

Manual Guide Manufacturers

to Determine Serving Size and Reference Amount



Introduction



This Manual guide helps manufacturers to determine the reference amount and appropriate serving sizes for many food product specified in grams for solid food products and in milliliters for liquids.

Serving Sizes



The serving size is a quantity of food that can be reasonably consumed at a single eating occasion.

A serving size is based on the food as offered for sale. For foods requiring preparation and foods commonly mixed with other ingredients or another food before being eaten (such as pudding mix, soups or breakfast cereal with milk), the serving size must be set out for the food as sold and may optionally be set out for the food as prepared

Reference Amounts



Reference amounts (RA) serve as the basis for determining the serving size for single-serving containers, as well as multiple-serving prepackaged foods. A reference amount (RA) is a specific regulated quantity of a type of food usually eaten by an individual at one sitting.

Reference amounts refer only to the edible portion of the food and exclude any liquid in which the solid food may be packed or canned, unless the liquid is customarily consumed with the solid food. For example, the reference amounts for olives and feta cheese do not include the brine, only the olives and the cheese, whereas canned fruit packed in fruit juice includes the fruit juice.

► The table (1)

below outlines the reference amounts and serving sizes for various foods which includes:

Cereals and Other Grain Products 	Beverages 	Bakery Products 
Egg and Egg Substitutes 	Desserts 	Dairy Products and Substitutes 
Fruits and Fruit Juices 	Sea Food 	Fats and Oils 
Combination Dishes 	Meat, Poultry, Their Products and Substitutes 	Legumes 
Salads 	Potatoes, Sweet Potatoes and Yams 	Nuts and Seeds 
Soups 	Snacks 	Sauces, Dips, Gravies and Condiments 
Miscellaneous category 	Vegetables 	Sugars and Sweets 

Bakery Products



Product Category	Reference Amount	Serving Size
Bread, excluding sweet quick-type rolls	50 g	"25-70 g (1-2 slices) – sliced 50 g – unsliced"
"Bagels, tea biscuits, scones, rolls, buns, croissants, tortillas, soft bread sticks, soft pretzels and corn bread "Pita bread"	55 g	25-100 g
Brownies	40 g	30-100 g
Cake (heavy weight): 10 g or more per 2.5 cm cube, such as cheese cake, pineapple upside-down, cake with at least 35% of the finished weight as fruit, nuts, or vegetables, or any of these combined	125 g	80-150 g
Cake (medium weight): 4 g or more per 2.5 cm cube but less than 10g per 2.5 cm cube, such as cake with or without icing or filling, cake with less than 35% of the finished weight as fruit, nuts or vegetables or any of these combined; light weight cake with icing; Boston cream pie, cupcakes, eclairs, or cream puffs	80 g	50-125 g
Cake (light weight): less than 4 g per 2.5 cm cube, such as chiffon, or sponge cake without icing or filling	55 g	40-80 g
Coffee cakes, doughnuts, danishes, sweet rolls, sweet quick-type breads and muffins	55 g	50-100 g
"Cookies, with or without coating or filling; graham wafers Crackers and cheese dip pack	30 g	30-40 g
Crackers, hard bread sticks and melba toast	20 g	15-30 g
Dry breads, matzo, and rusks	30 g	15-35 g
Flaky type pastries, with or without filling or icing	55 g	50-90 g

Product Category	Reference Amount	Serving Size
Toaster pastries	55 g	50-80 g
Ice cream cones	5 g	3-25 g
Croutons	7 g	7-20 g
French toast, pancakes, and waffles	75 g	60-110 g prepared (2-4 pancakes)
Grain-based bars with filling or partial or full coating	40 g	20-50 g
Grain-based bars, without filling or coating	30 g	20-50 g
Rice cakes and corn cakes	15 g	10-25 g
Pies, tarts, turnovers, other pastries	110 g	85-120g (1/6 of 20 cm diameter pie or 1/8 of 23 cm pie)
Pie crust	1/6 of 20 cm crust or 1/8 of 23 cm crust	1/6 of 20 cm pie or 1/8 of 23 cm pie)
Pizza crust	55 g	30-110 g
Taco shell, hard	30 g	20-40 g

