

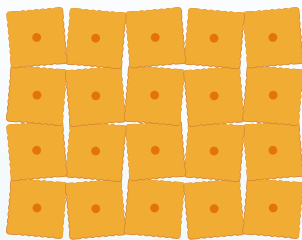
CACFP Ounce Equivalents Resource Guide



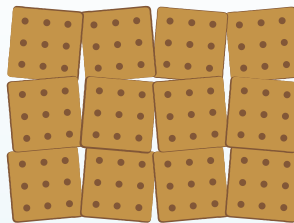
Using Ounce Equivalents for Grains in the Child and Adult Care Food Program

Grains are an important part of meals in the Child and Adult Care Food Program (CACFP). To make sure children and adults get enough grains at CACFP meals and snacks, required amounts for the grains component are listed in the meal pattern as ounce equivalents (oz. eq.). Ounce equivalents tell you the amount of grain in a portion of food.

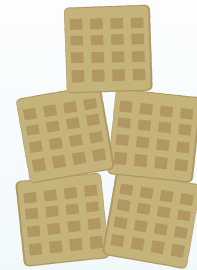
How Much Is 1 Ounce Equivalent?



20 cheese crackers
(1" by 1") = 1 oz. eq.



12 thin wheat crackers
(1 ¼" by 1 ¼") = 1 oz. eq.



5 woven whole-wheat crackers
(1 ½" by 1 ½") = 1 oz. eq.

Using the Grains Measuring Chart


The Grains Measuring Chart on pages 2-4 tells you how much of a grain item you need to serve to meet CACFP meal pattern requirements. To use this chart:

- Find the grain you want to serve under the "Grain Item and Size" column.
- Check if the chart lists a size or weight by the name of the grain. If the chart:
- Find the column for the age of your participants and the meal or snack you are serving. This column lists the amount of a grain you will need to serve to meet the meal pattern requirement for grains.

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. See page 5.

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 ¼" by 1 ½"*, then check if the item is the same size, or larger than, this amount. See page 6.

 Grain Item and Size		1- through 5-year-olds at Breakfast, Lunch, Supper, Snack
Grain Item and Size		Serve at Least ½ oz. eq., which equals about...
Pita Bread/Round (whole grain-rich or enriched) at least 56 grams*		¼ pita or 14 grams
Popcorn		1 ½ cups or 14 grams
Pretzel, Hard, Mini-Twist (about 1 ¼" by 1 ½")**		7 twists or 11 grams

Grains Measuring Chart for the Child and Adult Care Food Program


 Grain Item and Size	Age Group and Meal		
	1- through 5-year-olds at Breakfast, Lunch, Supper, Snack Serve at Least ½ oz. eq., which equals about...	6- through 18-year-olds at Breakfast, Lunch, Supper, Snack Adults at Snack only Serve at Least 1 oz. eq., which equals about...	Adults at Breakfast, Lunch, Supper Serve at Least 2 oz. eq., which equals about...
Bagel (entire bagel) at least 56 grams*	¼ bagel or 14 grams	½ bagel or 28 grams	1 bagel or 56 grams
Bagel, Mini (entire bagel) at least 28 grams*	½ bagel or 14 grams	1 bagel or 28 grams	2 bagels or 56 grams
Biscuit at least 28 grams*	½ biscuit or 14 grams	1 biscuit or 28 grams	2 biscuits or 56 grams
Bread (whole grain-rich or enriched) at least 28 grams*	½ slice or 14 grams	1 slice or 28 grams	2 slices or 56 grams
Bun or Roll (entire bun or roll) at least 28 grams*	½ bun/roll or 14 grams	1 bun/roll or 28 grams	2 buns/rolls or 56 grams
Cereal Grains (barley, bulgur, quinoa, etc.)	¼ cup cooked or 14 grams dry	½ cup cooked or 28 grams dry	1 cup cooked or 56 grams dry
Cereal, Ready-to-Eat: Flakes or Rounds	½ cup or 14 grams	1 cup or 28 grams	2 cups or 56 grams
Cereal, Ready-to-Eat: Granola	⅔ cup or 14 grams	¼ cup or 28 grams	½ cup or 56 grams
Cereal, Ready-to-Eat: Puffed	¾ cup or 14 grams	1 ¼ cup or 28 grams	2 ½ cups or 56 grams
Corn Muffin at least 34 grams*	½ muffin or 17 grams	1 muffin or 34 grams	2 muffins or 68 grams
Cracker, Animal (about 1 ½" by 1")**	8 crackers or 14 grams	15 crackers or 28 grams	30 crackers (~1 cup) or 56 grams
Cracker, Bear-Shaped, Sweet (about 1" by ½")**	12 crackers (~¼ cup) or 14 grams	24 crackers (~½ cup) or 28 grams	48 crackers (~1 cup) or 56 grams
Cracker, Cheese, Square, Savory (about 1" by 1")**	10 crackers or 11 grams	20 crackers (~⅓ cup) or 22 grams	40 crackers (~⅔ cup) or 44 grams
Cracker, Fish-Shaped or Similar, Savory (about ¾" by ½")**	21 crackers (~¼ cup) or 11 grams	41 crackers (~½ cup) or 22 grams	81 crackers (~1 cup) or 44 grams



*Check that the item you want to serve weighs this amount, or more. See "Using the Nutrition Facts Label" on page 5 for more information.

**Check that the item you want to serve is about this size or larger. See "Grains Measuring Tools" on page 6 for more information.

Grains Measuring Chart for the Child and Adult Care Food Program

 Grain Item and Size	Age Group and Meal		
	1- through 5-year-olds at Breakfast, Lunch, Supper, Snack	6- through 18-year-olds at Breakfast, Lunch, Supper, Snack Adults at Snack only	Adults at Breakfast, Lunch, Supper
	Serve at Least ½ oz. eq., which equals about...	Serve at Least 1 oz. eq., which equals about...	Serve at Least 2 oz. eq., which equals about...
Cracker, Graham (about 5" by 2 ½")**	1 cracker or 14 grams	2 crackers or 28 grams	4 crackers or 56 grams
Cracker, Round, Savory (about 1 ¾" across)**	4 crackers or 11 grams	7 crackers or 22 grams	14 crackers or 44 grams
Cracker, Saltine (about 2" by 2")**	4 crackers or 11 grams	8 crackers or 22 grams	16 crackers or 44 grams
Cracker, Thin Wheat, Square, Savory (about 1 ¼" by 1 ¼")**	6 crackers or 11 grams	12 crackers or 22 grams	23 crackers or 44 grams
Cracker, Woven Whole-Wheat, Square, Savory (about 1 ½" by 1 ½")**	3 crackers or 11 grams	5 crackers or 22 grams	10 crackers or 44 grams
Croissant at least 34 grams*	½ croissant or 17 grams	1 croissant or 34 grams	2 croissants or 68 grams
English Muffin (top and bottom) at least 56 grams*	¼ muffin or 14 grams	½ muffin or 28 grams	1 muffin or 56 grams
French Toast Stick at least 18 grams*	2 sticks or 35 grams	4 sticks or 69 grams	8 sticks or 138 grams
Grits	¼ cup cooked or 14 grams dry	½ cup cooked or 28 grams dry	1 cup cooked or 56 grams dry
Melba Toast (about 3 ½" by 1 ½")**	2 pieces or 11 grams	5 pieces or 22 grams	8 pieces or 44 grams
Muffin and Quick Bread (banana, etc.) at least 55 grams*	½ muffin/slice or 28 grams	1 muffin/slice or 55 grams	2 muffins/slices or 110 grams
Oatmeal	¼ cup cooked or 14 grams dry	½ cup cooked or 28 grams dry	1 cup cooked or 56 grams dry
Pancake at least 34 grams*	½ pancake or 17 grams	1 pancake or 34 grams	2 pancakes or 68 grams



*Check that the item you want to serve weighs this amount, or more. See "Using the Nutrition Facts Label" on page 5 for more information.

