10 Vitamin D Deficiency Symptoms You Can Identify Yourself

Fatigue, joint pain, low bone density, and weight gain: These and other ailments could be vitamin D deficiency symptoms that you can treat and even reverse.

By Jami Cooley, RN, CNWC • Feb 2, 2019

Long-term use of antiepileptic drugs (AEDs) is associated with vitamin D deficiency symptoms, even in sub-tropical countries, according to a study at the University of Malaya.

Vitamin D deficiency symptoms have been linked to numerous health problems, including heart disease, depression, and even cancer.[1] Here are 10 signs you're not getting enough vitamin D:

1. Depression or anxiety
2. Bone softening (low bone density) or fractures
3. Fatigue and generalized weakness
4. Muscle cramps and weakness
5. Joint pain (most noticeable in the back and knees)
6. Blood sugar issues
7. Low immunity
8. Low calcium levels in the blood
9. Mood changes and irritability
10. Weight gain

Other symptoms of vitamin D deficiency include exhaustion and decreased endurance; impaired wound healing (click here); and spasms in the muscles of the hands and feet.

Vitamin D Deficiency Symptoms and Testing

Do you have vitamin D deficiency symptoms? First, determine whether you have one or more of the ailments listed above. They're commonly overlooked and often dismissed as normal, everyday aches and pains. If some of these symptoms affect you, order a vitamin D deficiency test.

A 25-hydroxy vitamin D text (or 25(OH)D text) is usually measured in nanograms per milliliter, or ng/mL. But even after a test, things can get murky. Why? Because there's debate among experts as to what blood level results are "deficient" and what levels are "insufficient."

Most would agree that a vitamin D level lower than 10 ng/mL signals a deficiency.

- Some—like the Institute of Medicine—put the threshold at 12.5 ng/mL.
- Others—like the Endocrine Society—have recommended that vitamin D levels be at least 30 ng/mL, and that optimally, levels should sit in the range of 40 to 60 ng/mL.

Integrative doctors, as we discuss later in this post, may recommend higher levels—between 50 ng/mL and 70 ng/mL.

So what's the right vitamin D level? Your health, age, and lifestyle may affect what your ideal level should be; your physician will point you in the right direction. But ultimately, the most commonly accepted range for "adequate" vitamin D levels is 30 to 39 ng/mL, while the most commonly recommended "optimal" range is 40 to 49 ng/ML. (See chart below.)

Depression, Anxiety, and Vitamin D Deficiency Symptoms

It's No. 1 on the list above that we'll examine more closely here. After all, the link between depression and vitamin D deficiency symptoms has long been established in both children and adults.

Vitamin D is available in two different forms—D3 and D2. Research has shown that the connection between vitamin D and depression relief is linked to the D3 form—the same form of vitamin D that's obtained through sunlight. Scientists have found that people with low vitamin D symptoms are *11 times more prone* to be depressed than those who had normal levels.[2]

Vitamin D deficiency is actually more the norm than the exception, and has previously been implicated in both psychiatric and neurological disorders. Why? There are vitamin D receptors in the brain, and the vitamin may affect proteins in the brain known to play a role in mood, learning and memory, motor control, and possibly even maternal and social behavior.[3]

There may be more to your depression, of course, than low vitamin D levels. Other causes of depression include poor adrenal function (adrenal fatigue), neurotransmitter imbalance (serotonin and dopamine, for example), sex hormone imbalance (estrogen, testosterone), environmental factors, or other nutrient deficiencies (magnesium, for instance, and omega-3s). But it makes sense to explore whether or not vitamin D is contributing to depression.

Why Does It Matter If I Have Vitamin D Deficiency Symptoms?