Beverages



Product Category	Reference Amount	Serving Size
Carbonated and non-carbonated beverages and iced tea.	355 ml	250-375 ml
Energy drinks	250 ml	250 ml
Water	330 ml	200-600 ml
Coffee: regular, instant and specialty, including espresso, café au lait, flavored and sweetened	175 ml	amount to make 175-250 ml prepared
"Tea and herbal tea: (a) regular and instant (hot) (b) flavored and sweetened, prepared from mixes	175 ml 250 mL	amount to make 175-250 ml prepared
Cocoa and chocolate beverages (hot)	175 ml	5-15 g dry or amount to make 175-250 mL prepared

Cereals and Other Grain Products



Product Category	Reference Amount	Serving Size
Hot breakfast cereals, such as oatmeal, or cream of wheat	40 g dry, 250 ml prepared	30-40 g dry, 175-335 ml prepared
Ready-to-eat breakfast cereals, puffed and uncoated (less than 20 g per 250 ml)	15 g	10-20 g
Ready-to-eat breakfast cereals, puffed and coated, flaked, extruded, without fruit or nuts (20 g to 42 g per 250 ml), very high fiber cereals (with 28 g or more fiber per 100 g)	30 g	20-45 g
Ready-to-eat breakfast cereals, fruit and nut type, granola (weighing 43 g or more per 250 mL) and biscuit type cereals	55 g	45-80 g (1-2 biscuits)
Bran and wheat germ, milled flax seeds, Milled hemp seeds	15 g	10-20 g
Flours, including cornmeal	30 g	30-60 g
Grains, such as rice or barley	45 g dry 140 g cooked	30-45 g dry, 90-140 g cooked
Pastas without sauce, Gnocchi	85 g dry 215 g cooked	45-100 g dry, 140-250 g cooked
Pastas, dry and ready-to-eat, such as fried canned noodles	25 g	20-25 g
Starch, such as cornstarch, potato starch, tapioca starch or wheat starch	10 g	5-15 g
Stuffing	100 g	75-100 g

Dairy Products and Substitutes



Product Category	Reference Amount	Serving Size
Cheese, including cream cheese and cheese spread.	30 g	15-60 g
Cottage cheese	125 g	60-250 g
Cheese used as an ingredient, such as dry cottage cheese or ricotta cheese	55 g	25-100 g
Hard cheese, grated, such as parmesan or romano	15 g	8-30 g
Quark, fresh cheese and fresh dairy desserts	100 g	50-200 g
Cream and cream substitute.	15 ml	10-30 ml
Cream and cream substitute, powder	2 g	2-4 g
Cream and cream substitute, aerosol or whipped	15 g	10-30 g
Eggnog	125 ml	60-250 ml
Milk, evaporated or condensed	15 ml	10-30 ml
"Plant-based beverages, milk, buttermilk and milk-based drinks, such as chocolate milk Smoothie (if whey/dairy is a main ingredient) Drinkable yogurt	250 ml	125-250 ml
Shakes and shake substitutes such as dairy shake mix	250 ml	125-250 ml
Sour cream	30 ml	15-60 ml
Yogurt	170 ml	170 ml

Desserts



Product Category	Reference Amount	Serving Size
Ice cream, ice milk, frozen yogurt, sherbet Non-dairy desserts sold in tub	125 ml	60-250 ml
Dairy desserts, frozen, such as cakes, bars, sandwiches or cones	125 ml	60-175 ml
Non-dairy desserts, frozen, such as flavored and sweetened ice or pops, frozen fruit juices in bars or cups	75 ml	40-150 ml
Sundaes	250 ml	125-250 ml
Custard, gelatin and pudding	125 ml	80-140 g pudding, 15 g gelatin dessert (dry), 65-250 ml gelatin dessert prepared

Egg and Egg Substitutes



Product Category	Reference Amount	Serving Size
Egg mixtures, such as egg foo young, scrambled eggs, omelets	110 g	50-110 g
Eggs, including eggs in the shell, liquid eggs and liquid egg whites	50 g	50-100 g
Egg substitutes	50 g	50-100 g

