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Report: Vitamin D protects against COVID

Scientists and doctors have done clinical trials and statistical work to show that Vitamin D is extremely good at reducing the seriousness of COVID infection. For example:-

- Patients who habitually supplemented with even low doses of vitamin D were 34% less likely to develop COVID-19 compared to those who did not(1).
- Patients who had higher vitamin D blood levels upon hospital admission were 8 times less likely to have a severe COVID outcome (2).
- Of patients with COVID-19, 98.9% of those with [severe] vitamin D deficiency died; 88% of those with vitamin D insufficiency died, and just 4%of those with sufficiency died (3).

How does vitamin D protect against COVID-19?

Angiotensin 2 is a hormone that increases inflammation in the body's tissues. ACE2 receptors on the surface of the body's cells convert this hormone into other hormones that are anti-inflammatory. COVID spike protein (whether derived from virus or vaccine) blocks the ACE2 receptor so that it cannot convert pro-inflammatory Angiotensin 2 and remove it from the blood. So, it stands to reason that the more ACE2 receptors on our cells, the less inflammation in our bodies. This is especially true when our bodies are under attack from spike protein, whether of viral or vaccine origin. Vitamin D increases the number of ACE2 receptors on the surface of the body's cells. This explains the ability of Vitamin D to reduce the severity of COVID infection.

How much does Vitamin D protect against serious COVID illness?

If the quoted research is correct, then a vitamin D supplement that takes your blood Vitamin D from deficient/insufficient to top of normal range could decrease your risk of serious COVID illness by as much as 88 to 99%. This is as good as or better than vaccination.

The vitamin D "sweet spot" is 125-150 nmoles per litre.

A recent study analysed long-term vitamin D statistics in more than 400 million people worldwide, as well as seven clinical studies of vitamin D levels at the time of infection (4). The study found that people who had vitamin D levels of 125-150 nm/litre before COVID 19 infection were extremely unlikely to die, with the risk of death approaching close to zero.

Most Americans (New Zealanders will be the same) have low vitamin D

- 30% of Americans have vitamin D insufficiency(6) and vitamin D could reduce their COVID risk by 84%
- 40% of Americans are deficient(6) and vitamin D could reduce their COVID risk by 95%

There is just one proviso to your COVID protection from Vitamin D. You must blood test and you must be bold about supplementing. The good news is that Vitamin D (by mouth or by sunbathing) has been shown to be safe even in high doses. See next page, footnote 2.

References from the above report

- 1. Habitual use of vitamin D supplements and risk of coronavirus disease 2019 (COVID-19) infection: a prospective study in UK Biobank**
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- 2. Vitamin D supplementation could possibly improve clinical outcomes of patients infected with Coronavirus-2019 (COVID2019)**
<https://media-01.imu.nl/storage/energiekevrouwenacademie.nl/2851/vitamine-d-suppletie-2020.pdf>
- 3. Patterns of COVID-19 Mortality and Vitamin D: An Indonesian Study**
https://ultrasuninternational.com/wp-content/uploads/raharusun-et-al-2020_patterns_of_covid-19_mortality_and_vitamin_d_an_indonesian_study.pdf
- 4. COVID-19 Mortality Risk Correlates Inversely with Vitamin D3 Status, and a Mortality Rate Close to Zero Could Theoretically Be Achieved at 50 ng/mL 25(OH)D3: Results of a Systematic Review and Meta-Analysis**
<https://www.mdpi.com/2072-6643/13/10/3596>
- 5. Vitamin D deficiency (Endocrine Society)**
https://pro.aace.com/sites/default/files/2019-02/Vitamin_D_Deficiency_formatted.pdf
- 6. Prevalence of Vitamin D Deficiency and Associated Risk Factors in the US Population (2011-2012)**
<https://www.cureus.com/articles/11792-prevalence-of-vitamin-d-deficiency-and-associated-risk-factors-in-the-us-population-2011-2012>
- (7) Vitamin D (by Rhonda Patrick)**
<https://www.foundmyfitness.com/topics/vitamin-d>
- (8) Vitamin D may reduce susceptibility to COVID-19-associated lung injury**
<https://www.foundmyfitness.com/episodes/vitamin-d-covid-19>
- (9) Could Vitamin D's role in the ACE2 renin-angiotensin system help protect from severe COVID-19? | Roger Seheult**
<https://www.foundmyfitness.com/episodes/vitamin-d-ace2-covid-19>

