

New Study on Vitamin D Combating COVID

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✓ Fact Checked

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STORY AT-A-GLANCE

- › Researchers from Johns Hopkins University, the University of Chicago and the Department of Veterans Health Affairs conducted a large-scale pharmacoepidemiologic study of the association between vitamin D and COVID-19 infection and mortality
- › Those who took vitamin D2 supplements had a 28% lower risk of COVID-19 infection, while those taking vitamin D3 had a 20% lower risk
- › Death from COVID-19 was also lower among those taking vitamin D – 33% lower among those taking vitamin D3 and 25% lower among those taking vitamin D2
- › If the entire U.S. population in 2020 had supplemented with vitamin D3, it would have prevented 4 million COVID-19 cases and 116,000 deaths
- › I strongly recommend getting your vitamin D from proper sun exposure if possible, as it will provide numerous other benefits, many of which are only beginning to be understood

Optimizing your vitamin D level is a foundational element to lower your risk of COVID-19. This simple step will also help you ward off many types of viral infections, because vitamin D is an immunomodulatory agent.

This point – that vitamin D helps combat COVID-19 – was widely censored and deemed "misinformation" during the pandemic. But yet another study – this one published in *Scientific Reports*¹ – shows the association between vitamin D and COVID-19 protection cannot be ignored.

About half the U.S. population has deficient levels of vitamin D, and rates of vitamin D deficiency are even higher in people with darker skin, those living in higher latitudes in the winter, nursing home residents and people with reduced sun exposure. Among groups with low levels of vitamin D, rates of COVID-19 are higher.²

Vitamin D Supplementation Reduces COVID-19 Infection, Death

Researchers from Johns Hopkins University, the University of Chicago and the Department of Veterans Health Affairs conducted a large-scale pharmacoepidemiologic study of the association between vitamin D3 and D2 supplementation and the probability of COVID-19 infection and mortality.³

"Vitamin D deficiency has long been associated with reduced immune function that can lead to viral infection. Several studies have shown that vitamin D deficiency ... increases the risk of infection with COVID-19," they wrote.⁴

In the video above, John Campbell, a retired nurse and teacher based in England, detailed the findings. The study involved a large population of veterans, including 220,265 patients supplemented with vitamin D3 before and during the pandemic, 34,710 supplemented with vitamin D2 and 407,860 untreated patients.⁵

Those who took vitamin D2 supplements had a 28% lower risk of COVID-19 infection, while those taking vitamin D3 had a 20% lower risk. Please note that vitamin D2 is a plant-based version of vitamin D and I do not recommend it. Death from COVID-19 was also lower among those taking vitamin D – 33% lower among those taking vitamin D3 and 25% lower among those taking vitamin D2.⁶

"These associated reductions in risk are substantial and justify more significant exploration and confirmation using RCTs [randomized controlled trials]," the researchers explained. "This is particularly important given the high rates of vitamin D deficiency in the U.S. population and COVID-19."⁷

The veterans were taking varying doses of vitamin D, ranging from 20 IU which is absolutely worthless and no different than placebo, to 50,000 IU. Usually 50 IU doses

are given once a week. I am convinced this is inferior to taking 8,000 IU every day.

However, those taking higher doses received greater benefits than those taking lower dosages. Further, veterans with very low vitamin D levels (between zero and 19 ng/ml) had the largest decrease in COVID-19 infection after supplementation.⁸

"In response to these findings, physicians might consider regularly prescribing vitamin D3 to patients with deficient levels to protect them against COVID-19 infection and related mortality. The 50,000 IU dosage may be especially beneficial," according to the study.⁹

Black veterans also had greater reductions in COVID-19 risk (29% decrease) following supplementation than white veterans (18% decrease).¹⁰ "As a safe, widely available and affordable treatment, vitamin D may help to reduce the severity of the COVID-19 pandemic," the researchers concluded.¹¹

Vitamin Could Prevent 4 Million COVID Cases, 116,000 Deaths

When the researchers extrapolated their vitamin D findings to the entire U.S. population in 2020, they found supplementation with vitamin D3 would have prevented 4 million COVID-19 cases and 116,000 deaths.¹²

Even applying the data to the Department of Veterans Administration, which had 343,094 COVID-19 cases and 14,981 deaths through October 2, 2021, vitamin D supplementation would have resulted in 69,000 fewer COVID-19 cases and 4,900 fewer deaths from March 2020 to October 2021.

Further, "These back-of-the-envelope calculations may be conservative given possible reductions in COVID-19 transmission due to the general population risk reduction from broader supplementation," according to the researchers. "Given our findings, the absence of severe side effects, and the widespread availability of vitamin D3 at low cost, vitamin D3 presents a unique opportunity to reduce the spread and severity of the COVID-19 pandemic."¹³

Research Confirms Low Vitamin D Raises Risk of Infection

Being aware of your vitamin D levels, and increasing your levels if you're deficient, is one of the simplest steps you can take to stay well. Vitamin D receptors are present in nearly all cells of the human immune system, including monocytes/macrophages, T cells, B cells, natural killer cells, dendritic cells.