**Check that the item you want to serve is about this size or larger. See "Grains Measuring Tools" on page 6 for more information.

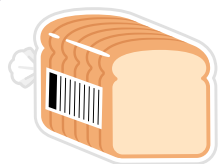
Grains Measuring Chart for the Child and Adult Care Food Program

 Grain Item and Size	Age Group and Meal		
	1- through 5-year-olds at Breakfast, Lunch, Supper, Snack	6- through 18-year-olds at Breakfast, Lunch, Supper, Snack Adults at Snack only	Adults at Breakfast, Lunch, Supper
	Serve at Least ½ oz. eq. , which equals about...	Serve at Least 1 oz. eq. , which equals about...	Serve at Least 2 oz. eq. , which equals about...
Pasta (whole grain-rich or enriched, all shapes)	¼ cup cooked or 14 grams dry	½ cup cooked or 28 grams dry	1 cup cooked or 56 grams dry
Pita Bread/Round (whole grain-rich or enriched) at least 56 grams*	¼ pita or 14 grams	½ pita or 28 grams	1 pita or 56 grams
Popcorn	1 ½ cups or 14 grams	3 cups or 28 grams	6 cups or 56 grams
Pretzel, Hard, Mini-Twist (about 1 ¼" by 1 ½")**	7 twists (~⅓ cup) or 11 grams	14 twists (~⅔ cup) or 22 grams	27 twists (~1 cup) or 44 grams
Pretzel, Hard, Thin Stick (about 2 ½" long)**	16 sticks or 11 grams	31 sticks or 22 grams	62 sticks or 44 grams
Pretzel, Soft at least 56 grams*	¼ pretzel or 14 grams	½ pretzel or 28 grams	1 pretzel or 56 grams
Rice (all types)	¼ cup cooked or 14 grams dry	½ cup cooked or 28 grams dry	1 cup cooked or 56 grams dry
Rice Cake at least 8 grams*	1 ½ cakes or 11 grams	3 cakes or 22 grams	5 ½ cakes or 44 grams
Rice Cake, Mini (about 1 ¾" across)**	7 cakes or 11 grams	13 cakes or 22 grams	25 cakes or 44 grams
Taco or Tostada Shell, Hard at least 14 grams*	1 shell or 14 grams	2 shells or 28 grams	4 shells or 56 grams
Tortilla, Soft, Corn (about 5 ½")**	¾ tortilla or 14 grams	1 ¼ tortillas or 28 grams	2 ½ tortillas or 56 grams
Tortilla, Soft, Flour (about 6")**	½ tortilla or 14 grams	1 tortilla or 28 grams	2 tortillas or 56 grams
Tortilla, Soft, Flour (about 8")**	¼ tortilla or 14 grams	½ tortilla or 28 grams	1 tortilla or 56 grams
Waffle at least 34 grams*	½ waffle or 17 grams	1 waffle or 34 grams	2 waffles or 68 grams



*Check that the item you want to serve weighs this amount, or more. See "Using the Nutrition Facts Label" on page 5 for more information.

**Check that the item you want to serve is about this size or larger. See "Grains Measuring Tools" on page 6 for more information.



Using the Nutrition Facts Label

Some items on the Grains Measuring Chart may have weights listed by the name of the item. Follow the steps below to see if your grain meets the minimum weight listed in the chart:

- Find the grain item and its minimum weight in the Grains Measuring Chart.

For example, the minimum weight for a pancake is at least 34 grams.

Grain Item and Size	Age Group and Meal		
	1- through 5-year-olds at Breakfast, Lunch, Supper, Snack	6- through 18-year-olds at Breakfast, Lunch, Supper, Snack Adults at Snack only	Adults at Breakfast, Lunch, Supper
	Serve at Least ½ oz. eq., which equals about...	Serve at Least 1 oz. eq., which equals about...	Serve at Least 2 oz. eq., which equals about...
Pancake at least 34 grams*	½ pancake or 17 grams	1 pancake or 34 grams	2 pancakes or 68 grams

- Look at the Nutrition Facts label of the grain you wish to serve. Find the weight of the serving size (usually provided as grams (g)). One serving of Brand P pancakes weighs 117 grams.

- Using the Nutrition Facts label, find how many items are in one serving. There are three pancakes in one serving of Brand P pancakes.

- If there is more than one of an item in a serving, you will need to divide to find the weight of each item. For example, the serving size of Brand P pancakes is three pancakes.

Divide the serving weight by the number of items in one serving to find the weight of each item.

Brand P Pancakes

Nutrition Facts

4 servings per container
Serving size **3 Pancakes** **117g**

Amount per serving	
Calories	280
% Daily Value*	
Total Fat 9g	12%
Saturated Fat 1.5g	8%
Trans Fat 0g	

$$\begin{array}{ccccc}
 \text{117 grams} & \div & \text{3 pancakes} & = & \text{39 grams per pancake} \\
 \text{Serving Weight} & & \text{Serving Size} & & \text{Weight of Each Item}
 \end{array}$$

Compare the weight of one item to the minimum weight listed in the Grains Measuring Chart (from Step 1). Is your item the same weight as, or heavier than, the minimum weight?



Yes: Use the Grains Measuring Chart to see how much of your grain to serve to meet CACFP meal pattern requirements. In the example above, pancakes must weigh at least 34 grams in order to use the Grains Measuring Chart. Because each Brand P pancake weighs 39 grams, you may use the chart as a guide to the minimum serving amount.



No: Use another method to determine how much of a grain item to serve. See “What If My Grain Is Different?” on page 6 for more information.



Are There Other Menu Planning Considerations?

If you serve an item that is larger, or weighs more, than what's listed on the Grains Measuring Chart, then you might serve more grains than required by the CACFP meal pattern. The Grains Measuring Chart can help make serving enough grains easier. However, the tools described under “What If My Grain Is Different?” can also help you determine how much of an item to serve to meet the meal pattern without serving more than what is needed.

What If My Grain Is Different?

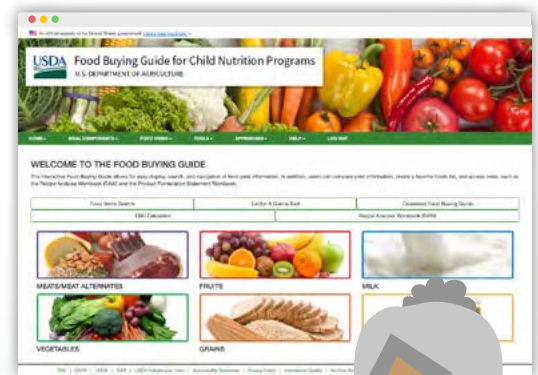
Is the grain item you want to serve:

- Smaller than the item listed on the Grains Measuring Chart?
- Lighter in weight than the item listed on the Grains Measuring Chart?
- Not listed on the Grains Measuring Chart?

