



APPENDIX D

YIELD PERCENTS AND WEIGHT/VOLUME EQUIVALENTS

Foodservice Operations and Management: Concepts and Applications

Karen Eich Drummond, Mary Cooley, and Thomas J. Cooley

A. Yield Percents for Fruits and Vegetables

| Fruits | Yield Percent | Vegetables | Yield Percent |
|---|---------------|--|---------------|
| Apples, cored, unpeeled | 91% | Artichokes (edible leaves and base) | 40% |
| Apples, cored, peeled | 78% | Asparagus | 53% |
| Apricots | 93% | Beans, green or wax | 88% |
| Avocado | 67% | Beans, lima, in pods | 44% |
| Bananas | 64% | Beets, whole, with full tops | 40% |
| Blackberries | 96% | Beets, whole, with no tops | 70% |
| Blueberries | 98% | Broccoli, spears | 61% |
| Cantaloupe | 51% | Brussels sprouts | 80% |
| Cherries (flesh) | 62% | Cabbage, green, red, or white (trimmed without core) | 80% |
| Coconut | 48% | Cabbage, Chinese | 59% |
| Figs (no stems) | 97% | Carrots, with full tops | 59% |
| Grapefruit (segments without membranes) | 52% | Carrots, without tops | 82% |
| Grapes (no stems) | 93% | Cauliflower, florets | 60% |
| Honeydew, chunk | 67% | Celeriac | 86% |
| Lemon, juice | 43% | Celery | 73% |
| Lime, juice | 47% | Chard | 77% |
| Mango | 69% | Collards | 57% |
| Orange, sections with membrane | 71% | Cucumber (peeled, sliced) | 84% |
| Orange, sections without membrane | 50% | Eggplant (peeled, sliced) | 81% |
| Papayas | 65% | Endive (trimmed, cored) | 86% |
| Peaches, peeled and pitted | 76% | Fennel (trimmed, cored) | 86% |
| Pears, peeled and pitted | 78% | Garlic (peeled, chopped) | 87% |
| Pineapple, chunks | 56% | Jicama, peeled and cubed | 92% |
| Plums, flesh | 94% | Kale (leaves without stems) | 64% |
| Pomegranates | 44% | Leeks (bulb and lower leaf) | 44% |
| Raspberries | 96% | Lettuce, butter/Bibb | 72% |
| Strawberries | 88% | | |

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| Fruits | Yield Percent | Vegetables | Yield Percent |
|--|---------------|-----------------------------------|----------------------|
| Tomatoes, cored and trimmed | 88% | Lettuce, Romaine (trimmed, cored) | 75% |
| Tomatoes, peeled, cored, seeded, chopped | 78% | Lettuce, iceberg (chopped) | 65% |
| Watermelon (rind and seeds removed) | 52% | | |
| | | Lettuce, leaf green or red | 77% |
| | | Mushrooms, trimmed and sliced | 89% |
| | | Okra | 86% |
| | | Onions, sliced or rings | 84% |
| | | Onions, diced | 91% |
| | | Peas, shelled | 38% |
| | | Peppers, sweet, diced | 81% |
| | | Potatoes, peeled and quartered | 81% |
| | | Radishes | 63% |
| | | Rutabagas, peeled | 93% |
| | | Shallots | 88% |
| | | Spinach | 70% |
| | | Squash, summer (not peeled) | 95% |
| | | Squash, winter, acorn | 74% |
| | | Squash, butternut | 84% |
| | | Squash, Hubbard | 68% |
| | | Squash, spaghetti | 69% |
| | | Sweet potatoes, hand peeled | 88% |
| | | Fresh Herbs | Yield Percent |
| | | Basil | 56% |
| | | Cilantro | 46% |
| | | Oregano | 78% |
| | | Parsley, Italian | 40% |
| | | Rosemary | 80% |
| | | Tarragon | 80% |

Sources: U.S. Department of Agriculture. (1975.) *Food yields: Summarized by different stages of preparation*. Agriculture Handbook No. 102. Agricultural Research Service; U.S. Department of Agriculture. (2019/2020). *Food buying guide for child nutrition programs*. <https://foodbuyingguide.fns.usda.gov/Appendix/DownloadFBG>; Produce Marketing Association. *Fresh Produce Manual* (2002); F. T. Lynch. (2010). *The book of yields: Accuracy in food costing and purchasing* (8th ed.). John Wiley & Sons.

