

The Amazing Wonder Nutrient That May Prevent or Cure Seven Common Diseases

YOU WON'T HEAR ABOUT THIS ONE IN THE NEWS!



Mercola.com
Take Control of Your Health

DR. MERCOLA

Want to know a secret?

You have ready access to a special “magic” nutrient that may benefit your entire body.

It may slow cancer growth, relieve your pain, strengthen your immune system, and even prevent illnesses such as rheumatoid arthritis, diabetes, and multiple sclerosis.

Plus, **YOU DON'T NEED A DOCTOR'S PRESCRIPTION TO GET IT.**

And you don't have to travel “over the border” to buy it for a reasonable price. As a matter of fact, it's absolutely free—really! It doesn't have to cost you one dime.

Here's the best part: your body creates this nutrient every single day.

Your body has the ability to manufacture, all on its own, one of the most amazing and beneficial vitamins in existence—Vitamin D.

Just take yourself, mix in a little sunshine, and you have Vitamin D...plus an amazing storehouse of health benefits.



WHAT IS VITAMIN D, REALLY?

Vitamin D is interesting because it not only fits into the “vitamin” category; it also fits comfortably in the “hormone” category too. Actually, it's a precursor of a steroid hormone that is formed when the sun's UV-B rays hit your skin.

When the sun's rays contact your skin they trigger a precholesterol molecule, which is then turned into Vitamin D (cholecalciferol). A top Vitamin D researcher explains that, through chemical processes taking place in the body, Vitamin D is further metabolized by the kidneys, liver, and other organs into a very powerful hormone.

Traditional thinking regarding Vitamin D has been that its only functions were to metabolize phosphorous and regulate the amount of calcium in the blood to maintain strong bones. It was also believed that the kidneys were the only organs in the body to have the receptors necessary to utilize Vitamin D.

Recent research has shown that to be very limited thinking. In fact, your body contains Vitamin D receptors throughout that have nothing at all to do with calcium and phosphorous utilization. These findings explain the hundreds of potential health benefits of Vitamin D (particularly since Vitamin D can affect virtually your entire body).

VITAMIN OR HORMONE?



You may wonder how **VITAMIN D CAN BE BOTH A VITAMIN AND HORMONE**. By definition, a vitamin must be consumed through your diet—your body is unable to manufacture it on its own.

Hormones, on the other hand, can be made by your body. In the case of Vitamin D, both definitions fit.

Those times when sunlight is not available (like in the winter), you can get Vitamin D by eating organ meats, eggs, fish, or other foods. Or you can take it in supplement form (such as high quality cod liver oil).

So you see, it can be considered both a vitamin and a hormone. In my opinion, that makes it even more of a magical substance.

JUST WHAT DOES VITAMIN D DO FOR YOU?

Vitamin D or calciferol is a fat-soluble vitamin (meaning the vitamin is stored in or dissolved in your fat cells) found in a variety of foods, but most commonly made by your body when your skin is exposed to sunlight.

Vitamin D is present in your body in many forms and each one of those performs a distinct task. One of Vitamin D's main functions, however, is keeping your blood levels of calcium and phosphorus normal.

It assists your body in absorbing calcium from the blood in order to maintain strong and healthy bones. It has been recognized for years that Vitamin D deficiency causes rickets and other bone weakening diseases. Without it, your bones become weak, brittle, and deformed.

Yet, the benefits of Vitamin D go far beyond strong bones. **STUDIES NOW LINK THIS MIRACULOUS VITAMIN TO THE PREVENTION OF (AND EVEN THE POTENTIAL CURE) FOR MANY DEVASTATING AND DEBILITATING CONDITIONS**, including:

- Cancer
- A variety of autoimmune disorders
- Cardiovascular disease
- Blood pressure issues

- High cholesterol levels
- Neurological disorders
- Reproductive system disorders
- Kidney failure
- Muscle weakness
- Obesity
- Disorders of the skin
- Even tooth decay

With the amount of research currently being conducted on Vitamin D, it's likely to be discovered that even more illnesses can be positively influenced by the healing capabilities of this vitamin.

Some of the current research on seven common illnesses—and their relationship to Vitamin D—is revealed here.

HEART DISEASE

Research studies have shown a **DIRECT CONNECTION BETWEEN VITAMIN D DEFICIENCY AND HEART DISEASE.**



Inflammation in the body can contribute to chronic heart disease. Researchers at the University of London found that people experiencing inflammation also had very low levels of Vitamin D. By giving these subjects small amounts of Vitamin D, their inflammation decreased.