If so, you will need to use another way to tell how much to serve in order to meet CACFP meal pattern requirements. You could:

- Enter information from the Nutrition Facts label into the *Food Buying Guide for Child Nutrition Program's (FBG) Exhibit A Grains Tool*.^{*} This tool will let you know how many ounce equivalents of grains are in one serving of the item.
- Use the *FBG Recipe Analysis Workbook (RAW)*^{*} to determine the ounce equivalents per serving for standardized recipes.

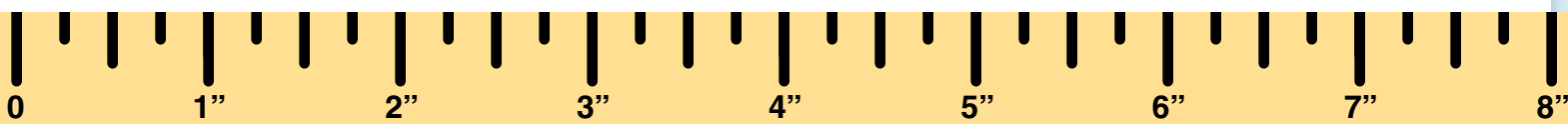
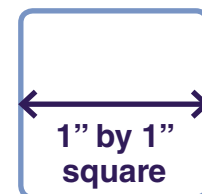
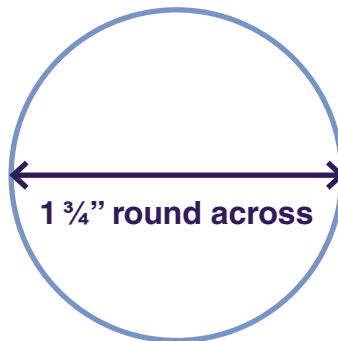
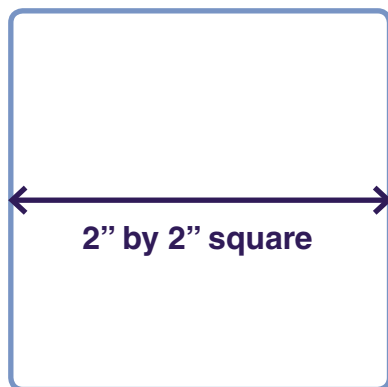
^{*}Available at <https://foodbuyingguide.fns.usda.gov>.



Grains Measuring Tools

Compare your food to the guides below to see if it is the same size or larger than the item listed on the Grains Measuring Chart.

Guides appear as actual size when this worksheet is printed at 100% on standard 8 1/2" by 11" paper.



Feeding Infants Using Ounce Equivalents for Grains in the Child and Adult Care Food Program



Grains in the form of bread/bread-like items, crackers, iron-fortified infant cereal, or ready-to-eat cereals are an important part of meals and snacks in the Child and Adult Care Food Program (CACFP). To make sure infants get enough grains, required amounts of grain items are listed in the infant meal pattern as ounce equivalents (oz eq). Ounce equivalents tell you the amount of grain in a portion of food.

As a reminder, iron-fortified infant cereal is the only grain that may count toward a reimbursable breakfast, lunch, or supper in the CACFP infant meal pattern. You may serve bread/bread-like items, crackers, iron-fortified infant cereal, or ready-to-eat cereals as part of a reimbursable snack.



Reminder!

Infant cereals and ready-to-eat cereals must be iron-fortified. Ready-to-eat cereals must contain no more than 6 grams of sugar per dry ounce.

All grains served must be enriched, fortified, or whole grain-rich.

Breakfast/Lunch/Supper

Grain Item	Requirements
Iron-Fortified Infant Cereal; or meats/meat alternates; or both	0-½ oz eq

Snack

(choose at least one item below)

Grain Item	Requirements
Bread/Bread-like Items; or	0-½ oz eq
Crackers; or	0-¼ oz eq
Iron-Fortified Infant Cereal; or	0-½ oz eq
Ready-to-Eat Cereal	0-¼ oz eq

For more information on the CACFP infant meal pattern, see the “Feeding Infants in the Child and Adult Care Food Program” guide at [TeamNutrition.USDA.gov](https://teamnutrition.usda.gov).

Using the Grains Measuring Charts

The Grains Measuring Charts on pages 3–4 tell you how much bread/bread-like items, crackers, iron-fortified infant cereal, and ready-to-eat cereals you need to serve to meet CACFP infant meal pattern requirements. To use these charts:

1 Find the chart that applies to the grain item you want to serve:
Iron-Fortified Infant Cereal (Page 3), Bread/Bread-Like Items (Page 3), Ready-To-Eat Cereal (Page 4), Crackers (Page 4).

2 Find the grain you want to serve under the "Grain Item and Size" column.

3 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 28 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. See page 5.
- **Lists a size** for the grain, such as **about 2" by 2"**, then check if the item is the same size or larger than this amount. See page 6.
- **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.

Grains Measuring Chart for the CACFP Infant Meal Pattern

Grain Item and Size

Bread at least 28 grams

Cracker, Saltine (about 2" by 2")

Iron-Fortified Infant Cereal
(single and multigrain)



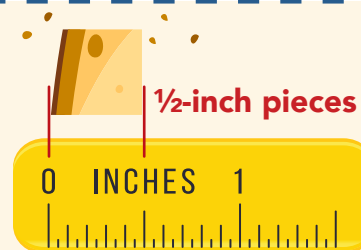
Reminder!

Do not offer babies crackers containing seeds and nuts.
These items can increase a baby's risk of choking.



Reminder!

Cut breads and bread-like items into thin strips or small pieces no larger than ½ inch.
This will reduce the risk of a baby choking.





BREAD/BREAD-LIKE ITEMS = ½ oz eq



IRON-FORTIFIED INFANT CEREAL = ½ oz eq

Grains Measuring Chart for the CACFP Infant Meal Pattern

Grain Item and Size		½ oz eq is about...	Creditable at Meals or Snacks?
Biscuit at least 28 grams	★	½ biscuit or 14 grams	Snack only
Bread at least 28 grams	★	½ slice or 14 grams	Snack only
Bun or Roll (entire bun or roll) at least 28 grams	★	½ bun/roll or 14 grams	Snack only
Corn Muffin at least 34 grams	★	½ muffin or 17 grams	Snack only
English Muffin (top and bottom) at least 56 grams	★	¼ muffin or 14 grams	Snack only
Iron-Fortified Infant Cereal (single and multigrain)		4 tablespoons (¼ cup) dry	Breakfast, lunch, supper, snack
Pancake at least 34 grams	★	½ pancake or 17 grams	Snack only
Pita Bread/Round at least 56 grams	★	¼ pita or 14 grams	Snack only
Tortilla, Soft, Corn (about 5 ½")	■	¾ tortilla or 14 grams	Snack only
Tortilla, Soft, Flour (about 6")	■	½ tortilla or 14 grams	Snack only
Tortilla, Soft, Flour (about 8")	■	¼ tortilla or 14 grams	Snack only
Waffle at least 34 grams	★	½ waffle or 17 grams	Snack only

★ Check that the item you want to serve weighs this amount, or more.
See "Using the Nutrition Facts Label" on page 5 for more information.

■ Check that the item you want to serve is about this size or larger.
See "Grains Measuring Tools" on page 6 for more information.



