

# Non-Dairy Food Sources of Calcium

Non-Dairy Food Sources of Calcium ranked by milligrams of calcium per standard amount; also calories in the standard amount. The bioavailability may vary. (The AI for adults is 1,000 mg/day.)<sup>a</sup>

| <b>Food, Standard Amount</b>                                       | <b>Calcium (mg)</b> | <b>Calories</b> |
|--|---------------------|-----------------|
| Fortified ready-to-eat cereals (various), 1 oz                     | 236-1043            | 88-106          |
| Soy beverage, calcium fortified, 1 cup                             | 368                 | 98              |
| Sardines, Atlantic, in oil, drained, 3 oz                          | 325                 | 177             |
| Tofu, firm, prepared with nigari <sup>b</sup> , ½ cup              | 253                 | 88              |
| Pink salmon, canned, with bone, 3 oz                               | 181                 | 118             |
| Collards, cooked from frozen, ½ cup                                | 178                 | 31              |
| Molasses, blackstrap, 1 Tbsp                                       | 172                 | 47              |
| Spinach, cooked from frozen, ½ cup                                 | 146                 | 30              |
| Soybeans, green, cooked, ½ cup                                     | 130                 | 127             |
| Turnip greens, cooked from frozen, ½ cup                           | 124                 | 24              |
| Ocean perch, Atlantic, cooked, 3 oz                                | 116                 | 103             |
| Oatmeal, plain and flavored, instant, fortified, 1 packet prepared | 99-110              | 97-157          |
| Cowpeas, cooked, ½ cup   | 106                 | 80              |
| White beans, canned, ½ cup   | 96                  | 153             |
| Kale, cooked from frozen, ½ cup                                    | 90                  | 20              |
| Okra, cooked from frozen, ½ cup                                    | 88                  | 26              |
| Soybeans, mature, cooked, ½ cup                                    | 88                  | 149             |
| Blue crab, canned, 3 oz  | 86                  | 84              |
| Beet greens, cooked from fresh, ½ cup                              | 82                  | 19              |
| Pak-choi, Chinese cabbage, cooked from fresh, ½ cup                | 79                  | 10              |
| Clams, canned, 3 oz  | 78                  | 126             |
| Dandelion greens, cooked from fresh, ½ cup                         | 74                  | 17              |
| Rainbow trout, farmed, cooked, 3 oz                                | 73                  | 144             |

<sup>a</sup> Both calcium content and bioavailability should be considered when selecting dietary sources of calcium. Some plant foods have calcium that is well absorbed, but the large quantity of plant foods that would be needed to provide as much calcium as in a glass of milk may be unachievable for many. Many other calcium-fortified foods are available, but the percentage of calcium that can be absorbed is unavailable for many of them.

<sup>b</sup> Calcium sulfate and magnesium chloride.

Source: Nutrient values from Agricultural Research Service (ARS) Nutrient Database for Standard Reference, Release 17. Foods are from ARS single nutrient reports, sorted in descending order by nutrient content in terms of common household measures. Food items and weights in the single nutrient reports are adapted from those in 2002 revision of USDA Home and Garden Bulletin No. 72, Nutritive Value of Foods. Mixed dishes and multiple preparations of the same food item have been omitted from this table.

## Appendix B-5. Food Sources of Calcium

Food Sources of Calcium ranked by milligrams of calcium per standard amount; also calories in the standard amount. (All are  $\geq 20\%$  of AI for adults 19-50, which is 1,000 mg/day.)

