



Disclaimer: I am not a qualified health practitioner. You should always consult a qualified health practitioner if you are sick. Opinions expressed on this website are my own or come from my own experience or research

## **Vitamin D for Immunity**

The information below comes from an interview of Dr David Grimes by Dr John Campbell. (See references for full interview).

Dr David Grimes is a lifelong physician, consultant, researcher/teacher and pioneer in Vitamin D. He has written several books on Vitamin D.

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The first thing of importance to understand about Vitamin D is how it is processed in the body to support immunity.

After receiving Vitamin D, either by sunshine, food or supplement, it goes to the liver to be converted into calcifediol. This is the active form.

Calcifediol is then released into the bloodstream where it is held in reserve for when you need it.

When calcifediol is needed by the immunity cells, i.e. when there is some sort of infection, it is taken in and immediately converted into calcitriol. In that form, it connects with the Vitamin D receptors, VDR and RXR, and this activates the nuclear genes, which then lead to the synthesis of defensive proteins that leak into the tissue fluid. See diagram below.

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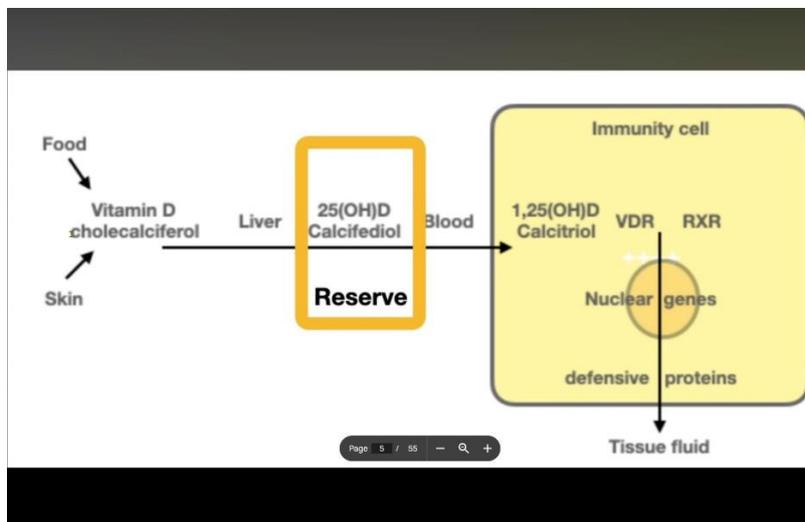


Diagram from interview of Dr Grimes by Dr John Campbell (see references)

It should be noted that once a molecule of calcitriol is used, it will be permanently deactivated. It cannot be reused.

The nuclear gene can produce as many VDR or RXR receptors as needed. It can produce up to 50 times the normal number of receptors when there is infection. But you need a good supply of calcitriol to feed this increase in receptors, and this must come from the reserve of calcifediol in the blood.

Great. So, when you are sick, just take large doses of Vitamin D, right?

Wrong.

The problem is that it takes about 2-3 weeks for Vitamin D to be converted into calcifediol and released into the blood stream.

This is why it is so important to take a good dose of Vitamin D daily so that you have reserves when you need them.



Low vitamin D (in the form of calcifediol in the blood) is like running out of ammunition. Low calcifediol means limited ability to fight infection as it will quickly run out when there is infection.

### Why Reserves Are So Important and How To Boost Reserves Quickly

In Brazil, 2021, randomized controlled trials against Covid 19 infection showed no benefit from Vitamin D.

Why was this?

Simple.

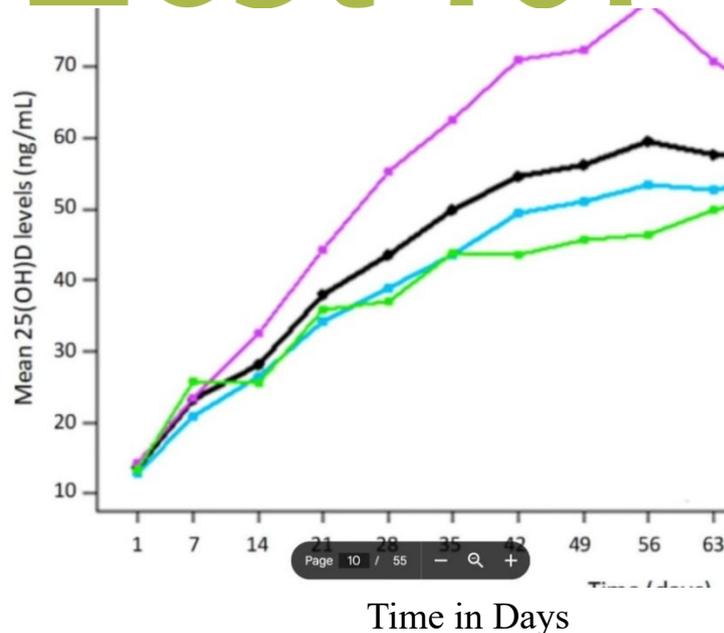
The people in the study were very low in Vitamin D, around 10ng/ml (nanograms per millilitre). The problem was (and still is) that it takes about 2-3 weeks for Vitamin D to get to an acceptable level in the bloodstream and 3 weeks or more to get into the high range of about 70ng/ml.