CRACKERS = ¼ oz eq



READY-TO-EAT CEREALS = ¼ oz eq

Grains Measuring Chart for the CACFP Infant Meal Pattern

Grain Item and Size	¼ oz eq is about...	Creditable at Meals or Snacks?
Cereal, Ready-to-Eat: Flakes or Rounds (e.g., o-shaped cereal)	4 tablespoons (¼ cup) or 7 grams	Snack only
Cereal, Ready-to-Eat: Puffed (e.g., crispy puffed rice cereal)	5 tablespoons (~⅓ cup) or 7 grams	Snack only
Cracker, Animal (about 1 ½" by 1")	■ 4 crackers or 7 grams	Snack only
Cracker, Bear-shaped or Similar, Sweet (not honey flavored) (about 1" by ½")	● ■ 6 crackers or 7 grams	Snack only
Cracker, Cheese, Square, Savory (about 1" by 1")	■ 5 crackers or 6 grams	Snack only
Cracker, Fish-shaped or Similar, Savory (about ¾" by ½")	■ 11 crackers or 6 grams	Snack only
Cracker, Graham (not honey flavored) (about 5" by 2 ½")	● ■ ½ cracker or 7 grams	Snack only
Cracker, Round, Savory (about 1 ¾" across)	■ 2 crackers or 6 grams	Snack only
Cracker, Round, Savory, Mini (about 1" across)	■ 4 crackers or 6 grams	Snack only
Cracker, Saltine (about 2" by 2")	■ 2 crackers or 6 grams	Snack only
Cracker, Thin Wheat, Square, Savory (about 1 ¼" by 1 ¼")	■ 3 crackers or 6 grams	Snack only
Cracker, Zwieback (not honey flavored)	● 1 cracker or 6 grams	Snack only

● Honey should never be fed to babies younger than 1 year.

■ Check that the item you want to serve is about this size or larger.
See "Grains Measuring Tools" on page 6 for more information.

Using the Nutrition Facts Label

Some items on the Grains Measuring Charts may have weights listed by the name of the item. Follow the steps below to see if your grain meets the minimum weight listed in the chart:

Example #1: Pita Bread/Round (1 item in a serving)

1. Find the grain item and its size in the Grains Measuring Chart. →

Grain Item and Size

Pita Bread/Round at least 56 grams

The pita bread/round you are comparing must weigh **at least 56 grams** to use the chart as a guide to the minimum serving amount.

- If the pita bread/round you want to serve is **at least 56 grams**, then you can serve that item.
- If the pita bread/round is lighter in weight than the item listed on the Grains Measuring Chart, see page 6.

Nutrition Facts

6 Servings Per Container

Serving Size 1 Round (57g)



Example #2: Pancakes (more than 1 item in a serving)

1. Find the grain item and its size in the Grains Measuring Chart. →
2. Look at the Nutrition Facts label of the grain you wish to serve. Find the weight of the serving size. One serving of pancakes weighs 117 grams.
3. Using the Nutrition Facts label, find out how much is in one serving (for example, the number of pancakes). There are three pancakes in one serving.
4. If there is more than one of an item in a serving, you will need to find the weight of each item. In this example, the serving size is three pancakes.

Grain Item and Size

½ oz eq is about...

Pancake at least 34 grams ½ pancake or 17 grams

Nutrition Facts

4 Servings Per Container

Serving Size 3 Pancakes (117g)



Divide the weight of the serving by the number of items in one serving to find the weight of one item.

$$117 \text{ grams} \div 3 \text{ pancakes} = 39 \text{ grams per pancake}$$

Serving Weight

Serving Size

Weight of Each Item

Compare the weight of one item to the minimum weight listed in the Grains Measuring Chart (from Step 1). Is your item the same weight as, or heavier than, the minimum weight?

- ✓ **Yes:** In the example above, pancakes must weigh at least 34 grams in order to use the Grains Measuring Chart. Because each pancake weighs 39 grams, you may use the chart as a guide for the minimum serving amount.

What If My Grain Is Different?

Is the grain item you want to serve:

- Smaller than the item listed on the Grains Measuring Chart?
- Lighter in weight than the item listed on the Grains Measuring Chart?
- Not listed on the Grains Measuring Chart?

If the answer is "yes", you will need to use another method to determine how much of a grain item to serve in order to meet CACFP infant meal pattern requirements. You could:

- Enter information from the Nutrition Facts label into the "Food Buying Guide for Child Nutrition Program's (FBG) Exhibit A Grains Tool."* This tool will let you know how many ounce equivalents of grains are in one serving of the item.
- Use the "FBG Recipe Analysis Workbook (RAW)"* to determine the ounce equivalents per serving for standardized recipes.

*Available at foodbuyingguide.fns.usda.gov.

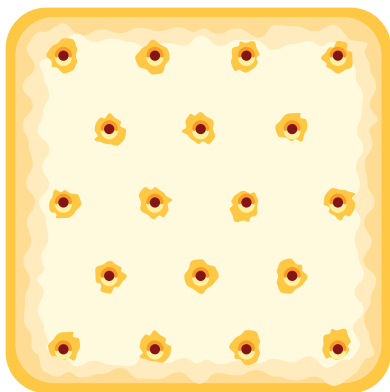
Note: Make sure the food you are entering is creditable for infants. For more information, see "Feeding Infants in the CACFP's Appendix F: Infant Foods List" at fns.usda.gov/sites/default/files/resource-files/FI_AppendixF.pdf.

Grains Measuring Tools

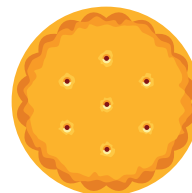
Compare your food to the guides below to see if it is the same size or larger than the item listed on the Grains Measuring Chart.

Guides appear as actual size when this worksheet is printed at 100% on standard 8.5" by 11" paper.

2" by 2"



1" across



1/4"
1/2"



Crediting Single-Serving Packages of Grains in the Child and Adult Care Food Program

Child and Adult Care Food Program (CACFP) operators may serve single-serving or snack-sized packages of grain items, such as breakfast cereals or whole grain crackers to meet grains requirements at snacks and meals.

In the CACFP, the minimum required amounts for grains are listed in the meal pattern as ounce equivalents (oz eq). Ounce equivalents tell you the amount of grains in a portion of food.



How Much is 1 Ounce Equivalent?

0.8 ounce (22 grams)
of **Cheese Crackers**



= 1 oz eq of grains

1 ounce (28 grams)
of **Toasted O's Cereal**



= 1 oz eq of grains

2 ounces (55 grams)
of **Blueberry Muffin**




= 1 oz eq of grains

Using the Grains Measuring Chart for Single-Serving Packages

To see how many single-serving packages of grains are needed to meet CACFP meal pattern requirements, follow the steps below:

- 1 Look at the Grains Measuring Chart for Single-Serving Packages on pages 2-3 and find the item you are serving under the "Grain Item and Package Weight" column. Grain items are listed in alphabetical order. If the item is not listed, see "What If My Grain is Different?" on page 5.
- 2 Each item on the chart lists a minimum package weight by the name of the item. Look at the package you are serving and find its weight listed on the Nutrition Facts label or on the front of the package. Check that the package weighs the same as, or more than, the weight listed on the chart (see page 4).
- 3 Look at the chart and find the column for the age group of your participants and the meal or snack you are serving. This column lists the number of packages you need to serve to meet the CACFP meal pattern requirement for grains. You may serve more than this amount.

