8
Bananas, Fresh, Regular, RAW, Unpeeled	pound	5.3	2.6
Blueberries, Fresh, Whole, RAW	Pound	11.9	5.9
Blueberries, Frozen, Whole, Thawed, Unsweetened	Pound	11.9	5.9
Cantaloupe, Whole, 15 Count, Cubed	Pound	6.7	3.3
Fruit Mix Cocktail, Drained	#10 Can	37	18.5
Grapes, Fresh, Seedless, Whole, w/o Stem	Pound	11.6	5.8
Kiwi, Fresh, Peeled, 33-39 Count, Whole, Chunks	Pound	8.3	4.1
Oranges, Mandarin, Canned, Drained	#10 Can	39.6	19.8
Peach, Fresh, Medium (2½ Inch Diameter	Pound	7	3.5
Peaches, Diced, Canned, Drained	#10 Can	35.4	17.7
Pineapple, Chunks, Canned, Drained	#10 Can	31.8	15.9
Pineapple, Tidbits, Canned, Drained	#10 Can	33.4	16.7
Plums, Fresh, (Purple, Red or Black) 2 in	Pound	9.8	4.9
Raisins, Seedless, (¼ cup Serving = ½ c)	Pound	12.6	6.3

MEAT/MA



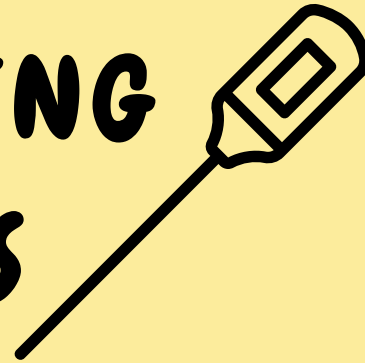
Item	Purchase Unit	Servings Per	Purchase Unit
		1/4 c	1/2 c
Beans, Great Northern, Dry, Canned, Heated, Drained	#10 Can	132.4	21.6
Beans, Kidney, Dry, Canned, Heated, Drained	#10 Can	38.9	25.9
Beans, Pinto, Canned, Heated, Drained	#10 Can	37.2	24.8
Beans, Refried, Canned, Heated	#10 Can	49.6	33
Beef, Ground, Fresh or Frozen, 15% Fat, Cooked	Pound	12	8
Cheese, American, Mozzarella, Cheddar	Pound	16	10.6
Cheese, Cottage or Ricotta	Pound	8	5.3
Chicken, Diced or Pulled, Cooked, Frozen	Pound	16	10.6
Eggs, in Shell, Fresh, Large, Whole	Dozen	24	16
Peanut /Almond /Sunflower Butter	#10 Can	#30 SC/ 97.5	#20 SC/ 65
Tuna, Water Packed, Canned, Chunk Style, Drained	12 oz. can	10.5	7
Turkey Ham, Fully Cooked, Chilled or Frozen	Pound	11.2	7.4
Turkey, Cooked, Frozen, Diced or Pulled, w/o Skin	Pound	16	10.6
Turkey, Ground, Fresh or Frozen	Pound	11.2	7.46
Yogurt, Fresh or Soy, Plain or Flavored	32 oz	8	5.3



FOOD SAFETY

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# INTERNAL COOKING TEMPERATURES



- Beef and pork (chops, roasts, and steaks)\*
- Fish and seafood
- Fresh, frozen, or canned fruits and vegetables cooked for holding hot holding
- Commercially processed ready-to-eat food

165°

- Poultry
- Casserole
- Reheat leftovers

160°

- Egg dishes
- Ground meat

145°

135°

## DANGER ZONE

Bacteria grow most rapidly in the range of temperatures between 40 °F and 140 °F, doubling in number in as little as 20 minutes.

40°

Refrigerator temperature

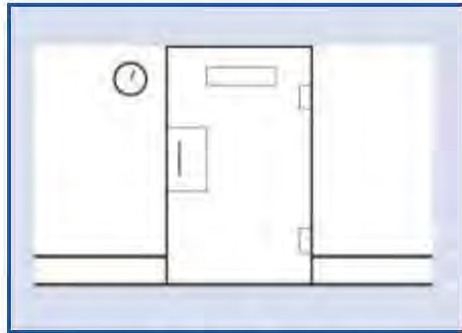
0°

Freezer temperature

\*Allow to rest for 3 minutes.

