

AN INDIVIDUALIZED APPROACH IS NECESSARY TO ACHIEVING YOUR TARGET VITAMIN D LEVEL

How do you do this?



TEST YOUR VITAMIN D LEVEL

Get your “D” Number Ask your doctor to test your level or use a blood spot test that can easily be done at home.



HOW DOES YOUR NUMBER COMPARE?

Are you high, low, or just where you want to be?

0 10 20 30 40 50 60 70 80 90 100 110 120 150 200 ng/ml



0 25 50 75 100 125 150 175 200 225 250 275 300 500 nmol/L



TAKE STEPS TO ACHIEVE YOUR OPTIMAL LEVEL

Supplement with vitamin D3 Based on your current vitamin D level, consider a loading dose or just go with a daily maintenance dose.



Use the vitamin D*calculator at <https://grassrootshealth.net/dcalculator>, which offers an accurate calculation based on weight, current vitamin D level, and preferred target vitamin D level.



Incorporate safe sun exposure or an indoor UVB device to further boost your level



RETEST EVERY 3-6 MONTHS

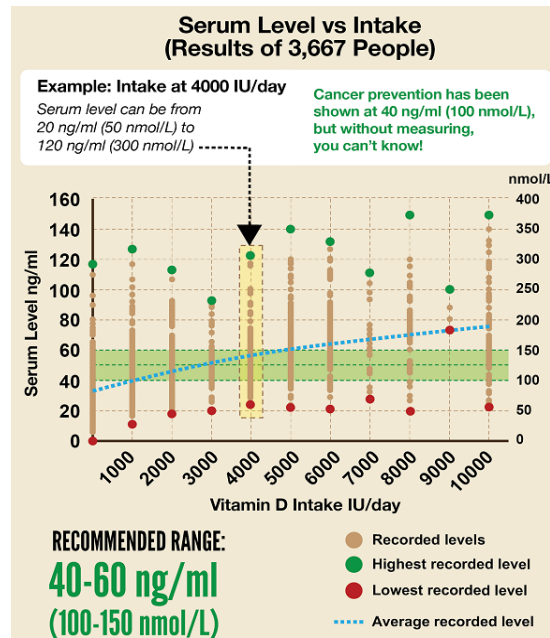
Track your progress and repeat the process until you have reached your target vitamin D level.



WHY IS IT IMPORTANT TO TEST YOUR VITAMIN D LEVEL?

Everyone responds differently to vitamin D... by up to 6 times for the same supplement amount! It is possible for a supplemental intake of 4000 IU/ day to result in a serum level of 25 ng/ml (62.5 nmol/L) in one individual and 60 ng/ml (150 nmol/L) in another.

Several factors including those listed above can affect how much vitamin D is made, absorbed, or converted for use in the body, and determine how much vitamin D your cells may actually be getting.



An estimated **75%** of the world's population is **vitamin D deficient!**



**GrassrootsHealth
 Nutrient
 Research Institute**

Moving Research Into Practice

Trusted Science for Efficacy

Vitamin **D*action**



KNOW “D” NUMBER!

Have you tested your vitamin D level?
 Is it at least 40 ng/ml (100 nmol/L)?

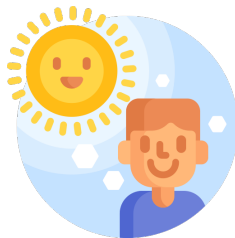
**A Guide for Individuals and
 Practitioners for Understanding
 Vitamin D, Testing & Results**

What is vitamin D?

Vitamin D, which is both a nutrient and a hormone, is needed by virtually every cell in the body and is essential for hundreds of processes each and every day. It acts as a regulator of all cell types, tissues, and organs, and enhances the functioning of each system of the body to help keep us healthy.

Why do we need vitamin D?

Every tissue in our bodies needs vitamin D and may be impaired if we do not get enough. In its most extreme forms, vitamin D deficiency results in rickets in children and osteomalacia (bone softening) in adults. The GrassrootsHealth panel of 48 Vitamin D scientists recommends a vitamin D blood level (measured as 25(OH)D) in the range of 40-60 ng/ml (100-150 nmol/L) for disease prevention.



RECOMMENDED RANGE
40-60 ng/ml
 (100-150 nmol/L)

How do you get Vitamin D?

People obtain vitamin D from three sources: sun exposure, food sources, and supplements. In the past, humans achieved the optimal vitamin D blood level of 40-60 ng/ml (100-150 nmol/L) living a nomadic lifestyle. However, most modern humans are not able to reach optimal blood levels with the occasional sun exposure and food sources typical of modern day living without supplementation.



Can Vitamin D deficiency also indicate a “Sunshine Deficiency”?

YES! Your vitamin D level is one way to tell if you are getting enough sunshine, especially if not taking vitamin D supplements. Sunshine has many benefits beyond vitamin D, and helps the body produce other important chemicals and nutrients, such as nitric oxide and melatonin. Sunshine exposure also results in the production of serotonin and beta-endorphins, which promote mood enhancement and relaxation, relieve pain, and boost immunity. Proper sun exposure is a must, with the most important rule being “don’t burn!”

How can you know if you are vitamin D deficient?

The only way to know is to measure your vitamin D level. The total 25(OH)D level is the accepted measure used to determine your current vitamin D status. Measuring vitamin D is essential to know if an individual is getting



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enough and how much additional vitamin D may be needed!

People who have current vitamin D deficiency may not have any symptoms or may experience any of the following symptoms: lack of focus, dizziness, frequent infections, exhaustion, weakness, headaches, body pain, depression, and anxiety.

Vitamin D deficiency has been linked to

BRAIN

Depression & Anxiety, Schizophrenia, Alzheimer’s Disease, ADHD & Autism

MUSCLE

Neuromuscular Pain, Weakness, Injury

BONE

Rickets, Osteoporosis, Fracture

CIRCULATORY

High Blood Pressure, Peripheral Artery Disease, Coronary Heart Disease, Atrial Fibrillation

AUTO-IMMUNE

Diabetes, Crohn’s Disease, Cancer, Multiple Sclerosis, Psoriasis

RESPIRATORY

Colds & Flu, Pneumonia & Acute Respiratory Distress Syndrome (ARDS), Asthma, Tuberculosis

REPRODUCTIVE

Infertility, Preterm Birth & Prenatal Complications

What other nutrients are important?

A major influence on how the body is able to respond to a specific nutrient is the status of its co-nutrients. Co-nutrients that are especially important to vitamin D include omega-3 fatty acids, magnesium, vitamin K2, calcium, boron, zinc, and B vitamins. It is essential to ensure an adequate supply of these nutrients through diet and/or supplementation.

Learn More About Vitamin D and How to Test!

Visit grassrootshealth.net

Questions? Email jen@grassrootshealth.org