Grains Measuring Chart for Single-Serving Packages			
Grain Item and Package Weight*	Child and Adult Care Food Program Age Group and Meal		
	1- through 5-year-olds at Breakfast, Lunch, Supper, Snack	6- through 18-year-olds at Breakfast, Lunch, Supper, Snack Adults at Snack	Adults at Breakfast, Lunch, Supper
	Serve at Least ½ oz eq, which equals about...	Serve at Least 1 oz eq, which equals about...	Serve at Least 2 oz eq, which equals about...
Bagel Chips at least 28 grams or 1 ounce	½ package	1 package	2 packages
Cereal, Ready-to-Eat, All Types**	½ package	1 package	2 packages
Corn Chips at least 28 grams or 1 ounce	½ package	1 package	2 packages

*Check that the package you want to serve weighs this amount, or more. See "Finding the Weight of Single-Serving Packages" on page 4 for more information.

**Must contain 6 grams of sugar or less per dry ounce.

All grains served in the CACFP must be whole grain-rich, enriched, or fortified.

Grains Measuring Chart for Single-Serving Packages

Grain Item and Package Weight*	Child and Adult Care Food Program Age Group and Meal		
	1- through 5-year-olds at Breakfast, Lunch, Supper, Snack	6- through 18-year-olds at Breakfast, Lunch, Supper, Snack Adults at Snack	Adults at Breakfast, Lunch, Supper
	Serve at Least ½ oz eq, which equals about...	Serve at Least 1 oz eq, which equals about...	Serve at Least 2 oz eq, which equals about...
			
Crackers, Savory (e.g., cheese, saltines, whole-wheat, etc.) at least 22 grams or 0.8 ounces	½ package	1 package	2 packages
Crackers, Sweet (e.g., animal, graham, etc.) at least 28 grams or 1 ounce	½ package	1 package	2 packages
Croissant at least 34 grams or 1.2 ounces	½ package	1 package	2 packages
Grits, Dry at least 28 grams or 1 ounce	½ package	1 package	2 packages
Muffin, All Types (except corn) at least 55 grams or 2 ounces	½ package	1 package	2 packages
Muffin, Corn at least 34 grams or 1.2 ounces	½ package	1 package	2 packages
Oatmeal, Dry (unflavored or flavored)** at least 28 grams or 1 ounce	½ package	1 package	2 packages
Pita Chips at least 28 grams or 1 ounce	½ package	1 package	2 packages
Pretzels, Hard*** at least 22 grams or 0.8 ounces	½ package	1 package	2 packages
Popcorn*** at least 14 grams or 0.5 ounce	1 package	2 packages	4 packages
Rice Cakes at least 22 grams or 0.8 ounces	½ package	1 package	2 packages
Tortilla Chips at least 28 grams or 1 ounce	½ package	1 package	2 packages

*Check that the package you want to serve weighs this amount, or more. See “Finding the Weight of Single-Serving Packages” on page 4 for more information.

**Must contain 6 grams of sugar or less per dry ounce.

***Choking hazard for children under the age of 4.

All grains served in the CACFP must be whole grain-rich, enriched, or fortified.

Finding the Weight of Single-Serving Packages

All items in the Grains Measuring Chart list weights by the name of the item. Follow the steps below to see if the package of grains you want to serve meets the minimum weight listed in the chart.

1. Find the grain item and the package weight in the Grains Measuring Chart.

For example, a package of hard pretzels must weigh at least 22 grams or 0.8 ounces.

Grain Item and Package Weight*	Child and Adult Care Food Program Age Group and Meal		
	1- through 5-year-olds at Breakfast, Lunch, Supper, Snack	6- through 18-year-olds at Breakfast, Lunch, Supper, Snack Adults at Snack	Adults at Breakfast, Lunch, Supper
	Serve at Least ½ oz eq, which equals about...	Serve at Least 1 oz eq, which equals about...	Serve at Least 2 oz eq, which equals about...
Pretzel, Hard at least 22 grams or 0.8 ounces	½ package	1 package	2 packages

2. Look at the Nutrition Facts label of the item you are serving. Find the serving size and make sure that it is listed as "1 package" or other similar wording. If the serving size is not listed as 1 package, look for the weight of one package on the front of the package, as shown in the picture below. If the weight of one package is shown on the front of the package, go to Step 4. If the serving size is not 1 package, and the weight of the package is not on the front of the package, see "What If My Grain Is Different?" on page 5.
3. Find the weight of one package. In this example, one package of **Brand P Hard Pretzels** weighs 28 grams.

Brand P Hard Pretzels

Nutrition Facts	
1 Serving Per Container	
Serving Size	1 package (28g)



If the weight of one package is not written on the Nutrition Facts label, look for the weight on the front of the package.

4. Compare the weight of one package to the weight listed in the Grains Measuring Chart. Is this package weight the same as, or heavier than, the weight listed in the Grains Measuring Chart?

✓ **Yes:** Use the Grains Measuring Chart to see how many packages you need to serve to meet CACFP meal pattern requirements.

In this example, a package of hard pretzels must weigh at least 22 grams or 0.8 ounces to use the Grains Measuring Chart. Because 1 package of Brand P hard pretzels weighs 28 grams, you may use the row for "Pretzels, Hard" in the chart to see how many packages of Brand P hard pretzels are needed to meet CACFP meal pattern requirements.

✗ **No:** Use another method to determine how many packages you need to serve to meet CACFP meal pattern requirements. See "What if My Grain Is Different?" on page 5.

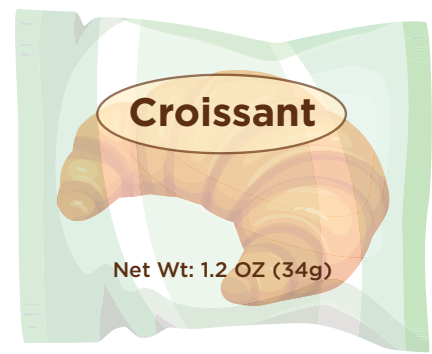
What If My Grain Is Different?

If the package of grains you are serving:

- is lighter in weight than the item listed in the Grains Measuring Chart, or
- does not list the weight of one package, or
- is not listed on the Grains Measuring Chart,

you will need to use another method to determine how many packages are needed to meet CACFP meal pattern requirements. To do this, you could:

- Use the “Food Buying Guide for Child Nutrition Programs (FBG) Exhibit A Grains Tool” available at foodbuyingguide.fns.usda.gov.
- Use Team Nutrition’s “Calculating Ounce Equivalents for Grains in the CACFP” worksheet available at TeamNutrition.USDAGov.
- Contact your State agency or sponsoring organization for assistance.



Are There Other Menu Planning Considerations?

If you serve a package that weighs more than what is listed on the Grains Measuring Chart, then you might serve more grains than required by the CACFP meal pattern. The serving amounts listed in the meal pattern are minimums, so you are allowed to serve more than that amount. However, the tools described under “What If My Grain Is Different?” can also help you determine how much of an item is needed to meet the meal pattern requirements without serving more than what is required. Work with your vendors to purchase single-serving packages of grains that provide the right amount for your participants.

Answer Key:

See “Try It Out!” practice questions on page 6.