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B. Yield Percents for Beef, Chicken, Pork, Turkey, Veal, Lamb, and Game Meats

| Beef Cut and Preparation Method (all grades included) | Yield Percent |
|---|---------------|
| Beef, bottom sirloin, tri-tip roast, separable lean and fat, trimmed to 0" fat, roasted | 84% |
| Beef, brisket, flat half, separable lean and fat, trimmed to 1/8" fat, braised | 69% |
| Beef, chuck eye roast, boneless, America's beef roast, separable lean and fat, trimmed to 0" fat, roasted | 80% |
| Beef, chuck eye steak, boneless, separable lean and fat, trimmed to 0" fat, grilled | 80% |
| Beef, chuck, arm pot roast, separable lean and fat, trimmed to 1/8" fat, braised | 71% |
| Beef, chuck, short ribs, boneless, separable lean and fat, trimmed to 0" fat, braised | 66% |
| Beef, chuck, shoulder clod, shoulder tender, medallion, separable lean and fat, trimmed to 0" fat, broiled or grilled | 77% |
| Beef, chuck, shoulder clod, shoulder top and center steaks, separable lean and fat, trimmed to 0" fat, broiled or grilled | 76% |
| Beef, chuck, shoulder clod, top blade, steak, separable lean and fat, trimmed to 0" fat, broiled or grilled | 76% |
| Beef, chuck, under blade pot roast, boneless, separable lean and fat, trimmed to 0" fat, braised | 64% |
| Beef, chuck, under blade steak, boneless, separable lean and fat, trimmed to 0" fat, braised | 64% |
| Beef, flank, separable lean and fat, trimmed to 0" fat, broiled or grilled | 81% |
| Beef, ground, high fat (>22%), patty, broiled or grilled | 63% |
| Beef, ground, medium fat (12% to 22%), patty, broiled or grilled | 69% |
| Beef, ground, low fat (<12%), patty, broiled or grilled | 73% |
| Beef, loin, tenderloin roast, boneless, separable lean and fat, trimmed to 0" fat, roasted | 82% |
| Beef, loin, tenderloin steak, separable lean and fat, trimmed to 0" fat, grilled | 79% |
| Beef, loin, top loin steak, boneless, lip off, separable lean and fat, trimmed to 0" fat, grilled | 82% |
| Beef, rib eye roast, bone-in, lip-on, separable lean and fat, trimmed to 1/8" fat, roasted | 77% |
| Beef, rib eye roast, boneless, lip-on, separable lean and fat, trimmed to 1/8" fat, roasted | 76% |
| Beef, rib eye steak, bone-in, lip-on, separable lean and fat, trimmed to 1/8" fat, grilled | 86% |
| Beef, rib eye steak, boneless, lip off, separable lean and fat, trimmed to 0" fat, grilled | 82% |
| Beef, rib eye steak, boneless, lip-on, separable lean and fat, trimmed to 1/8" fat, grilled | 84% |
| Beef, rib, back ribs, bone-in, separable lean and fat, trimmed to 0" fat, braised | 75% |
| Beef, rib, small end (ribs 10–12), separable lean and fat, trimmed to 1/8" fat, broiled or grilled | 82% |
| Beef, round tip round roast, separable lean and fat, trimmed to 0" fat, roasted | 85% |
| Beef, round, bottom round, roast, separable lean and fat, trimmed to 1/8" fat, roasted | 84% |
| Beef, round, bottom round, steak, separable lean and fat, trimmed to 1/8" fat, braised | 69% |
| Beef, round, eye of round, roast, separable lean and fat, trimmed to 1/8" fat, roasted | 81% |
| Beef, round, knuckle, tip center, steak, separable lean and fat, trimmed to 0" fat, broiled or grilled | 76% |
| Beef, round, knuckle, tip side, steak, separable lean and fat, trimmed to 0" fat, broiled or grilled | 75% |

