Vitamin D is a Powerful Cancer Prevention Strategy

Theories linking vitamin D to certain cancers have been tested and confirmed in more than 200 epidemiological studies, and understanding of its physiological basis stems from more than 2,500 laboratory studies, according to epidemiologist Cedric Garland, DrPH, professor of family and preventive medicine at the UC San Diego School of Medicine.

Dr. Garland's findings only lend further credence to the mountain of growing evidence that optimal levels of vitamin D are essential for your health. Here are just a few highlights into some of the most noteworthy findings:

- Some 600,000 cases of breast and colorectal cancers could be prevented each year if vitamin D levels among populations worldwide were increased, according to previous research by Dr. Garland and colleagues. And that's just counting the death toll for two types of cancer.
- Optimizing your vitamin D levels could help you to prevent at least 16 different types of cancer including pancreatic, lung, ovarian, prostate, and skin cancers.
- A large-scale, randomized, placebo-controlled study on vitamin D and cancer showed that vitamin D can cut overall cancer risk by as much as 60 percent! This was such groundbreaking news that the Canadian Cancer Society has actually begun endorsing the vitamin as a cancer-prevention therapy.
- Light-skinned women who had high amounts of long-term sun exposure had half the risk of developing advanced breast cancer (cancer that spreads beyond your breast) as women with lower amounts of regular sun exposure, according to a study in the *American Journal of Epidemiology*.
- A study by Dr. William Grant, Ph.D., internationally recognized research scientist and vitamin D expert, found that about 30 percent of cancer deaths -- which amounts to 2 million worldwide and 200,000 in the United States -- could be prevented each year with higher levels of vitamin D.

Now we're starting to see more evidence that the type of cancer in question may not be all that important, because vitamin D appears to play a key role in the development-- and prevention -- of ALL types of cancer!

Beyond cancer, researchers have pointed out that increasing levels of vitamin D could prevent diseases that claim nearly 1 million lives throughout the world each year!

Vitamin D Drastically Lowers Your Risk of Heart Disease

Low levels of vitamin D in your blood have long been correlated with higher risk of heart disease and heart attacks, and a previous study found women who take vitamin D supplements lower their risk of death from heart disease by one-third.

Further, low levels of vitamin D are known to nearly double the risk of cardiovascular disease in patients with diabetes.

It's also been suggested that the more sunlight you get, the better your cardiovascular health will be, as there are a number of physiological mechanisms triggered by vitamin D production through sunlight exposure that act to fight heart disease, such as:

- An increase in your body's natural anti-inflammatory cytokines
- The suppression of vascular calcificatio
- The inhibition of vascular smooth muscle growth

Vitamin D Can Boost Your Health All Around

Vitamin D is not “just a vitamin,” but rather the only known substrate for a potent, pleiotropic (meaning it produces multiple effects), repair and maintenance seco-steroid hormone that serves multiple gene-regulatory functions in your body.

There are only 30,000 genes in your body and vitamin D has been shown to influence about 3,000 of them. Receptors that respond to the vitamin have been found in almost every type of human cell, from your brain to your bones. And researchers keep finding health benefits from vitamin D in virtually every area they look.

Can vitamin D fight colds and the flu? Yes!

Help prevent obesity? It sure can.

Tackle depression, asthma and rheumatoid arthritis? Yes, yes and yes!

It is estimated that 25 to 50 percent of any health care budget could be saved with adequate vitamin D serum levels.

How Much Vitamin D Do You Need?

The best way to optimize your vitamin D is through safe sun exposure, or alternatively using a safe tanning bed. It is frequently possible to generate about 20,000 units of vitamin D by exposing your skin to the sun.

However, if you do not have access to regular sun exposure on a large portion of your bare skin, a vitamin D3 supplement may be necessary.

Based on the most recent research, the current recommendation for dosage is 35 IU’s of vitamin D per pound of body weight.

So for a child weighing 40 pounds, the recommended average dose would be 1,400 IU’s daily, and for a 170-pound adult, the dose would be nearly 6,000 IU’s.

However, it’s important to realize that vitamin D requirements are highly individual, as your vitamin D status is dependent on numerous factors, such as the color of your skin, your location, and how much sunshine you’re exposed to on a regular basis.

So, although these recommendations may put you closer to the ballpark of what most people likely need, it is simply impossible to make a blanket recommendation that will cover everyone’s needs.

The only way to determine the correct dose is to get your blood tested since there are so many variables that influence your vitamin D status.