Below is a graph showing the Vitamin D status of patients arriving at the hospital and the length of time it took for levels to improve in the bloodstream.

You can see that it took about 3 weeks for levels to rise to 40ng/ml. The different coloured lines refer to the different ways of administering the Vitamin D e.g. pill, injection, liquid etc.



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Graph comes from the interview of Dr Grimes by Dr John Campbell (see references)

With such low Vitamin D levels, patients admitted to A&E with severe infection could not activate their immune genes, so they could not produce the immune proteins, their immune system could not function, so the outcome was always going to be bleak...

Clearly, if a patient is critically ill, it is too late to give high dose Vitamin D.

It was seen that during Covid 19, deaths did not usually occur at levels over 40ng/ml. That's what the studies show; if you have 40ng/ml to 100ng/ml, you should be fine. And this was shown very clearly in a study from Galilee.

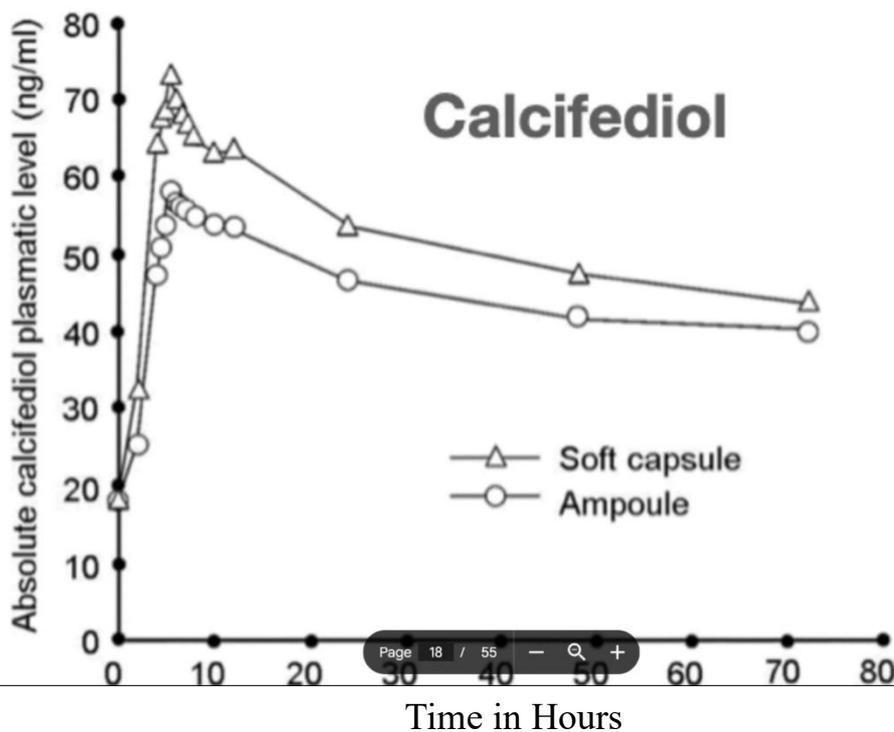
A study from Bratislava showed the Vitamin D level in the blood during a Covid infection only goes down by about 10% - 18%. But that 10% is critical if you are starting off at a very low level.

Critical illness requires optimal immunity, so what can be done? Can the liver be bypassed? Yes, it can - we can give calcifediol and bypass that slow

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processing of the liver to raise levels in the bloodstream quickly. It should be noted that there are no known side effects from calcifediol.

In the graph below, you can see that levels in the bloodstream increase to high levels within 10 hours of administering calcifediol. Within 5 hours it is already up to 40ng/ml.



Graph from interview of Dr Grimes by Dr John Campbell. See references.

## Evidence That Calcifediol Can Boost Immunity Fast

### Observational Study Published in October 2020 in Cordoba During Covid 19.

Reina Sofia hospital in Cordoba took 2 groups of patients, both groups were sick but not critical on admission with Covid 19. One group were given



standard high-quality care and the 2<sup>nd</sup> group were given calcifediol on admission.