Fats and Oils



Product Category	Reference Amount	Serving Size
Butter, margarine, shortening.	10 g	5-20 g
Vegetable oil	10 ml	5-20 ml
Butter replacement, powder	2 g	1-3 g
Dressings for salad	30 ml	15-30 ml
mayonnaise, sandwich spread and mayonnaise-type dressing	15 ml	8-30 ml
Oil, spray type	0.5 g	0.5 g

Sea Food



Product Category	Reference Amount	Serving Size
Canned anchovies, anchovy paste and caviar	15 g	15-60 g
Marine and fresh water animals with sauce, such as fish with cream sauce or shrimp with lobster sauce (Raw fish with sauce)	140 g cooked	90-140g
Marine and fresh water animals without sauce, such as plain or fried fish or shellfish, or fish or shellfish cakes, with or without breading or batter	125 g raw 100 g cooked	85-130g raw, fresh, frozen 60-100 g cooked
Fish, shrimp and shellfish, canned	55 g	50-100 g
Fish, shrimp and shellfish, smoked or pickled, or spreads	55 g	50-55 g

Fruits and Fruit Juices



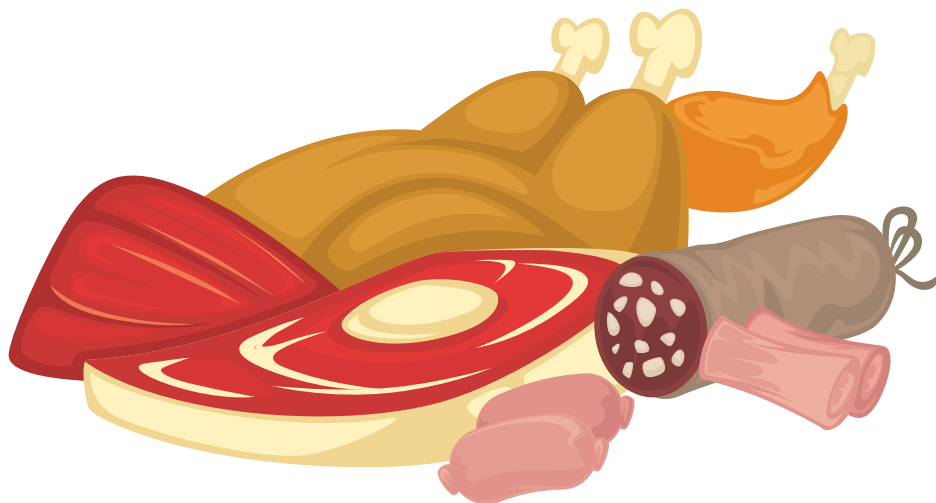
Product Category	Reference Amount	Serving Size
Fruit, fresh, canned or frozen, coated or uncoated, apple sauce	140 g 150 ml canned	110-160 g fresh or frozen, 120-150 ml canned
Candied or pickled fruit	30 g	30-40 g
Dried fruit, such as raisins, dates or figs	40 g	30-40 g
Fruit for garnish or flavor, such as maraschino cherries	4 g	1-3 cherries
Fruit relishes	60 ml	50-100 ml
Avocado, used as an ingredient	30 g	20-40 g
Cranberries, lemons and limes, used as ingredients	55 g	50-100 g
Watermelon, cantaloupe, honeydew and other melons	150 g	75-300 g
Juices, nectars and fruit drinks represented for use as substitutes for fruit juices	250 ml	175-250 ml
Juices, used as ingredients, such as lemon juice or lime juice	5 ml	5-10 ml

