

Milk



	Ages 1 - 2	Ages 3 - 5	Ages 6 - 12	Ages 13 - 19
All Meals	4 fluid ounces	6 fluid ounces	8 fluid ounces	8 fluid ounces

Allowable Milk Options:

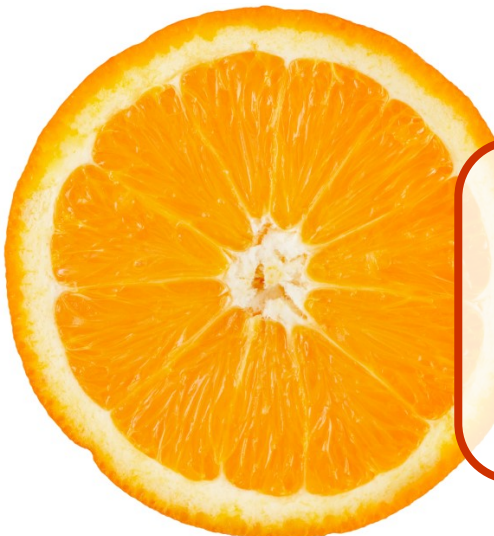
- **1 year old:** Whole Milk
- **2 year old and older:** Fat-Free, Low-Fat (1%), Lactose-reduced or lactose-free low-fat or fat-free
- Flavored Milk: Must be Fat-Free. Only allowed for children ages 6 and up

Best Practice:

- Serve only unflavored milk. If flavored milk is served limit to ≤ 22 grams of sugar per 8 ounces of flavored milk

Fruits

Meal	Food Components	Ages 1 - 2	Ages 3 - 5	Ages 6 - 12	Ages 13 - 19
Breakfast	Fruit OR Vegetable	$\frac{1}{4}$ cup	$\frac{1}{2}$ cup	$\frac{1}{2}$ cup	$\frac{1}{2}$ cup
Lunch/Supper	Fruit	$\frac{1}{8}$ cup	$\frac{1}{4}$ cup	$\frac{1}{4}$ cup	$\frac{1}{4}$ cup
Snack	Fruit	$\frac{1}{2}$ cup	$\frac{1}{2}$ cup	$\frac{3}{4}$ cup	$\frac{3}{4}$ cup



- Fruit can be fresh, frozen, canned in juice/light syrup, or dried
- $\frac{1}{4}$ cup dried fruit = $\frac{1}{2}$ cup fruit serving
- 100% juice only (limit juice to 1 time per day)

Best Practice:

- Serve a variety of fruit and choose whole fruits
- Make at least one snack component a fruit or vegetable

Vegetables

Meal	Food Components	Ages 1 - 2	Ages 3 - 5	Ages 6 - 12	Ages 13 - 19
Breakfast	Fruit or Vegetable	¼ cup	½ cup	½ cup	½ cup
Lunch/Supper	Vegetable	⅛ cup	¼ cup	½ cup	½ cup
Snack	Vegetable	½ cup	½ cup	¾ cup	¾ cup

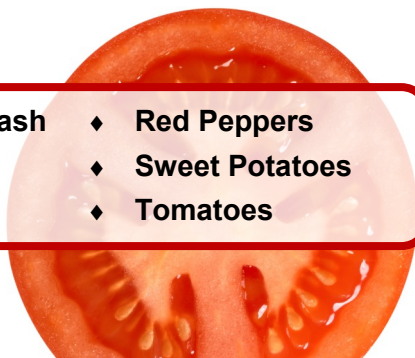
- Vegetables can be fresh, frozen, or canned
- Vegetable may replace fruit at lunch—but must be 2 different vegetables
- 100% juice only (limit to 1 time per day)

Best Practice:

- Serve at least one serving of each vegetable sub group once per week.
- Make at least one snack component a fruit or vegetable

Red/Orange

- ♦ Butternut Squash
- ♦ Pumpkin
- ♦ Carrots
- ♦ Red Peppers
- ♦ Sweet Potatoes
- ♦ Tomatoes



Legumes

- ♦ Black beans
- ♦ Lentils
- ♦ Pinto Beans
- ♦ White beans
- ♦ Edamame
- ♦ Garbanzo Beans