| Food, Standard Amount                                     | Calcium (mg) | Calories |
|---|--------------|----------|
| Plain yogurt, non-fat (13 g protein/8 oz), 8-oz container | 452          | 127      |
| Romano cheese, 1.5 oz                                     | 452          | 165      |
| Pasteurized process Swiss cheese, 2 oz                    | 438          | 190      |
| Plain yogurt, low-fat (12 g protein/8 oz), 8-oz container | 415          | 143      |
| Fruit yogurt, low-fat (10 g protein/8 oz), 8-oz container | 345          | 232      |
| Swiss cheese, 1.5 oz                                      | 336          | 162      |
| Ricotta cheese, part skim, ½ cup                          | 335          | 170      |
| Pasteurized process American cheese food, 2 oz            | 323          | 188      |
| Provolone cheese, 1.5 oz                                  | 321          | 150      |
| Mozzarella cheese, part-skim, 1.5 oz                      | 311          | 129      |
| Cheddar cheese, 1.5 oz                                    | 307          | 171      |
| Fat-free (skim) milk, 1 cup                               | 306          | 83       |
| Muenster cheese, 1.5 oz                                   | 305          | 156      |
| 1% low-fat milk, 1 cup                                    | 290          | 102      |
| Low-fat chocolate milk (1%), 1 cup                        | 288          | 158      |

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| 2% reduced fat milk, 1 cup                                   | 285 | 122 |
| Reduced fat chocolate milk (2%), 1 cup                       | 285 | 180 |
| Buttermilk, low-fat, 1 cup                                   | 284 | 98  |
| Chocolate milk, 1 cup  | 280 | 208 |
| Whole milk, 1 cup  | 276 | 146 |
| Yogurt, plain, whole milk (8 g protein/8 oz), 8-oz container | 275 | 138 |
| Ricotta cheese, whole milk, ½ cup                            | 255 | 214 |
| Blue cheese, 1.5 oz  | 225 | 150 |
| Mozzarella cheese, whole milk, 1.5 oz                        | 215 | 128 |
| Feta cheese, 1.5 oz  | 210 | 113 |

Source: Nutrient values from Agricultural Research Service (ARS) Nutrient Database for Standard Reference, Release 17. Foods are from ARS single nutrient reports, sorted in descending order by nutrient content in terms of common household measures. Food items and weights in the single nutrient reports are adapted from those in 2002 revision of USDA Home and Garden Bulletin No. 72, Nutritive Value of Foods. Mixed dishes and multiple preparations of the same food item have been omitted from this table.

## Appendix B-6. Food Sources of Vitamin A

Food Sources of Vitamin A ranked by micrograms Retinol Activity Equivalents (RAE) of vitamin A per standard amount; also calories in the standard amount. (All are  $\geq 20\%$  of RDA for adult men, which is 900 mg/day RAE.)

| Food, Standard Amount  | Vitamin A<br>( $\mu\text{g}$ RAE) | Calories |
|--|-----------------------------------|----------|
| Organ meats (liver, giblets), various, cooked, 3 oz <sup>a</sup> | 1490-9126                         | 134-235  |
| Carrot juice, ¾ cup  | 1692                              | 71       |
| Sweetpotato with peel, baked, 1 medium                           | 1096                              | 103      |
| Pumpkin, canned, ½ cup   | 953                               | 42       |
| Carrots, cooked from fresh, ½ cup                                | 671                               | 27       |
| Spinach, cooked from frozen, ½ cup                               | 573                               | 30       |
| Collards, cooked from frozen, ½ cup                              | 489                               | 31       |
| Kale, cooked from frozen, ½ cup                                  | 478                               | 20       |
| Mixed vegetables, canned, ½ cup                                  | 474                               | 40       |

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| Turnip greens, cooked from frozen, ½ cup               | 441     | 24      |
| Instant cooked cereals, fortified, prepared, 1 packet  | 285-376 | 75-97   |
| Various ready-to-eat cereals, with added vit. A, ~1 oz | 180-376 | 100-117 |
| Carrot, raw, 1 small                                   | 301     | 20      |
| Beet greens, cooked, ½ cup                             | 276     | 19      |
| Winter squash, cooked, ½ cup                           | 268     | 38      |
| Dandelion greens, cooked, ½ cup                        | 260     | 18      |
| Cantaloupe, raw, ¼ medium melon                        | 233     | 46      |
| Mustard greens, cooked, ½ cup                          | 221     | 11      |
| Pickled herring, 3 oz                                  | 219     | 222     |
| Red sweet pepper, cooked, ½ cup                        | 186     | 19      |
| Chinese cabbage, cooked, ½ cup                         | 180     | 10      |

<sup>a</sup> High in cholesterol.