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| Beef Cut and Preparation Method (all grades included) | Yield Percent |
|--|---------------|
| Beef, round, outside round, bottom round, steak, separable lean and fat, trimmed to 0" fat, broiled or grilled | 77% |
| Beef, round, top round steak, separable lean and fat, trimmed to 1/8" fat, broiled or grilled | 72% |
| Beef, shoulder pot roast, boneless, separable lean and fat, trimmed to 0" fat, braised | 66% |
| Beef, shoulder steak, boneless, separable lean and fat, trimmed to 0" fat, grilled | 78% |
| Beef, shoulder top blade steak, boneless, separable lean and fat, trimmed to 0" fat, grilled | 73% |
| Beef, tenderloin, steak, separable lean and fat, trimmed to 1/8" fat, broiled or grilled | 80% |
| Beef, top sirloin, steak, separable lean and fat, trimmed to 1/8" fat, broiled or grilled | 80% |
| Chicken Part and Preparation Method | Yield Percent |
| Chicken, broiler-fryer, breast, meat and skin, baked or roasted | 72% |
| Chicken, broiler-fryer, breast, meat and skin, poached, simmered, or stewed | 77% |
| Chicken, broiler-fryer, drumstick, meat and skin, baked or roasted | 76% |
| Chicken, broiler-fryer, thigh, meat and skin, baked or roasted | 69% |
| Chicken, broiler-fryer, thigh, meat and skin, poached, simmered, or stewed | 74% |
| Chicken, broiler-fryer, whole, including skin, baked or roasted | 78% |
| Chicken, broiler-fryer, whole, including skin, poached, simmered, or stewed | 75% |
| Chicken, broiler-fryer, wing, meat and skin, poached, simmered, or stewed | 86% |
| Chicken, broiler-fryer, wing, meat and skin, floured, fried in deep fat | 66% |
| Chicken, broilers or fryers, drumstick, meat and skin, braised | 77% |
| Chicken, broilers or fryers, thigh, meat and skin, braised | 68% |
| Chicken, broilers or fryers, wing, meat and skin, roasted | 78% |
| Chicken, drumstick, meat and skin, water/brined added, braised | 74% |
| Chicken, thigh, meat and skin, water/brine added, braised | 72% |
| Chicken, thigh, meat and skin, water/brine added, roasted | 67% |
| Pork Cut and Preparation Method | Yield Percent |
| Pork loin, fresh, back ribs, bone-in, separable lean and fat, baked or roasted | 82% |
| Pork, cured, bacon, baked or roasted | 32% |
| Pork, cured, bacon, microwaved | 29% |
| Pork, cured, bacon, pan-fried | 32% |
| Pork, cured, ham and water product, slice, bone-in, pan-broiled | 81% |
| Pork, cured, ham and water product, whole, boneless, baked or roasted | 96% |
| Pork, cured, ham with natural juices, slice, bone-in, pan-broiled | 86% |
| Pork, cured, ham with natural juices, whole, boneless, baked or roasted | 94% |
| Pork, fresh, blade, (chops), boneless, separable lean and fat, broiled or grilled | 85% |
| Pork, fresh, leg (ham), rump half, separable lean and fat, baked or roasted | 77% |
| Pork, fresh, leg (ham), shank half, separable lean and fat, baked or roasted | 79% |

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| Pork Cut and Preparation Method | Yield Percent |
|--|---------------|
| Pork, fresh, loin, blade (chops), bone-in, separable lean and fat, braised | 78% |
| Pork, fresh, loin, blade (chops), bone-in, separable lean and fat, broiled or grilled | 83% |
| Pork, fresh, loin, blade (chops), bone-in, separable lean and fat, pan-fried | 82% |
| Pork, fresh, loin, blade (roasts), bone-in, separable lean and fat, baked or roasted | 77% |
| Pork, fresh, loin, blade (roasts), boneless, separable lean and fat, baked or roasted | 75% |
| Pork, fresh, loin, center loin (chops), bone-in, separable lean and fat, braised | 74% |
| Pork, fresh, loin, center loin (chops), bone-in, separable lean and fat, pan-fried | 76% |
| Pork, fresh, loin, center loin (chops), boneless, separable lean and fat, pan-broiled | 80% |
| Pork, fresh, loin, center loin (roasts), bone-in, separable lean and fat, baked or roasted | 77% |
| Pork, fresh, loin, center rib (chops), bone-in, separable lean and fat, braised | 77% |
| Pork, fresh, loin, center rib (chops), bone-in, separable lean and fat, pan-fried | 77% |
| Pork, fresh, loin, center rib (roasts), bone-in, separable lean and fat, baked or roasted | 75% |
| Pork, fresh, loin, sirloin (chops), bone-in, separable lean and fat, braised | 73% |
| Pork, fresh, loin, sirloin (chops), boneless, separable lean and fat, braised | 76% |
| Pork, fresh, loin, sirloin (chops), boneless, separable lean and fat, broiled or grilled | 79% |
| Pork, fresh, loin, tenderloin, separable lean and fat, roasted | 80% |
| Pork, fresh, loin, tenderloin, separable lean only, baked or roasted | 77% |
| Pork, fresh, loin, top loin (chops), boneless, separable lean and fat, braised | 73% |
| Pork, fresh, loin, top loin (chops), boneless, separable lean and fat, pan-fried | 77% |
| Pork, fresh, shoulder breast, boneless, separable lean and fat, broiled or grilled | 80% |
| Pork, fresh, shoulder, arm picnic, separable lean and fat, braised | 74% |
| Pork, fresh, spareribs, separable lean and fat, baked or roasted | 76% |
| Pork, fresh, ground high fat (over 27%), pan-browned | 66% |
| Pork, ground, low fat (less than 10%), pan-browned | 68% |
| Pork, ground, patty, medium fat, broiled or grilled | 68% |
| Turkey Part and Preparation Method | Yield Percent |
| Turkey sausage, fresh, broiled or grilled | 77% |
| Turkey, water/brine added, breast, meat and skin, roasted | 68% |
| Turkey, no water/brine added, breast, meat and skin, roasted | 72% |
| Turkey, no water/brine added, drumstick, meat and skin, roasted | 72% |
| Turkey, no water/brine added, thigh, meat and skin, roasted | 83% |
| Turkey, no water/brine added, wing, meat and skin, roasted | 71% |
| Turkey, whole, water/brine added, meat and skin, roasted | 71% |
| Turkey, whole, no water/brine added, meat and skin, roasted | 71% |

