

Vitamin D and Your Health Deficiency

# Am I Vitamin D Deficient?



[Know your vitamin D level! Order your Vitamin D Test Kit here!](#)

Good Question! There is no way to know for certain until you get a [25-hydroxyvitamin D test](#), also called a 25(OH)D. Levels should be above 50 ng/ml (125 nmol/L) year-round, in both children and adults. Thanks to [Bruce Hollis](#), [Robert Heaney](#), Neil Binkley, and others, we now know the minimal acceptable level. It is 50 ng/ml (125 nmol/L). In a recent study, Heaney, *et al* expanded on Bruce Hollis's seminal work by analyzing five studies in which both the parent compound ([cholecalciferol](#)) and [25\(OH\)D](#) levels were measured. They found that the body does not reliably begin storing cholecalciferol in fat and muscle tissue until 25(OH)D levels get above 50 ng/ml (125 nmol/L). The average person starts to store cholecalciferol at 40 ng/ml (100 nmol/L), but at 50 ng/ml (125 nmol/L) virtually everyone begins to store it for future use. That is, at levels below 50 ng/ml (125 nmol/L), the body uses up vitamin D as fast as you can make it, or take it, indicating chronic [substrate](#) starvation—not a good thing. 25(OH)D levels should be between 50–80 ng/ml (125–200 nmol/L), year-round.

## How Can I Order A Vitamin D Test and What Kind Should I Get?

The only blood test that can diagnose [vitamin D deficiency](#) is a 25-hydroxyvitamin D. Get your levels above 50 ng/ml (125 nmol/L) year-round.

The Vitamin D Council has partnered with ZRT Labs to make a discounted take-home [Vitamin D Test Kit](#) that you can order on the Internet. A portion of the proceeds from the sale of each test will be donated to the Vitamin D Council by

ZRT to help us in our mission to end the worldwide epidemic of vitamin D deficiency. The tests will be available to order in either a quantity of one (1) or four (4). Whether you will be testing your entire family or simply retesting yourself, consider the 4 test kit as it is much less expensive per test.

## How it works

This is a home test for 25(OH)D, requiring a finger or heel stick to get several drops of blood. You order the test kit, which ZRT will ship to you. After receiving your kit either you, or someone you know in the medical field, will do a finger or heel stick and put the blood on the blotter included in the kit. You will then send the blotter paper back to ZRT in the envelope provided. ZRT will perform the 25(OH)D test in their lab and send the results directly back to you. The Vitamin D Council has verified that results obtained by ZRT are accurate and correspond very well to the results given by both LabCorp and DiaSorin RIA. These tests are good for either adults or children and avoid the venipuncture many children dislike.

However, if you have insurance, you may be able to save money by going to your doctor instead. You can have your doctor order the test—some insurance companies will pay for a 25(OH)D test, some will not. Unfortunately, about 20% of United States doctors order the wrong test. They order a 1,25-dihydroxy-vitamin D, thinking that by measuring the most potent steroid in the human body, [calcitriol](#), they are getting useful information. They are not. 1,25-dihydroxy-vitamin D is an adaptive [hormone](#); it goes up and down with calcium intake. So these doctors see the 1,25-dihydroxy-vitamin D is normal or high and tell their patients that they are ok when really, they are vitamin D deficient—advice that may prove fatal. Furthermore, most doctors who see a 25(OH)D of 30 ng/ml (75 nmol/L) will tell you that level is fine when it is not—that is, few doctors know how to correctly interpret the test results. With ZRT, you are in control of when you test, how often you test, and what you do with the results.

## How Much Vitamin D Should I Take?

Again, we don't know. This is a difficult question because it relies on so many personal factors. Everyone's situation is either a lot, or at least a little, different. How much vitamin D you need varies with age, body weight, percent of body fat, latitude, skin coloration, season of the year, use of sunblock, individual variation in sun exposure, and—probably—how ill you are. As a general rule, old people need more than young people, big people need more than little people, heavier people need more than skinny people, northern people need more than southern people, dark-skinned people need more than fair-skinned people, winter people need more than summer people, sunblock lovers need more than sunblock haters,

sun-phobes need more than sun worshipers, and ill people may need more than well people.

Quite a few factors are involved, as you can see. However, don't feel bad, no one understands it. Vitamin D is used by the body—metabolically cleared—both to maintain wellness and to treat disease. If you get an infection, how much vitamin D does your body use up fighting the infection? If you have [cancer](#), how much vitamin D does your body use up fighting the cancer? If you have heart disease, how much vitamin D does your body use up fighting the heart disease? If you are a child with [autism](#), how much vitamin D does your brain need to turn on the genes that autism has turned off? If you are an athlete, how much vitamin D does your body use to make you stronger and quicker? Nobody knows the answer to these questions.

## What We Recommend

If you use suntan parlors once a week or if you live in Florida and sunbathe once a week, year-round, do nothing. However, if you have little [UVB](#) exposure, my advice is as follows: healthy children under the age of 1 years should take 1,000 IU vitamin D3 per day—over the age of 1, 1,000 IU vitamin D3 per every 25 pounds of body weight per day. Well adults and adolescents should take 5,000 IU vitamin D3 per day. Around 2–3 months later have a 25-hydroxyvitamin D blood test, either through ZRT or your doctor.

Start supplementing with the vitamin D *before* you have the blood test. Then adjust your dose so your 25(OH)D level is between 50–80 [ng/ml](#) (125–200 [nmol/L](#)), summer and winter. But remember, these are conservative dosage recommendations. Most people who avoid the sun—and virtually all dark-skinned people—will have to increase their dose once they find their blood level is still low, even after two months of the above dosage, especially in the winter. Some people may feel more comfortable ordering the blood test before they start adequate doses of vitamin D. We understand. Test as often as you feel the need to, just remember, no one can get toxic on the doses recommended above and some people will need even more.

[John Jacob Cannell MD](#) Executive Director 2008.10.01

\*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.