

CACFP Helper Sheets

Nourishing Minds and Bodies of All Ages with Nutritious Meals



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Food and Nutrition Division
Child and Adult Care Food Program

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www.SquareMeals.org

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Child Nutrition Program Acronyms	Term
CACFP	Child and Adult Food Program
CCC	Child Care Center
CE	Contracting Entity
CN	Child Nutrition
CNP	Child Nutrition Program
DCH	Day Care Home
DGA	Dietary Guidelines for Americans
EG	Enriched Grain
eq	equivalent
ESC	Education Service Center
F	Fruit
FBG	Food Buying Guide
FNS	Food & Nutrition Service
g	gram
IFIF	Iron-Fortified Infant Formula
IFIC	Iron-Fortified Infant Cereal
M/MA	Meat/Meat Alternate
MPR	Meal Production record
NSLP	National School Lunch Program
OVS	Offer versus Serve
oz	ounce
POS	Point of Service
RDA	Recommended Daily Allowance
SBP	School Breakfast Program
SFSP	Summer Food Service Program
TDA	Texas Department of Agriculture
USDA	United States Department of Agriculture
VA	Vegetable Additional
VDG	Vegetable Dark Green
VG	Vegetable
VL	Vegetable Legumes
VO	Vegetable Other
VR	Vegetable Red
VS	Vegetable Starchy
WGR	Whole Grain Rich

Updates for PY 2021-22

Ounce Equivalents

Oct. 1, 2021 – CACFP contracting entities need to credit grains using ounce equivalents (oz eq). Meal Production Records need to reflect grain servings in oz eq.

Collection of Race/Ethnicity Data by Visual Observation and Identification

May 17, 2021 – Visual observation and identification by CACFP operators is no longer an allowable practice for the collection of race or ethnicity data.

Recipe Abbreviations:

Abbreviations	Term
Approx.	approximate
tsp or t	teaspoon
Tbsp or T	tablespoon
pt	pint
qt	quart
gal	gallon
wt	weight
oz	ounce
lb or #	pound (example: 3#)
g	gram
kg	kilogram
vol	volume
ml	Mililiter
l	liter
fl oz	fluid ounce
no. or #	number (example: #3)
in. or "	inches (example: 12")
°f	degree Fahrenheit
°c	degree Celsius or centigrade

Volume Equivalents for Liquids:



Measurement	1 st Equivalent	2 nd Equivalent
60 drops	= 1 tsp	
1 Tbsp	= 3 tsp	= 0.5 fl oz
1/8 cup	= 2 Tbsp	= 1 fl oz
1/4 cup	= 4 Tbsp	= 2 fl oz
1/3 cup	= 5 Tbsp + 2 tsp	= 2.65 fl oz
3/8 cup	= 6 Tbsp	= 3 fl oz
1/2 cup	= 8 Tbsp	= 4 fl oz
5/8 cup	= 10 Tbsp	= 5 fl oz
2/3 cup	= 10 Tbsp + 2 tsp	= 5.3 fl oz
3/4 cup	= 12 Tbsp	= 6 fl oz
7/8 cup	= 14 Tbsp	= 7 fl oz
1 cup	= 16 Tbsp	= 8 fl oz
1/2 pint	= 1 cup	= 8 fl oz
1 pint	= 2 cups	= 16 fl oz
1 quart	= 2 pints	= 32 fl oz
1 gallon	= 4 quart	= 128 fl oz

Equivalent Weights:



Measurement	1 st Equivalent	2 nd Equivalent
1 oz	= 1/16 lb	= 0.063 lb
4 oz	= 1/4 lb	= 0.250 lb
8 oz	= 1/2 lb	= 0.500 lb
12 oz	= 3/4 lb	= 0.750 lb
16 oz	= 1 lb	= 1.000 lb

Basics at a Glance *(continued)*



Fraction to Decimal Equivalents:



Fractions	Decimal Equivalents
1/8	= 0.125
1/4	= 0.250
1/3	= 0.333
3/8	= 0.375
1/2	= 0.500
5/8	= 0.625
2/3	= 0.666
3/4	= 0.750
7/8	= 0.875

Metric Equivalents by Weight:



Customary Unit (avoirdupois)	Metric Unit
Ounces (oz)	Grams (g)
1 oz	= 28.35 g
4 oz	= 113.4 g
8 oz	= 226.8 g
16 oz	= 453.6 g
Pounds (lb)	Grams (g)
1 lb	= 453.6 g
2 lb	= 907.2 g
Pounds (lb)	Kilograms (kg)
2.2 lb	= 1 kg (1000 g)

Equivalent by Volume:



Customary Unit (fl oz)	Metric Unit
1 cup = 8 fl oz	= 236.59 mL
1 quart = 32 fl oz	= 946.36 mL
1.5 quarts = 48 fl oz	= 1.42 L
33.818 fl oz	= 1.0 L

Basics at a Glance *(continued)*



Scoops (Dishes):



Size/No. ¹	Level Measure	Color Code
6	2/3 cup	Use colored dots matching the brand-specific color coding of scoop sizes.
8	1/2 cup	
10	3/8 cup	
12	1/3 cup	
16	1/4 cup	
20	3-1/3 Tbsp	
24	2-2/3 Tbsp	
30	2 Tbsp	
40	1-2/3 Tbsp	
50	3-3/4 tsp	
60	3-1/4 tsp	
70	2-3/4 tsp	
100	2 tsp	

¹ Scoops are left or right hand or squeeze-type that can be used for both hands. Number on the scoop indicates how many level scoopfuls make one quart. For example, eight No. 8 scoops = 1 quart.



Cooking or Serving Spoons:

Solid Spoons



Perforated Spoons



Slotted Spoons



Spoons vary in length (11", 13", 15", 18", 21") for ease of use in cooking or serving. Spoons can have plastic handles that are heat-resistant. Level scoops, ladles, and portion servers provide more accurate portion control than serving spoons that are not volume-standardized measure.

Specialty Spoons:



A thumb notch on a server or spoon handle prevents the spoon from slipping into the pan and prevents hands from sliding into the food. Triple-edge (solid or perforated) spoons have a flat edge that increases the area where the spoon touches the bottom of the pan when stirring.

Basics at a Glance *(continued)*



Ladles and Portion Servers:



Ladle (fl oz)	Approx. Measure	Portion Server (fl oz)	
1	1/8 cup	1	<p>Ladles and portion servers (measuring-serving spoons that are volume-standardized) are labeled "oz." "Fl oz" would be more accurate since they measure volume, not weight.</p> <p>Use ladles for serving soups, stews, creamed dishes, sauces, gravies, and other liquid products.</p> <p>Use portion servers (solid or perforated) for portioning solids and semi-solids such as fruits and vegetables, and condiments.</p>
2	1/4 cup	2	
3	3/8 cup	3	
4	1/2 cup	4	
6	3/4 cup	6	
8	1 cup	8	
12	1-1/2 cups	n/a	

Steamtable Pan Capacity:

Pan Size	Approx. Capacity	Serving Size	Ladle (fl oz)	Scoop #	Approx. # of Servings
12" x 20" x 2-1/2" 	2 gal	1/2 cup	4 oz	8	64
		3/8 cup	3 oz	10	80
		1/3 cup	2.65 oz	12	96
		1/4 cup	2 oz	16	128
12" x 20" x 4" 	3-1/2 gal	1/2 cup	4 oz	8	112
		3/8 cup	3 oz	10	135
		1/3 cup	2.65 oz	12	168
		1/4 cup	2 oz	16	224
12" x 20" x 6" 	5 gal	1/2 cup	4 oz	8	160
		3/8 cup	3 oz	10	200
		1/3 cup	2.65 oz	12	240
		1/4 cup	2 oz	16	320

Basics at a Glance *(continued)*



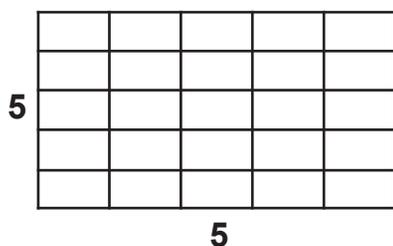
Approximate Dimensions of Serving Sizes from Different Pan Sizes

Pan Type	Approx. Size	No. and Approx. Size Servings per Pan		
Baking or Steamtable Sheet or bun		25	50	100
	12" x 20" x 2-1/2"	2" x 3-3/4"	2" x 2"	n/a
	18" x 26" x 1"	3-1/4" x 5"	3-1/4" x 2-1/2"	1-3/4" x 2-1/2"