Vitamin D is the superstar nutrient you don't want to be without. Vitamin D deficiency symptoms in women and men, if left untreated, can lead to serious health problems, including:

- Osteopenia or osteoporosis
- Rickets in children
- Contracting the cold or the flu (weakened immune system)
- Asthma
- Tuberculosis
- Diabetes
- Periodontal disease
- Cardiovascular disease (high blood pressure and/or congestive heart failure)
- Major depressive disorder or seasonal affective disorder
- Multiple sclerosis
- Cancer

A study conducted by Boston University researchers revealed that vitamin D deficiency actually affects your DNA: "Any improvement in vitamin D status will significantly affect expression of genes that have a wide variety of biologic functions of more than 160 pathways linked to cancer, autoimmune disorders and cardiovascular disease."[2]

What Causes Vitamin D Deficiency Symptoms?

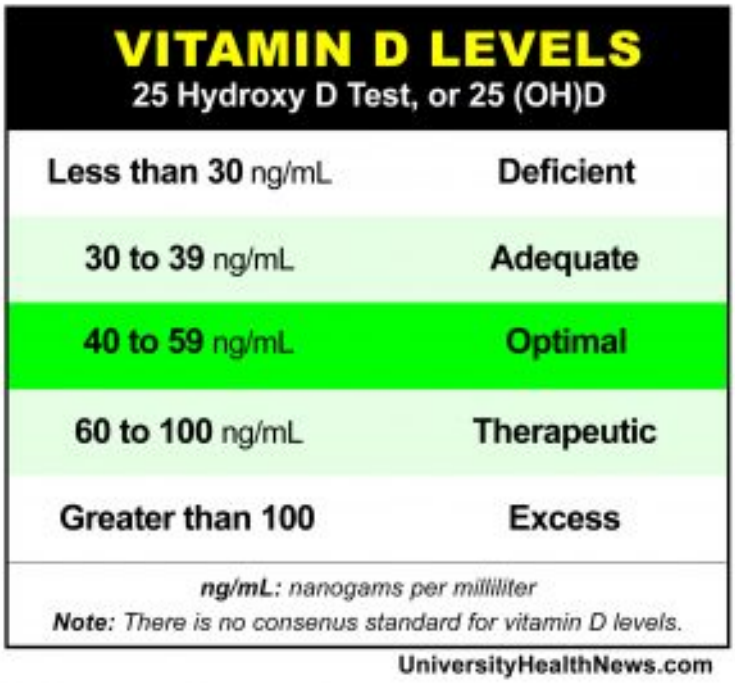
These are the most common causes of vitamin D deficiency symptoms:

1. **Inadequate exposure to sunlight.** Vitamin D is unlike any other vitamin because it is a "pro-hormone" produced in the skin with sunlight exposure. In particular, the sun is the main source of vitamin D3 <https://universityhealthnews.com/daily/energy/vitamin-d3-need-get/>, a type of vitamin D that increases levels of "feel-good" chemicals in the brain called dopamine and serotonin. (Deficient levels of either of these neurochemicals can be an underlying cause of depression.) Therefore a lack of exposure to the sun or extended periods of time spent indoors can lead to vitamin D deficiency symptoms.
2. **Getting a lack vitamin D from your food.** Although the sun's rays are the primary source of vitamin D, the nutrient can also be found in foods such as fish (salmon, tuna, mackerel and cod), oysters, shrimp, beef liver and eggs.
3. **Age.** As you age, your kidneys are less able to convert vitamin D to its active form, calcitriol, which can lead to a deficiency.
4. **Digestive Issues.** Problems in the digestive tract can cause inadequate absorption of vitamin D.
5. **Obesity (Body Mass Index greater than 30).** Vitamin D is extracted from the blood by fat cells. The more fat in the body, the less vitamin D is released into the circulation.
6. **Kidney or liver disease.** Kidney and liver diseases can impair vitamin D conversion to its active form.

Testing for Vitamin D Deficiency Symptoms

If you suspect you have a Vitamin D deficiency symptoms – or you just want to know for sure – you should ask your doctor for a blood test called the 25-hydroxy vitamin D test (also called Calcidiol 25-hydroxycholecalciferol test). This test is the most accurate way to measure how much vitamin D is in your body.