Vitamin D has multiple actions on the immune system, including enhancing the production of antimicrobial peptides by immune cells, reducing damaging pro-inflammatory cytokines and promoting the expression of anti-inflammatory cytokines.¹⁴

This has multiple benefits for avoiding infections. In terms of COVID-19:

- One study of 489 patients found those with vitamin D deficiency had a 77% increased risk of COVID-19 infection.¹⁵
- People with low vitamin D levels had a 59% increased risk of severe COVID-19 infection.^{16,17}
- Those with low vitamin D had a 45% increase in COVID-19 infection and a 95% increase in hospitalizations.^{18,19}
- A 53% increase in COVID-19 infection rates was found among people with vitamin D deficiency (< 20 ng/mL) compared to those with levels of 55 ng/ml or higher.^{20,21}

It's clear that people with higher levels of vitamin D are also less likely to die from COVID-19 – and one study suggested that, theoretically, "a mortality rate close to zero" could be achieved if your vitamin D level reaches 50 ng/ml.²²

The study authors believe that low vitamin D levels are not a "side effect" of COVID-19 but rather are a predictor of infection. As vitamin D plays a role in immune function, the epidemic of vitamin D deficiency is increasing the spread of many "diseases of civilization," they note in the journal *Nutrients*, such as heart disease,²³ along with reducing protection against infections.²⁴

"One strong pillar in the protection against any type of virus infection is the strength of our immune system. Unfortunately, thus far, this unquestioned basic

principle of nature has been more or less neglected by the responsible authorities.

It is well known that our modern lifestyle is far from optimal with respect to nutrition, physical fitness, and recreation. In particular, many people are not spending enough time outside in the sun, even in summer.

The consequence is widespread vitamin D deficiency, which limits the performance of their immune systems, resulting in the increased spread of some preventable diseases of civilization, reduced protection against infections, and reduced effectiveness of vaccination."

Deficiency of vitamin D3 is also "one of the main reasons for severe courses of SARS-CoV-2 infections," they explained, pointing out that fatality rates tend to be elevated in populations with very low vitamin D3 levels, including elderly people, black people and people with comorbidities.²⁵

At the end of October 2020, I also published my own vitamin D review in the peer-reviewed journal *Nutrients*,²⁶ co-written with William Grant, Ph.D., and Dr. Carol Wagner with the GrassrootsHealth expert vitamin D panel. At that time, 14 observational studies offered evidence that vitamin D levels are inversely correlated with the incidence or severity of COVID-19.

As noted in our paper, dark skin color, increased age, preexisting chronic conditions and vitamin D deficiency are all features of severe COVID disease and, of these, vitamin D deficiency is the only factor that is readily and easily modifiable.

It's Best to Get Your Vitamin D From the Sun

Optimizing your vitamin D levels isn't only about preventing COVID-19; it supports health in multiple ways. It's been shown that people genetically predisposed to vitamin D deficiency were 25% more likely to die from any cause compared to those with different genetics conducive to healthy vitamin D levels.²⁷

The data came from researchers with the Australian Center for Precision Health at the University of South Australia, who also revealed that vitamin D deficiency driven by genetics increases the risk of chronic diseases like heart disease, respiratory diseases and cancer.²⁸ A deficiency in vitamin D has also been implicated in such problems as multiple sclerosis²⁹ and Parkinson's disease.³⁰

I've long recommended a vitamin D level of 40 to 60 ng/ml for optimal health and disease prevention. However, higher levels of 60 to 80 ng/ml may be even better – a level upward of 100 ng/mL also appears safe and beneficial for certain conditions, **especially cancer.**

I strongly recommend getting your vitamin D from proper sun exposure if at all possible. This is because not only will adequate sun exposure naturally raise your vitamin D levels to healthy levels, but it will provide numerous other benefits, many of which are only beginning to be understood.

It's quite possible that having higher levels of vitamin D serves as a marker for healthy sun exposure, which in turn may be responsible for many of the beneficial health effects attributed to vitamin D – including increased longevity and lower cancer risk.

Many people are not aware that only 5% of your body's melatonin – a potent anticancer agent – is produced in your pineal gland. The other 95% is produced inside your mitochondria – provided you get proper sun exposure. So vitamin D is more than likely a biomarker or surrogate for sun exposure, which is intricately involved in melatonin production.³¹ However, if you're unable to get adequate sun exposure each day, supplementation may be necessary.

How to Determine Your Vitamin D Levels

The only way to determine how much sun exposure is enough and/or how much vitamin D3 you need to take is to measure your vitamin D level, ideally twice a year. The D*Action Project by GrassrootsHealth is a cost-effective way to do this, while simultaneously progressing valuable research.

To participate, simply purchase a D*Action Measurement Kit and follow the registration instructions included. When supplementing, also remember to take synergistic effects with other nutrients into account. If you take high-dose vitamin D, you will also need to increase your intake of:

- Magnesium
- Vitamin K2

These three nutrients – vitamins D and K2, and magnesium – all work in tandem and rely on sufficient amounts of each to work optimally. Once you've confirmed your vitamin D levels via testing, remember to retest in three to four months to make sure you've reached your target level.

If you have, then you know you're taking the correct dosage and/or getting the right amount of sun exposure. If you're still low (or have reached a level above 80 ng/ml), you'll need to adjust your dosage accordingly and retest again in another three to four months.

Sources and References

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- ^{4, 6, 8, 11} [Scientific Reports November 12, 2022, Abstract](#)
- ⁵ [Scientific Reports November 12, 2022, Study population](#)
- ^{7, 9, 10, 12, 13} [Scientific Reports November 12, 2022, Discussion](#)
- ¹⁴ [Scientific Reports volume 11, Article number: 10641 \(2021\)](#)
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- ²⁶ [Nutrients October 31, 2020;12, 3361; DOI: 10.3390/nu12113361](#)
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- ³⁰ [Acta Neurol Scand. 2019 Aug 6](#)
- ³¹ [Bitchute, The Joe Cohen Show, Episode 1, October 25, 2022, 4:00](#)