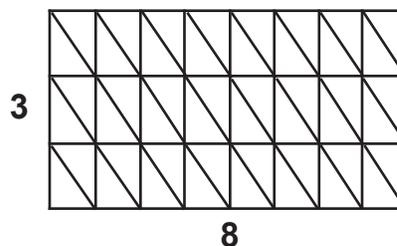
Cutting Diagrams for Portioning:



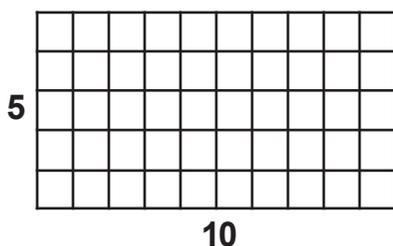
For 25 servings cut 5 x 5:



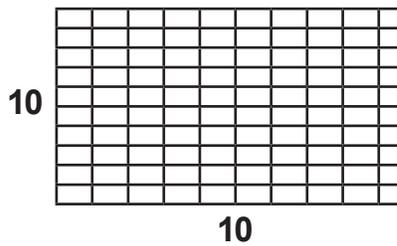
For 48 servings cut 3 x 8 then diagonally:



For 50 servings cut 5 x 10:



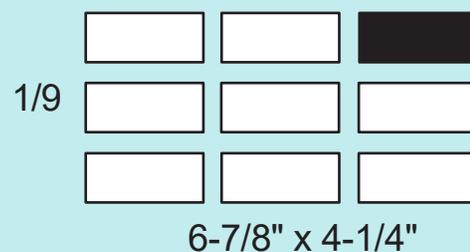
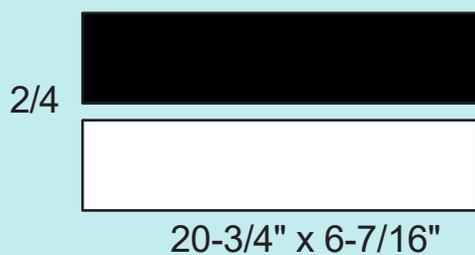
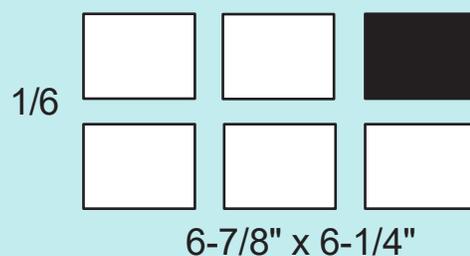
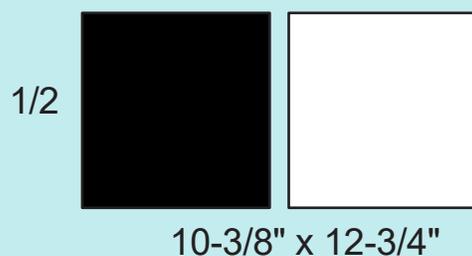
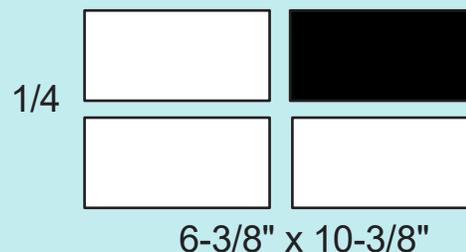
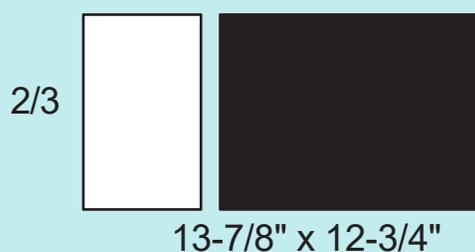
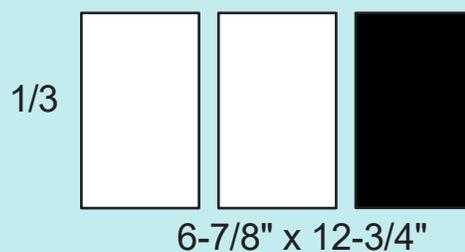
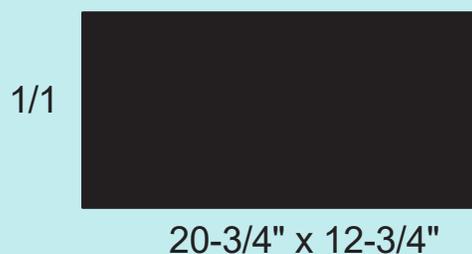
For 100 servings cut 10x10:



Basics at a Glance *(continued)*



Other Pan Sizes:



Steamtable or counter pans are available in various sizes. Smaller size pans may require the use of an adapter bar.

CACFP MEAL PATTERNS: BEST PRACTICES



CACFP meal patterns lay the foundation for a healthy eating pattern for children and adults in care. USDA has also developed the following optional best practices that build on the meal patterns and highlight areas where centers and day care homes may take additional steps to further improve the nutritional quality of the meals they serve.

Infants

- Support mothers who choose to breastfeed their infants by encouraging mothers to supply breastmilk for their infants in day care and offer a quiet, private area that is comfortable and sanitary for mothers who come to the center or day care home to breastfeed.

Vegetables and Fruits

- Make at least one of the two required components of a snack a vegetable or a fruit.
- Serve a variety of fruits and choose whole fruits (fresh, canned, dried or frozen) more often than juice.
- Provide at least one serving each of dark green vegetables, red and orange vegetables, beans and peas (legumes), starchy vegetables and other vegetables once per week.

Grains

- Provide at least two servings of whole grain-rich grains¹ per day.

Meat and Meat Alternates

- Serve only lean meats, nuts and legumes.
- Limit serving processed meats to no more than one serving per week.
- Serve only natural cheeses and choose low-fat or reduced-fat cheeses.

Milk

- Serve only unflavored milk to all participants. If fat-free flavored milk is served to children 6 years old and older, or adults, use the Nutrition Facts Label to select and serve flavored milk that contains no more than 22 grams of sugar per 8 fluid ounces, or the flavored milk with the lowest amount of sugar if flavored milk within this sugar limit is not available.
- Serve water as a beverage when serving yogurt in place of milk for adults.

Note: The best practices reflect recommendations from the Dietary Guidelines for Americans and the National Academy of Medicine to further help increase participants' consumption of vegetables, fruits and whole grains, and reduce the consumption of added sugars and saturated fats.

1. Whole grain-rich foods must contain at least 50% whole grains.

Infant Meal Pattern

Encourage and Support Breastfeeding

- Providers may receive reimbursement for meals containing breastmilk either provided by the mother or breastfed directly to her infant at the day care center or home.
- Only breastmilk and infant formula are served to infants 0 – 5 months old.
- For children 1 year and older, breastmilk can be used to meet the fluid milk component of a meal. A written request from a parent is not required.

Developmentally Appropriate Meals

- There are two age groups for infants: 0 – 5 months old and 6 – 11 months old.
- Solid foods are gradually introduced around 6 months of age, as developmentally appropriate.

More Nutritious Meals

- Requires a vegetable or fruit, or combination, to be served as a snack for infants 6 – 11 months old.
- No longer allows juice, cheese food, or cheese spread to be served.
- Allows ready-to-eat cereals to be served during snack time only.

	0-5 MONTHS	6-11 MONTHS
Breakfast	4 – 6 fl oz breast-milk or formula	6 – 8 fl oz breast-milk or formula and 0 – ½ oz eq iron-fortified infant cereal, 0-4 tbsp meat, fish, poultry, whole eggs, cooked dry beans or peas; or 0 – 2 oz cheese; or 0 – 4 oz (volume) cottage cheese; or 0 – 4 oz yogurt; or a combination* and 0 – 2 tbsp vegetable, fruit, or both*
Lunch or Supper	4 – 6 fl oz breast-milk or formula	6 – 8 fl oz breast-milk or formula and 0 – ½ oz eq iron-fortified infant cereal, 0-4 tbsp meat, fish, poultry, whole eggs, cooked dry beans or peas; or 0 – 2 oz cheese; or 0 – 4 oz (volume) cottage cheese; or 0 – 4 oz yogurt; or a combination* and 0 – 2 tbsp vegetable, fruit, or both*
Snack	4 – 6 fl oz breast-milk or formula	2 – 4 fl oz breast-milk or formula and 0 – ½ oz eq bread/bread-like items; 0 – ¼ oz eq crackers; or 0 – ½ oz eq iron-fortified infant cereal* and 0 – 2 tbsp vegetable, fruit, or both*

**Required when infant is developmentally ready.*

All serving sizes are minimum quantities of the food components that are required to be served.