To prepare for the test, do not eat for four hours before your appointment. The "normal" range for vitamin D per most lab reports is 30.0 to 74.0 nanograms per milliliter (ng/mL), but virtually all integrative physicians will recommend a minimum level of at least 50 ng/mL. Any levels below 20 ng/mL are considered serious deficiency states. To get an idea of just how widespread vit D deficiency symptoms are, consider that the late-winter average of 25-hydroxy vitamin D in the United States is only about 15–18 ng/mL. If you have depression, you are most likely vitamin D-deficient yourself.



The so-called 25-hydroxy vitamin D test—or 25(OH)D test—provides vitamin D blood level results in nanograms per milliliter (ng/mL). You'll find a variety of opinions as to vitamin D levels, but the most commonly accepted "adequate" and "optimal" ranges are 30 to 39 ng/mL and 40 to 59 ng/mL, respectively.

You can also test your own vitamin D blood level without a doctor's order by using one of the Direct to Consumer Testing Labs.

How to Reverse Signs of Low Vitamin D

Signs of low vitamin D can be reversed using inexpensive natural remedies:

- **Go out into the sun.** Recommended sunlight exposure should be from 10 to 30 minutes per day. This is a great way of obtaining vitamin D3 and reversing vitamin D3 deficiency symptoms and, of course, it's very cost effective!
- **If getting out in the sun is not an option for you, consider sitting in front of a light box** that supplies 10,000 lux of full-spectrum light for 30 minutes every morning. This is an especially good option for winter months, for night shift workers, and for those who live in the upper latitudes where the angle of the sun's rays do not permit complete production of vitamin D.
- **Take supplements.** For the vast majority of people who want to get their vitamin D levels consistently up above 50 ng/mL, supplementation is the easiest, safest, and most effective way to do so. Adults can take vitamin D3 (cholecalciferol) in regular capsule form at levels between 1,000 IU and 5,000 IU daily. *Note:* Children should NOT take extra vitamin D supplements without consulting a family doctor or pediatrician.
- **Take the 25-hydroxy vitamin D blood test again.** After a couple of months of supplementation, run the 25-hydroxy vitamin D blood test (by either your doctor or yourself directly) again, and adjust your D3 intake accordingly.

Share Your Experience

If you use vitamin D3 supplements, tell us about it. Share with us your daily dosage—how much do you take in order to feel good and keep your blood levels above 50 ng/mL?

What other techniques have you found effective in increasing your vitamin D levels? Has sunlight been an effective remedy for your vitamin d3 deficiency symptoms.

What do you think are the best ways to treat vitamin D deficiency symptoms in men? Do they differentiate from vitamin d deficiency symptoms in women?

Scroll down to the "Add Your Comments" section below and give your fellow readers some feedback and encouragement to help them with their vit d deficiency.

START NOW IN YOUR DEPRESSION RECOVERY

Remember, depression can be caused by multiple factors. Overcoming this illness usually takes more than one natural healing technique at a time. In addition to boosting your vitamin D levels, you may need to take additional supportive nutrients that work synergistically with vitamin D to beat depression for good. Consult your physician for advice.

Also, pursue common-sense natural depression strategies that go hand-in-hand with a healthy lifestyle: exercise regularly; eat a balanced diet rich in fruits, vegetables, and healthy polyunsaturated fats; get adequate sleep (the National Sleep Foundation recommends between seven and nine hours per night); and manage stress. For more, see our post "8 Tips on How to Cure Depression <https://universityhealthnews.com/daily/depression/8-tips-on-how-to-cure-depression/>."

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[1] JAMA, Nov. 14, 2012; 308(18). <http://jama.jamanetwork.com/article.aspx?articleid=195038>

[2] PLoS One. 2013;8(3):e58725. <http://www.ncbi.nlm.nih.gov/pubmed/23527013>

[3] American Journal of Geriatric Psychiatry, December 2006; 14(12): 1032-1040. <http://www.ajgponline.org/article/PIIS1064748112608902/abstract>

[4] The British Journal of Psychiatry. 2013;202:100–107. <http://bjp.rcpsych.org/content/bjprcpsych/202/2/100.full.pdf>

[5] Arch Gen Psychiatry. 2008 May;65(5):508-12. <http://archpsyc.jamanetwork.com/article.aspx?articleid=482702>

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