# THAWING FOOD

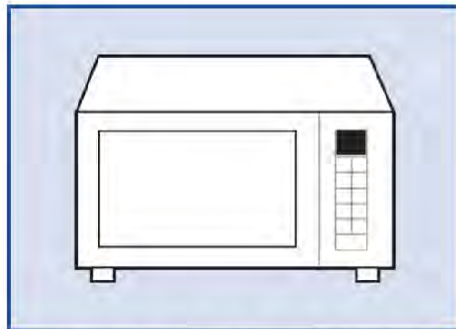
## The Four Acceptable Methods for Thawing Food



In a refrigerator, at 41°F (5°C) or lower



Submerged under running potable water, at a temperature of 70°F (21°C) or lower

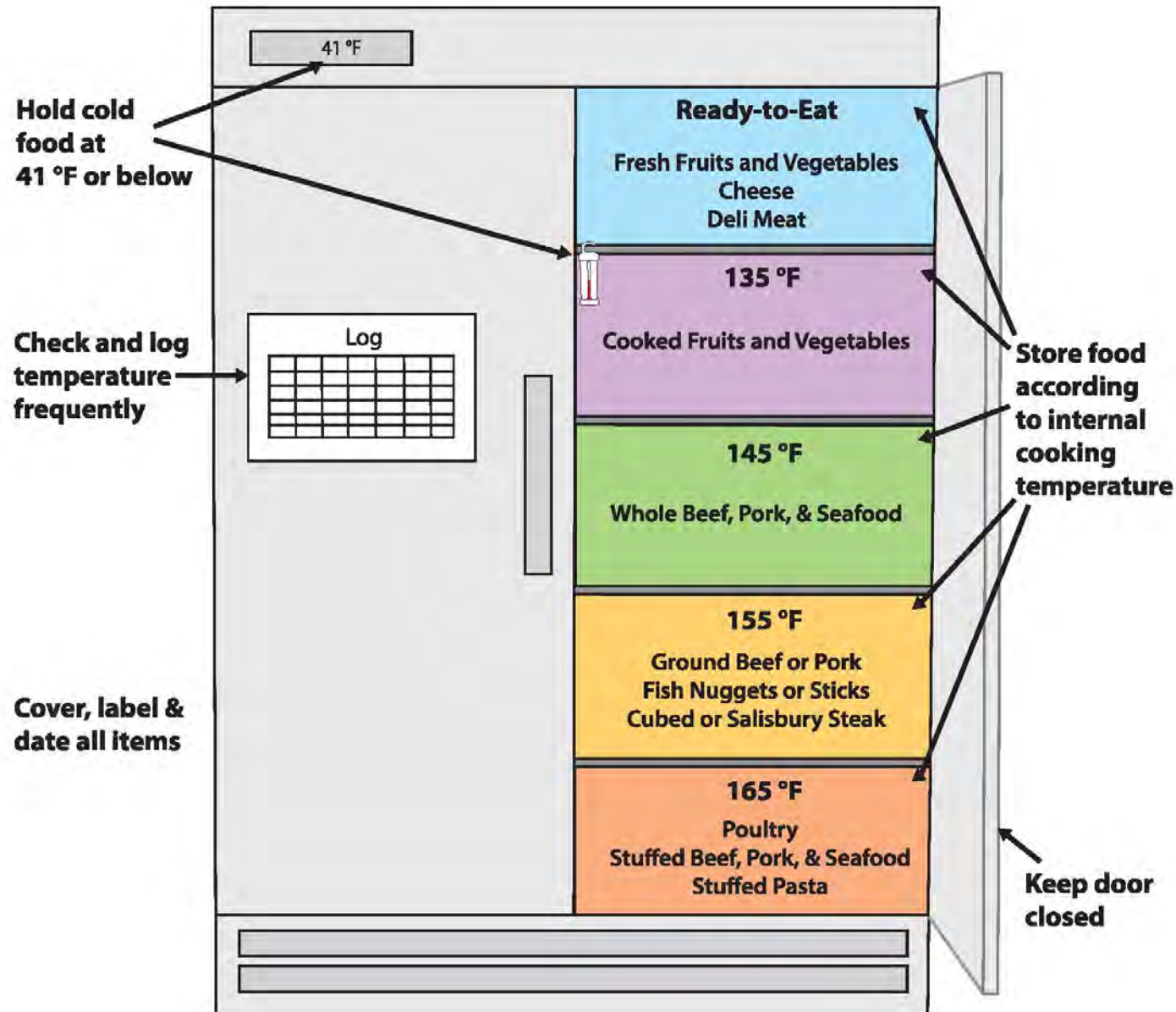


In a microwave oven, if the food will be cooked immediately after thawing