Source: Nutrient values from Agricultural Research Service (ARS) Nutrient Database for Standard Reference, Release 17. Foods are from ARS single nutrient reports, sorted in descending order by nutrient content in terms of common household measures. Food items and weights in the single nutrient reports are adapted from those in 2002 revision of USDA Home and Garden Bulletin No. 72, Nutritive Value of Foods. Mixed dishes and multiple preparations of the same food item have been omitted from this table.

## Appendix B-7. Food Sources of Magnesium

Food Sources of Magnesium ranked by milligrams of magnesium per standard amount; also calories in the standard amount. (All are  $\geq 10\%$  of RDA for adult men, which is 420 mg/day.)

| Food, Standard Amount                          | Magnesium (mg) | Calories |
|--|----------------|----------|
| Pumpkin and squash seed kernels, roasted, 1 oz | 151            | 148      |
| Brazil nuts, 1 oz                              | 107            | 186      |
| Bran ready-to-eat cereal (100%), ~1 oz         | 103            | 74       |
| Halibut, cooked, 3 oz                          | 91             | 119      |
| Quinoa, dry, ¼ cup                             | 89             | 159      |
| Spinach, canned, ½ cup                         | 81             | 25       |
| Almonds, 1 oz                                  | 78             | 164      |
| Spinach, cooked from fresh, ½ cup              | 78             | 20       |

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| Buckwheat flour, ¼ cup                                | 75 | 101 |
| Cashews, dry roasted, 1 oz                            | 74 | 163 |
| Soybeans, mature, cooked, ½ cup                       | 74 | 149 |
| Pine nuts, dried, 1 oz                                | 71 | 191 |
| Mixed nuts, oil roasted, with peanuts, 1 oz           | 67 | 175 |
| White beans, canned, ½ cup                            | 67 | 154 |
| Pollock, walleye, cooked, 3 oz                        | 62 | 96  |
| Black beans, cooked, ½ cup                            | 60 | 114 |
| Bulgur, dry, ¼ cup                                    | 57 | 120 |
| Oat bran, raw, ¼ cup                                  | 55 | 58  |
| Soybeans, green, cooked, ½ cup                        | 54 | 127 |
| Tuna, yellowfin, cooked, 3 oz                         | 54 | 118 |
| Artichokes (hearts), cooked, ½ cup                    | 50 | 42  |
| Peanuts, dry roasted, 1 oz                            | 50 | 166 |
| Lima beans, baby, cooked from frozen, ½ cup           | 50 | 95  |
| Beet greens, cooked, ½ cup                            | 49 | 19  |
| Navy beans, cooked, ½ cup                             | 48 | 127 |
| Tofu, firm, prepared with nigari <sup>a</sup> , ½ cup | 47 | 88  |
| Okra, cooked from frozen, ½ cup                       | 47 | 26  |
| Soy beverage, 1 cup                                   | 47 | 127 |
| Cowpeas, cooked, ½ cup                                | 46 | 100 |
| Hazelnuts, 1 oz                                       | 46 | 178 |
| Oat bran muffin, 1 oz                                 | 45 | 77  |
| Great northern beans, cooked, ½ cup                   | 44 | 104 |
| Oat bran, cooked, ½ cup                               | 44 | 44  |
| Buckwheat groats, roasted, cooked, ½ cup              | 43 | 78  |
| Brown rice, cooked, ½ cup                             | 42 | 108 |
| Haddock, cooked, 3 oz                                 | 42 | 95  |

<sup>a</sup> Calcium sulfate and magnesium chloride.