Beginning October 1, 2021 ounce equivalents will be used to determine the quantity of the creditable grain.

Child and Adult Meal Patterns

The meal patterns include a variety of vegetables, fruits, and whole grains, with small amounts of added sugar and saturated fats. Additional things to keep in mind when serving meals:

Greater Variety of Vegetables and Fruit

- Vegetables and Fruit are separate components for lunch and supper.
- Juice is limited to once per day, across all eating occasions.
- A second vegetable may be served in place of fruit at lunch/supper.

More Whole Grains

- At least one serving per day across all eating occasions must be whole grain-rich.
- Grain-based desserts do not count towards the Grains component.

More Protein Options

- Meat/meat alternates may be served in place of the entire Grains component at breakfast a maximum of three times per week.
- Tofu, soy yogurt, tempeh, and surimi are creditable meat alternates.

Less Added Sugar

- Yogurt must contain no more than 23 grams of sugar per 6 ounces.
- Breakfast cereals must contain no more than 6 grams of sugar per dry ounce.

Making Every Sip Count

- Children 1 year old must be served unflavored whole milk.
- Children 2 – 5 years old must be served unflavored low-fat or fat-free milk.
- Children 6 years old and older as well as adults must be served unflavored low-fat or fat-free milk or fat-free flavored milk.
- Adults may be served yogurt in place of milk once per day, and milk is optional at supper for adults only.

Additional Improvements

- Offer versus serve is allowed for adults and at-risk afterschool programs, excluding snack.
- Frying is not allowed as a method of preparing food on-site.

Child and Adult Meal Patterns

Breakfast Meal Patterns

	AGES 1-2	AGES 3-5	AGES 6-12 & 13-18	ADULTS
Milk	½ cup	¾ cup	1 cup	1 cup
Vegetables, fruit, or both	¼ cup	½ cup	½ cup	½ cup
Grains	½ oz eq*	½ oz eq*	1 oz eq*	2 oz eq*

*Meat and meat alternates may be used to substitute the entire grains component a maximum of three times per week.

oz eq = ounce equivalents

Yogurt may be used to fulfill the fluid milk requirement for adults once per day, when yogurt is not used as a meat alternate in the same meal.

Lunch and Supper Meal Patterns

	AGES 1-2	AGES 3-5	AGES 6-12 & 13-18	ADULTS
Milk	½ cup	¾ cup	1 cup	1 cup*
Meat/Meat Alternates	1 oz	1 ½ oz	2 oz	2 oz
Vegetables	¼ cup	¼ cup	½ cup	½ cup
Fruits	¼ cup	¼ cup	¼ cup	½ cup
Grains	½ oz eq	½ oz eq	1 oz eq	2 oz eq

*A serving of milk is not required at supper meals for adults

oz eq = ounce equivalents

Yogurt may be used to fulfill the fluid milk requirement for adults once per day, when yogurt is not used as a meat alternate in the same meal.

In lieu of offering a fruit and vegetable for lunch or supper 2 vegetables may be served; however, two different kinds of vegetables must be served.

Snack Meal Patterns

	AGES 1-2	AGES 3-5	AGES 6-12 & 13-18	ADULTS
Milk	½ cup	½ cup	1 cup	1 cup
Meat/Meat Alternates	½ oz	½ oz	1 oz	1 oz
Vegetables	½ cup	½ cup	¾ cup	½ cup
Fruits	½ cup	½ cup	¾ cup	½ cup
Grains	½ oz eq	½ oz eq	1 oz eq	1 oz eq

Select two of the five components for snack.

oz eq = ounce equivalents

Note: All serving sizes are minimum quantities of the food components that are required to be served.

Current updates to the suggested serving sizes have been updated from USDA requirements from 1969 and are effective October 1, 2017.

Beginning October 1, 2021 ounce equivalents will be used to determine the quantity of the creditable grain.

Helpful Formulas

When planning how much to prepare or purchase:

$$\frac{\text{\# of Servings Needed}}{\text{Helper Sheets Factor}} = \text{Amount of Purchased Units Needed}$$

Example: 30 Servings of Applesauce, #10 can

$$\frac{30 - \frac{1}{4} \text{ c servings (Children Ages 3-5, 6-12, 13-18)}}{47.6 - \frac{1}{4} \text{ c servings / \#10 can (Helper Sheets Factor)}} = 0.63 \text{ \#10 cans needed (if a decimal, round up)} = \text{One \#10 can needed}$$

When identifying how many servings you have on hand and check your math:

$$\text{\# of Purchased Units On Hand} \times \text{Helper Sheets Factor} = \text{\# of Servings On Hand}$$

Example: Applesauce, #10 Can

$$2 \text{ \#10 cans of Applesauce} \times 47.6 - \frac{1}{4} \text{ c servings / \#10 can (Helper Sheets Factor)} = 95.2 - \frac{1}{4} \text{ c servings (always round down, if a decimal)}$$

Milk

Quick Reference Charts

Use the following pages to quickly determine the number of servings in a purchase unit.

MILK	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT		
		1 /2 cup	3/4 cup	1 cup
Milk, Fluid	Gallon	32	21.3	16
Milk, Fluid	Quart	8	5.3	4
Milk, Fluid	Pint	4	2.6	2

MEAT/MEAT ALTERNATES

MEAT/MEAT ALTERNATE ITEM	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT		
		1 oz	1.5 oz	2 oz
Beans, Great Northern, Dry, Canned, Heated, Drained	#10 Can	32.4	21.6	16.2
Beans, Great Northern, Dry, Whole, Cooked	Pound	25.5	17	12.7
Beans, Kidney, Dry, Canned, Heated, Drained	#10 Can	38.9	25.9	19.4
Beans, Kidney, Dry, Whole, Cooked	Pound	24.8	16.5	12.4
Beans, Pinto, Canned, Heated, Drained	#10 Can	37.2	24.8	18.6
Beans, Pinto, Dry, Cooked, Drained	Pound	21	14	10.5
Beans, Refried, Canned, Heated	#10 Can	49.6	33	24.8
Beans, Refried, Dehydrated, Cooked	Pound	20.5	13.6	10.2
Beef, Ground, Fresh or Frozen, 10% Fat, Cooked	Pound	12.1	8	6
Beef, Ground, Fresh or Frozen, 15% Fat, Cooked	Pound	12	8	6
Beef, Ground, Fresh or Frozen, 20% Fat, Cooked	Pound	11.8	7.8	5.9
Cheese, American, Mozzarella, Cheddar	Pound	16	10.6	8
Cheese, Cottage or Ricotta (2 oz serving 1/4 c = 1 oz MMA)	Pound	8	5.3	4
Chicken, 8 piece, Frozen, Heated 1 breast piece, OR 1 drumstick & 1 wing, OR 1 thigh w/ back = 2 oz MMA	40 lb box			83
Chicken, Diced or Pulled, Cooked, Frozen	Pound	16	10.6	8
Eggs, Frozen, Whole Eggs, Pasteurized	Pound	18	12	9
Eggs, in Shell, Fresh, Large, Whole	Dozen	24	16	12
Peanut /Almond /Sunflower Butter (including Reduced Fat) (2 Tbsp = 1 oz MMA)	#10 Can	#30 SC 97.5	#20 SC 65	#16 SC 48.7
Peanut /Almond /Sunflower Butter (including Reduced Fat) (2 Tbsp = 1 oz MMA)	32 oz container	#30 SC 28.8	#20 SC 19.2	#16 SC 14.4