Vitamin D contains proteins called cytokines, which control and manage inflammatory responses, thereby reducing both inflammation and further potential health risks.

In the case of congestive heart failure (CHF), medical studies have shown an increase in pro-inflammatory cytokines (those which increase inflammation). In a recent clinical trial, people with CHF were given high doses of Vitamin D.

Within 9 months their bodies had produced a 43% increase in natural anti-inflammatory substances. There was no increase in inflammation-causing cytokines. The conclusions were obvious: that Vitamin D plays an important role in reducing inflammation in heart patients.

Studies indicate that Vitamin D strengthens your body's anti-inflammatory response by boosting **ANTI-INFLAMMATORY CYTOKINES** and overpowering the inflammation-causing cytokines.

We already know that one of the major functions of Vitamin D is its ability to help your body absorb calcium from the blood to keep bones strong. In other research, calcium regulation has been shown to affect heart muscle cells.

In order for blood to be pumped efficiently throughout the body, the concentration of calcium must be maintained in ideal proportions. If it is not, the cells in your heart muscle will not contract and expand correctly, leading to dangerous heart problems.

Research continues in the area of heart disease with regard to the role of Vitamin D plays in its prevention.

CANCER

Evidence validating the benefits of adequate levels of Vitamin D in the treatment of a variety of cancers has been recorded since the 1980s. Vitamin D produced by sunlight exposure has demonstrated **PROTECTIVE QUALITIES AGAINST CANCERS** such as colon, breast, ovarian, prostate, and non-Hodgkin's lymphoma.

In a 1993 study on Vitamin D and cancer risk, researchers found that Vitamin D increased calcium absorption by the blood, **HELPED TO KILL CANCER CELLS, AND REDUCED OR STOPPED CANCER CELL GROWTH ALTOGETHER.**

Years of research resulting in thousands of reports cite the overwhelming evidence of cancer treatment, prevention, and even cure with the use of Vitamin D.

The authors of a 2006 article in the *American Journal of Public Health* state, after a review of more than 60 studies on Vitamin D and Cancer, that cancer occurrence and death could be reduced with improved levels of Vitamin D in the body. The incidence of breast cancer could be reduced by 50% and colon cancer by 80%! That's staggering!

The list of cancers that could potentially benefit from adequate levels of Vitamin D include but are certainly not limited to leukemia, lung cancer, kidney cancer, thyroid cancer, and pancreatic cancer. The list is virtually endless.

DIABETES

Type I diabetes is an autoimmune disease occurring mostly in children and adolescents. It inhibits the body's ability to produce insulin.

Vitamin D deficiency has been shown to contribute to many autoimmune disorders. The *American Journal of Clinical Nutrition* recently published a study done in Norway showing that **COD LIVER OIL CONTAINING VITAMIN D GREATLY REDUCED THE RISK OF TYPE I DIABETES IN CHILDREN IF IT WAS TAKEN THE FIRST YEAR OF LIFE.**



The researchers discovered that cod liver oil has an anti-inflammatory affect on the body, reducing the onset of type I diabetes.

OSTEOPOROSIS

Over 25 million adults in the U.S. have or are at risk of developing osteoporosis, says The National Institutes of Health. They also report that osteoporosis is caused by a lack of calcium and that Vitamin D deficiency contributes to the body's inability to absorb calcium and phosphorus.



Research over the years has contributed to understanding that an adequate amount of Vitamin D in the body will prevent bone loss. Vitamin D helps the body utilize calcium efficiently and beneficially.

THOSE MOST AT RISK FOR OSTEOPOROSIS ARE OLDER PEOPLE AND MENOPAUSAL WOMEN. IT IS THIS GROUP WHO ARE MORE LIKELY TO BE VITAMIN D DEFICIENT AS WELL.

As you age, your body loses the ability to produce Vitamin D as well as it once did. This prevents the kidneys from converting Vitamin D into its beneficial hormone to keep your bones strong.

According to the National Institutes of Health, 50% of women hospitalized for hip fractures were shown to have osteoporosis and Vitamin D deficiency. An estimated 30–40% of older people with hip fractures have low levels of Vitamin D. By

maintaining adequate storage levels of Vitamin D, the risk of osteoporosis and fractures in the older population could be greatly reduced.

