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# High Dose Vitamin D May Treat Incurable Diseases: Experts

PREMIUM FEATURED VITAMIN D



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Supplements such as vitamins D and E are essential to skin health, especially if fish or other suggested foods aren't readily available. (Kelvin Wong/Shutterstock)

Vitamin D supplements are currently recommended at a dose of 600 international units (IU) per day by the National Institutes of Health (NIH), alongside a warning about potential toxicities if people take more.

But for some people, supplementing with what would be seen as a very high dose of vitamin D every day may reap health benefits rather than toxicities, experts suggest.

In 2019, board-certified internist Dr. Patrick McCullough published a report on the experiences of three patients who were taking high doses of 20,000 to 60,000 IUs of vitamin D daily for many years, all three of whom have since seen significant health improvements.

One patient started supplementing with vitamin D3 eight years before the publication of the report and saw his asthma attacks decline from five or six severe exacerbations per year to only one serious exacerbation from 2011 to 2019.

He initially started at 10,000 IUs per day, and by the time of publication, he had stopped most of his asthma medication and was taking 30,000 IUs daily.

Another patient's ulcerated hand lesion, which was presumed to be a form of skin cancer, shrank after taking high doses.

One patient had extensive psoriasis plaques across his scalp, forehead, and ears, as well as smaller plaques on his chest, abdomen, elbows, and thighs. He was given 50,000 IUs of vitamin D2 and soon saw a dramatic improvement in his psoriasis. His skin cleared after a few months of treatment and he was able to stop using steroid creams and medicated shampoos.

While the clinical improvements are impressive, the dosages these patients received—which would be considered potentially toxic—are particularly astounding.

### Adequate Versus Optimal Dose

The current NIH recommendations stem from a 2010 dietary reference by the Institute of Medicine (IOM) (pdf).

The reference suggests a daily intake of 600 IU to reach a serum level of 20 ng/ml vitamin D in the blood—an adequate amount. It set an upper tolerable limit of 4,000 IUs per day; therefore, any dosage higher than that would be considered a high dose.

Yet some experts believe that the current recommendations are not sufficient for optimal health.

McCullough argued that "the current doses recommended by the IOM are subphysiologic," meaning that they are below the natural needs of the body. Instead, McCullough proposed that 10,000 IUs a day would be the adequate physiologic dose.

His arguments have been echoed by other health care professionals.

Prior to the IOM's recommendations, experts from the Council for Responsible Nutrition suggested increasing the maximum daily limit be set to 10,000 IUs a day, after finding no toxicities in vitamin D clinical trials where a person was given 10,000 IUs or even higher dosages.

In 2011, the Endocrine Society similarly said that up to 10,000 IUs per day was safe for adults.

The disparities in the dosage limits are caused by the different considerations in the potential health benefits of vitamin D.

The IOM's lower dosage recommendations were based mainly on the role of vitamin D in promoting bone health by enhancing calcium absorption. However, the Endocrine Society and other experts argue that vitamin D may also play important roles in other systems and organs, suggesting that the dosage be adjusted accordingly.

#### Vitamin D Is More Than a Vitamin

Multiple papers in the literature show that vitamin D has a host of roles across multiple processes and organs. Most cells have a specific receptor for vitamin D, and when the vitamin D molecule binds to its receptor, it can activate around 2,000 genes in the body.

Vitamin D expert William Grant, who has published over 300 papers on vitamin D, told The Epoch Times that vitamin D should be viewed as a hormone rather than a vitamin. Vitamins are micronutrients; the body uses them in small amounts for their assisting role in establishing health pathways.

Vitamin D, however, acts on many genetic pathways as a direct contributor rather than an assistant, regulating calcium levels and parathyroid hormones, and interacting with immune cells, neurons, pancreatic cells, and many more.

Most importantly, while all the other vitamins have to be obtained through the diet, the body naturally produces vitamin D from sunlight. Many studies have also shown that without sun exposure, it is quite difficult to obtain sufficient vitamin D through a natural diet alone.

Deficiencies in vitamin D are associated with poor cardiovascular health, diabetes, hypertension, cancer mortalities, cognitive decline, infections, autoimmune disease, and allergies.

#### 600 IUs May Not Be Enough for Overall Health

For this reason, some experts suggest that vitamin D is needed in a much higher dose than what is being recommended to maintain general health.

Board-certified internist and integrative physician Dr. Ana Mihalcea said that most of her patients need 10,000 IUs a day to reach optimal function with their cognition and energy levels.

Many of her patients came to her with fatigue, muscle weakness, and poor cognitive abilities, all of which may be linked to vitamin D deficiencies despite these patients being at an "adequate" level of 20 ng/ml.

Once she boosted their serum levels to 70 ng/ml or more using supplements, some of them saw great improvements. Mihalcea indicates that vitamin D deficiencies may have been the culprit for their symptoms.

#### Optimal Dose Differs Among Patients

A surgeon and physician for more than 20 years, Dr. Joseph Bosiljevac likewise reports great variability in optimal vitamin D serum levels among different patients.

He told The Epoch Times that some patients see great improvements once their levels hit 60 ng/ml, and he would deem them sufficient, but other patients may need 120 ng/ml or more.

Studies have shown that vitamin D toxicities may develop when serum vitamin D levels hit above 150 ng/ml, though McCullough said he has seen some patients operate fine at more than 200 ng/ml.

## High-Dose Vitamin D as Medicine

Doctors say people with certain pathologies may need more vitamin D than healthy people. Some people with incurable diseases have made a great recovery after being prescribed high-dose vitamin D.

The extra vitamin D can be used "as a medicine, not just a preventative vitamin," said Mihalcea.

