



# 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	
<b>Calories</b> 80	Calories from Fat 0
% Daily Value*	
<b>Total Fat</b> 0g	0%
Saturated Fat 0g	0%
<b>Cholesterol</b> Less than 5mg	0%
<b>Sodium</b> 120mg	5%
<b>Total Carbohydrate</b> 11mg	4%
Dietary Fiber 0g	0%
Sugars 11g	
<b>Protein</b> 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
<b>&gt;400 mg</b>		
Tofu, regular with calcium sulfate	½ cup	434
Tofu, firm with calcium sulfate	½ cup	860
Fortified cereal	¾ cup	varies by brand
<b>300-400 mg</b>		
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
<b>200-300 mg</b>		
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
<b>100-200 mg</b>		
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](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>