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| Veal Cut and Preparation Method | Yield Percent |
|--|---------------|
| Veal, leg, top round, cap off, cutlet, boneless, grilled | 74% |
| Veal, shoulder, blade chop, separable lean and fat, grilled | 77% |
| Lamb Cut and Preparation Methods | Yield Percent |
| Lamb, roasts, all samples, baked or roasted | 74% |
| Lamb, shoulder, shank, breast, flank, braised | 60% |
| Lamb, shoulder, shank, breast, flank, poached, simmered, or stewed | 60% |
| Game Meat and Preparation Method | Yield Percent |
| Bison, ground, broiled or grilled | 77% |
| Deer, ground, broiled or grilled | 83% |
| Elk, Ground, broiled or grilled | 84% |
| Ostrich, ground, broiled or grilled | 87% |

Source: U.S. Department of Agriculture. (2017). *USDA table of cooking yields for meat and poultry*, Release 2. <https://data.nal.usda.gov/dataset/usda-table-cooking-yields-meat-and-poultry>

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C. Yield Percents for Seafood

| Seafood and Preparation Method | Yield Percent |
|--|---------------|
| Bass, striped, fillet without skin, baked or broiled | 90% |
| Bluefish, fillet with skin, broiled | 93% |
| Bluefish, fillet without skin, broiled | 98% |
| Clams, in shell, edible portion | 15% |
| Cod, fillet, baked | 76% |
| Crab, Blue, whole, cooked | 17% |
| Crab, Dungeness, whole, cooked | 27% |
| Crab, King, whole, cooked in shell | 25% |
| Flounder, baked or broiled | 72% |
| Haddock, fillet without skin, baked or broiled | 80% |
| Halibut steak, baked | 84% |
| Halibut steak, broiled | 73% |
| Lobster, body, claw, and tail, boiled | 28% |
| Mackerel, fillet, baked | 86% |
| Mackerel, fillet, broiled | 77% |
| Oyster, meat and liquor | 18% |
| Perch, ocean, fillet without skin, baked | 79% |
| Perch, ocean, fillet without skin, broiled | 81% |
| Red Snapper, filet, baked or broiled | 87% |
| Salmon steak, boneless, baked | 85% |
| Shad, fillet with skin, broiled | 81% |
| Shrimp, boiled in shell, deveined | 66% |
| Trout, fillet with skin, broiled | 77% |
| Tuna, steak | 60% |

Source: U.S. Department of Agriculture. (1975). *Food yields: Summarized by different stages of preparation*. Agriculture Handbook No. 102. Agricultural Research Service.

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D. Weight and Measure Equivalents for Common Foods