Results:

Group	Patient (N)	Treatment type	ICU transfers	Deaths
1	26	Standard care	13 (50%)	2 (7.6%)
2	50	Calcifediol on admission	1 (2%)	0 (0%)

Are these numbers too small to prove the case? Dr Grimes says no, you only need large numbers of subjects if you are looking for a very small difference. For a very big difference, you don't need many people to show a large benefit.

In response to this observational study, UK NICE (National Institute for Care and Excellence) said....

“Clinical doctors should not alter their treatment on the basis of this study”

NICE responded very quickly and only 2 doctors responded on behalf of NICE. They said that the trial wasn't big enough. Perhaps they wanted more deaths to prove efficacy....?

Dr Grimes says the fact that calcifediol was stopped for human consumption on the advice of just 2 doctors is an absolute disgrace.

Second study in Spain – Barcelona, 2020

This was a bigger study and it is published in The Journal of Clinical Endocrinology and Metabolism. Published on 7 June, 2021.

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## Results:

Group	Patient (N)	Treatment type	ICU transfers	Deaths
1	379	Received calcifediol in ICU	80 (21%)	57 (15%)
2	551	Received calcifediol on admission	30 (5%)	36 (6.5%)

In 2020 and 2021, intensive care units were really struggling. Imagine the difference if patients had been given Calcifediol on admission?

Dr Grimes and Dr John Campbell believe it is glaringly obvious that calcifediol is of great benefit.

Once again UK NICE responded....

“There is not enough evidence to recommend vitamin D”

This was a statement by one doctor only and yet this became national policy.

Calcifediol is available without prescription in Spain and Italy and cheaper than a course of antibiotics. This is one available in Spain.





Until 2023, doctors in the UK were not allowed to prescribe calcifediol for human consumption.

In 2023, NICE allowed calcifediol into the British National Formulary (a book listing all the drugs allowed in the UK). However, doctors were not informed of this.

In the book, it says it is only permitted to be given for Vitamin D deficiency, and the dose is about 10,000IU (international units) per month. But both Dr John Campbell and Dr Grimes agreed that this is simply not enough for Vitamin D deficiency. The liver should be producing this amount anyway.

Weirdly, the dose is measured in micrograms rather than international units. Just so you know, 266micrograms (the dose in the packet) equals about 10,000 International Units (IU)

The prescription for calcifediol in the UK is for 1 capsule once a month. Just one.

In Spain and Italy, the box contains 5 capsules which is standard treatment for acute infection. Same dose.

The treatment is for 2 capsules immediately, 1 after 3 days, 1 after 7 days and 1 after 14 days. This is lifesaving treatment.

Ignoring Vitamin D is ignoring immunity and there is a heavy price to pay for this. Infection, inflammation – all these need a strong immune response.

And remember, there is still no treatment for viruses. We can only rely on our immune system.



## BBC Article on Vitamin D Deficiency Linked to Hospital Admissions

This article was written by Cash Murphy, published on 26 January, 2026 and available to read on the BBC website (see references).

The article was based on research done by the University of Surrey published in Journals in 2026.

The study gathered NHS data from 36,258 people which is considered a good sample size.

The study compared people whose vitamin D levels were less than 15nmol/litre with people who had better vitamin D levels ie greater than 75nmol/litre

It showed a 33% reduction in hospitalization with acute respiratory infections (upper and lower)

For each 10 nmol/l (4ng/ml) increase in vitamin D, the hospital rate for respiratory tract infection fell by 4%.

The lead author, Abi Bournot, says

“antibacterial and antiviral properties of vitamin D are thought to help reduce the risk of respiratory tract infections.”

“This research attaches hard data to support the theory.

Despite its importance to our overall health, many people are deficient and do not meet the government’s recommended intake of 10 micrograms of vitamin D per day.”

10 micrograms is 400IU which is a very low dose.



## Daily Dose

I take about 4,000 IU per day of vitamin D3 with K2 (the K2 is of importance, but I will go into that on another post). In the winter, I take around 8,000 IU and I give my husband 10,000 IU per day. If possible, it is good to get your blood level checked to see where your levels are before you start taking it and possibly every 6 months. Remember, everyone is different and will respond differently to supplementation.

According to Professor Angus Dalgliesh who is a highly respected cancer specialist in the UK, the ideal level of Vitamin D in your blood should be 40mg/ml which equals 100nmol/litre. Normal is considered up to 200 nmol/litre. The National Health Service (NHS) in the UK only recommends up to 50nmol/litre. Professor Dalgliesh says this is simply not enough. He keeps all his patients at the higher level, many of whom have been in remission for over 20 years.