As part of the cooking process

# REFRIGERATE FOR SAFETY



# STOREROOM BASICS



**MAINTAIN TEMPERATURE  
BETWEEN 50°F - 70°F**

**USE FIFO  
FIRST IN, FIRST OUT**

**LABEL AND DATE FOOD**

**KEEP STORAGE  
AREA CLEAN**

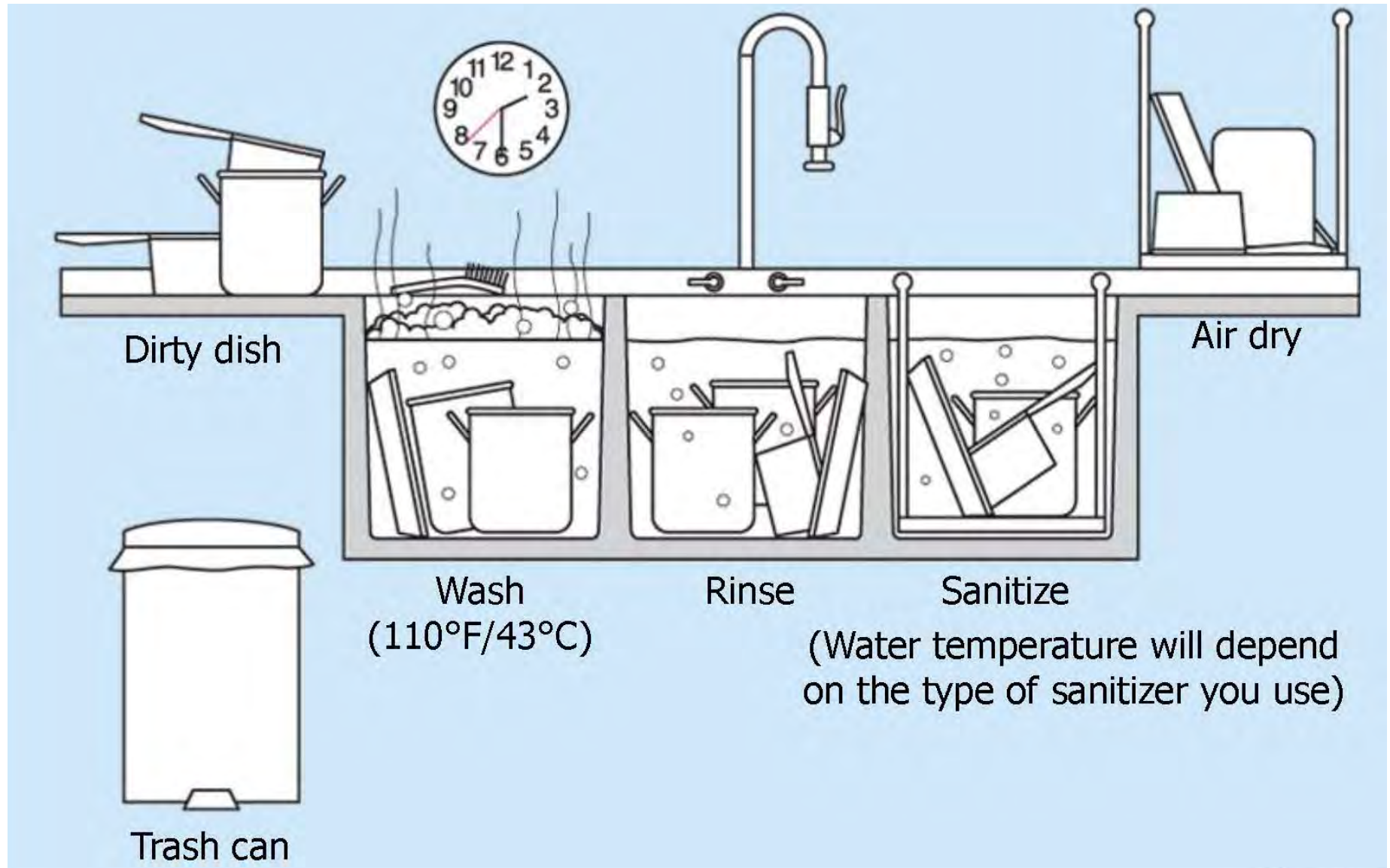
**STORE ITEMS AT LEAST 6  
INCHES OFF THE FLOOR**

