

7 SIGNS YOU MAY HAVE A VITAMIN D DEFICIENCY

Vitamin D deficiency is incredibly common in the US, but many Americans mistakenly believe they aren't at risk because they consume vitamin D-fortified foods (such as milk).

There are very few foods that actually have therapeutic levels of vitamin D naturally and even fortified foods do not contain enough vitamin D to support your healthy needs.

Despite its name, vitamin D is not a regular vitamin. It's actually a steroid hormone that you are designed to obtain primarily through sun exposure, not your diet.

JUST HOW WIDESPREAD IS VITAMIN D DEFICIENCY?

Before the year 2000, very few doctors ever considered the possibility that you might be vitamin D deficient.

But as the technology to measure Vitamin D became inexpensive and widely available, more and more studies were done, and it became increasingly clear that vitamin D deficiency was absolutely rampant. For example, according to one of the leading vitamin D researchers, Dr. Michael Holick:

The Centers for Disease Control and Prevention (CDC) reported that 32 percent of children and adults throughout the US were vitamin D deficient – and this is grossly underestimated as they used vitamin D levels that were not consistent with optimal healthy.

STORY AT A GLANCE

Vitamin D deficiency is prevalent in adults of all ages who always wear sun protection (which blocks vitamin D production) or limit their outdoor activities.

Researchers estimate that 50 percent of the general population is at risk of vitamin D deficiency and insufficiency, and this percentage rises in higher-risk populations such as the elderly and those with darker skin.

Signs you may have a vitamin deficiency include age over 50, having darker skin, obesity, achy bones, feeling blue, head sweating , and gut trouble.

Increasing levels of vitamin D3 among the general population could prevent chronic diseases that claim nearly one million lives throughout the world each year.

Optimizing your vitamin D levels may help you prevent cancer, heart disease, autoimmune diseases, infections, mental health conditions, and more.

Researchers have also noted that vitamin D deficiency is prevalent in adults of all ages who always wear sun protection (which block vitamin D production) or limit their outdoor activities. People with increased skin pigmentation (such as those whose ancestors are from Africa, the Middle East, or India) are also at risk, as are the elderly.

It's estimated that over 95 percent of US senior citizens may be deficient in vitamin D. not only because they tend to spend a lot of time indoors but also because they produce less in response to sun exposure (a person over the age of 70 produces about 30 percent less vitamin than a younger person with the same sun exposure).

7 SIGNS YOU MAY BE VITAMIN D DEFICIENT

The only way to know for sure if you're vitamin D deficient is via blood testing. However, there are some signs and symptoms to be aware of as well. If any of the following apply to you, you should get your vitamin D levels tested sooner rather than later.

You Have Darker Skin

African Americans are at greater risk of vitamin D deficiency, because If you have dark skin, you may need as much as 10 times more sun exposure to produce the same amount of vitamin D as a person with

pale skin!

As Dr. Holick explained, your skin pigment acts as a natural sunscreen so the more pigment you have, the more time you'll need to spend in the sun to make adequate amounts of vitamin D.

You Feel "Blue"

Serotonin, the brain hormone associated with mood elevation, rises with exposure to bright light and falls with decreased sun exposure. In 2006, scientists evaluated the effects of vitamin D on the mental health of 80 elderly patients and found those with the lowest levels of vitamin D were 11 times more prone to be depressed than those received healthy doses.

You're 50 or Older

As mentioned, as you get older your skin doesn't make as much vitamin D in response to sun exposure. At the same time, your kidneys become less efficient at converting vitamin D into the form used by your body and older adults tend to spend more time indoors (i.e. getting even less sun exposure and therefore vitamin D)

You're Overweight or Obese (or Have a Higher Muscle Mass)

Vitamin D is a fat-soluble, hormone-like vitamin, which means body fat acts as a "sink" by collecting it. If you're overweight or obese, You're therefore likely going to need more vitamin D than a slimmer person – and the same holds true for people with higher body weights due to muscle mass.

Your Bones Ache

According to Dr. Holick, many who see their doctor for aches and pains, especially in combination with fatigue, end up being misdiagnosed as having fibromyalgia or chronic fatigue syndrome.

"Many of these symptoms are classic signs of vitamin D; deficiency osteomalacia, which is different from the vitamin D deficiency that causes osteoporosis in adults, he says.

“What is happening is that the vitamin D deficiency causes a defect in putting calcium into the collagen matrix into your skeleton. As a result, you have throbbing, aching bone pain.”

Head Sweating

According to Dr. Holick, one of the first, classic signs of vitamin D deficiency is a sweaty head. In fact, physicians used to ask new mothers about head sweating in their newborns for this very reason. Excessive sweating in newborns due to neuromuscular irritability is still described as a common, early symptom of vitamin D deficiency.

You have Gut Trouble

Remember, vitamin D is a fat-soluble vitamin, which means if you have a gastrointestinal condition that affects your ability to absorb fat, you may have lower absorption of fat-soluble vitamins like vitamin D as well. This includes gut conditions like Crohn's, celiac and non-celiac gluten sensitivity, and inflammatory bowel disease.