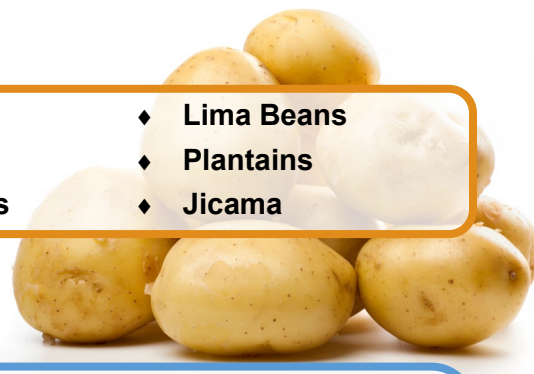
Dark Green

- ♦ Broccoli
- ♦ Dark Green Leaf Lettuce
- ♦ Spinach
- ♦ Romaine Lettuce
- ♦ Collard Greens



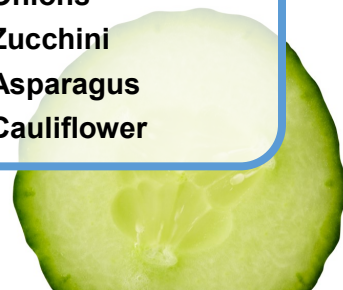
Starchy

- ♦ Corn
- ♦ Potatoes
- ♦ Green Peas
- ♦ Lima Beans
- ♦ Plantains
- ♦ Jicama



Other

- ♦ Avocado
- ♦ Celery
- ♦ Cucumbers
- ♦ Green Beans
- ♦ Green Pepper
- ♦ Iceberg Lettuce
- ♦ Onions
- ♦ Zucchini
- ♦ Asparagus
- ♦ Cauliflower



Meat / Meat Alternate

Meal	Ages 1 - 2	Ages 3 - 5	Ages 6 - 12	Ages 13 - 19
Breakfast	Meat and meat alternates may be used to meet the entire grains requirement a maximum of three times a week. One ounce of meat and meat alternates is equal to one ounce equivalent of grains.			
Lunch/Supper	1 oz eq	1½ oz eq	2 oz eq	2 oz eq
Snack	½ oz eq	½ oz eq	1 oz eq	1 oz eq

- **Yogurt** must contain no more than 23 grams of total sugars per 6 oz
- **Peanuts, soy nuts, tree nuts, or seeds** may be used to meet no more than 50% of the M/MA requirement at lunch or supper
- **Tofu is allowed** (must be commercially prepared and be a soybean derived with the basic ingredients being whole soybeans, one or more food-grade coagulants, and water)

Best Practice:

- 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.



Ounce Equivalent Crediting	
Lean meat, poultry, fish	1 oz = 1 oz eq
Tofu	2.2 oz = 1 oz eq
Cheese	1 oz = 1 oz eq
Large egg	½ egg = 1 oz eq
Cooked dry beans or split peas	¼ cup = 1 oz eq
Peanut butter, soy nut butter, or other nut or seed butters	2 Tbsp = 1 oz eq
Yogurt, plain or flavored	½ cup = 1 oz eq
Peanuts, soy nuts, tree nuts, or seeds	1 oz = 1 oz eq



Grains

	Ages 1 - 2	Ages 3 - 5	Ages 6 - 12	Ages 13 - 19
All meals	½ oz eq	½ oz eq	1 oz eq	1 oz eq



- Must be whole grain or enriched grain product
- At least **1 serving per day**, across all eating patterns, must be **whole grain-rich**
- Grain-based desserts do not count towards meeting the grains requirement
- Breakfast cereals must contain no more than 6 grams of sugar per dry ounce

Best Practice:

- Serve at least two servings of whole grain rich grains per day.

Whole Grain-Rich

- ♦ Grain content is 50% whole grain by weight

OR

- ♦ Contains 8 grams of whole grain per ounce equivalent serving (Groups A-G on Exhibit A)

OR

- ♦ Product has the FDA whole grain health claim "Diets rich in whole grain foods and other plant foods and low in total fat, saturated fat and cholesterol, may help reduce the risk of heart disease and certain cancers."