RHEUMATOID ARTHRITIS

Approximately 2 million people in the U.S. alone have rheumatoid arthritis. It's one of several autoimmune diseases, conditions in which the body's immune system turns on itself, thereby increasing inflammation, swelling, and pain around many of the small joints of the body. More women than men are affected by rheumatoid arthritis.

Numerous studies demonstrate that **THE ANTI-INFLAMMATORY AFFECTS OF VITAMIN D HAVE PROVEN TO BE BENEFICIAL IN THE TREATMENT AND PREVENTION OF RHEUMATOID ARTHRITIS.**

What happens with rheumatoid arthritis is that for some reason, the body's immune system is given the signal to attack its own tissues. A report from Georgetown University states that a storm of disease-fighting cytokines rapidly builds up and wages war on healthy tissue.

Vitamin D has been shown to curb that storm by calming the immune system. In essence, it works as an anti-inflammatory, subsequently protecting against rheumatoid arthritis. However, in my opinion, it's the deficiency in Vitamin D that weakens the immune system in the first place.

INFLAMMATORY BOWEL DISEASE

This condition is actually a group of disorders causing an inflammation of the intestines. It affects over 600,000 people every year in the United States and can occur in more than one form.

One kind of inflammatory bowel disease (IBD) is Crohn's disease. This consists of ulcers running along the length of both the small and large intestines. The ulcers become inflamed and may become infected. It's a very painful and debilitating disease.

Another painful inflammatory bowel disease is ulcerative colitis; it is also an inflammation of the intestines. It causes painful ulcers that are exclusively found in the large intestine. Its symptoms are closely related to that of Crohn's disease; the two disorders are often mistaken for one another.

Treatment focuses on eliminating or at least reducing the inflammation associated with inflammatory bowel disease. The key word here is “inflammation”.

As discussed above, Vitamin D has recognized anti-inflammatory qualities that have been shown to reverse symptoms of inflammation and prevent their return. I’ve found that those diagnosed with IBD nearly always possess a deficiency in Vitamin D. Again, Vitamin D to the rescue. Raising the levels can reduce inflammation.

MULTIPLE SCLEROSIS

Multiple sclerosis (MS) is an autoimmune disease affecting the central nervous system. The condition causes your body’s immune system to attack the insulation surrounding nerve fibers, manifesting in muscle weakness, vision changes, and a host of other symptoms. It is a progressive illness that only worsens over time.



MS affects approximately 350,000 people in the United States and 2 million people around the world. Of those, more women are diagnosed than men, and they are usually struck between the ages of 20 and 40 years old.

Studies have shown an overwhelming relationship between the incidence of multiple sclerosis and latitude. The farther away you live from the equator, the greater your risk for developing MS.

SCIENTISTS BELIEVE THERE IS A DIRECT CONNECTION BETWEEN ACCESS TO SUNLIGHT AND ITS EFFECTS ON MULTIPLE SCLEROSIS. Those people living in areas of limited sunlight and have MS have also been shown to suffer from a Vitamin D deficiency, in many cases.

This brings us once again to the amazing health benefits of Vitamin D. It’s produced by sunlight reaching your skin; we already know that. And we know it has immune-stimulating, anti-inflammatory qualities.

Further research is now focusing on the benefits of Vitamin D as it relates to multiple sclerosis. Results are showing, because of its ability to boost immune function, Vitamin D may protect you from developing MS in the first place.

WHAT'S THE BEST WAY TO GET YOUR VITAMIN D & AVOID DEFICIENCY?

Over many years of practice, I've come to realize that about 85% of people in the U.S. are Vitamin D deficient. In fact, **MANY SCIENTISTS AND RESEARCHERS CONSIDER VITAMIN D DEFICIENCY TO BE AN UNRECOGNIZED GLOBAL EPIDEMIC.**

One of the major causes of this epidemic is simply that most people don't know they are deficient. They also don't know that the remedy can be so very simple.

You can get Vitamin D from your diet. It's found in animal organ meats such as liver, and in egg yolks and fish. The main trouble with these foods is that not everyone eats them regularly enough to obtain and maintain optimal amounts of Vitamin D.

"THE SUNSHINE VITAMIN"

THE SINGLE BEST WAY TO GET ALL THE VITAMIN D YOUR BODY NEEDS IS TO SPEND TIME OUTSIDE IN THE SUNSHINE.



Vitamin D has been dubbed “the sunshine vitamin” because all it takes is 15 minutes in the sun for a light-skinned person to create 10,000 to 20,000 IU of Vitamin D. That's many times more than the current FDA requirements of between 200 and 400 IU!