Source: Nutrient values from Agricultural Research Service (ARS) Nutrient Database for Standard

Reference, Release 17. Foods are from ARS single nutrient reports, sorted in descending order by nutrient content in terms of common household measures. Food items and weights in the single nutrient reports are adapted from those in 2002 revision of USDA Home and Garden Bulletin No. 72, Nutritive Value of Foods. Mixed dishes and multiple preparations of the same food item have been omitted from this table.

## Appendix B-8. Food Sources of Dietary Fiber

Food Sources of Dietary Fiber ranked by grams of dietary fiber per standard amount; also calories in the standard amount. (All are  $\geq 10\%$  of AI for adult women, which is 25 grams/day.)

| <b>Food, Standard Amount</b>                    | <b>Dietary Fiber<br/>(g)</b> | <b>Calories</b> |
|---|------------------------------|-----------------|
| Navy beans, cooked, ½ cup                       | 9.5                          | 128             |
| Bran ready-to-eat cereal (100%), ½ cup          | 8.8                          | 78              |
| Kidney beans, canned, ½ cup                     | 8.2                          | 109             |
| Split peas, cooked, ½ cup                       | 8.1                          | 116             |
| Lentils, cooked, ½ cup                          | 7.8                          | 115             |
| Black beans, cooked, ½ cup                      | 7.5                          | 114             |
| Pinto beans, cooked, ½ cup                      | 7.7                          | 122             |
| Lima beans, cooked, ½ cup                       | 6.6                          | 108             |
| Artichoke, globe, cooked, 1 each                | 6.5                          | 60              |
| White beans, canned, ½ cup                      | 6.3                          | 154             |
| Chickpeas, cooked, ½ cup                        | 6.2                          | 135             |
| Great northern beans, cooked, ½ cup             | 6.2                          | 105             |
| Cowpeas, cooked, ½ cup                          | 5.6                          | 100             |
| Soybeans, mature, cooked, ½ cup                 | 5.2                          | 149             |
| Bran ready-to-eat cereals, various, ~1 oz       | 2.6-5.0                      | 90-108          |
| Crackers, rye wafers, plain, 2 wafers           | 5.0                          | 74              |
| Sweetpotato, baked, with peel, 1 medium (146 g) | 4.8                          | 131             |
| Asian pear, raw, 1 small                        | 4.4                          | 51              |
| Green peas, cooked, ½ cup                       | 4.4                          | 67              |
| Whole-wheat English muffin, 1 each              | 4.4                          | 134             |
| Pear, raw, 1 small                              | 4.3                          | 81              |

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| Bulgur, cooked, ½ cup                               | 4.1     | 76  |
| Mixed vegetables, cooked, ½ cup                     | 4.0     | 59  |
| Raspberries, raw, ½ cup                             | 4.0     | 32  |
| Sweetpotato, boiled, no peel, 1 medium (156 g)      | 3.9     | 119 |
| Blackberries, raw, ½ cup                            | 3.8     | 31  |
| Potato, baked, with skin, 1 medium                  | 3.8     | 161 |
| Soybeans, green, cooked, ½ cup                      | 3.8     | 127 |
| Stewed prunes, ½ cup                                | 3.8     | 133 |
| Figs, dried, ¼ cup                                  | 3.7     | 93  |
| Dates, ¼ cup  | 3.6     | 126 |
| Oat bran, raw, ¼ cup                                | 3.6     | 58  |
| Pumpkin, canned, ½ cup                              | 3.6     | 42  |
| Spinach, frozen, cooked, ½ cup                      | 3.5     | 30  |
| Shredded wheat ready-to-eat cereals, various, ~1 oz | 2.8-3.4 | 96  |
| Almonds, 1 oz                                       | 3.3     | 164 |
| Apple with skin, raw, 1 medium                      | 3.3     | 72  |
| Brussels sprouts, frozen, cooked, ½ cup             | 3.2     | 33  |
| Whole-wheat spaghetti, cooked, ½ cup                | 3.1     | 87  |
| Banana, 1 medium                                    | 3.1     | 105 |
| Orange, raw, 1 medium                               | 3.1     | 62  |
| Oat bran muffin, 1 small                            | 3.0     | 178 |
| Guava, 1 medium                                     | 3.0     | 37  |
| Pearled barley, cooked, ½ cup                       | 3.0     | 97  |
| Sauerkraut, canned, solids, and liquids, ½ cup      | 3.0     | 23  |
| Tomato paste, ¼ cup                                 | 2.9     | 54  |
| Winter squash, cooked, ½ cup                        | 2.9     | 38  |
| Broccoli, cooked, ½ cup                             | 2.8     | 26  |
| Parsnips, cooked, chopped, ½ cup                    | 2.8     | 55  |
| Turnip greens, cooked, ½ cup                        | 2.5     | 15  |