Approximate Weight to Volume Chart

| Ingredient | Weight | Approximate Volume | Other Notes |
|---|---------|-----------------------|--|
| FRUITS | | | |
| Apples, cored, peeled, sliced | 1 lb. = | 4 cups | 1 baked apple (size 125–138) = 1/2 cup cooked fruit |
| Apricots, canned, slices, peeled | 1 lb. = | 1 7/8 cup | 1 No. 10 can = 62 oz. (7 2/3 cups) drained apricots 1 lb. AP = 8.9 oz. (1 1/8 cups) drained apricots |
| Apricot halves, dried | 1 lb. = | 2 7/8 cups (100 each) | |
| Banana, fresh, 150 count, sliced | 1 lb. = | 2 1/2 cups | 1 lb. AP = 0.64 lb. EP or about 1 5/8 cups sliced bananas 1 banana = 1/2 cup fruit |
| Bananas, mashed | 1 lb. = | 2 cups | |
| Blackberries, whole, fresh | 1 lb. = | 3 cups | |
| Blueberries, whole fresh | 1 lb. = | 3 cups | |
| Cantaloupe, fresh, cubed | 1 lb. = | 3 cups | 1 melon = about 14 oz. EP |
| Cherries, sweet, fresh, whole, pitted | 1 lb. = | 2 1/2 cups | 1 lb. = 45 cherries |
| Clementine, peeled | 1 lb. = | 2 1/2 cups + 2 T | 1 whole, peeled clementine = about 3/8 cup fruit |
| Cranberries, dried | 1 lb. = | 4 cups | |
| Figs, fresh, whole | 1 lb. = | 2 cups | 1 lb. = about 20 small figs |
| Fruit cocktail, canned, drained | 1 lb. = | 2 1/8 cup | 1 No 10 can = 69 oz. or 9 1/4 cups drained fruit |
| Grapefruit, fresh, fruit with liquid | 1 lb. = | 1 3/4 cup | 1 lb. AP = 0.74 lb. (about 1 5/8 cups) peeled, ready-to-serve raw grapefruit sections |
| Grapes, fresh, seedless | 1 lb. = | 2 5/8 cups | |
| Honeydew melon, fresh, cubes | 1 lb. = | 2 1/2 cups | |
| Nectarines, fresh, pitted | 1 lb. = | 2 cups | 1 whole nectarine (size 88–96) = about 1/2 cup fruit 1 whole nectarine (size 56–64) = about 3/4 cup fruit |
| Oranges, fresh, 126 count, peeled | 1 lb. = | 2 1/4 cups | |
| Peaches, fresh, pitted, diced | 1 lb. = | 2 2/3 cups | |
| Peached, canned, clings, sliced, light syrup, drained | 1 lb. = | 2 cups | 1 No. 10 can = 105 oz. (12 1/2 cups) peaches and liquid OR 72 oz. (9 cups) drained peaches |
| Pears, fresh, cored, sliced | 1 lb. = | 2 1/4 cups | |

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| Pears, canned, halves, packed in juice or light syrup, drained | 1 lb. = | 2 cups | 1 No. 10 can = about 62 oz. (7 3/4 cups) drained pears |
| Pineapple, fresh, ready to serve | 1 lb. = | 2 cups | |
| Pineapple, canned, chunks, packed in juice or light syrup, drained | 1 lb. = | 2 cups | 1 No. 10 can = about 12 3/8 cups pineapple and liquid or about 8 cups drained pineapple |
| Plums, fresh, purple, red or black, 2 1/2 inch diameter, pitted | 1 lb. = | 2 7/8 cups | |
| Raisins | 1 lb. = | 3 1/8 cups | |
| Raspberries, fresh | 1 lb. = | 3 cups | |
| Strawberries, fresh | 1 lb. = | 3 cups | |
| Tangerines, fresh, 150 count, peeled sections | 1 lb. = | 2 3/4 cups | |
| Tomatoes, fresh, all sizes, wedges | 1 lb. = | 2 1/2 cups | |
| Tomatoes, fresh, cherry, ready to serve | 1 lb. = | 3 cups | |
| Tomatoes, canned, diced, with juice | 8.5 oz. = | 1 cup | Drained weight yield percent = 66% |
| Watermelon, fresh, chunks | 1 lb. = | 1 1/2 cups | |

VEGETABLES

| | | | |
|---|---------|------------|--|
| Artichokes, fresh, large, cooked, drained | 1 lb. = | 1 1/2 cups | |
| Asparagus, fresh, trimmed, cooked | 1 lb. = | 2 1/4 cups | |
| Avocados, fresh, peeled, chopped or diced | 1 lb. = | 2 1/2 cups | |
| Beans, Great Northern, canned, heated, drained | 1 lb. = | 1 7/8 cups | 1 No. 10 can = about 68.5 oz. (about 8 1/8 cups) heated, drained beans |
| Beans, Great Northern, dry | 1 lb. = | 2 1/2 cups | |
| Beans, green or wax, fresh, trimmed, cooked | 1 lb. = | 3 1/4 cups | |
| Beans, green, frozen, cooked | 1 lb. = | 2 7/8 cups | |
| Beans, kidney, canned, heated, drained | 1 lb. = | 2 1/2 cups | 1 No. 10 can = about 65.0 oz. (9 5/8 cups) heated, drained beans |
| Beans, kidney, dry | 1 lb. = | 2 1/2 cups | |
| Beans, lima, baby, frozen, heated | 1 lb. = | 2 5/8 cups | |
| Beans, lima, baby, dry | 1 lb. = | 2 3/4 cups | |
| Beans, navy or pea, canned, heated, drained | 1 lb. = | 2 1/8 cups | 1 No. 10 can = about 72.0 oz. (9 3/4 cups) heated, drained beans |
| Beans, navy or pea, dry | 1 lb. = | 2 1/4 cups | |
| Beans, pinto, canned, heated, drained | 1 lb. = | 2 1/4 cups | 1 No. 10 can = about 67.4 oz. (9 1/4 cups) heated, drained beans |
| Beans, pinto, dry | 1 lb. = | 2 3/8 cups | |
| Beets, fresh, without tops, cooked, sliced or diced | 1 lb. = | 2 1/2 cups | |