Author's personal experience of Vitamin D supplementation

In October of 2020, my Vitamin D blood level was 79 nmol/litre which is the middle of the laboratory range. At that time I had a heavy cold (not COVID) which was noticeable for a good 10 days. So I sunbathed that summer and took 5,000 IU of the vitamin. I then took vitamin D daily for 10 months. September of 2021 my blood tested at 172 nmol per litre. I have had a couple of mild colds since then, of short duration and much less than my experience of colds over the years. I am sleeping better (this didn't happen immediately) and am better able to control occasional bursts of anger. I am not a psychiatric patient, but Vitamin D is shown to be useful in psychiatric patients¹. I also noted an improvement in irritable bowel. Note that research shows you need to take a minimum of 5,000 units of Vitamin D daily to get an improvement in irritable bowel, and 3,000 units is not enough².

¹ The effects of vitamin D supplementation on mental health, and biomarkers of inflammation and oxidative stress in patients with psychiatric disorders: A systematic review and meta-analysis of randomized controlled trials
<https://www.sciencedirect.com/science/article/abs/pii/S0278584619302258>

² Vitamin D supplementation in people with IBS has no effect on symptom severity and quality of life: results of a randomised controlled trial. Dose 3,000 per day for 12 weeks
<https://link.springer.com/article/10.1007/s00394-021-02633-w>

Effects of Vitamin D Supplementation in Patients with Irritable Bowel Syndrome: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial Dose 50,000 units per week for 6 weeks
<https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC6390425/>

Vitamin D3 Supplementation in Diarrhea-Predominant Irritable Bowel Syndrome Patients: The Effects on Symptoms Improvement, Serum Corticotropin-Releasing Hormone, and Interleukin-6 – A Randomized Clinical Trial Dose 50,000 units per week for 9 weeks
<https://www.karger.com/Article/Abstract/506149>

Your blood test and supplement strategy for COVID-2 protection

1. Get your vitamin D blood test

Go direct to your local blood test lab with your credit card and tell them you want a patient requested blood test for vitamin D. You do not need a doctor's note. You are legally entitled to directly request a range of blood tests and the receptionist and staff will draw your blood, process your request and report directly to you. You can have the report sent to your doctor as well.

2. Use the table to determine your Vitamin D dose

Table: sample blood test results and how much you should supplement to improve your COVID resistance (All blood test results are quoted in nmoles/litre)(1)

| Blood test result (NZ laboratories quote the normal range as 50 to 150 nmoles per litre) | Desired blood test level (you need to have your levels at top end of the "normal" range) | Loading dose to get your blood levels up (per day) These high doses are required, to lock in the huge benefit of Vitamin D and are safe over short periods (ref 2 below) | Maintenance dose (per day) Short daily suntanning will help your Vitamin D levels too. |
|--|--|---|---|
| 50 | 150 | 25,000 units for 11 days | 10,000 re-test in 6 months |
| 100 | 150 | 25,000 for 6 days | 6,000 re-test in 6 months |
| 150 | 150 | Nil | 2,000 re-test in 6 months |

3. Take your vitamin D supplement

Daily dosing is best. Once a month vitamin D (from your doctor) is fine for bone health but may reduce the respiratory protective effect (3). Ideally, you should take vitamin K2 alongside your vitamin D3

Suntanning

Suntanning will help your Vitamin D levels and will reduce the amount & cost of supplements. Do 10–30 minutes of midday sunlight, several times per week (4).

Safety of Vitamin D

Provided you are not on a Calcium supplement it is nearly impossible to overdose on vitamin D such that no researcher has been able to show adverse effects up to 10,000 units daily in adults. Vitamin K2 has a high safety margin too (2). 6 to 12 monthly blood tests will re-confirm that you've hit the COVID protection sweet spot.



References

1. Vitamin D*calculator™

<https://www.grassrootshealth.net/project/dcalculator/>

2. Vitamin D Is Not as Toxic as Was Once Thought: A Historical and an Up-to-Date Perspective

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Vitamin D supplementation: Recommendations for Canadian mothers and infants

<https://cps.ca/documents/position/vitamin-d>

3. Vitamin D supplementation to prevent acute respiratory tract infections: systematic review and meta-analysis of individual participant data (look for the word "boluses")

<https://www.bmj.com/content/356/bmj.i6583>

4. How to Safely Get Vitamin D From Sunlight

<https://www.healthline.com/nutrition/vitamin-d-from-sun>