

# Calcium

Calcium is the most abundant mineral in the body, 99% of which is found in the bones and teeth where it supports their structure and function.

The Institute of Medicine recommends the following amounts of calcium consumption per day for these specific age groups:

| Male and Female Age (years) | Calcium (mg/day) | Pregnancy & Lactation |
|-----------------------------|------------------|-----------------------|
| 14 to 18                    | 1300             | 1300                  |
| 19 to 50                    | 1000             | 1000                  |
| 51+                         | 1200             | N/A                   |

Though it may seem that you would have to probably double the amount of milk you drink per day to meet these recommendations, you also should take other sources of calcium into consideration. The following chart is a comparison of the calcium content of 8 fluid ounces of milk compared to other food sources of calcium:

8 fl oz Milk = 1 cup yogurt OR 1.5 oz Cheddar Cheese

OR 1 ½ cups Cooked Kale OR 2 ¼ cups Cooked Broccoli OR 8 cups Cooked Spinach

To help guide you in your calcium selection, here is a chart with calcium found in everyday foods:

## Animal Based Foods

| Food Description                          | Calcium (mg) | % DV*  |
|---|--------------|--------|
| Yogurt, plain, low fat, 8 oz.             | 415          | 42%    |
| Yogurt, fruit, low fat, 8 oz.             | 245-384      | 25-38% |
| Milk, non-fat, 8 fl oz.                   | 302          | 30%    |
| Milk, reduced fat (2% milk fat), 8 fl oz. | 297          | 30%    |
| Milk, whole (3.25% milk fat), 8 fl oz.    | 291          | 29%    |
| Milk, buttermilk, 8 fl oz.                | 285          | 29%    |

Sources:

<http://dietary-supplements.info.nih.gov/factsheets/calcium.asp> June 2011

<http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm> June 2011

|   |         |        |
|---|---------|--------|
| Milk, lactose reduced, 8 fl oz.**   | 285-302 | 29-30% |
| Mozzarella, part skim, 1.5 oz.  | 275     | 28%    |
| Cottage cheese, 1% milk fat, 1 cup unpacked   | 138     | 14%    |
| Cream cheese, regular, 1 Tbsp.  | 12      | 1%     |
| Cheddar cheese, 1.5 oz.   | 306     | 31%    |
| Sour cream, reduced fat, cultured, 2 Tbsp   | 32      | 3%     |
| Ice cream, vanilla, ½ cup   | 85      | 8.5%   |
| Frozen yogurt, vanilla, soft serve, ½ cup   | 103     | 10%    |
| Pudding, chocolate, instant, made with 2% milk, ½ cup                                     | 153     | 15%    |
| Instant breakfast drink, various flavors and brands, powder prepared with water, 8 fl oz. | 105-250 | 10-25% |
| Sardines, canned in oil, with bones, 3 oz.  | 324     | 32%    |
| Salmon, pink, canned, solids with bone, 3 oz.   | 181     | 18%    |

### Plant Based Foods

| Food Description                                    | Calcium (mg) | %DV*    |
|---|--------------|---------|
| Ready to eat cereal, calcium fortified, 1 cup       | 100-1000     | 10-100% |
| Tortilla, corn, ready to bake/fry, 1 medium         | 42           | 4%      |
| Tortilla, flour, ready to bake/fry, one 6" diameter | 37           | 4%      |
| Bread, white, 1 oz.                                 | 31           | 3%      |
| Bread, whole wheat, 1 slice                         | 20           | 2%      |
| Tofu, firm, made with calcium sulfate, ½ cup***     | 204          | 20%     |
| Tofu, soft, made with calcium sulfate, ½ cup***     | 138          | 14%     |
| Spinach, cooked, ½ cup                              | 120          | 12%     |
| Turnip greens, boiled, ½ cup                        | 99           | 10%     |
| Kale, cooked, 1 cup                                 | 94           | 9%      |
| Kale, raw, 1 cup                                    | 90           | 9%      |
| Chinese cabbage, raw, 1 cup                         | 74           | 7%      |
| Broccoli, raw, ½ cup                                | 21           | 2%      |
| Broccoli, cooked, 1 cup                             | 86           | 9%      |
| Collard greens, cooked, 1 cup                       | 357          | 36%     |
| Turnip greens, cooked, 1 cup                        | 249          | 25%     |
| Okra, cooked, 1 cup                                 | 176          | 18%     |
| Soybeans, cooked, 1 cup                             | 175          | 18%     |
| Sesame seeds, 2 Tbsp                                | 160          | 16%     |
| Bok choy, cooked, 1 cup                             | 158          | 16%     |
| Tempeh, 1 cup                                       | 154          | 15%     |
| Mustard greens, cooked, 1 cup                       | 152          | 15%     |
| Figs, dried or fresh, 5 medium                      | 135          | 14%     |
| Tahini, 2 Tbsp                                      | 128          | 13%     |
| Almonds, ¼ cup                                      | 97           | 10%     |
| Almond butter, 2 Tbsp                               | 86           | 9%      |

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|   |         |        |
|---|---------|--------|
| Blackstrap molasses, 2 Tbsp                               | 342     | 34%    |
| Soy beverage, calcium fortified, 8 fl oz.                 | 80-500  | 8-50%  |
| Soy/ricemilk, commercial, calcium-fortified, plain, 8 oz. | 150-500 | 15-50% |
| Soymilk, commercial, plain, 8 oz.                         | 80      | 8%     |
| Orange juice, calcium fortified, 8 oz.                    | 300     | 30%    |
| Commercial soy yogurt, plain, 6 oz.                       | 250     | 25%    |

\*DV = Daily Value

\*\*Content varies slightly according to fat content; average = 300 mg calcium.

\*\*\*Calcium values are only for tofu processed with a calcium salt. Tofu processed with a non calcium salt will not contain significant amounts of calcium.

### Follow these tips to make this healthy change easier:

- Use low fat or fat free milk instead of water in recipes such as pancakes, mashed potatoes, pudding and oatmeal.
- Blend a fruit smoothie made with low fat or fat free yogurt for a great breakfast.
- Sprinkle grated low fat or fat free cheese on salad, soup or pasta.
- Choose low fat or fat free milk instead of carbonated soft drinks.
- Serve raw fruits and vegetables with a low fat or fat free yogurt based dip.
- Create a vegetable stir-fry and toss in diced calcium-set tofu.
- Enjoy a parfait with fruit and low fat or fat free yogurt.
- Complement your diet with calcium-fortified foods such as certain cereals, orange juice and soy beverages.

### What about supplements?

According to the 2010 *Dietary Guidelines for Americans*, “nutrients should come primarily from foods. Foods in nutrient-dense, mostly intact forms contain not only the essential vitamins and minerals that are often contained in nutrient supplements, but also dietary fiber and other naturally occurring substances that may have positive health effects. Dietary supplements or fortification of certain foods may be advantageous in specific situations to increase intake of a specific vitamin or mineral.” If you think you are not getting enough calcium to meet your needs from the foods mentioned above, speak with a registered dietitian (RD) about whether you may need a calcium supplement.



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