The problem here is the amount of Vitamin D you get from the sun varies greatly from person to person. Optimal sun exposure is based on where you live, the altitude where you live, whether you are dark-skinned or light-skinned, and many other factors.

The manufacture of Vitamin D from the sun requires UV-B rays to reach the skin. You might think that would be pretty easy.

However, we're an industrialized society, meaning most of us work indoors during the peak hours of sun exposure. That short walk from your office to your car at lunchtime doesn't count as “optimal sun exposure”.

Something else you might not be aware of is that your latitude can affect the amount of Vitamin D your body is able to produce. If you live in the northern latitudes (30 degrees or above), there's not enough year-round sunshine reaching your skin to generate adequate Vitamin D levels.

From September to the middle of April, in those locations, the sky can remain quite gray and you're probably indoors more due to the cold. If you're wondering just what the northern latitudes encompass—it's most of North America.

Other factors, such as the amount of smog in the air, the use of sunscreens, and the amount of melanin in your skin can also play a part in Vitamin D production. As stated earlier, it takes light-skinned people only a few minutes in the sun to receive enough UV-B rays to make Vitamin D. Darker-skinned people may need to be in the sun 5 to 10 times longer to reach the same levels of UV-B exposure in order to create Vitamin D.

SUNSCREEN CAN BE HARMFUL INSTEAD OF PROTECTIVE

Here's something else to think about. You're probably fully aware of all the ominous warnings about sun exposure and cancer. Every time you turn around there's another product on the market emphasizing the highest SPF number possible to block out any and all of the sun's rays.

Now here's the rub on that—**SUNLIGHT CAN ACTUALLY PROTECT YOU FROM SOME CANCERS**. In fact, one study revealed that the use of sunscreen actually increased the prevalence of malignant melanoma.

The truth is there is evidence that exposure to the sun's UV rays, without sunburn, does not cause cancer. There is no real evidence that it does cause cancer. The research does show, however, that exposure to sunlight can potentially protect you from many forms of cancer, not just skin cancer.

Sunscreen comes with its own set of problems and I would recommend not using it at all. The chemicals in sunblocks are toxic by themselves and can increase your risk of disease and health problems.

One common ingredient, titanium dioxide, is literally identified as “a potential occupational carcinogen” by the National Institute for Occupational Safety and Health! You're better off practicing safe sun exposure and trusting in nature.

No one is saying to go out and bake in the sun. Over-exposure to the sun's ultra-violet rays is indeed dangerous. But a moderately gradual exposure can be healthful.

SAFE TANNING BEDS MAY BE HELPFUL

For a majority of people getting enough natural sunlight to produce adequate amounts of Vitamin D just isn't possible. They're either indoors most of the time, or live in the northern latitudes where sunshine is limited several months out of the year.

For those people I would cautiously recommend artificial lighting in the form of tanning beds. The light emitted from tanning beds contains UV-B rays; the same type of rays emitted from the sun that creates Vitamin D through contact with the skin. Limited exposure in a tanning bed can increase Vitamin D levels in your body.

Now, I mentioned that I'd recommend tanning beds 'cautiously' because all tanning beds are not created equal. As a matter of fact, the majority of tanning beds found in salons and spas are very dangerous and emit potentially harmful EMF rays.

Most commercial tanning beds are constructed with magnetic ballasts, which emit dangerous EMF rays. Exposure to these rays has been found to produce cell damage in the skin, potentially leading to skin cancer. However, it is possible to convert tanning beds with magnetic ballasts to ones containing electronic ballasts.

Electronic ballasts eliminate this risk and are safe. They also use about 30% less electricity and produce more light so they are far more economical to run. The issue is that it is very difficult to find salons that use safe tanning beds.

So, before running out to make a tanning appointment at your local salon or spa, do your homework. Find out if the equipment they use is truly safe. Many places will advertise they are "safe" when in reality they're not.

I've compiled a list of tanning facilities in the U.S. that state they do use the safer ballasts. Go to www.Mercola.com/SafeTan for the list.

But, if you absolutely can't get enough sunshine (and you hate to eat liver), there are supplements available.

SUPPLEMENTING YOUR VITAMIN D

I recommend taking a **HIGH QUALITY COD LIVER OIL TO BOOST YOUR VITAMIN D**. Cod liver oil provides not only adequate amounts of Vitamin D but it's an excellent source of omega-3 fats as well. These beneficial omega-3's help combat a variety of diseases (including coronary heart disease), increase your energy, and improve your concentration.

