Calcium, Vitamin D and Osteoporosis — What Should Your Intake Be?

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Calcium and Vitamin D Recommendations for Osteoporosis

When it comes to healthy bones, our bodies rely on two essential nutrients: calcium and vitamin D. These nutrients work hand in hand to ensure our bones can keep up with our busy lives, so it only makes sense that calcium and vitamin D recommendations for osteoporosis are common. Our vitamin intakes must be at appropriate levels from infancy right through our entire lifespan. If you are at risk of osteoporosis, or if you have a diagnosis of osteopenia or osteoporosis, your calcium and vitamin D intakes must be at a sufficient level to reduce your risk of bone loss and fractures.

Understanding Labels

When reading the nutritional labels on packaged foods, including supplements, you may see this symbol: IU. This acronym means “international unit” and this is the unit of measurement for some vitamins. Calcium’s unit of measure is typically in milligrams. Knowing which foods are rich in calcium and vitamin D can help you make the best dietary choices. You may also want to consider taking a supplement to boost your intake of these nutrients. You may find that consulting a dietician or nutritionist can be of value.

A Calcium Overview

Calcium works to rebuild our bones. It is a mineral that is stored in bones and teeth, reinforcing their composition and strength. As our bodies do not produce calcium, and because we lose calcium through skin, nails, hair, sweat, urine and feces every day, we must consume adequate amounts daily. This nutrient is also needed for our hearts, muscles and nerves to perform their functions.

Unfortunately, as we age, our bodies may not absorb enough calcium. Without sufficient levels, our bones are at risk of not being as strong as possible, which puts us at an increased fracture risk. Research on older adults suggests that a sufficient amount of calcium can slow down our bone loss and lower our risk of a painful and possibly life-changing fractures. Research has also shown that many of us are not getting the levels we need to optimize our bone health.

How Much Calcium Do I Need?

How much calcium you need daily is primarily based on your age and sex, but other health conditions and pregnancy may impact your needs. Most experts recommend that women and men under age 50 obtain 1,000 milligrams daily, and women over age 50 get 1,200 milligrams. For men over age 50, the recommended level is 1,000 milligrams. These amounts are available from a combination of foods and supplements.

Sources of Calcium

It is helpful to ensure that your intake of calcium is sufficient by adding calcium-rich foods to your diet. Dairy is an excellent choice, but there are several other tasty choices if you are sensitive to dairy or lactose intolerant. Consider foods like soy, orange, almond and rice drinks. Salmon and sardines, which are canned, are also an excellent source. Yogurt, white beans and cheeses like blue, cheddar, edam and swiss are also delicious options.

Most health experts recommend consuming sufficient amounts of calcium, either from our diet or via a supplement. If your diet is too high in sodium and proteins, this may result in your body shedding calcium through your kidneys. Your need for a supplement will depend on your dietary intake from foods, age and health conditions. If you are unsure about your need for a supplement, discuss your concerns with your healthcare team.

A Vitamin D Overview

You may have heard that vitamin D is the sunshine vitamin. This phrase rings true because our bodies produce vitamin D when our skin gets exposed to the sun. If you live in an area with limited sunlight or protect your skin from exposure to the sun, you may not be producing enough to ensure your bone health is optimal.

In addition to creating the vitamin through sun exposure, our bodies can also get it from foods and supplements. Another vital fact to remember is that as we age, our body's ability to produce vitamin D reduces. Most experts agree that it is challenging to get enough through diet alone; bone health may be optimal by adding a supplement.

This vitamin is critical because it works to increase the body's absorption of calcium. If we have less than sufficient amounts, calcium is taken from the bones and the production of new bone stalls. Without enough vitamin D, our bodies cannot maintain healthy bones. It has another essential role in improving our muscle function, enhancing our balance and strength. An overall strong body, including core strength, reduces the chance of a fall.

How Much Vitamin D Do I Need?

Many health experts recommend that adults take a vitamin D supplement throughout the year. Experts recommend that this supplement is at a level of 800 to 2000 IU every day if you are a man or woman over the age of 50, or if you have a risk of osteoporosis, or if you have osteopenia or osteoporosis. If you are under the age of 50, 400 to 800 IUs daily is the recommendation.

Sources of Vitamin D

One type of vitamin D found to be very beneficial is vitamin D3 or cholecalciferol, found primarily in animal sources such as fish oils, eggs and liver, but it is also in the form of a supplement. A limited number of foods contain sufficient levels to meet our needs, so supplementing this nutrient intake is recommended by most health experts. Some delicious foods that offer this include tuna, swordfish, pink and sockeye salmon, cod liver oil and snapper. Other significant sources are milk, enriched soy drinks, fortified yogurt and egg yolks. By adding these foods to your daily diet, you can increase your intake.

Your Next Steps

Arm yourself with the correct information about your health and your body's need for nutrients to protect against bone loss and fractures. Ensuring that your calcium and vitamin D intake is adequate is just one aspect of preventing bone loss and fractures due to osteoporosis. While many multivitamins contain some amount of calcium and vitamin D, they may not provide an amount that is right for you. Read the labels on multivitamin packages to determine how much calcium and vitamin D they contain. Discuss your daily diet and your potential need for dietary supplements with your health care team to have the healthiest bones possible. Your doctors are best equipped to give you your calcium and vitamin D recommendations for osteoporosis.