|                                    |     |    |
|------------------------------------|-----|----|
| Collards, cooked, ½ cup            | 2.7 | 25 |
| Okra, frozen, cooked, ½ cup        | 2.6 | 26 |
| Peas, edible-podded, cooked, ½ cup | 2.5 | 42 |

Source: ARS Nutrient Database for Standard Reference, Release 17. Foods are from single nutrient reports, which are sorted either by food description or in descending order by nutrient content in terms of common household measures. The food items and weights in these reports are adapted from those in 2002 revision of USDA Home and Garden Bulletin No. 72, Nutritive Value of Foods. Mixed dishes and multiple preparations of the same food item have been omitted.

## Appendix B-9. Food Sources of Vitamin C

Food Sources of Vitamin C ranked by milligrams of vitamin C per standard amount; also calories in the standard amount. (All provide  $\geq 20\%$  of RDA for adult men, which is 90 mg/day.)

| Food, Standard Amount              | Vitamin C (mg) | Calories |
|------------------------------------|----------------|----------|
| Guava, raw, ½ cup                  | 188            | 56       |
| Red sweet pepper, raw, ½cup        | 142            | 20       |
| Red sweet pepper, cooked, ½ cup    | 116            | 19       |
| Kiwi fruit, 1 medium               | 70             | 46       |
| Orange, raw, 1 medium              | 70             | 62       |
| Orange juice, ¾ cup                | 61-93          | 79-84    |
| Green pepper, sweet, raw, ½ cup    | 60             | 15       |
| Green pepper, sweet, cooked, ½ cup | 51             | 19       |
| Grapefruit juice, ¾ cup            | 50-70          | 71-86    |
| Vegetable juice cocktail, ¾ cup    | 50             | 34       |
| Strawberries, raw, ½ cup           | 49             | 27       |
| Brussels sprouts, cooked, ½ cup    | 48             | 28       |
| Cantaloupe, ¼ medium               | 47             | 51       |
| Papaya, raw, ¼ medium              | 47             | 30       |
| Kohlrabi, cooked, ½ cup            | 45             | 24       |
| Broccoli, raw, ½ cup               | 39             | 15       |
| Edible pod peas, cooked, ½ cup     | 38             | 34       |
| Broccoli, cooked, ½ cup            | 37             | 26       |



|                            |    |     |
|----------------------------|----|-----|
| Sweetpotato, canned, ½ cup | 34 | 116 |
| Tomato juice, ¾ cup        | 33 | 31  |
| Cauliflower, cooked, ½ cup | 28 | 17  |
| Pineapple, raw, ½ cup      | 28 | 37  |
| Kale, cooked, ½ cup        | 27 | 18  |
| Mango, ½ cup               | 23 | 54  |

Source: Nutrient values from Agricultural Research Service (ARS) Nutrient Database for Standard Reference, Release 17. Foods are from ARS single nutrient reports, sorted in descending order by nutrient content in terms of common household measures. Food items and weights in the single nutrient reports are adapted from those in 2002 revision of USDA Home and Garden Bulletin No. 72, Nutritive Value of Foods. Mixed dishes and multiple preparations of the same food item have been omitted from this table.