Optimizing Your Vitamin D Levels May Prevent Cancer, Heart Disease, and More

Researchers have pointed out that increasing levels of vitamin D3 among the general population could prevent chronic diseases that claim nearly one million lives throughout the world each year. Incidence of several types of cancer could also be slashed in half. As mentioned by Dr. Holick, one of the Nurses' Health Studies showed that nurses who had the highest blood levels of 25-hydroxyvitamin D, averaging about 50 ng/ml, reduced their risk of developing breast cancer by as much as 50 percent. Similarly, a Canadian study done by Dr. Knight showed that women who reported having the most sun exposure as a teenager and young adult had almost a 70 percent reduced risk of developing breast cancer. Dr. Holick noted:

“Studies have shown that if you improve your vitamin D status, it reduces risk of colorectal cancer, prostate cancer, and a whole host of other deadly cancers by 30 to 50 percent. You're correct. Cancer is a big deal. You need to realize that vitamin D is playing a very important role in helping to maintain cell growth and to help fight cancer when a cancer cell

Is developing in your body.

Vitamin D also fights infections, including colds and the flu, as it regulates the expression of genes that influence your immune system to attack and destroy bacteria and viruses. In this interview above, Dr. Holick expounds on these and many other health benefits of vitamin D. For instance, optimizing your vitamin D levels can help protect against:

Cardiovascular disease. Vitamin D is very important for reducing Hypertension, atherosclerotic heart disease, heart attack and stroke. According to Dr. Holick, one study showed that vitamin D deficiency increased the risk of heart attack by 50 percent. What's worse, if you have a heart attack and you're vitamin D deficient, your risk of dying from that heart attack creeps up to nearly 200 percent.

Autoimmune diseases. Vitamin D is a potent immune modulator, making it very important for the prevention of autoimmune diseases, like multiple Sclerosis and inflammatory bowel disease.

Infections, including influenza. It also helps you fight infections of all kinds. A study done in Japan, for example, showed that school children taking 1,200 units of vitamin D per day during winter reduced their risk of getting Influenza A infection by about 40 percent. I believe it's far more prudent, safer, less expensive, and most importantly, far more effective to optimize your vitamin D levels than to get vaccinated against the flu.

DNA repair and metabolic processes. One of Dr. Holick's studies showed that healthy volunteers taking 2,000 IU's of vitamin D per day for a few months up-regulated 201 different genes that control up to 80 different metabolic processes, from improving DNA repair to having effect on Autoxidation (oxidation that occurs in the presence of oxygen and/or UV radiation, which has implications for aging and cancer, for example), Boosting your immune system and many other biological processes.

How Much Vitamin D Do You Need For Optimal Health?

When it comes to vitamin D, you don't want to be in the "average" or "normal"

range, you want to be in the “optimal” range. The reason for this is that as the years have gone by, researchers have progressively moved that range upward. At present, based on the evaluation of healthy populations that get plenty of natural sun exposure, the optimal range for general health appears to be somewhere between 50 and 70 ng/ml. As for how to optimize your vitamin D levels, I firmly believe that appropriate sun exposure is the best way. I personally have not taken a vitamin D supplement for three or four years, yet my levels are in the 70ng/ml range.

Generally speaking, this will be when your skin turns the lightest shade of pink, as Dr. Holick recommends, about half of the time you suspect it would take you to get a mild sunburn (so if you know you tend to get sunburned after 30 minutes, you’d want to stay in the sun for about 15 minutes) How long you need to stay in the sun varies greatly depending on the factors below:

Antioxidant levels and diet in general
Skin color and/or current tan level
Latitude and altitude (elevation)
Ozone layer
Season
Weight

Age
Use of sunscreen
Cloud cover /pollution
Surface reflection
Time of Day

If you can’t get enough sunshine for whatever reason, then a safe tanning bed would be your next best option. Most tanning equipment uses magnetic ballasts to generate light. These magnetic ballasts are well known sources of EMF’s that can contribute to cancer. If you hear a loud buzzing noise while in a tanning bed, it has a magnetic ballast system. I strongly recommend you avoid these types of beds and restrict your use of tanning beds to those that use electronic ballasts.

If your circumstances don’t allow you to access the sun or a safe tanning bed, then you really only have one option, if you want to raise your vitamin D, and that is to take a vitamin D supplement. As a general guideline, research by Grassroots Health suggests that adults need about 8,000 IUs per day to achieve a serum level of 40ng/ml. If you do opt for a vitamin D supplement, please remember that you also need to boost your intake of vitamin K2 through food and/or supplement. If you are getting your vitamin D from the sun, this is not as critical, although you’d

be wise to make sure you're getting sufficient amount of vitamin K2 from your diet either way.

Get Your Vitamin D Levels Tested with D

How do you know if your vitamin D level is in the right range? The most important factor is having your vitamin D serum level tested every six months, as people vary widely in their response to ultraviolet exposure or oral D3 supplementation. The test is called 25(OH)D, also called 25-hydroxyvitamin D, and you can have it done by virtually any physician. You should test at your highest point, which (if you live in the US) is typically in August and again at your lowest point, which is usually in February. Knowing your vitamin D levels is one of the most important tests you can take, so please, if you haven't checked your levels before do it now—I cannot stress the importance of this enough.