Research has indicated that sufficient vitamin D levels may reduce the risk of many conditions, from cardiovascular disease to allergies.

#### **Autoimmune Disease**

Autoimmune diseases occur when the body's immune system starts attacking healthy tissues. It is associated with inflammation.

Vitamin D regulates immune cells, reduces inflammation, and activates immune cells that counteract autoimmune responses.

Some autoimmune disease patients have vitamin D resistance; the person becomes less responsive to vitamin D supplementation and sun exposure. Therefore, they need higher doses of vitamin D to raise their serum vitamin D levels to a suitable range.

Autoimmune specialist Dr. Cicero Coimbra, who authored the famous Coimbra Protocol, has found many of his patients with multiple sclerosis reach remission after taking massive doses of vitamin D, along with other supplements.

The protocol can start as low as 150 IU per kilogram of body weight and can potentially increase to doses as high as 1,000 IUs per kilogram of body weight daily, provided that patients are routinely tested to ensure their parathyroid hormones, calcium, and other micronutrient levels are in balance.

In an interview with The Epoch Times, Coimbra said that his clinic has treated over 15,000 patients with autoimmune diseases; among multiple sclerosis patients, around 85 percent reach remission. His protocol has also been used in rheumatoid arthritis, lupus, inflammatory bowel disease, psoriasis, and Crohn's disease around the world, with the majority of patients following these protocols reporting significant improvements.

Regarding those who do not respond well to vitamin D treatment, Coimbra has observed that most tend to experience a high level of stress, and only by changing the way they respond to stress do they start to see improvements.

#### Cancer

Higher doses of vitamin D are associated with lower risks of cancer progression and mortality.

Deficiencies in B-group vitamins, vitamin C, iron, zinc, magnesium, and selenium have been linked with increased cancer risks.

Many observational studies on cancer patients have found vitamin D deficiency to also be a risk factor.

A 2016 report found that women whose vitamin D levels were raised above 40 ng/ml had a more than 65 percent lower risk of cancer incidence. Another 2019 study that followed end-term colon cancer patients found that those who increased their vitamin D levels experienced a slower worsening of their symptoms.

Grant's research shows that vitamin D reduces the risk of cancer incidence by affecting differentiation, proliferation, and apoptosis (disintegration) of cells, prevents mortality by reducing the formation of new blood vessels to sustain tumor growth, and reduces metastasis.

Since vitamin D acts by blocking pathways that promote further cancer growth and metastasis, it is better at preventing cancer mortalities than cancer incidence, Grant said.

It is worth noting that cancer can be triggered by a multitude of factors including environmental toxins, smoking, radiation, genetics, and inflammation, many of which cannot be controlled by vitamin D intake alone.

Furthermore, it is still uncertain if vitamin D will be effective for all cancers, and the reason for cancer patients' ailments vary from one to another.

Nonetheless, there have been case reports of cancer remission after taking high doses of vitamin D, though other factors may play into patients' recovery.

Anesthesiologist Dr. Judson Sommerville said his patient's wife was told by highly renowned cancer center MD Anderson Cancer Center in Houston, Texas, that she only had six months to live due to advanced ovarian cancer. She figured she had nothing to lose so she started taking high doses of vitamin D3 together with magnesium.

The patient's wife started feeling better, and after a few months, she went to the doctor for a check-up. "They examined her and to their surprise, found her cancerfree," Sommerville said. It has been almost 12 years and the cancer still hasn't recurred.

#### Brain Health

Low vitamin D levels have been associated with higher risks of anxiety, depression, Alzheimer's disease, Parkinson's disease, and autism.

Vitamin D regulates chemicals in the brain that help neurons in the cortex and the hippocampus grow and survive. These two areas are involved in memory and cognitive functions, processing emotions, and complex motor functions.

Mihalcea said that the brain fog her patients experience as part of their deficiency would alleviate once she raised their vitamin D levels.

Psychiatrist Dr. John J. Cannell has said in an interview with ZME Science that in treating children with autism, he has found that giving them a higher dose of 5,000 IUs a day helped nearly 80 percent of these children with their symptoms.

"My experience, having treated about 100 children with autism, is that 25 percent respond dramatically to high dose vitamin D, 50 percent respond significantly, and 25 percent do not respond at all," he said.

## How Much Vitamin D Is Necessary?

Board-certified internist Dr. Syed Haider recommends a certain amount of sun exposure as the best option to get vitamin D, since it is impossible to develop toxicities from sun exposure, as the body has a mechanism to prevent further production.

Yet with most people living in urban areas and being indoors for most of the daytime, taking supplements is probably the most convenient option.

A person can supplement with either the plant-based vitamin D2, known as ergocalciferol, or the animal-based vitamin D3, also known as cholecalciferol. The two vitamins are not synonymous with each other; when ingested, the body produces different metabolites.

Between the two, doctors tend to prescribe D2 as it is more available on the market, but the more recommended version is D3. The body absorbs it better, and it also lasts longer in the body.

Moreover, D3 may be less associated with toxicities, as the body is more tolerant of it.

It is advisable to take vitamin D with K2 and magnesium when supplementing, as this will prevent vitamin D toxicity.

Both K2 and magnesium help deposit calcium in the bones rather than the arteries, and therefore prevents hypercalcemia, which can occur as a result of vitamin D toxicity.

Mihalcea emphasized the importance of testing serum vitamin D levels as an indication for dosage, since the following conditions may all impair the absorption of vitamin D:

- Inflammation
- Stress
- Obesity
- Poor gut health

Endocrinologist and vitamin D expert Dr. Michael Holick has shown obese people tend to be deficient since the extra fat in their bodies sequesters more vitamin D in their cells rather than allowing it to free-float in serum, which is why obese people tend to need several times more than the recommended dosage.



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