1. You should serve each child at least half (1/2) of a corn muffin. Because each corn muffin weighs 1.2 ounces (34 grams), you may use the row for “Muffin, Corn” in the Grains Measuring Chart (Page 3) to see how many muffins to serve each child.
2. You should serve each participant 2 boxes of Brand B bran flakes cereal. Because one box of this cereal weighs 1 ounce, you may use the row for “Cereal, Ready-to-Eat, All Types” in the Grains Measuring Chart (Page 2) to see how many boxes to serve each participant. You may also serve each participant 1 box of Brand B bran flakes, and serve 1 oz eq of another grain item.
3. No, you should not use the Grains Measuring Chart to see how many bags of Brand S savory crackers to serve. A package of savory crackers must weigh at least 0.8 ounces or 22 grams in order to use the chart. One bag of Brand S savory crackers weighs 0.75 ounces. Because 0.75 ounces is less than 0.8 ounces, you must use another method to see how many packages of Brand S savory crackers to serve.

Try It Out!

Use the information in this worksheet to answer the questions below.
See page 5 for the Answer Key.

- 1** You want to serve individually wrapped corn muffins at lunch to 3-year-olds. Each corn muffin weighs 1.2 ounces (34 grams). How many corn muffins should you serve each child to meet the minimum amount of grains required at lunch in the CACFP?

- 2** Your adult day care wants to offer single-serving boxes of ready-to-eat cereal at breakfast. One box of Brand B bran flakes weighs 1 ounce (28 grams). How many boxes of bran flakes should you serve each participant to meet the minimum amount of grains required at breakfast?

- 3** Your at-risk afterschool program wants to serve single-serving bags of Brand S savory crackers at snack to 10-year-olds. One single-serving bag of Brand S savory crackers weighs 0.75 ounces (21 grams). Should you use the Grains Measuring Chart to determine how many bags of Brand S savory crackers to serve? Why or why not?



Grain items prepared from scratch can be a wonderful addition to Child and Adult Care Food Program (CACFP) menus. These items may count toward the minimum amount of grains required at CACFP meals and snacks, which are listed in ounce equivalents (oz eq). **One ounce equivalent (oz eq) is equal to 16 grams of grains.**

To determine how many oz eq of grains are in one serving of a recipe, you can:

A

Complete the Homemade Grains Worksheet on page 6.

Or

B

Weigh one serving of the grain item. Compare the weight of the item to what's listed in the "Using Ounce Equivalents for Grains in the CACFP" worksheet at [TeamNutrition.USDA.gov](https://www.teamnutrition.usda.gov). You can also compare the weight of the item to what's listed in "Exhibit A: Grains Requirements for Child Nutrition Programs" at [foodbuyingguide.fns.usda.gov](https://www.foodbuyingguide.fns.usda.gov). If you use this method, all grain ingredients in the recipe must be creditable.

Using the Homemade Grains Worksheet

You can use the Homemade Grains Worksheet on page 6 to help determine how many oz eq of grains are in one serving of your recipe. Complete the worksheet by following the steps below:

- 1 Write the name of the recipe on the line after "Homemade Grains Worksheet." Then, list each creditable grain ingredient in the recipe. Creditable grains include whole grains, enriched grains, bran, and germ. See the Grains Conversion Chart on page 5 for a list of commonly used grain ingredients. If an ingredient in your recipe is not creditable, do not include it in the Homemade Grains Worksheet.

Pizza Crust

Yield: 25 servings

Ingredients

3 $\frac{1}{4}$ cups enriched bread flour

3 $\frac{1}{2}$ cups whole-wheat flour

$\frac{1}{2}$ cup milk

$\frac{1}{3}$ cup sugar

1 tablespoon active dry yeast



The creditable grain ingredients in this recipe are enriched bread flour and whole-wheat flour.

Homemade Grains Worksheet: Pizza Crust

1 Grain Ingredient	2 Amount	Multiply by	3 Conversion Factor	Equals	4 Grams of Grains
Enriched bread flour		x		=	
Whole-wheat flour		x		=	
5 Total Grams of Creditable Grains					

- 2** List the amount of each creditable grain ingredient in the recipe. If amounts are listed as fractions, change the amounts to decimals by using the Fractions and Decimals Chart below.


Fractions and Decimals Chart		
Fraction	Equals	Decimal
$\frac{1}{8}$	=	0.125
$\frac{1}{4}$	=	0.25
$\frac{1}{3}$	=	0.333
$\frac{3}{8}$	=	0.375
$\frac{1}{2}$	=	0.5
$\frac{5}{8}$	=	0.625
$\frac{2}{3}$	=	0.667
$\frac{3}{4}$	=	0.75
$\frac{7}{8}$	=	0.875

Pizza Crust

Yield: 25 servings

Ingredients

- 3 $\frac{1}{4}$ cups enriched bread flour
- 3 $\frac{1}{2}$ cups whole-wheat flour
- $\frac{1}{2}$ cup milk
- $\frac{1}{3}$ cup sugar
- 1 tablespoon active dry yeast



3 $\frac{1}{4}$ cups = 3.25 cups

3 $\frac{1}{2}$ cups = 3.5 cups

1 Grain Ingredient	2 Amount	Multiply by	3 Conversion Factor	Equals	4 Grams of Grains
Enriched bread flour	3.25 cups	x		=	
Whole-wheat flour	3.5 cups	x		=	
5 Total Grams of Creditable Grains					

- 3** If the recipe lists the amount of grain ingredients in grams (g), skip to Step 5. If amounts are listed as cups, ounces, or pounds, you will need to change these measurements to grams. To do so, use the Grains Conversion Chart on page 5 to find the conversion factor for each grain ingredient. Write the conversion factor for each grain ingredient on the worksheet. If the recipe has a creditable grain ingredient that is not listed in the chart, you will need to weigh your ingredient in grams.

1 Grain Ingredient	2 Amount	Multiply by	3 Conversion Factor	Equals	4 Grams of Grains
Enriched bread flour	3.25 cups	x	137 g	=	
Whole-wheat flour	3.5 cups	x	120 g	=	

- 4** Multiply the amount of the creditable grain ingredient by the conversion factor to determine grams of the ingredient. If you have weighed the ingredient, enter the weight under the "Grams of Grains" column.

1 Grain Ingredient	2 Amount		3 Conversion Factor		4 Grams of Grains
Enriched bread flour	3.25 cups	x	137 g	=	445.25 g
Whole-wheat flour	3.5 cups	x	120 g	=	420 g
5 Total Grams of Creditable Grains					

- 5** Add the grams of all creditable grain ingredients to determine the total grams of creditable grains in the recipe.

1 Grain Ingredient	2 Amount		3 Conversion Factor		4 Grams of Grains
Enriched bread flour	3.25 cups	x	137 g	=	445.25 g
Whole-wheat flour	3.5 cups	x	120 g	=	420 g
5 Total Grams of Creditable Grains					865.25 g

445.25 grams of enriched bread flour + 420 grams of whole-wheat flour =
865.25 grams of creditable grains

- 6** Divide the total grams of creditable grains in the recipe (from Step 5) by the number of servings (yield) in the recipe. This tells you the amount of creditable grains per serving.

865.25 grams of creditable grains ÷ 25 servings =
34.61 grams of creditable grains per serving

- 7** Divide the grams of creditable grains per serving (from Step 6) by 16 grams. This tells you how many ounce equivalents of grains are in each serving.

34.61 grams of creditable grains per serving ÷ 16 grams =
2.16 oz eq of grains per serving

- 8** If the answer in Step 7 ends in a decimal, round the number **down** to the nearest 0.25 oz eq of grains.