Oatmeal	Whole Wheat
Brown Rice	Whole Corn
Whole White Wheat	Wild Rice
Whole Barley	Bulgur

EXHIBIT A:

SCHOOL LUNCH AND BREAKFAST WHOLE GRAIN RICH OUNCE EQUIVALENCY (OZ EQ) REQUIREMENTS^{1, 2}

GROUP A	OZ EQ FOR GROUP A
<ul style="list-style-type: none"> • Bread type coating • Bread sticks (hard) • Chow Mein noodles • Savory Crackers (saltines and snack crackers) • Croutons • Pretzels (hard) • Stuffing (dry) Note: weights apply to bread in stuffing 	1 oz eq = 22 g or 0.8 oz $\frac{3}{4}$ oz eq = 17 g or 0.6 oz $\frac{1}{2}$ oz eq = 11 g or 0.4 oz $\frac{1}{4}$ oz eq = 6 g or 0.2 oz
GROUP B	OZ EQ FOR GROUP B
<ul style="list-style-type: none"> • Bagels • Batter type coating • Biscuits • Breads (white, wheat, whole wheat, French, Italian) • Buns (hamburger and hot dog) • Sweet Crackers⁴ (graham crackers - all shapes, animal crackers) • Egg roll skins • English muffins • Pita bread • Pizza crust • Pretzels (soft) • Rolls • Tortillas • Tortilla chips • Taco shells 	1 oz eq = 28 g or 0.8 oz $\frac{3}{4}$ oz eq = 21 g or 0.6 oz $\frac{1}{2}$ oz eq = 14 g or 0.4 oz $\frac{1}{4}$ oz eq = 7 g or 0.2 oz
GROUP C	OZ EQ FOR GROUP C
<ul style="list-style-type: none"> • Cookies³ (plain—includes vanilla wafers) • Cornbread • Corn muffins • Croissants • Pancakes • Pie crust (dessert pies,³ cobbler,³ fruit turnovers,⁴ and meat/meat alternate pies) • Waffles 	1 oz eq = 34 g or 0.8 oz $\frac{3}{4}$ oz eq = 26 g or 0.6 oz $\frac{1}{2}$ oz eq = 17 g or 0.4 oz $\frac{1}{4}$ oz eq = 9 g or 0.2 oz

¹ The following food quantities from Groups A-G, must contain at least 16 grams of whole-grain or can be made with 8 grams of whole-grain and 8 grams of enriched meal and/or enriched flour to be considered whole grain-rich.

² Some of the following grains may contain more sugar, salt, and/or fat than others. This should be a consideration when deciding how often to serve them.

^{3, 4} Grain-based desserts do not count towards meeting the grains requirement.

GROUP D	OZ EQ FOR GROUP D
<ul style="list-style-type: none"> Doughnuts⁴ (cake and yeast raised, unfrosted) Cereal bars, breakfast bars, granola bars⁴ (plain) Muffins (all, except com) Sweet roll⁴ (unfrosted) Toaster pastry⁴ (unfrosted) 	1 oz eq = 55 g or 0.8 oz $\frac{3}{4}$ oz eq = 42 g or 0.6 oz $\frac{1}{2}$ oz eq = 28 g or 0.4 oz $\frac{1}{4}$ oz eq = 14 g or 0.2 oz
GROUP E	OZ EQ FOR GROUP E
<ul style="list-style-type: none"> Cereal bars, breakfast bars, granola bars⁴ (with nuts, dried fruit, and/or chocolate pieces) Cookies³ (with nuts, raisins, chocolate pieces and/or fruit purees) Doughnuts⁴ (cake and yeast raised, frosted or glazed) French toast Sweet rolls⁴ (frosted) Toaster pastry⁴ (frosted) 	1 oz eq = 69 g or 0.8 oz $\frac{3}{4}$ oz eq = 52 g or 0.6 oz $\frac{1}{2}$ oz eq = 35 g or 0.4 oz $\frac{1}{4}$ oz eq = 18 g or 0.2 oz
GROUP F	OZ EQ FOR GROUP F
<ul style="list-style-type: none"> Cake³ (plain, unfrosted) Coffee cake⁴ 	1 oz eq = 82 g or 0.8 oz $\frac{3}{4}$ oz eq = 62 g or 0.6 oz $\frac{1}{2}$ oz eq = 41 g or 0.4 oz $\frac{1}{4}$ oz eq = 21 g or 0.2 oz
GROUP G	OZ EQ FOR GROUP G
<ul style="list-style-type: none"> Brownies³ (plain) Cake³ (all varieties, frosted) 	1 oz eq = 125 g or 0.8 oz $\frac{3}{4}$ oz eq = 94 g or 0.6 oz $\frac{1}{2}$ oz eq = 63 g or 0.4 oz $\frac{1}{4}$ oz eq = 32 g or 0.2 oz
GROUP H	OZ EQ FOR GROUP H
<ul style="list-style-type: none"> Cereal Grains (barley, quinoa, etc.) Breakfast cereals (cooked)^{5, 6} Bulgur or cracked wheat Macaroni (all shapes) Noodles (all varieties) Pasta (all shapes) Ravioli (noodle only) Rice (enriched white or brown) 	1 oz eq = 1/2 cup cooked or 1 ounce (28 g) dry
GROUP I	OZ EQ FOR GROUP I
<ul style="list-style-type: none"> Ready to eat breakfast cereal (cold, dry)^{5, 6} 	1 oz eq = 1 cup or 1 ounce for flakes and rounds 1 oz eq = 1.25 cups or 1 ounce for puffed cereal 1 oz eq = $\frac{1}{4}$ cup or 1 ounce for granola

