

Would Vitamin D Have Saved Half of COVID Deaths?

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✓ Fact Checked

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STORY AT-A-GLANCE

- › Vitamin D supplementation cut risk of death from COVID-19 by 51% and reduced risk of admission to the intensive care unit (ICU) by 72%
- › The results were deemed “conclusive” and suggest “a definitive association between the protective role of vitamin D and ICU hospitalization” from COVID-19
- › Vitamin D may protect against COVID-19 by maintaining pulmonary barrier function, boosting the innate immune response and reducing the production of proinflammatory cytokines
- › In another study, none of the patients with severe COVID-19 who received high-dose vitamin D died; instead, 100% of the group improved
- › Regulatory agencies around the world are largely industry-funded, which is likely why they aren’t recommending vitamin D — a “dirt cheap” intervention — for COVID-19

I launched an information campaign to raise awareness about the use of vitamin D for COVID-19 back in June 2020. [My own vitamin D review](#) was published October 31, 2020, in the high-impact, peer-reviewed journal *Nutrients*.¹

At the time, 14 observational studies suggested vitamin D levels are inversely linked with the incidence or severity of COVID-19, and my paper concluded, "The evidence seems strong enough that people and physicians can use or recommend vitamin D supplements to prevent or treat COVID-19."²

I was widely vilified and discredited in the media for bringing attention to vitamin D's potential for COVID-19. The New York Times, in their July 2021 front-page hit piece,³ even dubbed me, "The most Influential spreader of coronavirus misinformation online," in an attempt to minimize my efforts. The reporter claimed she could not verify my published study on vitamin D, even though I sent her a link to it, and it's easy to find online.

Now, however, as is usually the case, the truth is being set free. An increasing number of studies are confirming what I said in 2020 – that vitamin D is a potent and highly effective intervention for COVID-19.

New Studies on Vitamin D and COVID-19

Giving vitamin D to people with COVID-19 cut risk of death from SARS-CoV-2 by 51% and reduced risk of admission to the intensive care unit (ICU) by 72%.⁴ This was the finding of a meta-analysis and trial sequential analysis (TSA), which weighs errors in order to assess if further studies are needed⁵ – or the results are so solid they're unlikely to be affected by other studies.

The TSA revealed "the protective role of vitamin D and ICU admission showed that, since the pooling of the studies reached a definite sample size, the positive association is conclusive."⁶ To put it another way, the results suggest "a definitive association between the protective role of vitamin D and ICU hospitalization."⁷

Words like "conclusive" and "definitive" aren't typically used lightly in scientific research. So, this finding is indeed impressive – although not altogether surprising, since a wealth of other data also shows vitamin D's protective effect against COVID-19.

What does raise eyebrows, however, is why the study, which has major implications for public health, isn't being talked about – and vitamin D isn't being widely recommended for COVID-19.

Vitamin D Offers Serious Protection Against COVID-19

In the video above, John Campbell, a retired nurse and teacher based in England, details the study, which was published in the journal *Pharmaceuticals*.⁸ He believes regulatory authorities are acting unethically by not recommending vitamin D for COVID-19. Not only did COVID-19 patients supplemented with vitamin D have lower rates of ICU admission and fewer mortality events, but they also had lower rates of COVID-19 infection, by 54%.⁹

In other words, vitamin D provided significant protection against SARS-CoV-2 infection. Meanwhile, throughout the pandemic, "high-risk interventions were carried out. Very, very safe interventions, like vitamin D, zinc – basically ignored. It really is a scandal. A total scandal. Absolute disgrace," Campbell says.¹⁰ The study laid out a number of reasons why it makes perfect sense that vitamin D fights COVID-19, stating:¹¹

"COVID-19 is characterized by high levels of inflammatory markers, including C-reactive protein (CRP), and increased levels of inflammatory cytokines and chemokines. In this sense, various data have demonstrated the anti-inflammatory, antioxidant, and immunomodulatory properties of vitamin D, in addition to the importance of vitamin D for bone health, as well as its role in extra-skeletal function."

Specific examples of how vitamin D may be beneficial in the case of COVID-19 show that it:¹²

Maintains pulmonary barrier function	Determines the production of antimicrobial peptides
Enhances neutrophil activity, which boosts the innate immune response	Shifts that adaptive immune response to a more T helper cell-2 type
Reduces the production of proinflammatory cytokines	Increases the anti-inflammatory response

Taken together, the researchers again stated that an "indisputable association between vitamin D supplementation and the protective effect on ICU admission can be considered definitive evidence."¹³

High-Dose Vitamin D Saves Many COVID Patients

Another study investigated the effect of the drug tocilizumab and other factors, including high-dose vitamin D, in people with severe COVID-19.¹⁴ Perhaps most revealing was Table 3,¹⁵ which showed the effects of co-management agents including vitamin D, anticoagulants, steroids and antivirals. Among the seven patients who received high-dose vitamin D, none died. Instead, 100% of the group improved. According to the study:¹⁶

"100% of the patients with a low vitamin D status (less than 20 ng/mL) receiving high doses of vitamin D (50,000 IU every other day for two weeks or one intramuscular shot of 300,000 IU) showed clinical improvement compared to those receiving the usual treatment doses (10,000 IU daily or less) or those who did not receive it."

