

Nutrition

fact sheet



Calcium and Vitamin D: Essential Nutrients for Bone Health

Calcium and Vitamin D for Everyone

Calcium and vitamin D are both essential nutrients when it comes to bone health. Although most people link calcium to strong bones, vitamin D sometimes gets overlooked—and it shouldn't. Recent research shows that vitamin D plays an important role, along with calcium, in bone health. The stronger your bones are at age 30, the more you will have "invested" in your "calcium bank account" as you get older. To maintain strong bones and get enough calcium and vitamin D in your diet, stay active with weight-bearing exercise and get 15 minutes of sunlight several times a week.

Building strong bones is a lot like building a healthy balance in your "calcium bank account." Bones are living tissue and constantly in a state of turnover, making calcium deposits and withdrawals daily. Vitamin D is also essential for strong bones. Your body needs it for optimum bone strength and to help absorb calcium. However, most people are not getting enough of either of these nutrients. Bones don't come with a lifetime guarantee. They need continuing maintenance or they can weaken and break. If your diet is low in calcium, your body will take calcium from

your bones to keep blood calcium at normal levels. For a lifetime of healthy bones:

- consume 3 servings of low-fat or fat-free milk or other dairy products every day.
- supplement your diet with calcium from calcium-fortified foods and beverages, if you don't or can't consume milk.
- follow an overall healthy eating plan using the MyPyramid Food Guidance system (www.mypyramid.gov) and
- be physically active with weight-bearing exercise like walking, running or weight training.

Calcium and Vitamin D Goals

Age (males & females)	Calcium (mg*/day)	Vitamin D (IU**/day)
1-3	500	200
4-8	800	200
9-18	1,300	200
19-50	1,000	200
51-70	1,200	400
71 and over	1,200	600
	*Milligrams	** International Units

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Information

American Dietetic Association Knowledge Center

For food and nutrition information or for a referral to a nutrition professional in your area call:

800/366-1655

or visit: www.eatright.org



American Dietetic Association Your link to nutrition and healthsm 120 South Riverside Plaza, Suite 2000 Chicago, Illinois 60606-6995

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How much calcium and vitamin D do you need?

The Institute of Medicine of the National Academy of Sciences sets the dietary recommendations for the daily nutrition requirements for Americans. The recommendations for calcium and vitamin D can be found in the table on page 1.

Focus on Food First!

Dietitians recommend food as the primary source of vitamins, minerals and other nutrients, such as calcium and vitamin D. Dairy products, fortified cereals and calcium-fortified orange juice are good sources of calcium and vitamin D.

Are all sources of calcium absorbed efficiently?

Calcium is absorbed best if your intake of calcium-rich foods is spread out during the day. For all sources of calcium, adequate vitamin D from food or sunlight is necessary to help the absorption. The calcium in milk products is very well absorbed as is the calcium in fruit juice fortified with calcium citrate malate. Since calcium citrate malate is a patented

calcium source, it is found in only certain fruit juices.

A registered dietitian can help you choose foods or a combination of foods and a supplement to meet your individual calcium and vitamin D needs, while keeping in mind that calcium intake should not exceed 2,500 milligrams per day.

More Tips for Bone Health

- Do some weight-bearing activities daily—like walking, running, dancing, weight training.
- Avoid smoking and excessive alcohol intake.
- Ask your physician if you need a bone density test based on your risk factors for osteoporosis or if you are a woman over age 50.
- Read food labels and look for foods and beverages that provide calcium and vitamin D.
- Choose a calcium supplement—if you need it—that contains vitamin D.
- See a registered dietitian for individual assistance and recommendations.

Sources of Calcium and Vitamin D

Foods and Beverages	Calcium (milligrams)	Vitamin D (International Units)
Milk, low-fat or non-fat, 1 cup	301	98
Calcium & vitamin D-Fortified orange juice, 1 cup	350	100
Fruit yogurt, low-fat, 1 cup	372	100
Cheddar cheese, low-fat, 2 oz.	236	*
Salmon, pink, canned with soft bones, 3 oz.	208	530

*Not a significant source of nutrient indicated. Note: Sunlight causes skin to make vitamin D and, for most people, 15 minutes of sunlight several days a week (with hands and face exposed) is enough.