MEAT/MEAT ALTERNATES *(continued)*

MEAT/MEAT ALTERNATE ITEM	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT		
		1 oz	1.5 oz	2 oz
Pork, Mild Cured, Ready to Cook, Chilled or Frozen, Ham w/o bone (1.2 oz Ham w/Water Added = 1 oz MMA) (1.8 oz Ham w/Water Added = 1.5 oz MMA) (2.44 oz Ham w/Water Added = 2 oz MMA)	Pound	10	6.6	5
Tuna, Water Packed, Canned, Chunk Style, Drained	12 oz. can	10.5	7	5.2
Tuna, Water Packed, Canned, Chunk Style, Drained	66 1/2 oz. can	51.2	34.1	25.6
Turkey, Boneless, Fresh or Frozen w/Skin	Pound	11.2	7.4	5.6
Turkey, Cooked, Frozen, Diced or Pulled, w/o Skin	Pound	16	10.6	8
Turkey Ham, Fully Cooked, Chilled or Frozen (1.4 oz = 1 oz MMA) (2.1 oz = 1.5 oz MMA) (2.8 oz = 2 oz MMA)	Pound	11.2	7.4	5.6
Turkey Ham, Fully Cooked, Chilled or Frozen (15% added ingredients) (1.7 oz = 1 oz MMA) (2.6 oz = 1.5 oz MMA) (3.4 oz = 2 oz MMA)	Pound	9.41	6.2	4.7
Turkey Roast, Frozen, w/o Bone, USDA Foods Only (w/o Skin)	Pound	10.5	7	5.2
Turkey, Whole, Fresh or Frozen, (w/o Neck & Giblets) (w/o Skin)	Pound	7.5	5	3.7
Turkey, Whole, Fresh or Frozen, (w/Neck & Giblets) (w/Skin)	Pound	7.6	5.1	3.8
Yogurt, Fresh or Soy, Plain or Flavored, Sweetened or Unsweetened, Commercially Prepared (1/2 cup or 4 oz = 1oz MMA) (3/4 cup or 6 oz = 1.5 oz MMA)	32 oz Container	8	5.3	4

GRAINS/Oz Eqs.

Using the Grains/Ounce Equivalent Reference Chart

1. Look at the Nutrition Facts Label
2. Determine how many grams a serving is: One serving = 5 crackers (16g)
3. Look at the Ounce Equivalent Reference chart, find the grain item and then find the range.
4. One serving is 16g so it is ½ oz eq of grains.



1. Nutrition Facts

▼ Premium Original Sea Salt
Saltine Crackers

about 28 Serving Per Container
2. **Serving Size 5.00 crackers(16g)**

Amount Per Serving
Calories 70
Calories from Fat 0

Grains/Ounce Equivalent Reference Chart ^{1, 2}

Group A	Grams to oz eq	Ounces to oz eq
	Oz Equivalent for Group A	
Bread type coating	5gm = 0 oz eq	0.0 oz – 0.1 oz = 0 oz eq
3. Crackers (hard)	10 gm = 1/4 oz eq	0.2 oz – 0.3 oz = 1/4 oz eq
Egg noodle	11 gm - 16gm = 1/2 oz eq	0.4 oz – 0.5 oz = ½ oz eq
Savory crackers (saltines and snack crackers)	17 gm – 21gm = 3/4 oz eq	0.6 oz – 0.7 oz = ¾ oz eq
Croutons	22gm - 27gm = 1 oz eq	0.8 oz – 0.9 oz = 1.00 oz eq
Pretzels (hard)	28gm - 32 gm = 1.25 oz eq	1.0 oz – 1.1 oz = 1.25 oz eq
Stuffing (dry) Note: weights apply to bread in stuffing	33gm - 38 gm = 1.50 oz eq	1.2 oz – 1.3 oz = 1.50 oz eq
	39gm - 43 gm = 1.75 oz eq	1.4 oz – 1.5 oz = 1.75 oz eq
	44 gm - 49 gm = 2 oz eq	1.6 oz – 1.7 oz = 2.00 oz eq

¹ In the CACFP, creditable grains must be made with whole grains or enriched meal or enriched flour, bran, or germ. At least one grain serving per day must meet whole grain-rich criteria.

² Starting Oct.1, 2021 grain quantities are determined using ounce equivalents (oz. eq.). Use the table to determine how much of a grain item is needed to meet the specified grain ounce equivalent.

GRAINS *(continued)*

GRAINS	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Cereal Grain, Oats Rolled, Quick, Dry, Cooked	Pound	47.6	23.8
Cereal Grain, Oats Rolled, Regular, Dry, Cooked	Pound	45.4	22.7
Pasta, Elbow Macaroni, Whole Wheat, Regular, Dry, Cooked	Pound	32.5	16.2
Pasta, Penne, Whole Wheat, Dry, Cooked	Pound	34.5	17.2
Pasta, Spaghetti, Whole Wheat, Regular, Dry, Cooked	Pound	34	17
Rice, Brown, Instant, Dry, Cooked	Pound	28.8	14.4
Rice, Brown, Long Grain, Dry, Cooked	Pound	17.5	8.75
Rice, Brown, Long Grain, Dry, Parboiled, Cooked	Pound	31	15.5

Grains Ounce Equivalent Reference Chart ¹ ²

Group A	Grams to oz eq	Ounces to oz eq
	Oz Equivalent for Group A	
Bread type coating	0 gm – 5gm = 0 oz eq	0.0 oz – 0.1 oz = 0 oz eq
Bread sticks (hard)	6 gm – 10 gm = 1/4 oz eq	0.2 oz – 0.3 oz = 1/4 oz eq
Chow mein noodles	11 gm - 16gm = 1/2 oz eq	0.4 oz – 0.5 oz = 1/2 oz eq
Savory crackers (saltines and snack crackers)	17 gm – 21gm = 3/4 oz eq	0.6 oz – 0.7 oz = 3/4 oz eq
Croutons	22gm - 27gm = 1 oz eq	0.8 oz – 0.9 oz = 1.00 oz eq
Pretzels (hard)	28gm - 32 gm = 1.25 oz eq	1.0 oz – 1.1 oz = 1.25 oz eq
Stuffing (dry) Note: weights apply to bread in stuffing	33gm - 38 gm = 1.50 oz eq	1.2 oz – 1.3 oz = 1.50 oz eq
	39gm - 43 gm = 1.75 oz eq	1.4 oz – 1.5 oz = 1.75 oz eq
	44 gm - 49 gm = 2 oz eq	1.6 oz – 1.7 oz = 2.00 oz eq

¹ In the CACFP, creditable grains must be made with whole grains or enriched meal or enriched flour, bran, or germ. At least one grain serving per day must meet whole grain-rich criteria.

² Starting Oct.1, 2021 grain quantities are determined using ounce equivalents (oz. eq.). Use the table to determine how much of a grain item is needed to meet the specified grain ounce equivalent.

GRAINS *(continued)*

Grains Ounce Equivalent Reference Chart ^{1 2}

	Grams to oz eq	Ounces to oz eq
Group B	Oz Equivalent for Group B	
Bagels	0 gm – 6 gm = 0 oz eq	0.0 oz – 0.24 oz = 0 oz eq
Batter type coating	7 gm – 13 gm = 1/4 oz eq	0.25 oz – 0.49 oz = 1/4 oz eq
Biscuits	14 gm – 20 gm = 1/2 oz eq	0.50 oz – 0.74 oz = 1/2 oz eq
Breads (sliced white, whole wheat, French, Italian)	21 gm – 27 gm = 3/4 oz eq	0.75 oz – 0.99 oz = 3/4 oz eq
Buns (hamburger and hot dog)	28 gm - 34 gm = 1 oz eq	1.00 oz – 1.24 oz = 1.00 oz eq
Sweet Crackers ⁵ (graham crackers – all shapes, animal crackers)	35 gm - 41 gm = 1.25 oz eq	1.25 oz – 1.49 oz = 1.25 oz eq
Egg roll skins	42 gm - 48 gm = 1.50 oz eq	1.50 oz – 1.74 oz = 1.50 oz eq
English muffins	49 gm - 55 gm = 1.75 oz eq	1.75 oz – 1.99 oz = 1.75 oz eq
Pita bread (white, whole wheat, whole grain-rich)	56 gm - 62 gm = 2 oz eq	2.00 oz – 2.24 oz = 2.00 oz eq
Pizza crust		
Pretzels (soft)		
Rolls (white, whole wheat, whole grain-rich)		
Tortillas (wheat or corn)		
Tortilla chips (wheat or corn)		
Taco shells		
Group C	Oz Equivalent for Group C	
Cookies ³	0 gm – 8 gm = 0 oz eq	0.0 oz – 0.29 oz = 0 oz eq
Cornbread	9 gm – 16 gm = 1/4 oz eq	0.3 oz – 0.59 oz = 1/4 oz eq
Corn muffins	17 gm – 25 gm = 1/2 oz eq	0.6 oz – 0.89 oz = 1/2 oz eq
Croissants	26 gm – 33 gm = 3/4 oz eq	0.9 oz – 1.19 oz = 3/4 oz eq
Pancakes	34 gm - 42 gm = 1.00 oz eq	1.2 oz – 1.49 oz = 1.00 oz eq
Pie crust (dessert pies ³ , cobbler ³ , fruit turnovers ⁴ , and meat/meat alternate pies)	43 gm - 50 gm = 1.25 oz eq	1.5 oz – 1.79 oz = 1.25 oz eq
	51 gm - 59 gm = 1.50 oz eq	1.8 oz – 2.09 oz = 1.50 oz eq
Waffles	60 gm - 67 gm = 1.75 oz eq	2.1 oz – 2.39 oz = 1.75 oz eq
	68 gm - 76 gm = 2.00 oz eq	2.4 oz – 2.69 oz = 2.00 oz eq

³ Considered a grain-based dessert and cannot count towards the grain component in CACFP or NSLP/SBP infant preschool meals, as specified in 226.20(a)(4) and 2.10.10.