⁵ Refer to program regulations for the appropriate serving size for supplements served to children ages 1 through 5 in the National School Lunch Program; and meals served to children ages 1 through 5 and adult participants in the Child and Adult Care Food Program. Breakfast cereals are traditionally served as a breakfast menu item but may be served in meals other than breakfast.

⁶ Cereals must be whole grain, or whole grain and enriched or fortified cereal.

Exhibit A Ranges

Group A

2 oz eq = 44 - 49 g
1³/₄ oz eq = 39 - 43 g
1¹/₂ oz eq = 33 - 38 g
1¹/₄ oz eq = 28 - 32 g
1 oz eq = 22 - 27 g
3⁴/₄ oz eq = 17 - 21 g
1¹/₂ oz eq = 11 - 16 g
1¹/₄ oz eq = 6 - 10 g
Don't count ≤ 5 g

Group B

3 oz eq = 84 - 90 g
2³/₄ oz eq = 77 - 83 g
2¹/₂ oz eq = 70 - 76 g
2¹/₄ oz eq = 63 - 69 g
2 oz eq = 56 - 62 g
1³/₄ oz eq = 49 - 55 g
1¹/₂ oz eq = 42 - 48 g
1¹/₄ oz eq = 35 - 41 g
1 oz eq = 28 - 34 g
3⁴/₄ oz eq = 21 - 27 g
1¹/₂ oz eq = 14 - 20 g
1¹/₄ oz eq = 7 - 13 g
Don't count ≤ 6 g

Group C

3 oz eq = 102 - 111 g
2³/₄ oz eq = 94 - 101 g
2¹/₂ oz eq = 85 - 93 g
2¹/₄ oz eq = 77 - 84 g
2 oz eq = 68 - 76 g
1³/₄ oz eq = 60 - 67 g
1¹/₂ oz eq = 51 - 59 g
1¹/₄ oz eq = 43 - 50 g
1 oz eq = 34 - 42 g
3⁴/₄ oz eq = 26 - 33 g
1¹/₂ oz eq = 17 - 25 g
1¹/₄ oz eq = 9 - 16 g
Don't count ≤ 8 g

Group D

2 oz eq = 110 - 123 g
1³/₄ oz eq = 97 - 109 g
1¹/₂ oz eq = 83 - 96 g
1¹/₄ oz eq = 69 - 82 g
1 oz eq = 55 - 68 g
3⁴/₄ oz eq = 42 - 54 g
1¹/₂ oz eq = 28 - 41 g
1¹/₄ oz eq = 14 - 27 g
Don't count ≤ 13 g

Group E

2 oz eq = 138 - 155 g
1³/₄ oz eq = 121 - 137 g
1¹/₂ oz eq = 104 - 120 g
1¹/₄ oz eq = 87 - 103 g
1 oz eq = 69 - 86 g
3⁴/₄ oz eq = 52 - 68 g
1¹/₂ oz eq = 35 - 51 g
1¹/₄ oz eq = 18 - 34 g
Don't count ≤ 17 g

