Why Don’t Some People Get Enough Vitamin D?

Everyone needs vitamin D. However, people are different in their ability to get enough of this vitamin. Vitamin D can be produced in the skin as a result of sun exposure, typically 10-15 minutes per day, with arms and legs exposed. The amount of vitamin D made this way is variable, depending on where you live and the time of year: the farther north you live and during winter months, less vitamin D is made. Also, adults over the age of 50, due to changes in chemical reactions in the skin, may be limited in their ability to make vitamin D with sun exposure. In addition, people with darker complexions and people of any race who use sunscreen make less vitamin D, due to lower sunlight absorption. People make almost no vitamin D with the use of sunscreen with an SPF of 15 or higher. People with less exposure to the sun, including those living in more northern regions, those with jobs indoors, the elderly and those who are chronically ill, also have limited ability to make vitamin D. Once produced in the skin, this initial form of vitamin D is further processed in the liver and kidney, producing its active form. This makes people with chronic liver and kidney diseases at risk of low levels of active vitamin D.

Vitamin D can also be obtained in the diet. However, vitamin D occurs naturally in only a few foods, including salmon and other fatty fish, liver and egg yolks. Vitamin D is frequently added to dairy products, especially milk, as well as some fruit juices and cereals. However, since it does not naturally occur in these products, you need to be careful in reading the label, as different products contain different amounts of vitamin D. Some people are lactose intolerant or are otherwise unable to consume dairy products. These people are at risk of not getting enough vitamin D to develop or maintain optimal bone strength. Even those products with vitamin D contain only a portion of the amount that you need every day. So, even if vitamin D-supplemented products are a regular part of your diet, it may be difficult to take in enough vitamin D only through your diet. Check product labels for the amount of vitamin D contained in individual servings.

Vitamin D and Your Bone Health

Why is vitamin D important? Vitamin D is necessary to form and maintain strong bones. Among other roles, vitamin D helps your body absorb the calcium you take in from food or supplements. Once absorbed, calcium, along with other minerals, provides the strength needed for bones to withstand the stresses of daily activities. Low levels of vitamin D or calcium intake can lead to bone loss, making bones weaker. An adequate diet, especially in terms of calcium and vitamin D, and exercise are the cornerstones of achieving and maintaining optimal bone health and helping to prevent broken bones.
Vitamin D is necessary to develop and maintain bone health. Vitamin D, along with calcium and exercise, can help prevent broken bones. It is important for you to talk with your health care provider to find out how much vitamin D you need and the best way to make sure you are getting enough every day.

How Much Vitamin D Do I Need?

The biology of vitamin D is complex and impacted by many factors. Recommendations for daily intake are made assuming you make minimal amounts from sun exposure. Adults should consume 600 IU (International Units) of vitamin D, and those over the age of 70 may need up to 800 IU per day, from food and, if needed, supplements. More may not be better: taking in more than 4,000 IU per day in adults (and even less in children) may be dangerous. If you are obese or have undergone weight loss surgery, you may need higher doses of vitamin D. Also, prescription and over-the-counter medications to help you lose weight or lower your cholesterol may keep you from absorbing vitamin D from your diet or supplements, meaning you may need to take in more.

Discuss with your health care provider how much vitamin D is right for you and your bones and how best to take it in enough vitamin D. Your health care provider may recommend that you get a blood test to see how much vitamin D is in your body. Medications to treat osteoporosis work better if you are taking in enough vitamin D and calcium to help build bone. If you are already on one of these medications, talk with your health care provider to ensure that you are getting enough vitamin D. If you and your health care provider decide that you aren’t getting enough vitamin D from your diet and that you need vitamin D supplements, discuss the supplements that are best for you because different supplements contain different forms and amounts of vitamin D.

While vitamin D is necessary for strong bones, it cannot do it alone. You also need calcium and weight-bearing exercise for strengthening bones and preventing falls that can lead to bone fracture.