

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.

1. 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.

2. 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 who received healthy doses.³

3. 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).

4. 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](#).

5. 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's 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."

6. 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.⁴

7. 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.