⁴ Considered a grain-based dessert and cannot count towards the grain component in the CACFP and NSLP/SBP infant and preschool meals, as specified in 226.20 (a)(4) and 210.10.

⁵ Allowed in NSLP (up to 2.0 eq grain-based dessert per week in grades K-12) as specified in 210.10. May count towards the grain component in SBP (grades K-12), CACFP, NSLP/SBP infant and preschool meals, and SFSP.

GRAINS *(continued)*

Grains Ounce Equivalent Reference Chart ^{1 2}

	Grams to oz eq	Ounces to oz eq
Group D	Oz Equivalent for Group D	
Doughnuts ⁴ (cake and yeast raised, unfrosted)	0 gm – 13 gm = 0 oz eq	0.0 oz – 0.49 oz = 0 oz eq
Cereal bars, breakfast bars, granola bars ⁴ (plain)	14 gm – 27 gm = 1/4 oz eq	0.5 oz – 0.99 oz = 1/4 oz eq
Muffins (all, except corn)	28 gm – 41 gm = 1/2 oz eq	1.0 oz – 1.49 oz = 1/2 oz eq
Sweet roll ⁴ (unfrosted)	42 gm – 54 gm = 3/4 oz eq	1.5 oz – 1.99 oz = 3/4 oz eq
Toaster pastry ⁴ (unfrosted)	55 gm - 68 gm = 1.00 oz eq	2.0 oz – 2.49 oz = 1.00 oz eq
	69 gm - 82 gm = 1.25 oz eq	2.5 oz – 2.99 oz = 1.25 oz eq
	83 gm - 96 gm = 1.50 oz eq	3.0 oz – 3.49 oz = 1.50 oz eq
	97 gm - 109 gm = 1.75 oz eq	3.5 oz – 3.99 oz = 1.75 oz eq
	110 gm - 123 gm = 2.00 oz eq	4.0 oz – 4.49 oz = 2.00 oz eq
Group E	Oz Equivalent for Group E	
Cereal bars, breakfast bars, granola bars ⁴ (with nuts, dried fruit, and/or chocolate pieces)	0 gm – 17 gm = 0 oz eq	0.0 oz – 0.59 oz = 0 oz eq
	18 gm – 34 gm = 1/4 oz eq	0.6 oz – 1.19 oz = 1/4 oz eq
Cookies ³ (with nuts, raisins, chocolate pieces and/or fruit purees)	35 gm – 51 gm = 1/2 oz eq	1.2 oz – 1.79 oz = 1/2 oz eq
	52 gm – 68 gm = 3/4 oz eq	1.8 oz – 2.39 oz = 3/4 oz eq
Doughnuts ⁴ (cake and yeast raised, frosted or glazed)	69 gm - 86 gm = 1.00 oz eq	2.4 oz – 2.99 oz = 1.00 oz eq
French toast	87 gm - 103 gm = 1.25 oz eq	3.0 oz – 3.59 oz = 1.25 oz eq
Sweet rolls ⁴ (frosted)	104 gm - 120 gm = 1.50 oz eq	3.6 oz – 4.19 oz = 1.50 oz eq
Toaster pastry ⁴ (frosted)	121 gm - 137 gm = 1.75 oz eq	4.2 oz – 4.79 oz = 1.75 oz eq
	138 gm - 155 gm = 2.00 oz eq	4.8 oz – 5.39 oz = 2.00 oz eq

³ Considered a grain-based dessert and cannot count towards the grain component in CACFP or NSLP/SBP infant preschool meals, as specified in 226.20(a)(4) and 2.10.10.

⁴ Considered a grain-based dessert and cannot count towards the grain component in the CACFP and NSLP/SBP infant and preschool meals, as specified in 226.20 (a)(4) and 210.10.

⁵ Allowed in NSLP (up to 2.0 eq grain-based dessert per week in grades K-12) as specified in 210.10. May count towards the grain component in SBP (grades K-12), CACFP, NSLP/SBP infant and preschool meals, and SFSP.

GRAINS *(continued)*

Grains Ounce Equivalent Reference Chart ^{1, 2}

	Grams to oz eq	Ounces to oz eq
Group F		
Oz Equivalent for Group F		
Cake ³ (plain, unfrosted)	0 gm – 20 gm = 0 oz eq	0.0 oz – 0.72 oz = 0 oz eq
Coffee cake ⁴	21 gm – 40 gm = 1/4 oz eq	0.73 oz – 1.44 oz = 1/4 oz eq
	41 gm – 61 gm = 1/2 oz eq	1.45 oz – 2.17 oz = 1/2 oz eq
	62 gm – 81 gm = 3/4 oz eq	2.18 oz – 2.89 oz = 3/4 oz eq
	82 gm - 102 gm = 1.00 oz eq	2.9 oz – 3.62 oz = 1.00 oz eq
Group G		
Oz Equivalent for Group G		
Brownies ³ (plain)	0 gm – 31 gm = 0 oz eq	0.0 oz – 1.09 oz = 0 oz eq
Cake ³ (all varieties, frosted)	32 gm – 62 gm = 1/4 oz eq	1.1 oz – 2.19 oz = 1/4 oz eq
	63 gm – 93 gm = 1/2 oz eq	2.2 oz – 3.29 oz = 1/2 oz eq
	94 gm – 124 gm = 3/4 oz eq	3.3 oz – 4.39 oz = 3/4 oz eq
	125 gm - 156 gm = 1.00 oz eq	4.4 oz – 5.49 oz = 1.00 oz eq
Group H		
Oz Equivalent for Group H		
Cereal Grains (barley, quinoa, etc.)	1.00 oz eq = ½ cup cooked or 1 ounce (28 gm) dry	
Breakfast cereals (cooked) ^{6,7}		
Bulgur or cracked wheat		
Macaroni (all shapes)		
Noodles (all varieties)		
Pasta (all shapes)		
Group I		
Oz Equivalent for Group I		
Ready to eat breakfast cereal (cold, dry) ^{6,7}	1.00 oz eq = 1 cup or 1 ounce for flakes and rounds	
	1.00 oz eq = 1.25 cups or ounce for puffed cereal	
	1.00 oz eq = ¼ cup or 1 ounce for granola	

³ Considered a grain-based dessert and cannot count towards the grain component in CACFP or NSLP/SBP infant preschool meals, as specified in 226.20(a)(4) and 2.10.10.

⁴ Considered a grain-based dessert and cannot count towards the grain component in the CACFP and NSLP/SBP infant and preschool meals, as specified in 226.20 (a)(4) and 210.10.

⁶ Refer to program regulations for the appropriate serving size for supplements 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.

⁷ In the CACFP and SFSP, cereals must be whole-grain, enriched, or fortified: cereals served in CACFP and NSLP/SBP infant and preschool meals must contain no more than 6 grams of sugar per dry ounce.

GRAINS *(continued)*

Grain-based desserts like those in the chart below can be served but are **NOT** creditable in the CACFP. [The USDA Exhibit A Grains Chart](#) lists many grains-based dessert, but not all. If a food containing grains is commonly thought of as a dessert or treat, it may not qualify for reimbursement.