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|---|----------------------|---------------------|--|
| Beets, canned, diced, drained, not heated | 1 lb. = | 2 1/2 cups | |
| Bok choy, fresh, ready-to-serve | 1 lb. = | 4 1/2 cups | |
| Broccoli, fresh, trimmed, florets, cooked | 1 lb. = | 3 3/4 cups | |
| Broccoli, frozen, florets, cooked | 1 lb. = 4.6 oz. = | 3 1/2 cups 1 cup | |
| Brussels sprouts, fresh, trimmed, steamed | 1 lb. = | 3 1/3 cups | |
| Cabbage, green, fresh, cooked, wedges | 1 lb. = | 3 cups | |
| Cabbage, red, fresh, shredded, ready-to-cook | 1 lb. = | 6 1/2 cups | |
| Carrots, fresh, no tops, trimmed, peeled, sliced | 1 lb. = | 3 1/8 cups | |
| Cauliflower, fresh, florets, ready-to-cook | 1 lb. = | 4 1/2 cups | |
| Celery, fresh, chopped, diced, ready to cook | 1 lb. = | 3 1/4 cups | 1 bunch = approximately 1 lb. |
| Corn, fresh, 5- to 6-inch length, cooked | 1 medium ear = | 1/2 cup | |
| Corn, niblets | 5.7 oz. = | 1 cup | |
| Cucumber, fresh, not peeled, diced | 1 lb. = | 2 3/4 cups | |
| Garlic, minced | 1 oz. = | 2 T | |
| Kale, fresh, stemmed, chopped, cooked | 1 lb. = | 3 cups | |
| Lentils, dry | 1 lb. = | 2 3/8 cups | |
| Lettuce, fresh (such as iceberg, leaf, and romaine), ready to serve | 1 lb. = | 6–8 cups | |
| Mushrooms, fresh, trimmed, chopped, ready to cook | 1 lb. = | 5 3/4 cups | |
| Onions, diced, ready to cook or serve | 1 lb. = | 3 1/8 cups | |
| Peas, green, dry | 1 lb. = | 2 1/3 cups | |
| Peas, green, canned, heated, drained | 1 lb. = | 2 1/2 cups | |
| Peas, green, frozen, cooked, drained | 1 lb. = | 2 3/8 cups | |
| Peppers, bell, fresh, chopped or diced | 1 lb. = 5.3 oz. = | 3 cups 1 cup | |
| Peppers, green chilies, Anaheim, fresh, ready to serve | 1 lb. = | 3 1/2 cups | |
| Peppers, Jalapeno, ready to serve | 1 lb. = | 3 7/8 cups | |
| Potatoes, fresh, white, cooked, unpeeled, diced | 1 lb. = | 2 1/2 cups | |
| Potatoes, fresh, white, raw, diced | 1 lb. = | 2 2/3 cups | |
| Scallions, chopped | 1 bunch = | 1/2 cup | 1 bunch is not weight; it is a common purchase unit. |
| Shallots, minced | 5.5 oz. = | 1 cup | |