In the references, there is an interesting link discussing a research paper on high dosing of Vitamin D. Patients and medical staff were given high doses of vitamin D, 5,000 IU to 50,000 IU, for about 7 years with no ill effects but with good results.

Vitamin D is fat soluble so should be taken with some form of fat; some supplements are fat/oil based. I use Vitamin D3 with K2 by Metagenics which is an oil based supplement.

<https://www.metagenics.co.uk/vitamin-d3-1000iu-with-k2.html>

I give my husband this one which is 10,000IU per capsule. We take it with dinner which always contains some form of fat.

<https://www.british-supplements.net/products/clean-vitamin-d3-k2-msm-capsules?variant=32615728480330>



It should be noted that people with kidney issues and children should not be taking high doses of Vitamin D. A doctor must be consulted.

If you are admitted to the ICU, you are almost certainly deficient in vitamin D or your body will be rapidly using up vitamin D reserves.

Ideally, Dr Grimes and Dr Campbell agree that hospitals should give 2 capsules of Calcifediol on admission to hospital. Even if the patient is replete, it won't do any harm. Then take the blood test within the first hour to check levels i.e. before blood levels have risen from the administration of calcifediol.

Another time to give Calcifediol is for an emergency operation. If you have high levels of vitamin D in the bloodstream, there is a low chance of infection.

According to Dr Grimes, low levels of Vitamin D mean a much higher chance of infection - over 90%.

According to Dr Grimes, everyone should optimise their vitamin D levels before an operation – increase intake about one month before the operation.

For an emergency operation, it would be ideal to take Calcifediol as outlined above.

This research was done in the Massachusetts Hospital a few years ago but has not been taken on board by the medical profession.

Also, it is advisable to take vitamin D throughout pregnancy, which should reduce the complication rate. Ideally, optimise levels before getting pregnant.

According to Dr Grimes pre-eclampsia is more prevalent in pregnant women with Vitamin D deficiency.



## References

Interview of Dr John Grimes by Dr John Campbell -

<https://youtu.be/HEjhUZbRZ7I?si=0v02BzVH3FU0PNlr>

Live discussion of paper published on high dose vitamin D.

[https://youtu.be/E3\\_t-EQly0s?si=dygqCg84iH9c4-oH](https://youtu.be/E3_t-EQly0s?si=dygqCg84iH9c4-oH)

Brazil - <https://pubmed.ncbi.nlm.nih.gov/33595634/>

Bratislava - <https://www.mdpi.com/2072-6643/14/12/2362>

Galilee - <https://www.medrxiv.org/content/10.1101/2021.06.04.21258358v1.full.pdf>

Cordoba - <https://www.sciencedirect.com/science/article/pii/S0960076020302764>

Barcelona - <https://pubmed.ncbi.nlm.nih.gov/34097036/>

<https://pubmed.ncbi.nlm.nih.gov/26086941/>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC5460735/#:~:text=Effects%20of%20D3%20vs%2025D3%20on%20serum%20vitamin%20D%20metabolites,similar%20across%20race/ethnic%20groups.>

Article by Cash Murphy on Vitamin D on BBC website -

<https://www.bbc.co.uk/news/articles/czx3g1d57xpo>

<https://openresearch.surrey.ac.uk/esploro/outputs/journalArticle/Association-between-serum-25-hydroxyvitamin-D-status/991087828702346>

Professor Angus Dalgliesh

<https://iconcancercentre.co.uk/consultants/angus-dalgleish/#:~:text=Professor%20Angus%20Dalgleish%20studied%20medicine,The%20Academy%20of%20Medical%20Scientists.>

<https://iconcancercentre.co.uk/consultants/angus-dalgleish/#:~:text=Professor%20Angus%20Dalgleish%20studied%20medicine,The%20Academy%20of%20Medical%20Scientists.>

Interview with Professor Dalgliesh by Dr John Campbell on Vitamin D and Cancer

<https://youtu.be/LmF1j33lz1s?si=uY1MU3Uwv9L-5e>

Vitamin D3, Fat Increases Absorption

<https://pubmed.ncbi.nlm.nih.gov/25441954/>

<https://www.sciencedirect.com/science/article/abs/pii/S2212267214014683>

Books by Dr David Grimes

Vitamin D, Evolution and Actions



How to Prevent Covid, DVD, Alzheimer;s with Vitamins D3 and K2

The Secrets of Vitamins D3K2 and B9

The Secrets of Vitamins D3 & K2 That Can Save Your Life: Learn how Hip Fracture and Dying from Osteoporosis Can Be Prevented with Vitamins D3 and K2.

Further Reading

The Vitamin D Solution by Michael Holick PhD, MD