GRAIN-BASED DESSERTS
Cookies (with nuts, raisins, chocolate pieces and/or fruit purees)
Dessert pies, cobbler, fruit turnovers
Doughnuts (cake and yeast raised, unfrosted, frosted or glazed)
Cereal bars, breakfast bars, granola bars, fig bars (plain, with nuts, dried fruit, and/or chocolate pieces)
Sweet rolls (unfrosted, frosted)
Toaster pastry (unfrosted, frosted)
Cake (all varieties, plain, unfrosted, frosted)
Coffee Cake
Brownies
Pie crust if in sweet pie, turnover or cobbler
Bread pudding
Scones (made with fruit or icing)
Cupcakes
Fruit Fritters

VEGETABLES - SUBGROUPS

Dark Green	Red/Orange	Beans/Peas /Legumes	Starchy	Other	Additional
Argula	Acorn squash	Black beans	Black-eyed peas (not dry)	Artichokes	Italian blend
Bok choy	Butternut squash	Garbanzo beans (chickpeas)	Corn	Asparagus	Peas and Carrots
Boston or Bibb lettuce	Carrots	Kidney beans	Cassava (yucca)	Avocados	Soups, vegetable
Broccoli	Hubbard squash	Lentils	Green bananas	Bean sprouts	Succotash
Cilantro	Orange bell peppers	Navy beans	Green peas	Beets	Tuscan blend
Collard greens	Pumpkin	Pinto beans	Green lima beans	Broccoflower	Vegetables, mixed
Dark green leaf Lettuce	Red bell peppers	Refried beans	Jicama	Brussels sprouts	
	Sweet potatoes	Soy beans	Parsnips	Cabbage, green/red	
Green or Red leaf lettuce	Tomatoes	Split peas	Plantains	California blend (broccoli, cauliflower & carrots)	
Kale	Tomato juice	White beans	Taro	Cauliflower	
Mesclun	Yellow Yams		Water chestnuts	Celery	
Mustard greens			White potatoes	Cucumbers	
Romaine lettuce			White yams	Eggplant	
Spinach				Garlic	
Turnip greens				Green beans	
Watercress				Green bell peppers	
				Iceburg lettuce	
				Mushrooms	
				Okra	
				Olives	
				Onions	
				Radishes	
				Snowpeas	
				Squash, yellow	
				Squash, spaghetti	
				Tomatillos	
				Turnips	
				Wax beans	
				Yellow bell peppers	
				Zucchini	

VEGETABLES – DARK GREEN

DARK GREEN VEGETABLES VEGETABLE SUBGROUP	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT		
		1/4 CUP	1/2 CUP	1 CUP
Broccoli, Fresh, Spears, Untrimmed, Cooked, Drained	Pound	9.4	4.7	
Broccoli, Fresh, RAW, Florets	Pound	28.8	14.4	
Broccoli, Fresh, RTU, RAW, Spear, Untrimmed	Pound	9.8	4.9	
Broccoli, Frozen, Chopped, Cooked, Drained	Pound	9.6	4.8	
Lettuce, Dark Green Leafy, Untrimmed *	Pound	21.7	10.8	5.4
Lettuce, Romaine, Untrimmed *	Pound	31.3	15.6	7.8
Salad Mix, Romaine/Spinach, w/color, RTU *	Pound	36	18	Approx 9
Salad Mix, Romaine/Spinach, w/out color, RTU *	Pound	28	14	Approx 7
Spinach, Canned, Heated, Drained	#10 Can	25.2	12.6	
Spinach, Canned, Heated, Drained	#300 Can	3.9	1.95	
Spinach, Fresh Leaves, RTU *	Pound	25.6	12.8	6.4
Spinach, Frozen, Chopped	Pound	5.6	2.8	

*1 cup of fresh green leafy vegetables credits as ½cup in CACFP. EX: 1 cup fresh Romaine credits as ½ cup vegetable.

VEGETABLES – RED/ORANGE

RED - ORANGE VEGETABLES VEGETABLE SUBGROUP	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Carrots, Baby, RTU, RAW	Pound	12.9	6.4
Carrots, Fresh, Shredded, RTU, RAW	Pound	19.9	9.9
Carrots, Frozen, Sliced, Cooked, Drained	Pound	9.8	4.9
Carrots, Canned, Sliced, Heated, Drained	#10 Can	37.2	18.6
Carrots, Canned, Sliced, Heated, Drained	#300 Can	5.2	2.5
Carrots, Sticks, RTU, 1/2 X 4 inch (about 3 sticks)	Pound	15.4	7.7
Peppers, Bell, Red or Orange, Medium or Large, Whole, Strips	Pound	14.7	7.3
Pumpkin, Canned, Heated	#10 Can	51.5	25.7
Pumpkin, Canned, Heated	#300 Can	7.0	3.5
Salsa, Canned, all vegetable ingredients plus a minor amount of spices	#10 Can	49.3	24.6
Squash, Acorn, Mashed, Cooked, Drained	Pound	4.7	2.3
Squash, Butternut, Cubed, Cooked, Drained	Pound	7.5	3.7
Squash, Hubbard, Cubed, Cooked, Drained	Pound	4.4	2.2
Sweet Potatoes, Canned, Cut, Light Syrup, Heated, Drained	#10 Can	33.8	16.9
Sweet Potatoes, Canned, Cut, Light Syrup, Heated, Drained	#300 Can	5.2	2.5
Sweet Potatoes, Canned, Mashed, Heated	#10 Can	49.1	24.5
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	
Tomatoes, Canned, Diced, Heated, Vegetable & Juice	#10 Can	49.2	24.6
Tomatoes, Canned, Diced, Heated, Vegetable & Juice	#300 Can	7.0	3.5

VEGETABLES – RED/ORANGE *(continued)*

RED - ORANGE VEGETABLES VEGETABLE SUBGROUP	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Tomatoes, Canned, Crushed, Heated, Vegetable & Juice	#10 Can	46.6	23.3
Tomatoes, Fresh, Cherry (3 Cherry Tomatoes = ¼ cup Vegetable)	Pound	12.1	6
Tomatoes, Fresh, Cherry, Tomato Halves	Pound	11	5.5
Tomatoes, Fresh, Grape	Pound	9	4.5
Tomatoes, Fresh, Whole, All Sizes (1/4 cup diced Vegetable)	Pound	7.6	3.8
Tomatoes, Fresh, Large, 2½ inch - 2¾ inch Diameter (¼ Large Tomato or 4 slices = ¼ cup Vegetable)	Pound	8.7	4.3
Tomatoes, Fresh, Medium (5 slices = ¼ cup Vegetable)	Pound	8.5	4.2
Tomato Paste (1 Tablespoon = ¼ cup Vegetable)	#10 Can	192	96
Tomato Paste (1 Tablespoon = ¼ cup Vegetable)	#2-1/2 Can	52	26
Tomato Sauce, Canned	#10 Can	50.7	25.3
Tomato Sauce, Canned	#300 Can	6.8	3.4
Tomato, Spaghetti Sauce, Meatless, Heated	#10 Can	47.9	23.9
Tomatoes, Canned, Whole or Stewed, Heated, w/Juice	#10 Can	45.5	22.7
Tomatoes, Canned, Whole or Stewed, Heated, w/Juice	#300 Can	6.1	3.0

VEGETABLES – BEANS/PEAS/LEGUMES

BEANS/PEAS/LEGUMES VEGETABLE SUBGROUP	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Beans, Black, Dry, Canned, Heated, Drained	#10 Can	27.8	13.9
Beans, Black, Dry, Canned, Heated, Drained	#300 Can	5.9	2.95
Beans, Black, Dry, Whole, Cooked	Pound	18.3	9.1
Beans, Black-eyed Peas, Canned, Heated, Drained	#10 Can	37.7	18.8
Beans, Black-eyed Peas, Canned, Heated, Drained	#300 Can	4.9	2.4
Beans, Black-eyed Peas, Canned, Unheated	#10 Can	46	23
Beans, Baked in Sauce, Vegetarian, Heated	#10 Can	47.1	23.5
Beans, Baked in Sauce, Vegetarian, Heated	#300 Can	6.9	3.4
Beans, Baked, Sauce & Pork, Canned, Heated	#10 Can	48.9	24.4
Beans, Baked, Sauce & Pork, Canned, Heated	#300 Can	7.1	3.5
Beans, Pinto, Dry, Cooked	Pound	21	10.5
Beans, Pinto, Canned, Heated, Drained	#10 Can	37.2	18.6
Beans, Pinto, Canned, Unheated, Drained	#10 Can	40.5	20.2
Beans, Refried, Dehydrated, Cooked	Pound	20.5	10.2
Beans, Refried, Canned, Heated	#10 Can	49.6	24.8
Beans, Refried, Canned, Heated	#300 Can	7.0	3.5