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|--|-------------|-------------|--|
| Spinach, leaves, fresh, ready to cook or serve | 1 lb. = | 6 3/8 cups | |
| Spinach, leaves, fresh, lightly steamed | 1 lb. = | 3 1/8 cups | |
| Squash, zucchini, fresh, cubed, ready to cook or serve | 1 lb. = | 3 cups | |
| Squash, acorn, whole, baked, flesh | 1 lb. = | 4 cups | |
| Squash, butternut, whole, fresh, cubes, ready to cook | 1 lb. = | 3 cups | |
| Sweet potatoes, fresh, cooked | 1 lb. = | 2 1/4 cups | |
| Turnips, fresh, peeled, cubed, cooked and drained | 1 lb. = | 2 3/4 cups | |
| GRAINS | | | |
| Bulgur | 1 lb. dry = | 3 cups | |
| Cornmeal | 1 lb. dry = | 3 cups | |
| Kasha | 1 lb. dry = | 2 3/8 cups | |
| Oats, rolled, instant | 1 lb. dry = | 5 2/3 cups | |
| Oats, rolled, quick-cooking | 1 lb. dry = | 6 1/4 cups | |
| Oats, rolled, regular | 1 lb. dry = | 6 cups | |
| Quinoa | 1 lb. dry = | 2 1/2 cups | 1 lb. quinoa when prepared with 2 parts water to 1 part quinoa yields 6 1/2 cups cooked. |
| Couscous, regular, enriched | 1 lb. dry = | 2 3/8 cups | 1 lb. dry couscous when cooked with 3 1/4 cups water yields 7 1/4 cups cooked. |
| Pasta, elbow macaroni, enriched | 1 lb. dry = | 3 1/2 cups | |
| Pasta, elbow macaroni, whole wheat and enriched flour | 1 lb. dry = | 3 3/4 cups | 1 lb. dry = about 8 1/2 cups cooked. |
| Pasta, egg noodles, enriched | 1 lb. dry = | 11 7/8 cups | |
| Pasta, lasagna noodles, enriched | 1 lb. dry = | 21 pieces | 1 lb. dry yields 7 cups (2.66 lbs) when boiled 15 minutes. |
| Pasta, lasagna noodles, whole wheat and enriched flour blend | 1 lb. dry = | 5 7/8 cups | 1 lb. dry yields about 8 1/8 cups cooked pieces when cooked. |
| Pasta, orzo, enriched | 1 lb. dry = | 2 3/8 cups | 1 lb. dry yields 3 lbs. (6 3/8 cups) when boiled 14 minutes. |
| Pasta, penne, enriched | 1 lb. dry = | 5 1/8 cups | 1 lb. dry yields 2.6 lbs. (7 3/4 cups) when boiled 14 minutes. |
| Pasta, penne, whole wheat and enriched flour blend | 1 lb. dry = | 4 3/8 cups | 1 lb. dry yields 8 5/8 cups when cooked. |
| Pasta, shells, enriched | 1 lb. dry = | 6 cups | 1 lb. dry yields 2.53 pounds (about 6 2/3 cups) when cooked. |

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| | | | |
|--|----------------------|------------------------------|--|
| Pasta, shells, whole wheat and enriched flour blend | 1 lb. dry = | 5 7/8 cups | 1 lb. dry yields 9 5/8 cups when cooked. |
| Pasta, spaghetti, enriched | 1 lb. dry = | 3 1/4 cups | 1 lb. dry yields 2.37 lbs. (about 5 1/4 cups) al dente after boiled for 8 minutes. |
| Pasta, spaghetti, whole wheat and enriched flour blend | 1 lb. dry = | 4 3/4 cups | 1 lb. dry yields 8 7/8 cups when cooked. |
| Pasta, rotini, enriched | 1 lb. dry = | 5 3/8 cups | 1 lb. dry yields about 9 1/2 cups cooked. |
| Pasta, rotini, whole wheat and enriched flour blend | 1 lb. dry = | 4 5/8 cups | 1 lb. dry yields about 8 1/4 cups cooked. |
| Rice, brown, instant | 1 lb. dry = | 4 3/8 cups | 1 lb. dry yields about 7 1/8 cups cooked. 1 cup dry yields about 1 2/3 cups cooked. |
| Rice, brown, long grain, regular | 1 lb. dry = | 2 1/2 cups | 1 lb. dry yields about 4 3/8 cups cooked. 1 cup dry yields about 1 3/4 cups cooked. |
| Rice, white long grain, instant, enriched | 1 lb. dry = | 4 1/2 cups | 1 lb. dry yields about 7 cups cooked. 1 cup dry yields about 1 1/2 cups cooked. |
| Rice, white, short/medium grain, enriched | 1 lb. dry = | 2 1/4 cups | 1 lb. dry yields about 6 3/4 cups cooked. 1 cup dry yields about 3 cups cooked. |
| Wild rice and enriched white rice mix | 1 lb. dry = | 2 3/8 cups | 1 lb. dry yields about 7 1/8 cups cooked. |
| MEAT, POULTRY, EGGS, CHEESE | | | |
| Beef, cooked, diced | 1 lb. = | 3 cups | |
| Chicken, cooked, cubed | 1 lb. = | 3 cups | |
| Egg, raw, large, shelled | 8 oz. = | 1 cup | 1 shelled large egg = 1.66 oz. |
| Egg product, frozen, egg whites | 1 lb. = | 1 5/8 cups thawed egg whites | |
| Egg product, frozen, egg yolks | 1 lb. = | 1 5/8 cups thawed egg yolks | |
| Cheese, grated cheddar or mozzarella | 1 lb. = 4 oz. = | 4 cups 1 cup | |
| Cheese, grated Parmesan | 1 lb. = | 4 1/2 cups | |
| Cheese, ricotta | 1 lb. = | 2 cups | |
| BAKERY SUPPLIES | | | |
| Sugar, white, granulated | 7 oz. = 1 lb. = | 1 cup 2 1/4 cups | 1/4 cup = 1.76 oz. |
| Sugar, brown, firmly packed | 7 oz. = | 1 cup | 1/4 cup = 1.59 oz. |
| Sugar, confectioners' sugar | 4 oz. = | 1 cup | |
| Flour, all-purpose or bread | 1 lb. = 4.3 oz. = | 3 3/4 cups 1 cup | |
| Flour, cake or pastry | 1 lb. = 4.3 oz. = | 3 3/4 cups 1 cup | |
| Flour, whole wheat | 1 lb. = | 4 cups | |