Legumes



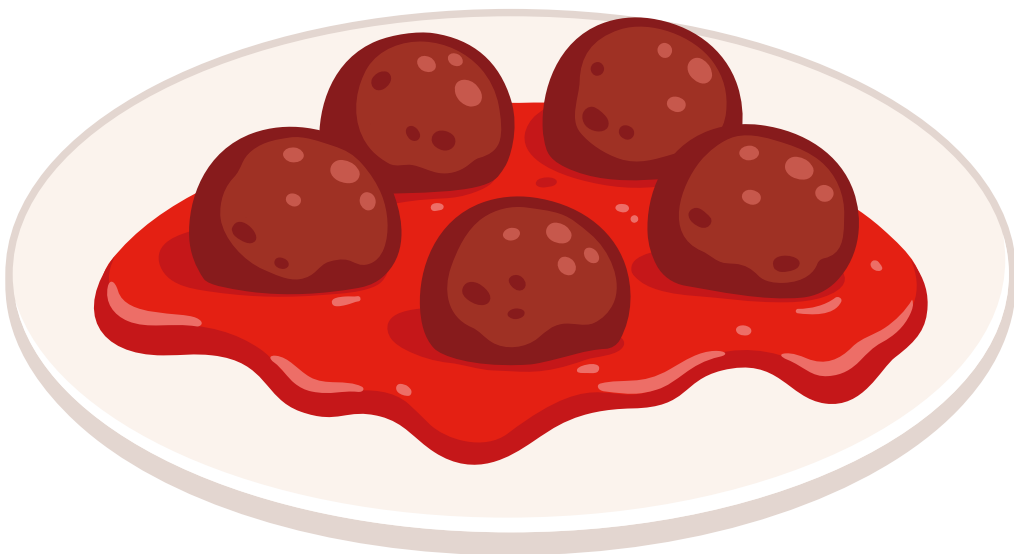
Product Category	Reference Amount	Serving Size
Bean curd (tofu) or tempeh	85 g	85-100 g
Beans, peas and lentils, such as white beans, kidney beans, romano beans, soybeans or chick peas	100 g dry, 250 ml cooked or canned	35-100 g dry, 100-250 ml cooked or canned

Meat, Poultry, Their Products and Substitutes



Product Category	Reference Amount	Serving Size
Beef and poultry breakfast strips	30 g uncooked 15 g cooked	15-60 g uncooked 10-30 g cooked
Dried meat and poultry, dried beef, as well as sausage products such as salami, or smoked hot dog.	30 g	15-60 g
Luncheon meats such as bologna, minced luncheon roll, liver sausage, mortadella, sandwich spread, potted meat food product; taco fillings; meat pie fillings.	75 g uncooked, 55 g cooked	35-100 g uncooked, 25-75 g cooked
Sausage products, such as linked sausage, smoked sausage, pepperoni Sausage made with combination of seafood.	75 g uncooked, 55 g cooked	75-165 g uncooked, 25-115 g cooked
Cuts of meat and poultry without sauce, and ready-to-cook cuts, Shish kebab (only marinated meat, no vegetables) Whole chicken (no stuffing) Turkey roast (no stuffing)	125 g raw, 100 g cooked	80-130 g raw, 50-100 g cooked
Patties (including veggie burger patties), steakettes, meatballs, sausage meat and ground meat, with or without breading or batter Falafels	100 g raw, 60 g cooked	80-130 g raw, 50-100 g cooked
Cured meat products such as corned beef, pastrami, smoked meat or pickled meat	85 g raw, 55 g cooked	50-110 g raw, 30-100 g cooked
Canned meat and poultry	55 g	50-100 g
Meat and poultry with sauce, such as meat in barbecue sauce or turkey with gravy, but excluding combination dishes	140 g	90-150 g