VEGETABLES – STARCHY

STARCHY VEGETABLES VEGETABLE SUBGROUP	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Corn, Frozen, On the Cob, Cooked (3 inch Ear) 1 cobbette = ¼ cup Vegetable	Pound	4.2	2.1
Corn, Frozen, On the Cob, Cooked, (5¼ inch Ear) 1 medium cob = ½ cup Vegetable	Pound	2.44	1.2
Corn, Frozen, Whole Kernel, Cooked	Pound	11	5.5
Corn, Whole Kernel, Heated, Canned, Drained	#10 Can	39.6	19.8
Corn, Whole Kernel, Heated, Canned, Drained	#300 Can	5.8	2.9
Jicama, Fresh, Peeled, Strips	Pound	11.9	5.9
Peas, Black-eyed, Canned, Heated, Drained	#10 Can	37.7	18.8
Peas, Green, Frozen, Cooked, Drained	Pound	9.5	4.7
Peas, Green, Canned, Heated, Drained	#10 Can	36.7	18.3
Peas, Green, Canned, Heated, Drained	#300 Can	4.9	2.5
Potatoes, Curly Fries, Frozen, Cooked, ½ inch width	Pound	16.2	8.1
Potatoes, Dehydrated, Granules, Reconstituted, Heated	Pound	50.5	25.2
Potatoes, Diced, Canned, Drained, Unheated	#10 Can	39.9	19.9
Potatoes, Diced, Frozen, Precooked, Cooked	Pound	8.9	4.4
Potatoes, Fries, Crinkle Cut, Frozen, Ovenable, Cooked	Pound	16.2	8.1
Potatoes, Fries, Straight, Frozen, Ovenable, Cooked	Pound	14	7
Potatoes, Hash browns, Diced, Cooked	Pound	7.7	3.8
Potatoes, Rounds, Frozen (approximately 8 pieces = ½ cup Vegetable)	Pound	12.7	6.3
Potatoes, Russet, Baked w/Skin, 100 Count, Whole (approximately 8 oz each)	Pound	6.7	3.3
Potatoes, Small Whole, Canned, Heated, Drained	#10 Can	43.7	21.8
Potatoes, Small Whole, Canned, Heated, Drained	#300 Can	5.9	2.9
Potatoes, Wedges, Frozen, Cooked	Pound	11.9	5.9

VEGETABLES – OTHER

OTHER VEGETABLES -VEGETABLE SUBGROUP	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Beans, Green, Canned, Cut, Drained, Heated	#10 can	45.3	22.6
Beans, Green, Canned, Cut, Drained, Heated	#300 can	5.0	2.5
Beans, Green, Frozen, Cut, Cooked, Drained	Pound	11.6	5.8
Cabbage, Fresh, Green, Untrimmed, Chopped, RAW	Pound	17.7	8.8
Cabbage, Green, Shredded, RTU, RAW	Pound	27	13.5
Cabbage, Red, Shredded, RTU, RAW	Pound	22.8	11.4
California Blend, Frozen, Cooked, Drained (Broccoli, Carrots and Cauliflower)	Pound	10.6	5.3
Cauliflower, Fresh, Florets, RTU, RAW	Pound	18.3	9.1
Celery, Fresh, Trimmed, ½ inch x 4 inch sticks (about 3 sticks)	Pound	12.2	6.1
Celery, Sticks, RAW, RTU, ½ inch x 4 inch (3 sticks = ¼ cup Vegetable)	Pound	14	7
Cucumbers, Peeled, Sliced, RAW	Pound	10.5	5.2
Cucumbers, Unpeeled, Sliced, RAW	Pound	12.4	6.2
Lettuce, Mixed Greens (equal amounts of Iceberg and Romaine w/Shredded Carrots & Red Cabbage)	Pound	25.7	12.8
Lettuce, Salad Mix (mostly Iceberg, some Romaine, w/Shredded Carrot & Red Cabbage)	Pound	26.4	13.2
Mushrooms, Fresh, RAW, Sliced	Pound	18.7	9.3
Mushrooms, Fresh, RAW, Sliced, RTU, (7 slices = ¼ cup Vegetable)	Pound	18.5	9.2
Okra, Fresh, Cooked, Drained, Sliced	Pound	9	4.5
Okra, Frozen, Cut, Cooked, Drained	Pound	9.1	4.5
Onions, Chopped, RAW, All Sizes, Whole	Pound	9.3	4.6
Onions, Sliced, RAW, All Sizes, Whole	Pound	14.2	7.1
Peppers, Green, RAW, Diced	Pound	9.7	4.8
Squash, Yellow, Fresh, Cubed, Cooked, Drained	Pound	7.3	3.6
Squash, Yellow, Fresh, Sliced, Cooked, Drained	Pound	8.4	4.2
Squash, Yellow, Frozen, Sliced, Cooked, Drained	Pound	7.9	3.9
Squash, Zucchini, Fresh, Cubed, Cooked, Drained	Pound	7.6	3.8
Squash, Zucchini, Fresh, Sliced, Cooked, Drained	Pound	10.2	5.1
Squash, Zucchini, RAW, Sticks, ½ inch X 3 inch sticks, (3 Sticks = ¼ cup Vegetable)	Pound	11.9	5.9

VEGETABLES – ADDITIONAL

ADDITIONAL VEGETABLES VEGETABLE SUBGROUP	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Peas & Carrots, Canned, Heated, Drained	#10 Can	41.3	20.6
Peas & Carrots, Frozen, Cooked, Drained	Pound	10.9	5.4
Vegetables, Mixed, Canned, 7 Vegetables, Heated, Drained	#10 Can	36.1	18
Vegetables, Mixed, Canned, 7 Vegetables, Heated, Drained	#300 Can	4.6	2.3
Vegetables, Mixed, Frozen, 7 Vegetables, Cooked, Drained	Pound	8.1	4
Vegetables, Mixed, Frozen, (carrots, corn, green beans), Cooked	Pound	9.2	4.6

FRUIT

FRUIT	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Apples, Fresh, Small, Unpeeled, 125-138 Count/Case (¼ apple = ¼ cup Fruit)	Pound	14.8	7.4
Apples, Sliced, Canned, Drained	#10 Can	47.5	23.7
Apples, Sliced, Canned, Fruit & Juice	#10 Can	50.4	25.2
Applesauce, Canned	#10 Can	47.6	23.8
Applesauce, Canned	23 oz jar	10.1	5.0
Apricots, Fresh, Medium, Whole, RAW (1 apricot = ¼ cup Fruit)	Pound	11.9	5.9
Apricots, Halves, Unpeeled, Canned, Drained	#10 Can	29.3	14.6
Apricots, Halves, Unpeeled, Canned, Fruit & Juice	#10 Can	48	24
Apricots, Halves, Unpeeled, Canned, Fruit & Juice	#300 Can	6.5	3.2
Apricots, Halves, Unpeeled, Frozen, Thawed & Drained	Pound	4.9	2.4
Apricots, Halves, Unpeeled, Frozen, Thawed, Fruit & Juice	Pound	7.25	3.6
Apricots, Slices, Peeled, Canned, Drained	#10 Can	30.6	15.3
Apricots, Slices, Peeled, Canned, Fruit & Juice	#10 Can	45.7	22.8
Bananas, Fresh, Regular, RAW, 100-120 Count, ½ inch sliced fruit	Pound	7	3.5
Bananas, Fresh, Regular, RAW, Unpeeled, 100-120 Count, (½ banana = ¼ cup Fruit)	Pound	5.3	2.6
Blueberries, Fresh, Whole, RAW	Pound	11.9	5.9
Blueberries, Frozen, Whole, Cooked, Sugar added during cooking	Pound	7.8	3.9
Blueberries, Frozen, Whole, Thawed, Unsweetened	Pound	11.9	5.9
Cantaloupe, Whole, 15 Count (5 inch diameter), Cubed	Pound	6.7	3.3
Cantaloupe, Whole, 18 Count (5¾ inch diameter), Cubed	Pound	5.7	2.8
Cherries, Red Tart, Frozen, Thawed, Unsweetened, Drained	Pound	7	3.5
Cherries, Red Tart, Frozen, Thawed, Unsweetened, Fruit & Juice	Pound	11.4	5.7
Cherries, Red Tart, Canned, Drained	#10 Can	36.2	18.1
Cherries, Red Tart, Canned, Fruit & Juice	#10 Can	46.8	23.4
Cranberry Relish or Sauce, Canned, Strained	#10 Can	47.9	23.9
Fruit Mix Cocktail, Drained (Peaches, Pears, Pineapple, Grapes, Cherries)	#10 Can	37	18.5