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| | | | |
|---------------------------|-----------------------|-------------------|--|
| Cocoa, unsweetened | 1 lb. = | 5 1/4 cups | |
| Honey | 12 oz. = | 1 cup | |
| Salt, table | 2/3 oz. = | 1 T | |
| Baking powder | 1 lb. = 0.44 oz. = | 2.3 cups 1 T | |
| Baking soda | 1 lb. = 0.53 oz. = | 1.9 cups 1 T | |
| Vanilla | 1 oz. = | 2 T | |
| HERBS AND SPICES | | | |
| Allspice, ground | 1 oz. 0.25 oz. = | 1/4 cup 1 T | |
| Basil, fresh | 1 oz. = | 1 cup | |
| Cinnamon, ground | 1 oz. = 0.25 oz. = | 1/4 cup 1 T | |
| Cloves, ground | 1 oz. = 0.25 oz. = | 1/4 cup 1 T | |
| Curry powder | 1 oz. = 0.25 oz. = | 1/4 cup 1 T | |
| Ginger, fresh, sliced | 1 oz. = | 1/8 cup | |
| Ginger, ground | 1 oz. = | 5 T | |
| Nutmeg, ground | 1 oz. = 0.25 oz. = | 1/4 cup 1 T | |
| Paprika | 1 oz. = 0.25 oz. = | 1/4 cup 1 T | |
| Pepper, black or white | 1 oz. = 0.25 oz. = | 1/4 cup 1 T | |
| OTHER FOODS | | | |
| Butter, margarine | 1 lb. = | 2 cups | 1/4 cup = 2 ounces 1 cup = 16 T = 8 oz. |
| Oil, vegetable | 1 lb. = 7.6 oz. = | 2.1 cups 1 cup | |
| Shortening | 1 lb. = 7.3 oz. = | 2.2 cups 1 cup | |
| Almonds, sliced | 1 lb. = | 3 3/4 cups | |
| Cashews, whole or chopped | 1 lb. = | 4 cups | |
| Peanuts, whole | 5 oz. = | 1 cup | |
| Peanut butter | 9 oz. = | 1 cup | |
| Pecans, diced | 4 oz. = | 1 cup | |
| Walnuts, chopped | 1 lb. = | 4 cups | |
| Bread crumbs, dried | 1 lb. = | 4 cups | |

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| | | | |
|------------------------------|---------|------------|--|
| Chocolate, chopped | 1 lb. = | 2 5/8 cups | |
| Chocolate chips | 1 lb. = | 2 5/8 cups | |
| Coconut, sweetened, shredded | 1 lb. = | 5 cups | |
| Catsup | 10 oz | 1 cup | |
| Mustard, prepared | 1 oz | 2 T | |
| Maple syrup | 1 lb. = | 1 1/2 cups | |

Sources: U.S. Department of Agriculture. (2019/2020). *Food buying guide for child nutrition programs*. <https://foodbuyingguide.fns.usda.gov/Appendix/DownloadFBG>; U.S. Department of Agriculture. (1975). *Food yields: Summarized by different stages of preparation*. Agriculture Handbook No. 102. Agricultural Research Service; King Arthur Flour. (2020). *Ingredient weight chart*. <https://www.kingarthurbaking.com/learn/ingredient-weight-chart>