Combination Dishes



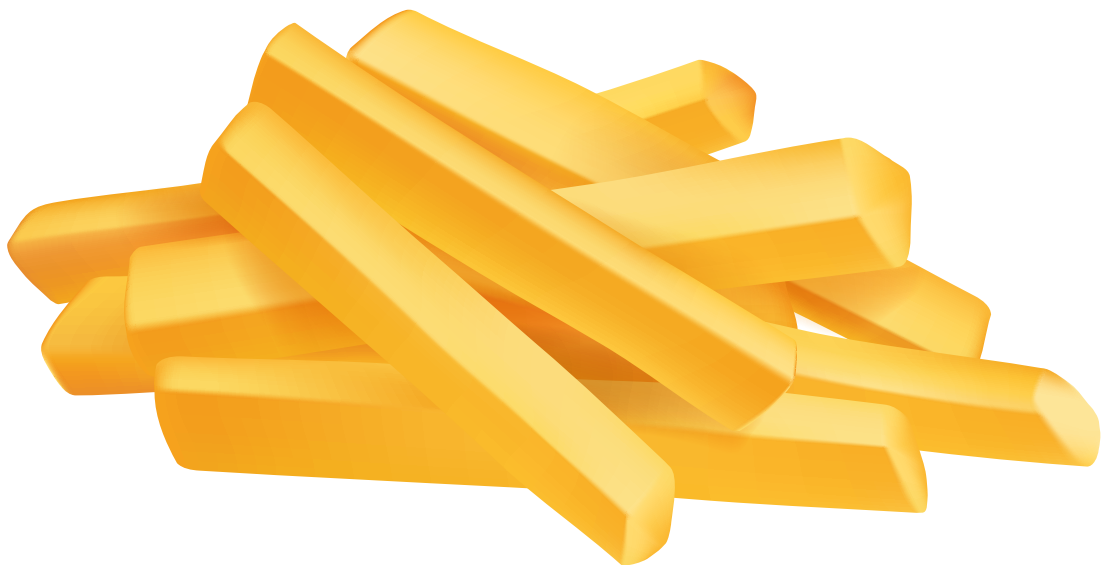
Product Category	Reference Amount	Serving Size
<p>Measurable with a cup, such as casserole, hash, macaroni and cheese with or without meat, pot pie, spaghetti with sauce, stir fry, meat or poultry casserole, baked or refried beans, meat chili, chili with beans, creamed chipped beef, beef or poultry ravioli in sauce, rice and vegetables, butter chicken with rice Shepherd's pie</p>	<p>250 ml</p>	<p>200-375g or 200-375 ml</p>
<p>Not measurable with a cup, such as burritos, egg rolls, enchiladas, pizza (considered to be "without sauce"), pizza rolls, sausage rolls, pastry rolls, cabbage rolls, quiche, sandwiches, crackers and meat or poultry, burger on a bun, calzones, tacos, pockets stuffed with meat, lasagna, chicken cordon bleu, stuffed vegetables with meat or poultry, shish kabobs (if combination of meat and vegetables), fajitas, meat pie or tourtière Meat-filled cannelloni, no sauce Stuffed turkey roast Stuffed chicken</p>	<p>140 g without gravy or sauce, 195 g with gravy or sauce</p>	<p>90-300 g including gravy or sauce</p>

Nuts and Seeds



Product Category	Reference Amount	Serving Size
Nuts and seeds, not for use as snacks: whole, chopped, sliced, slivered or ground	30 g shelled	30-75 g
Butters, pastes and creams, other than peanut butter	30 g	15-45 g
Peanut butter	15 g	15-30 g
Flours, such as coconut flour	15 g	10-20 g

Potatoes, Sweet Potatoes and Yams



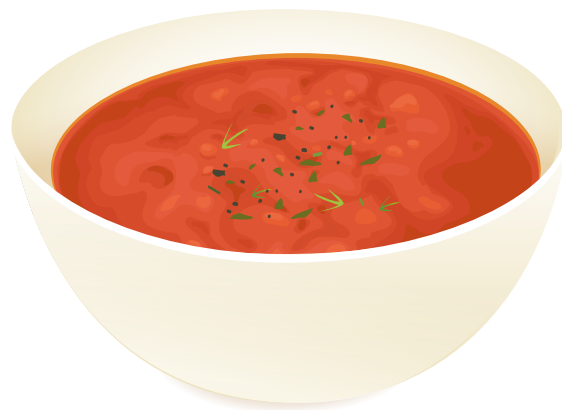
Product Category	Reference Amount	Serving Size
French fries, hash browns, skins and pancakes	85 g frozen French fries, 70 g prepared	70-110 g
Mashed, candied, stuffed, or with sauce	140 g	100-200 g
Plain, fresh, canned or frozen	110 g fresh or frozen, 125 g vacuum-packed, 160 g canned	110-150 g

Salads



Product Category	Reference Amount	Serving Size
Salads, such as egg, fish, shellfish, bean, fruit, vegetable, meat, poultry salad.	100 g	75-150 g
Gelatin salad	120 g	100-175 g
Pasta or potato salad	140 g	100-200 g

