

calcium & vitamin d

Did you know your bones are constantly being remodeled? Your daily diet plays a key role in building strong bones today and reduces your chance of activity-limiting conditions such as osteoporosis as you age.

Getting enough calcium and vitamin D every day is critical to current and future bone health. Calcium's role in the body extends beyond the bones; it also helps nerves send messages and muscles contract, amongst other important functions.

Each day, calcium is lost from your body through skin, nails, hair, sweat, urine and feces. We rely on our diet (and supplements when needed) to replace these losses, as our bodies cannot make calcium. When adequate calcium is not obtained from the diet, it is taken from the stores in our bones. Over time this can lead to lower density making them more susceptible to breakage.

Total Recommended Daily Calcium Intake

Women Age 9-18	1,300 mg
Women Age 19-50	1,000 mg
Women Age ≥51	1,200 mg

We encourage nutrition through real food whenever possible. Calcium rich foods include dairy products such as nonfat milk, yogurt and cheese. Many plant based foods, such as kale, oranges, almonds and broccoli also contain calcium.

For a list of calcium rich foods:

<http://www.iofbonehealth.org/calcium-rich-foods>

Nutrition labels typically list calcium as a "% DV". This is based on 1000 mg. Therefore, a label that reads "Calcium 15%" has 150 mg of calcium PER SERVING. If you are unable to reach your daily calcium intake goal through food sources, consider a supplement. See below for additional information about supplements.

Vitamin D also plays an essential role in bone health. It is required for your body to absorb calcium.

Total Recommended Daily Vitamin D Intake

Women Age 9-18	600 IU (international units)
Women Age 19-50	600 IU (600-800 IU range)
Women Age 51-70	600 IU (600-800 IU range)
Women Age ≥71	800 IU (800-1000 IU range)

There are three ways to get Vitamin D: sunlight exposure, food, and supplements. Vitamin D is made in the skin during exposure to ultraviolet rays (sunlight). This process is limited by sunscreen and clothing. It also is dependent on duration of outdoor exposure and the amount of skin exposed - not to mention geographic location and skin color. Only a few foods contain significant amounts of Vitamin D naturally - examples include fatty fish like salmon and tuna. Some foods, like milk and some orange juice are fortified with Vitamin D.

Nutrition labels often list Vitamin D as a % of DV. This is based on 400 IU. Therefore, a label that reads "Vitamin D 25%" contains 100 IU of Vitamin D PER SERVING.

To learn more: <http://nof.org/articles/10>

Supplements

In nature, calcium does not exist independently - it is found in combination with other substances, called compounds. Many forms of calcium supplements exist; examples include calcium carbonate, calcium citrate, calcium lactate and calcium phosphate. These compounds contain varying amounts of elemental calcium, which is the actual amount of calcium in the supplement. Generally speaking, calcium carbonate and calcium citrate are most readily available. Calcium carbonate is better absorbed if taken with food while calcium citrate is better if fasting. Calcium carbonate may not be well absorbed in people taking certain medications (proton pump inhibitors or H2 blockers) commonly used for heartburn. Choosing the "right" supplement hinges upon the individual's needs and ability to take the chosen nutrient.

For more information: <http://nof.org/articles/10#CALCIUMSUPPLEMENTS>

If you are not getting adequate Vitamin D through sunlight and food, consider a supplement. There is a blood test, calcidiol (aka 25(OH)D), that for some patients can help guide decisions on if and how much to supplement. Before initiating a supplement check to see how much Vitamin D is in any multivitamin or calcium supplement you are already taking, as taking too much can be dangerous. According to the Institute of Medicine the safe upper limit of vitamin D is 4,000 IU per day. While recommendations vary between health experts, many recommend a daily supplement of 600-800IU for most people living in the northern latitudes. ■