Vitamin D is a fat-soluble vitamin. That means it's stored in the body's fat tissues and liver. If you are taking Vitamin D orally it is possible to overdose as, it can accumulate over time and become potentially toxic.

If you have decided to take oral Vitamin D, for whatever reason, I strongly recommend having your blood levels checked to determine how much Vitamin D your body really needs before taking any supplements. Also, have your levels checked regularly if you are or have been taking Vitamin D supplements.

It's best to have your levels tested by a doctor who is nutritionally as well as medically oriented because there are two tests for checking your blood levels of Vitamin D. One is definitely more thorough than the other and is a better indicator of overall health: it's called 25(OH)D, also called hydroxyvitamine D.

Dr. Michael Hollick is one of the top Vitamin D researchers in the world and he has been advocating higher reference ranges, though not as high as the ones suggested here. (Holick MF. Calcium and Vitamin D. Diagnostics and Therapeutics. Clin Lab Med. 2000 Sep;20(3):569-90)

<p>Optimal 25-hydroxyvitamin D values are:</p> <p>45-50 ng/ml or 115-128 nmol/l</p>	<p>Normal 25-hydroxyvitamin D values are:</p> <p>20-56 ng/ml or 50-140 nmol/l</p>
<p><small>YOUR VITAMIN D LEVEL SHOULD NEVER BE BELOW 32 NG/ML. ANY LEVELS BELOW 20 NG/ML ARE CONSIDERED SERIOUS DEFICIENCY STATES AND WILL INCREASE YOUR RISK OF BREAST AND PROSTATE CANCER AND AUTOIMMUNE DISEASES LIKE MS AND RHEUMATOID ARTHRITIS.</small></p>	

There are cases when Vitamin D supplements are *not* recommended. If you or someone you know has lymphoma, tuberculosis, or sarcoidosis, supplementation should be avoided.

With all the miraculous health benefits of Vitamin D, too much of a good thing can be bad. In optimal amounts, Vitamin D has been shown to improve the health of heart disease patients, cancer patients, and to prevent osteoporosis.

Conversely, excessive amounts of Vitamin D can actually cause hardening of the arteries and osteoporosis. That's why Vitamin D supplementation should be closely monitored by a health professional.

The National Institutes of Health—Office of Dietary Supplements lists nausea, vomiting, poor appetite, constipation, headache, bone pain, weakness, apathy, and weight loss as symptoms of possible Vitamin D overdose.

These are signs of hypercalcemia, meaning there is an over-abundance of calcium in the blood. Some people report feeling mentally confused or experiencing abnormal heart rhythms. None of these symptoms should be taken lightly. You should see your doctor immediately if you are experiencing any of them while taking Vitamin D. If the symptoms aren't treated, kidney and heart damage could result.

Once you have reached a toxic amount of Vitamin D in your system, it's hard to reverse the effects. The truth of the matter is that your body is meant to get its Vitamin D from sunlight—not from supplements.



Unfortunately, because of current lifestyles (and the fact that at least 6 months out of the year there often isn't enough sunshine available to manufacture adequate amounts of Vitamin D), supplements often become necessary.

One amazing thing about your body is that under the best conditions of perfect and steady amounts of sunlight, it is virtually impossible to reach toxic levels of Vitamin D. Your body just won't allow it.

IF YOU ABSOLUTELY INSIST ON AN ORAL FORM OF VITAMIN D WITHOUT HAVING YOUR LEVELS TESTED, I EMPHATICALLY SUGGEST ONLY ONE TEASPOON A DAY OF A VERY HIGH QUALITY COD LIVER OIL DURING THE WINTER MONTHS. In the summer, Vitamin D supplements are not usually necessary.

I just can't say enough about the wonders of Vitamin D, the "sunshine vitamin". The number of amazing healing benefits and the many illnesses this vitamin can potentially prevent and even cure has only been minimally discussed here. Research is ongoing.

No doubt you won't be hearing of any amazing breakthroughs from most clinicians or pharmaceutical companies. The research is not significantly funded or supported by the drug companies because, quite honestly, there is no real cost benefit to them.

Fortunately, Vitamin D and all its wonders doesn't need to be concocted in some laboratory and then marketed through expensive ad campaigns. It's absolutely free to you and everyone through the wisdom of nature.

For more information on this or hundreds
of other health topics, go to:

www.Mercola.com