In response, science journalist Simon Goddek, Ph.D., tweeted, "What happens if you administer high doses of Vitamin D to severe COVID-19 patients? They simply won't die, as this study shows."¹⁷

Vitamin D Lowers COVID-19 Infection and Death

Yet another study – this one published in Scientific Reports¹⁸ – shows the association between vitamin D, a "safe, widely available and affordable treatment,"¹⁹ and COVID-19 protection cannot be ignored.

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.²⁰

"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.²¹

The study involved a large population of veterans, including 220,265 patients supplemented with vitamin D3 before and during the pandemic, and 407,860 untreated patients.²² 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 D3.²³

"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."²⁴

About half the U.S. population has insufficient or 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.²⁵

"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.²⁶

Why Isn't Vitamin D Recommended for COVID?

The fact that vitamin D helps combat COVID-19 was widely censored and deemed "misinformation" during the pandemic. And despite the "conclusive" evidence, the U.K.'s National Institute for Health and Care Excellence (NICE) states, "Do not offer a vitamin D supplement to people solely to prevent COVID-19, except as part of a clinical trial." It added:²⁷

"Based on direct evidence from the NICE evidence review and indirect evidence from the SACN [Scientific Advisory Committee on Nutrition] rapid review of

vitamin D in acute respiratory tract infection (which did not include COVID-19 as an outcome), the panel agreed that there was not enough evidence to recommend vitamin D supplements solely for preventing COVID-19."

Yet, vitamin D is typically nontoxic, representing a low-risk option that could have significant positive public health outcomes. When the researchers of the Scientific Reports study 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.²⁸ Campbell asks:²⁹

"Now, why is this not being used despite the definitive evidence ... why is it not being advised? Why is it not being shouted from the hilltops? ... Medicines & Healthcare products Regulatory Authority in the United Kingdom is 86% industry-funded. Of course, they have no vested interest.

This is the national body that represents medicine ... throughout all of the United Kingdom, and it's 86% industry-funded. Coincidentally, vitamin D, which is basically free – it's dirt cheap – and is essentially completely safe is not recommended. Other interventions, which are associated with high levels of risk are recommended ... When is this going to be addressed? This is outrageous."

This conflict of interest isn't unique to the U.K., however. Significant portions of regulatory agencies' budgets around the world come from the pharmaceutical industry that these agencies are supposed to regulate. For instance:³⁰

Australia's Therapeutic Goods Administration – 96% of budget derived from industry

Europe's EMA – 89%

U.K.'s MHRA – 6%

Japan's Pharmaceuticals and Medical Devices Agency – 85%

Vitamin D Even Improves Pancreatic Cancer

Another little-talked-about benefit of vitamin D relates to pancreatic cancer, one of the deadliest forms of cancer with a five-year survival rate of just 7.2%.³¹ Researchers published the case of an 83-year-old woman with pancreatic cancer "who errantly took supratherapeutic doses of vitamin D 50,000 U daily, achieving a serum 25(OH)D level of more than 150 ng/mL, with no appreciable side effects."

Eight months after diagnosis — and consistent daily intake of high-dose vitamin D — scans revealed "no evidence of disease progression." Further, the researchers noted, "Currently she describes as feeling quite well with no difficulty accomplishing her activities of daily living." They called for further research to investigate:³²

"One cannot conclude that her vitamin D dose was in any way related to this outcome. There is only one CT scan before the initiation of vitamin D, and there is no way to know what her pace of disease would have been in the absence of vitamin D supplementation. In addition, she was taking several other supplements such as shiitake mushrooms, although inconsistently and for a shorter duration, which were also intended to treat her malignancy.

Nonetheless, given the poor prognosis of pancreatic cancer and the limited treatment options for patients, this case should stimulate further investigation. The daily dose of 50,000 U of vitamin D3 was well tolerated in our patient for over 10 months at the time of writing. Consideration should be given to a clinical trial that evaluates a similar dose."

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, while a level upward of 100 ng/mL appears safe and beneficial for certain conditions, especially cancer.³³

Ideally, 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.³⁴

To optimize your levels, regular sun exposure is the best option, as not only will it naturally raise your vitamin D levels to healthy levels, but it will provide numerous other benefits, such as enhanced production of melatonin — a potent anticancer agent.³⁵ However, if you're unable to get adequate sun exposure each day, supplementation may be necessary.

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. When supplementing, also remember vitamins D and K2, calcium and magnesium all work together and must be properly balanced for optimal health.

Once you've confirmed your vitamin D levels via testing, adjust your sun exposure and/or vitamin D3 supplementation accordingly. Then, remember to retest in three to four months to make sure you've reached your target level.

Sources and References

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