2.16 rounds down to 2.
One serving of this pizza crust provides 2 oz eq of grains.

Grains Conversion Chart

Any ingredient: 1 pound (lb) = 453.6 g, 1 ounce (oz) = 28.35 g

Ingredient	Measurement Unit	Conversion Factor
All-Purpose Flour, Enriched, Bleached and Unbleached	1 Cup	125 g
Almond Flour (Not Creditable)	-	-
Bread Flour, Enriched	1 Cup	137 g
Bromated Flour (Not Creditable)	-	-
Chia Seeds (Not Creditable as a Grain)	-	-
Corn Fiber (Not Creditable)	-	-
Corn Masa, Enriched	1 Cup	114 g
Cornmeal, Degerminated (Not Creditable)	-	-
Cornmeal, Enriched, Degermed	1 Cup	138 g
Cornmeal, Whole Grain	1 Cup	122 g
Corn Flour, Yellow (Not Creditable)	-	-
Corn Flour, Whole Grain	1 Cup	117 g
Cracked Wheat	1 Cup	160 g
Flaxseed (Not Creditable as a Grain)	-	-
Lentil Flour (Not Creditable as a Grain)	-	-
Oat Bran	1 Cup	94 g
Oat Fiber (Not Creditable)	-	-
Oat Flour, Whole Grain	1 Cup	120 g
Oats, Quick-Cooking or Rolled	1 Cup	81 g
Rice Flour, Brown	1 Cup	158 g
Rice Flour, Enriched	1 Cup	160 g
Rice Flour, Unenriched (Not Creditable)	-	-
Self-Rising Flour, Enriched	1 Cup	125 g
Sorghum Flour (Not Creditable)	-	-
Tapioca Flour (Not Creditable)	-	-
USDA Foods White Whole Wheat/Enriched 60/40 Blend	1 Cup	120 g
Wheat Bran	1 Cup	58 g
Wheat Flour, Unenriched (Not Creditable)	-	-
Wheat Germ	1 Cup	115 g
White Flour, Enriched	1 Cup	125 g
White Flour, Unenriched (Not Creditable)	-	-
Whole-Wheat Flour	1 Cup	120 g

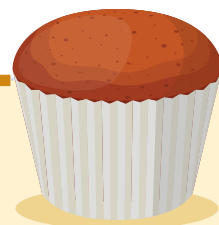
Try It Out!

Use the Homemade Grains Worksheet to determine how many oz eq of grains are in one serving of the recipe.

Multigrain Muffins

Yield: 15 servings

- ☐ 1 cup whole-wheat flour
 - ☐ 1 cup oat bran
 - ☐ ½ cup enriched all-purpose flour
 - ☐ ⅓ cup flaxseeds



Homemade Grains Worksheet:

1 Grain Ingredient	2 Amount		3 Conversion Factor		4 Grams of Grains
		x		=	
		x		=	
		x		=	
		x		=	
5 Total Grams of Creditable Grains					

- 6 $\frac{\text{grams of creditable grains}}{\text{number of servings}} = \text{grams of creditable grains per serving}$
- 7 $\frac{\text{grams of creditable grains per serving}}{16 \text{ grams of grains per oz eq}} = \text{oz eq of grains per serving}$
- 8 Round amount of oz eq down to nearest 0.25 oz eq = $\text{oz eq of grains per serving}$

- Round amount of oz eq down to nearest 0.25 oz eq = 1 oz eq of grains per serving

(1)	(2)	(3)	(4)
Grain Ingredient	Amount	Conversion Factor	Grams of Grains
Whole-Wheat Flour	1 cup	x	120 g
Enriched All-Purpose Flour	½ cup	x	62.5 g
Oat Bran	1 cup	x	94 g
		x	=
			Total Grams of Creditable Grains = 276.5

Homemade Grains Worksheet: Multigrain Muffins

ANSWER KEY

More training, menu planning, and nutrition education materials for the CACFP can be found at TeamNutrition.USDA.gov.

Calculating Ounce Equivalents of Grains in the Child and Adult Care Food Program

Grains are an important part of meals in the Child and Adult Care Food Program (CACFP). To make sure children and adults get enough grains at CACFP meals and snacks, minimum required amounts for grains are listed in the meal pattern as ounce equivalents (oz eq). Ounce equivalents tell you the amount of grain in a portion of food.

Below are three ways you can determine how much of an item you need to serve at CACFP meals and snacks:

1

Grains Measuring Chart for the CACFP: This chart shows the amount of common grain items equal to a ½ ounce equivalent, 1 ounce equivalent, and 2 ounce equivalents. Find the chart in the “Using Ounce Equivalents for Grains in the Child and Adult Care Food Program” worksheet at fns.usda.gov/tn/meal-pattern-training-worksheets-cacfp.

2

Food Buying Guide for Child Nutrition Programs (FBG): Use this application’s “Exhibit A Grains Tool” to enter information from the Nutrition Facts label of the grain product. It will calculate how many ounce equivalents are in one serving. Use the application’s “Recipe Analysis Workbook” to determine the ounce equivalents of grains in a serving of a standardized recipe. The FBG is available at foodbuyingguide.fns.usda.gov.

3

Calculation Method: Use the information on the item’s Nutrition Facts label, and follow the steps for “Calculating Ounce Equivalents for Grains” beginning on page 2 of this worksheet.



Calculating Ounce Equivalents for Grains

What is the requirement?

- 1 Determine the minimum amount of grains you need to serve. Look at the table below. Find the age group of your participants and the meal or snack you are serving.

Write the minimum amount of grains required here: ____ ounce equivalent(s).

Example: You want to serve grains at lunch to 4-year-olds. The minimum amount of grains required at lunch for 1- through 5-year-olds is a $\frac{1}{2}$ ounce equivalent.



Age Group and Meal	Minimum Amount of Grains Required
1- through 5-year-olds at Breakfast, Lunch, Supper, and Snack	$\frac{1}{2}$ ounce equivalent
6- through 18-year-olds at Breakfast, Lunch, Supper, and Snack	1 ounce equivalent
Adults at Snack	1 ounce equivalent
Adults at Breakfast, Lunch, and Supper	2 ounce equivalents

- 2 Find the grain item you are serving on the Grains Ounce Equivalents Chart on pages 4 and 5.

Next, find the amount of required ounce equivalent(s) (from Step 1).

Write the weight of the required ounce equivalent(s) here: ____ grams (g)

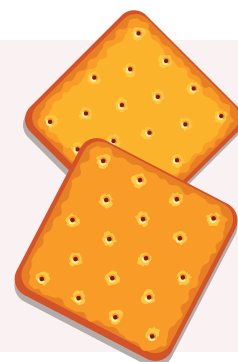
ITEM	$\frac{1}{4}$ oz eq equals	$\frac{1}{2}$ oz eq equals	$\frac{3}{4}$ oz eq equals	1 oz eq equals	2 oz eq equals
Bread Sticks (hard)	6 g	11 g	17g	22 g	44 g
Bread-Type Coating	6 g	11 g	17g	22 g	44 g
Chow Mein Noodles	6 g	11 g	17g	22 g	44 g
Crackers, Savory	6 g	11 g	17g	22 g	44 g

Example:

You are serving savory whole-wheat crackers at lunch to **4-year-olds**.

Step 1 shows that you must serve at least a **$\frac{1}{2}$ ounce equivalent** of grains at lunch.