**STORE  
CHEMICALS  
SEPARATE  
FROM  
FOODS**





# HOW TO CLEAN AND SANITIZE UTENSILS?



(Iowa State University Extension, 2011)

# SERVING FOOD

## PRACTICE GOOD PERSONAL HYGIENE

**Wash hands for  
20 seconds.**



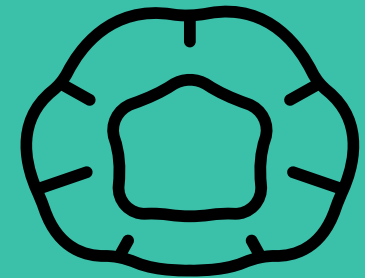
**Wear disposable gloves.  
Change after tasks.**



**Wear a clean apron.**



**Wear a hair restraint.**



## HOLD

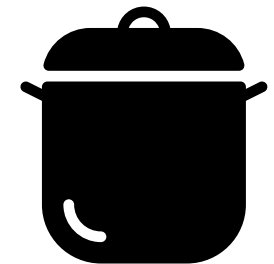
### **DISHES AND UTENSILS**

- **PLATES BY EDGE OR BOTTOM**
- **CUP BY HANDLE OR BOTTOM**
- **UTENSILS BY HANDLE**

### **FOOD**

- **HOT FOODS AT 135° OR ABOVE AND COLD FOODS AT 41° OR BELOW**

**COVER FOOD  
BETWEEN SERVING  
PERIODS**



(The Institute for Child Nutrition , 2018)





# RESOURCES



# RESOURCES

## **North Dakota State University**

### **Now You're Cooking! Well-Measured Recipes**

<https://www.ag.ndsu.edu/publications/food-nutrition/now-serving-well-measured-recipes>

## **The Institute for Child Nutrition**

### **Good Practices for Serving Food**

<https://theicn.org/icn-resources-a-z/foodsafetyminiposters/>

### **Refrigerate For Safety!**

<https://theicn.org/icn-resources-a-z/foodsafetyminiposters/>

### **Storeroom Basics**

<https://theicn.org/icn-resources-a-z/foodsafetyminiposters/>

### **Internal Cooking Temperatures**

<https://theicn.org/icn-resources-a-z/foodsafetyminiposters/>

## **U.S. Department of Agriculture**

### **Administrative Review Process Regarding the CN Label, Watermarked CN Label and Manufacturer's Product Formulation Statement**

<https://www.fns.usda.gov/cn/administrative-review-process-regarding-child-nutrition-cn-label>

### **Using Ounce Equivalents for Grains in the Child and Adult Care Food Program**

<https://fns-prod.azureedge.net/sites/default/files/resource-files/CACFPworksheetGrainsOzEq%20.pdf>

### **Calculating Ounce Equivalents of Grains in the CACFP**

<https://www.fns.usda.gov/tn/calculating-ounce-equivalents-grains-cacfp>

### **How to Spot Whole Grain-Rich Foods for the CACFP**

<https://www.fns.usda.gov/tn/how-spot-whole-grain-rich-foods-cacfp>

### **Food Buying Guide for Child Nutrition Programs**

<https://foodbuyingguide.fns.usda.gov/Appendix/DownloadFBG>

### **Crediting Handbook for the Child and Adult Care Food Program**

[https://fns-prod.azureedge.net/sites/default/files/resource-files/FNS\\_Crediting\\_Handbook.pdf](https://fns-prod.azureedge.net/sites/default/files/resource-files/FNS_Crediting_Handbook.pdf)

## **University of Nebraska-Lincoln**

### **Basic Ingredient Substitutions**

<https://food.unl.edu/article/ingredient-substitutions>

