

Understanding Vitamin D Cholecalciferol

The high rate of natural production of vitamin D3 [cholecalciferol](#) (pronounced koh-luh-kal-sif-uh-lawl) in the skin is the single most important fact every person should know about vitamin D—a fact that has profound implications for the natural human condition.

Technically not a "vitamin," vitamin D is in a class by itself. Its metabolic product, [calcitriol](#), is actually a [secosteroid hormone](#) that targets over 2000 genes (about 10% of the human [genome](#)) in the human body. Current [research](#) has implicated [vitamin D deficiency](#) as a major factor in the pathology of at least 17 varieties of cancer as well as heart disease, stroke, hypertension, autoimmune diseases, diabetes, depression, chronic pain, osteoarthritis, osteoporosis, muscle weakness, muscle wasting, birth defects, periodontal disease, and more.

Vitamin D's influence on key biological functions vital to one's health and well-being mandates that vitamin D no longer be ignored by the health care industry nor by individuals striving to achieve and maintain a greater state of health.

Sunshine and Your Health

If well adults and adolescents regularly avoid sunlight exposure, [research](#) indicates a necessity to supplement with at least 5,000 units (IU) of vitamin D daily. To obtain this amount from milk one would need to consume 50 glasses. With a multivitamin more than 10 tablets would be necessary. Neither is advisable.

The skin produces approximately 10,000 IU vitamin D in response 20–30 minutes summer sun exposure—50 times more than the US government's recommendation of 200 IU per day!

How To Get Enough Vitamin D

There are 3 ways for adults to insure adequate levels of vitamin D:

- regularly receive midday sun exposure in the late spring, summer, and early fall, exposing as much of the skin as possible.
- regularly use a sun bed (avoiding sunburn) during the colder months.
- take **5,000 IU** per day for three months, then obtain a [25-hydroxyvitamin D test](#). Adjust your dosage so that blood levels are between **50–80 ng/mL** (or 125–200 nM/L) year-round.

Noteworthy News

H1N1 Swine Flu and Vitamin D

Dr. Cannell receives crucial emails from two physicians who have evidence vitamin D is protective against H1N1 Swine Flu.

Read the emails in our September 2009 "Special Report" edition of our Vitamin D Newsletter: [Vitamin D and H1N1 Swine Flu](#).

Learn about the profound effects vitamin D has on the [immune system](#) and why it could potentially be a potent ally this coming swine flu season!

Read the May 2009 [H1N1 Flu and Vitamin D](#) edition of our [Vitamin D Newsletter](#) (subscription form at top of page).

Watch this [video](#) of an interview with Vitamin D Council Executive Director [Dr. John Cannell](#), where he explains vitamin D's effect on innate and adaptive immunity and what that means in relation to viral infections, such as the flu or the common cold.

We need your help!

The Vitamin D Council envisions a world with less illness, suffering, and needless death due to [vitamin D deficiency](#). It is our mission to make that vision a reality by educating the masses as to the profound health benefits of vitamin D.

But we can't do it alone. We rely on your tax-deductible donations to help us carry out our mission.

If you would like to help us bring to fruition our dream of a greater state of health for humanity, we encourage you to use the PayPal orange "**Donate**" button on the left sidebar. No amount is too small and every bit helps.

Thank you for your support.

New Site Additions!

Visit our newly-expanded [Vitamin D Research](#) section to see research on topics such as **Influenza, Innate and Adaptive Immunity**, Mortality, Breast and Prostate Cancer, Depression, Premenstrual Syndrome (PMS), Parkinson's Disease, Alzheimer's Disease, Asthma, COPD, and more. Additional topics to be added soon!

Read quotes about vitamin D and sunlight by vitamin D experts, nutrition experts, and medical professionals on our new [Vitamin D Quotes](#) page.

Vitamin D and Autism

Now a single theory answers the many unanswered questions surrounding autism. A theory that implies a simple prevention and raises the possibility of treatment.

It's called the **Vitamin D Theory of Autism**—read about it in our section, [Autism and Vitamin D](#).

*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.