I recommend using Lab Corp in the U.S. If you get it done by Quest, you’ll need to divide your result by 1.3 to get the “real” number.

Getting the correct test is the first step in this process, as there are TWO vitamin D tests currently being offered: 1,25(OH)D, and 25(OH)D.

The correct test your doctor needs to order is 25(OH)D, also called 25-hydroxyvitamin D, which is the better marker of overall D status. This is the marker that is most strongly associated with overall health.

Next, the "normal" 25-hydroxyvitamin D lab range is between 20-56 ng/ml. As you can see in the chart below, this conventional range is really a sign of deficiency, and is too broad to be ideal.

In fact, your vitamin D level should never be below 32 ng/ml, and any levels below 20 ng/ml are considered serious deficiency states, increasing your risk of as many as 16 different cancers and autoimmune diseases like multiple sclerosis and rheumatoid arthritis, just to name a few.

The OPTIMAL value that you're looking for is 50-65 ng/ml.

This range applies for everyone; children, adolescents, adults and seniors.

These ranges are based on healthy people in tropical or subtropical parts of the world, where they are receiving healthy sun exposures. It seems more than reasonable to assume that these values are in fact reflective of an optimal human requirement.

Vitamin D Levels
25 Hydroxy D

Deficient	Optimal	Cancer	Excess
<50 ng/ml	50-65 ng/ml	65-90 ng/ml	>100 ng/ml

Keeping your level in this range, and even erring toward the higher numbers in this range, is going to give you the most protective benefit. And the way you maintain your levels within this range is by getting tested regularly -- say two to four times a year in the beginning, and adjusting your vitamin D intake accordingly.

The D*Action Project: How YOU Can Make a Difference and Spread the Word About Vitamin D

GrassrootsHealth has launched a worldwide public health campaign to solve the vitamin D deficiency epidemic in a year through a focus on testing and education with all individuals spreading the word.

And you are all invited to join in this campaign!

With Dr. Garland at the helm, The D*Action Project will be monitoring, for five years, the health outcomes of individuals who get their vitamin D levels to the levels of 40-60 ng/ml. I would highly recommend that you optimize your levels to the high end of this spectrum, as optimal vitamin D levels are 50-65 ng/ml, or 65-90 ng/ml if you are treating cancer.

Says Carole Baggerly, director of GrassrootsHealth:

"We will be tracking the incidence of many diseases, from cancer to diabetes and muscular function as well as pain levels to see what effect the higher vitamin D levels may have.

We expect to see a significant reduction in the incidence of breast cancer (and its recurrence), colon cancer, diabetes and myocardial infarction, compared with the general population. With the expansion of the project by individuals, we could substantially reduce this epidemic in a few years!"

So how can you get involved? Join the D*action Project!

Simply complete a health questionnaire and test your vitamin D levels two times per year during the 5-year program to help demonstrate the public health impact of this nutrient.

GrassrootsHealth is sponsoring the use of blood spot test kits (laboratory analysis done by ZRT Labs) for a $40 fee to each individual. The tests are to be done twice a year by each individual along with the submission of some basic health data. The fee includes:

- A vitamin D blood spot test kit to be used at home (except in the state of New York)
- The results are sent directly to you

You will be asked to take a quick health survey and also to take action to adjust your vitamin D levels to get into the desired ranges, ideally in consultation with a knowledgeable health care professional.

If you are a physician, medical institution or other health group, please also get involved by contacting Baggerly directly at: carole@grassrootshealth.org. Baggerly was also instrumental in getting Canada to investigate the use of vitamin D against the swine flu.

The information you provide in the health survey will then be used in a five-year study to evaluate the results of the program in disease prevention, and to help create a long-term plan for public health.

This project depends on a true 'grassroots' health movement. Together we can stop the vitamin D deficiency epidemic in its tracks and improve the health of millions of people.

With only 100 of you joining today, and getting two friends to join in two weeks (and those two friends getting two more), by week 42 there could be 400,000,000 people who are vitamin D 'replete' (more than the United States population)!

Finally, to find out more about vitamin D and your health, please watch my one-hour, free vitamin D lecture.

Related Links:

- **My One Hour FREE Vitamin D Lecture to Clear Up All Your Confusion on this Vital Nutrient**
- **How Much Vitamin D Do You Really Need to Take?**
- **Vitamin D Resource Page**

Reference website: http://articles.mercola.com/sites/articles/archive/2009/12/01/Important-New-Vitamin-D-Research-Papers.aspx