The Grains Ounce Equivalents Chart shows that a **$\frac{1}{2}$ ounce equivalent** of savory crackers weighs **11 grams**.



Calculating Ounce Equivalents for Grains

How much is needed to meet the requirement?

Brand C Cheese Crackers

Nutrition Facts	
about 16 servings per container	
Serving Size	16 pieces (32g)
Amount per serving	
Calories	140
% Daily Value*	
Total Fat 5g	6%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 150mg	8%
Total Carbohydrate 48g	8%
Dietary Fiber 2g	7%
Total Sugars 4g	
Includes 4g Added Sugars	8%
Protein 2g	
Vitamin D 0mcg	0%
Calcium 32mg	2%
Iron 0.87 mg	4%
Potassium 90mg	0%
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

3

Now look at the Nutrition Facts label of the grain item you are serving. Find the serving size. Write the weight of one serving here:

___ grams

One serving of these crackers weighs 32 grams.

4

Find the number of items or pieces in one serving. Write the number of items here:

___ items

There are 16 crackers (pieces) in one serving.

5

Divide the weight (grams) of one serving (from Step 3) by the number of items (pieces) in one serving (from Step 4):

___ grams ÷ ___ items = ___ grams per item

32 grams ÷ 16 crackers = 2 grams per cracker

6

Divide the weight of the required ounce equivalent(s) (from Step 2) by the weight per item (from Step 5):

___ grams ÷ ___ grams per item = ___ items

11 grams ÷ 2 grams per cracker = 5.5 crackers

7

[As Needed] If the answer in Step 6 ends in a fraction (such as 5 ½) or a decimal (such as 5.5), round the number up to the next whole number.

Five and a half (5.5) rounds up to 6 crackers. Serve at least 6 Brand C cheese crackers to 4-year-olds to meet the minimum amount of grains required at lunch for this age group in the CACFP.

More training, menu planning, and nutrition education materials for the CACFP can be found at TeamNutrition.USDA.gov.

Grains Ounce Equivalents Chart



ITEM	¼ oz eq equals	½ oz eq equals	¾ oz eq equals	1 oz eq equals	2 oz eq equals
Bagels	7 g	14 g	21 g	28 g	56 g
Batter-Type Coating	7 g	14 g	21 g	28 g	56 g
Biscuits	7 g	14 g	21 g	28 g	56 g
Bread Sticks (hard)	6 g	11 g	17 g	22 g	44 g
Bread-Type Coating	6 g	11 g	17 g	22 g	44 g
Breads	7 g	14 g	21 g	28 g	56 g
Bulgur/Cracked Wheat*	7 g	14 g	21 g	28 g	56 g
Buns	7 g	14 g	21 g	28 g	56 g
Cereal, Breakfast (all types, including grits, oatmeal, ready-to-eat, etc.)*	7 g	14 g	21 g	28 g	56 g
Cereal Grains (barley, quinoa, etc.)*	7 g	14 g	21 g	28 g	56 g
Chow Mein Noodles (ready-to-eat)	6 g	11 g	17 g	22 g	44 g
Corn Muffins	9 g	17 g	26 g	34 g	68 g
Cornbread	9 g	17 g	26 g	34 g	68 g
Crackers, Savory	6 g	11 g	17 g	22 g	44 g
Crackers, Sweet	7 g	14 g	21 g	28 g	56 g
Croissants	9 g	17 g	26 g	34 g	68 g
Croutons	6 g	11 g	17 g	22 g	44 g

oz eq = ounce equivalent(s)

g = grams

*Weights listed refer to the dry/uncooked version of the item. For example, 28 grams of uncooked barley, breakfast cereal, rice, etc. equals 1 ounce equivalent of grains.



Grains Ounce Equivalents Chart



ITEM	¼ oz eq equals	½ oz eq equals	¾ oz eq equals	1 oz eq equals	2 oz eq equals
Egg Roll Wrappers	7 g	14 g	21 g	28 g	56 g
English Muffins	7 g	14 g	21 g	28 g	56 g
French Toast	18 g	35 g	52 g	69 g	138 g
Muffins (all, except corn)	14 g	28 g	42 g	55 g	110 g
Pancakes	9 g	17 g	26 g	34 g	68 g
Pasta (whole grain-rich or enriched; all types)*	7 g	14 g	21 g	28 g	56 g
Pie Crust (for savory pies)	9 g	17 g	26 g	34 g	68 g
Pita Bread	7 g	14 g	21 g	28 g	56 g
Pizza Crust	7 g	14 g	21 g	28 g	56 g
Pretzels, Hard	6 g	11 g	17 g	22 g	44 g
Pretzels, Soft	7 g	14 g	21 g	28 g	56 g
Rice*	7 g	14 g	21 g	28 g	56 g
Rolls	7 g	14 g	21 g	28 g	56 g
Stuffing (weights apply to bread in stuffing)*	6 g	11 g	17 g	22 g	44 g
Taco Shells	7 g	14 g	21 g	28 g	56 g
Tortilla Chips	7 g	14 g	21 g	28 g	56 g
Tortillas	7 g	14 g	21 g	28 g	56 g
Waffles	9 g	17 g	26 g	34 g	68 g

oz eq = ounce equivalent(s)

g = grams

*Weights listed refer to the dry/uncooked version of the item. For example, 28 grams of uncooked barley, breakfast cereal, rice, etc. equals 1 ounce equivalent of grains.



Try It Out!

Follow the steps on pages 2-3 to answer the questions below.

A

You want to serve **Brand P hard pretzels** at snack at your afterschool center to children ages 7 to 10 years old. How many pretzels do you need to serve to meet the minimum amount of grains required for this age group?

Nutrition Facts

11 Servings Per Container

Serving Size **20 Pretzels (30g)**

**B**

You want to serve brown rice and **Brand T soft flour tortillas** at supper to your adult participants. You will serve 1 ounce equivalent of brown rice. How many tortillas do you need to serve to meet the remaining 1 ounce equivalent of grains required?

Nutrition Facts

10 Servings Per Container

Serving Size **2 Tortillas (56g)**



Step			
1	Minimum Amount of Grains Required	1 oz eq	1 oz eq
2	Weight of Required Oz Eq	22 g	28 g
3	Weight of One Serving of Grain Item	30 g	56 g
4	Number of Items in One Serving	20 pretzels	2 tortillas
5	Weight of One Item (Weight of One Serving ÷ Number of Items)	1.5 grams (30 grams ÷ 20 pretzels)	28 grams (56 grams ÷ 2 tortillas)
6	Number of Items to Serve (Weight of Required Oz Eq ÷ Weight of One Item)	14.6 pretzels (22 grams ÷ 1.5 grams)	1 tortilla (28 grams ÷ 28 grams)
7	[As Needed] Round Up Items	15 pretzels	1 is a whole number; no rounding needed

Answers

**B**

Resources

<https://www.fns.usda.gov/tn/meal-pattern-training-worksheets-cacfp>

fns.usda.gov/team-nutrition/cacfp-meal-pattern-training-worksheets
foodbuyingguide.fns.usda.gov

Easy Tools to Determine Serving Amounts - fns.usda.gov/tn/halftime-cacfp-thirty-thursdays-training-webinar-series

Exhibit Grains Tool to the rescue webinar - fns.usda.gov/tn/exhibit-grains-tool-rescue

TeamNutrition.usda.gov