Sauces, Dips, Gravies and Condiments



Product Category	Reference Amount	Serving Size
Sauces for dipping, such as barbecue, hollandaise, tartar, mustard or sweet and sour sauce	30 ml	15-45 ml
Dips, such as legume or dairy-based	30 g	15-45 g
Major main entrée sauce, such as spaghetti sauce	125 ml	100-200 ml
Minor main entrée sauce such as pizza sauce, pesto sauce, or other sauces used as toppings such as white sauce, cheese sauce, salsa, cocktail sauce or gravy	60 ml	50-100 ml
Major condiments, such as ketchup, steak sauce, soy sauce, vinegar, teriyaki sauce.	15 ml	10-20 ml
Minor condiments, such as horseradish, hot sauce, mustard.	5 ml	5-10 ml

Snacks



Product Category	Reference Amount	Serving Size
Chips, pretzels, popcorn, extruded snacks, grain-based snack mixes and fruit-based snacks, such as fruit chips, Pita chips	50 g	40-60 g
Nuts or seeds for use as snacks	50 g shelled	40-60 g
Meat or poultry snack food sticks	20 g	15-25 g

Soups



Product Category	Reference Amount	Serving Size
All varieties	250 ml	175-250 ml prepared, 85-125 ml condensed, 15 g dehydrated or dry

Sugars and Sweets



Product Category	Reference Amount	Serving Size
Candies, including chocolate bars and other chocolate products.	40 g	30-70 g
Hard candies.	15 g	15-30 g
Baking candies, such as chocolate chips	15 g	10-20 g
Breath mints	2 g	1-3 g
Roll-type hard candies and mini size hard candies in dispenser packages	5 g	5-10 g
Confectioner's or icing sugar	30 g	15-60 g
Bread spreads, honey and molasses	20 g	15-25 g
Jams, jellies, marmalades, fruit butters and spreads	15 ml	10-20 ml
Marshmallows	30 g	25-50 g
Sugars.	4 g	4-5 g
Sugar substitute	amount equivalent in sweetness to 4g sugar	amount equivalent in sweetness to 4-5 g sugar
Syrups, including chocolate, maple and corn syrup	30 ml as ingredient, 60 ml other uses	30-60 ml

Vegetables



Product Category	Reference Amount	Serving Size
Vegetables without sauce, including cream style corn and stewed tomatoes, but not including vegetables. Onion rings Breaded zucchini sticks	85 g fresh or frozen, 125 ml canned	70-100 g fresh, frozen
Vegetables with sauce	110 g fresh or frozen, 125 ml canned	95-125 g fresh or frozen, 80-175 ml canned
Vegetables primarily used for garnish or flavoring, fresh, canned or frozen, but not dried, such as parsley or garlic	4 g	4-5 g
Chili pepper and green onion	30 g	25-45 g
Seaweed Dehydrated mushrooms	15 g	10-20 g
Lettuce and sprouts	65 g	50-75 g
Vegetable juice and vegetable drink	250 ml	125-250 ml
Olives Sun-dried tomato packed in oil	15 g	10-20 g 3 to 5 olives 1 to 2 sundried tomatoes
Pickles Artichoke hearts	30 g	1 dill pickle, 2 mini-dills or gherkins 1 artichoke heart
Vegetable pastes, such as tomato paste	30 ml	25-45 ml
Vegetable sauce or purée, such as tomato sauce or tomato purée	60 ml	50-75 ml

Miscellaneous category



Product Category	Reference Amount	Serving Size
Baking powder, baking soda, pectin and yeast	0.6 g	0.5-2 g
Baking decorations, such as colored sugars or sprinkles for cookies	4 g	3-5 g
Bread crumbs and batter mixes	30 g	15-60 g
Cocoa powder	5 g	5 g
Chewing gum	3 g	3-5 g
Salt and salt substitute, as well as seasoned salt such as garlic salt Seasoning products with salt (e.g. vegetarian seasoning) Coating mix (with salt as one of main ingredients)	1 g	0.5-1.5 g
Spices and herbs (no salt)	0.5 g	0.5-1.0 g
Dessert toppings, such as maple butter and marshmallow cream	30 g	15-30 g
Cake frostings and icings, streusel topping	35 g	25-45 g
Pie fillings	75 ml	40-150 mL

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