FRUIT *(continued)*

FRUIT	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Fruit Mix Cocktail, Fruit & Juice (Peaches, Pears, Pineapple, Grapes, Cherries)	#10 Can	46.9	23.4
Fruit Mix Cocktail, Fruit & Juice (Peaches, Pears, Pineapple, Grapes, Cherries)	#300 Can	6.3	3.1
Grapefruit, Fresh, Peeled, 27-32 Count (Large), Whole (½ Grapefruit = ½ cup Fruit)	Pound	6.4	3.2
Grapes, Fresh, Seedless, Whole, w/o Stem	Pound	11.6	5.8
Grapes, Fresh, Seedless, Whole, w/Stem	Pound	10.5	5.2
Kiwi, Fresh, Peeled, 33-39 Count, Whole, Chunks (1 Kiwi = ¼ cup Fruit)	Pound	8.3	4.1
Orange, Fresh, 125 Count, Unpeeled	Pound	7	3.5
Orange, Fresh, 138 Count, Unpeeled	Pound	6.8	3.4
Orange, Fresh, Sections, Drained	Pound	3.5	1.7
Oranges, Mandarin, Canned, Drained	#10 Can	39.6	19.8
Peach, Fresh, Medium (2½ Inch Diameter), 60-64 Count, RAW (1 Medium Peach = ⅔ cup Fruit)	Pound	7	3.5
Peach, Fresh, Small (2⅝ Inch Diameter), 88-84 Count, (1 Small Peach, RAW = ⅔ cup Fruit)	Pound	8.2	4.1
Peaches, Diced, Canned, Drained	#10 Can	35.4	17.7
Peaches, Diced, Canned, Fruit & Juice	#10 Can	48.6	24.3
Peaches, Frozen, Sliced, Sweetened or Unsweetened, Thawed & Drained	Pound	5.4	2.7
Peaches, Frozen, Sliced, Sweetened or Unsweetened, Thawed, Fruit & Juice	Pound	7.34	3.6
Peaches, Sliced, Canned, Drained	#10 Can	36.1	18
Peaches, Sliced, Canned, Fruit & Juice	#10 Can	50	25
Pear, Fresh, Medium, 120 Count, RAW (1 Medium Pear = ¾ cup Fruit)	Pound	9.9	3.3
Pear, Fresh, Small, 150 Count, RAW (1 Small Pear = ½ cup Fruit)	Pound	8.2	4.1
Pears, Diced, Canned, Drained	#10 Can	38	19
Pears, Diced, Canned, Fruit & Juice	#10 Can	47.6	23.8
Pears, Halves, Canned, Drained	#10 Can	31	15.5
Pears, Halves, Canned, Fruit & Juice	#10 Can	52	26

FRUIT *(continued)*

FRUIT	PURCHASE UNIT	SERVINGS PER PURCHASE UNIT	
		1/4 CUP	1/2 CUP
Pears, Sliced, Canned, Drained	#10 Can	29.5	14.7
Pears, Sliced, Canned, Drained	#300 Can	3.0	1.5
Pears, Sliced, Canned, Fruit & Juice	#10 Can	49.7	24.8
Pears, Sliced, Canned, Fruit & Juice	#300 Can	7.0	3.5
Pineapple, Chunks, Canned, Drained	#10 Can	31.8	15.9
Pineapple, Chunks, Canned, Fruit & Juice	#10 Can	49.9	24.9
Pineapple, Slices, Canned, Drained (approx 60 slices)	#10 Can	37.7	18.8
Pineapple, Slices, Canned, Fruit & Juice (approx 60 slices)	#10 Can	47.5	23.7
Pineapple, Tidbits, Canned, Drained	#10 Can	33.4	16.7
Pineapple, Tidbits, Canned, Fruit & Juice	#10 Can	50.1	25
Plums, Fresh, (Purple, Red or Black), Size 45 & 50 or 2 inches Diameter, Whole, RAW (1 Plum = ½ cup Fruit)	Pound	9.8	4.9
Raisins, Seedless, (¼ cup Serving = ½ cup Fruit)*	Pound	12.6	6.3
Strawberries, Fresh, Whole, RAW	Pound	10.5	5.2
Strawberries, Frozen, Sliced, Unsweetened, Thawed, Fruit & Liquid	Pound	7.2	3.6
Tangerines, Fresh, 121 Count, Whole, Peeled, Sections, RAW (1 Tangerine = ¾ cup Fruit)	Pound	7.7	3.8
Watermelon, Fresh, Cubed, w/o Rind	Pound	6.1	3

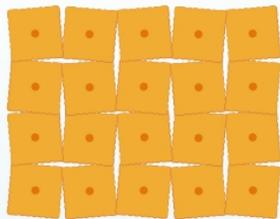
*1 cup of dried fruit credits as ½ cup in CACFP. EX: 1 cup raisins credits as ½ cup fruit.



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 1/4" by 1 1/4") = 1 oz. eq.



5 woven whole-wheat crackers
(1 1/2" by 1 1/2") = 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:

- 1 Find the grain you want to serve under the "Grain Item and Size" column.
- 2 Check if the chart lists a size or weight by the name of the grain. If the chart:
- 3 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 1/4" by 1 1/2"*, 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 Serve at Least 1/2 oz. eq., which equals about...
Pita Bread/Round <small>(whole grain-rich or enriched) at least 56 grams*</small>	1/4 pita or 14 grams
Popcorn	1 1/2 cups or 14 grams
Pretzel, Hard, Mini-Twist <small>(about 1 1/4" by 1 1/2")**</small>	7 twists or 11 grams

More training, menu planning, and nutrition education materials for the CACFP can be found at <https://teamnutrition.usda.gov>.



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

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.

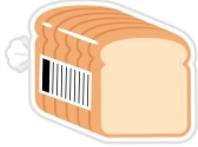
Grains Measuring Chart for the Child and Adult Care Food Program

 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:

1

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

2

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.

3

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

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		

4

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.

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

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?

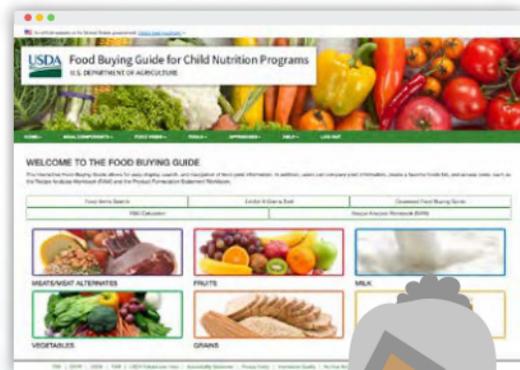
Is the grain item you want to serve:

- 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.

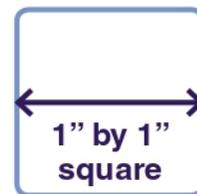
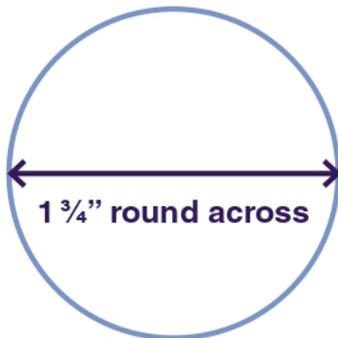
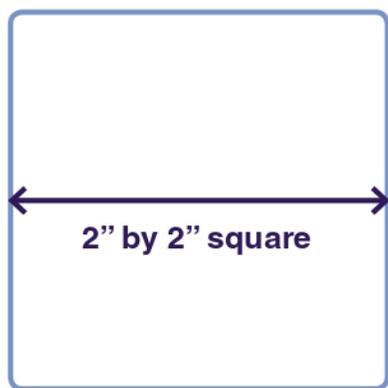
^{*}Available at <https://foodbuyingguide.fns.usda.gov>.



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 ½" by 11" paper.





TEXAS DEPARTMENT OF AGRICULTURE COMMISSIONER SID MILLER

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