



Calcium & Vitamin D

CALCIUM COUNTS

During childhood and adolescence, the body uses calcium and Vitamin D to build strong bones. This is an important time to eat foods rich in calcium and Vitamin D.

WHAT ABOUT VITAMIN D?

Vitamin D is known as the sunshine vitamin. It is found in food and can be made in our body after exposure from the sun. Sunshine is a significant source of vitamin D because it triggers vitamin D to be made by the skin. Vitamin D is needed to help the body absorb calcium. Lack of vitamin D can result in rickets in children, a condition that results in bone deformities.

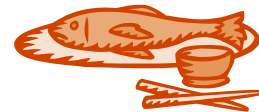


DIETARY REFERENCE INTAKE (DRI) FOR CALCIUM

| Age | Amount per day |
|-----------------|----------------------|
| 1-3 years old | 500 milligrams(mg) |
| 4-8 years old | 800 milligrams(mg) |
| 9 -18 years old | 1300 milligrams (mg) |

WHAT ARE RICH SOURCES OF VITAMIN D?

Rich sources of vitamin D include fortified milk, cod liver, salmon, mackerel, tuna, sardines and margarine



HOW CAN YOUR CHILD MEET THEIR CALCIUM NEEDS?

| Age | Amount |
|----------------|--|
| 1-3 years old | 16 oz (2 cups) of milk <u>or</u> yogurt a day |
| 3-8 years old | 24 oz (3 cups) of milk <u>or</u> yogurt a day |
| 9 years or old | 24-32 oz (3-4 cups) of milk <u>or</u> yogurt a day |

DON'T FORGET TO WEAR YOUR SUNSCREEN

Sunscreens with a sun protection factor (SPF) of 8 or greater will block UV rays that produce vitamin D, but it is still important to routinely use sunscreen to help prevent skin cancer and the harmful effects of excess sun exposure. A short exposure to sunlight (10 -15 minutes) allows enough time for Vitamin D to be made!

WHEN IS SUPPLEMENTATION NECESSARY?

Infants get their calcium needs through breast milk or formula. Infants who are exclusively breast fed require Vitamin D supplementation, you should talk to your doctor for more information.

Encourage your child to eat calcium rich foods everyday (see table for more ideas). However, if your child doesn't eat enough calcium rich foods, a supplement may be needed. The two best forms of calcium found in supplements are carbonate and citrate combined with Vitamin D. Absorption from supplements is best in doses of 500 mg or less. No more than 250 mg should be taken in children 6 years or younger or 500 mg for children over 7 years.

HOW TO READ THE FOOD LABELS

Use the Percent Daily Value listed on the Nutrition Facts panel of a food label to find the milligrams of calcium or Vitamin D per serving. To find the milligrams of calcium in a standard serving of a food, drop the % sign from the Percent Daily Value for calcium and add a zero. It is important to know that on food labels, 100% Daily Value (%DV) for vitamin D is 400 IU/day, however children need 200 IU/day.

You calculate vitamin D content using (IU per serving).

For example Vitamin D: 25% vitamin D = 25% of 400 IU = 100 IU per serving.

For example calcium: 30% Daily Value = 300 mg.



| Nutrition Facts | |
|--|---------------------|
| Serving Size 1 cup (236ml) | |
| Servings Per Container 1 | |
| Amount Per Serving | |
| Calories 80 | Calories from Fat 0 |
| % Daily Value* | |
| Total Fat 0g | 0% |
| Saturated Fat 0g | 0% |
| Cholesterol Less than 5mg | 0% |
| Sodium 120mg | 5% |
| Total Carbohydrate 11mg | 4% |
| Dietary Fiber 0g | 0% |
| Sugars 11g | |
| Protein 9g | 17% |
| Vitamin A 10% | Vitamin C 4% |
| Calcium 30% | Iron 0% |
| *Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs. | |

Calcium Containing Foods By Calcium Content Per Serving with 100 mg

| Food | Serving size | Calcium, mg |
|--|--------------|-----------------|
| >400 mg | | |
| Tofu, regular with calcium sulfate | ½ cup | 434 |
| Tofu, firm with calcium sulfate | ½ cup | 860 |
| Fortified cereal | ¾ cup | varies by brand |
| 300-400 mg | | |
| Whole milk | 1 cup | 291 |
| Milkshake | 8 oz. | 300 |
| Lowfat yogurt | 8 oz. | 300 |
| Fortified orange juice | 1 cup | 300 |
| Fortified soy milk | 1 cup | 300 |
| Fortified rice milk | 1 cup | 300 |
| Skim, 1%, or 2% milk | 1 cup | 321 |
| Fortified cereal | ¾ cup | varies by brand |
| Fortified oatmeal | 1 pkt | 350 |
| 200-300 mg | | |
| Cheddar, monterey or provolone cheese | 1 oz. | 206 |
| Soybeans, roasted | 1 cup | 237 |
| Spinach (cooked) | 1 cup | 245 |
| Mixed cheese dish | 1 cup | 250 |
| Fortified energy bar | 1 | 250 |
| Soybeans (cooked) | 1 cup | 261 |
| Swiss cheese | 1 oz. | 272 |
| Plain yogurt | 8 oz | 274 |
| 100-200 mg | | |
| Pizza | 1 slice | 100 |
| Fortified waffles | 2 | 100 |
| Fortified butter or margarine | 1 Tbsp. | 100 |
| Sherbet | 1 cup | 103 |
| Mustard greens (cooked), Bok Choy | 1 cup | 104 |
| Spaghetti, lasagna | 1 cup | 125 |
| Cottage cheese | 1 cup | 138 |
| Baked beans | 1 cup | 142 |
| Dandelion greens or turnip greens (cooked) | 1 cup | 147 |
| Ice cream | 1 cup | 151 |
| Frozen yogurt or pudding | ½ cup | 152 |
| American, Feta, or Mozzarella cheese | 1 oz. | 174 |
| Soybeans, boiled | 1 cup | 175 |

Source: USDA 2002.

Websites to visit for more information:

Your Health

http://www.pcrm.org/health/prevmed/building_bones.html

National Bone Health Campaign

<http://www.cdc.gov/powerfulbones/>

Dairy Council: recipes and more

<http://www.nationaldairyCouncil.org/NationalDairyCouncil/>

Information Fact Sheets

<http://ods.od.nih.gov/factsheets/calcium.asp>