Group F

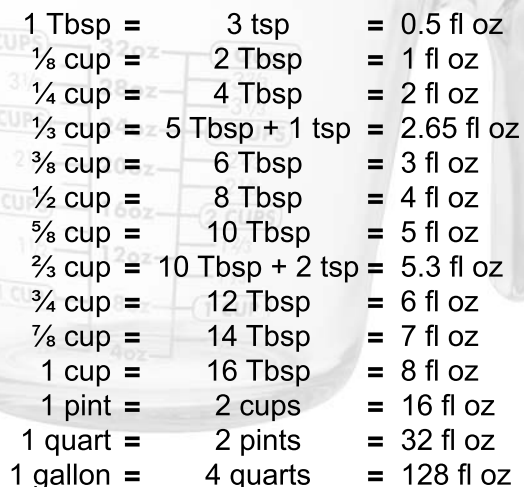
1 oz eq = 82 - 102 g
3⁴/₄ oz eq = 62 - 81 g
1¹/₂ oz eq = 41 - 61 g
1¹/₄ oz eq = 21 - 40 g
Don't count ≤ 20

Group G

1 oz eq = 125 - 156 g
3⁴/₄ oz eq = 94 - 124 g
1¹/₂ oz eq = 63 - 93 g
1¹/₄ oz eq = 32 - 62 g
Don't count ≤ 31 g

Measurement References

Volume Equivalents



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 + 1 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 pint	=	2 cups	=	16 fl oz
1 quart	=	2 pints	=	32 fl oz
1 gallon	=	4 quarts	=	128 fl oz

Equivalent Weights

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

Scoop Sizes

6	=	3/8 cup
8	=	1/2 cup
10	=	3/4 cup
12	=	1/3 cup
16	=	1/4 cup

Metric Conversion

To Change	To	Multiply By
Ounces (oz)	Grams (g)	28.35
Pounds (lb)	Kilograms (kg)	0.45
Fluid ounces	Milliliters (ml)	29.58
Cups (c)	Liters (l)	0.24

Metric Equivalents

by Weight

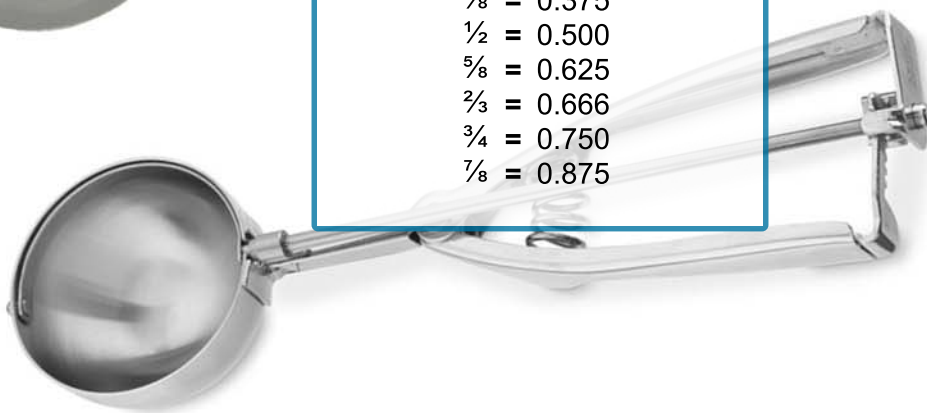
1 oz	=	28.35 gm
4 oz	=	113.4 gm
8 oz	=	226.8 gm
16 oz	=	453.6 gm
1 lb	=	453.6 gm
2.2 lb	=	1 kg

by Volume

8 fluid oz	=	236.59 mL
32 fluid oz	=	946.36 mL
48 fluid oz	=	1.42 L
33.818 fluid oz	=	1 L

Fraction to 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



Additional Best Practices

- ◆ Incorporate seasonal and locally produced foods into meals
- ◆ Limit serving purchased pre-fried foods to no more than one serving per week
- ◆ Avoid serving non-creditable foods that are sources of added sugars, such as sweet toppings, mix-in ingredients sold with yogurt and sugar-sweetened beverages

Menu Planning Principles

Balance

- ◆ Balance higher fat foods with ones that have less fat
- ◆ Balance higher sodium foods with lower sodium foods

Variety

- ◆ Use a combination of mild and strong flavors
- ◆ Use a variety of shapes and sizes
- ◆ Include variety in day to day menu choices

Contrast

- ◆ Think about the texture of foods as well as taste and appearance
- ◆ Use a variety of textures (soft/crispy/smooth/firm/chewy)
- ◆ Use a combination of sizes and shapes of foods

Color

- ◆ Avoid using too many foods of the same color in the same meal
- ◆ Use colorful foods in combination dishes

Eye Appeal

- ◆ Think about total presentation
- ◆ Plan the way you will place the menu items on the plate

Offer Choices

- ◆ Plan some choices for individual taste preferences