NUTRA HEALTH 365

THE IMPORTANCE OF VITAMIN D

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Forward

The purpose of this document is to explore vitamin D and how it impacts an individual's health and well-being. We will also look at and explain the blood serum levels which are desirable compared with those that are recommended. A lot of the content in this article is based the opinions of the author which have developed over the last four years of research into the subject.

There are number of topics which will be considered for discussion. These will include the history of vitamin D, the benefits of vitamin D supplementation (particularly for those living in the northern hemisphere where there is insufficient sunlight), the correct levels to maintain maximum health benefits as well as some personal observations in relation to the medical profession and its attitude towards vitamin D.

This essay is by no means intended to be a scientific paper nor are the opinions in it to be taken as medical advice. One of the biggest challenges in relation to vitamin D and the scientific literature is the massive variation in the quality of different studies that have taken place over the last number of decades. As vitamin D is non patentable there is very little incentive for those with the financial resources required to carry out large-scale randomised control trials, as they would not be able to profit from it.

Practically every study has a recommendation in the conclusion that “further trials will need to be carried out” but nobody is willing to fund these very expensive trials, unfortunately. Considering how relatively inexpensive it is and the huge potential benefits to both individuals and the health system, it is strange that the government has not done so.

The present recommended daily intake of vitamin D3, according to both the NHS in Britain and the HSE in Ireland, is that adults should take approximately 800 IU of vitamin D per day.

As far as I can ascertain this level of supplementation is simply twice the amount required to prevent rickets in children and was determined approximately 30 years ago. These recommended levels are considerably lower than the levels recommended

by many very prominent medical doctors, who have found extremely promising results in many areas of medicine.

According to medical authorities the vast majority of those admitted to ICU during COVID-19 were seriously deficient in vitamin D. However, when they talk of being deficient, they are still referring to the decade's old advice as to what they consider to be sufficient. A growing number of highly credentialed medical professionals consider the official recommended blood serum levels of vitamin D to be wholly inadequate. This is discussed further in the paper.

In the case of cancer patients, levels of up to 100ng/mL are demonstrating phenomenal results. You could follow the work of Dr William Makkis MD who has treated thousands of cancer patients with a protocol that he has developed.

In some types of cancer, he has observed remission rates of over 75%, after only three or four months of treatment. Dr Makkis recommends that his patients should have vitamin D levels five times those recommended by the NHS. His treatment protocol is used alongside traditional treatments such as chemotherapy and radiation.

About the author

Although not a medical professional I have two primary degrees and was awarded my Masters in Business Administration from Trinity College. In a career spanning over forty years, I have been involved in many sectors at a senior level and these include hospitality, automotive, journalism, customs auditor and more recently, founder of NutraHealth365.com.

My impetus to start the company occurred in the later halve of 2020 when I became aware that over 75% of all those in hospital ICUs with 'covid' had wholly inadequate levels of vitamin D. Although not based on any specific scientific data or random controlled trials it became obvious that having a highly functioning immune system should be a priority.

Supplementing with vitamin D3 alone would not be enough as high doses of vitamin D3 without additional supplements such as zinc, vitamin C, K2 and a natural ionophore such as quercetin would be ineffective. As there was nothing on the market that contained these nutrients as a single supplement, the decision to build a business around what has become ImmuneX365 was made in 2021. After two years of studying the scientific literature, the eventual formulation was determined and based on the work of the late Dr 'Zed' Zelenko and world-renowned cardiologist Dr Peter McCullough.

ImmuneX365 went on sale in October 2023 and has proven to be very popular since. From day one, the business has been a fervent supporter of the independent media and presently makes contributions to thirteen journalists and media. In the early days of the 'pandemic' all treatment alternatives were censored by the MSM and some of the most eminent scientists in the world were silenced and publicly ridiculed.

By suppressing the truth, it is possible that millions of people needlessly died as a direct result of the mainstream medias complicity in what will become to be one of the biggest crimes against humanity, in history.

The Medical Profession and Vitamin D

I have had firsthand experience of the apparent distain that the 'medical profession' has in relation to vitamin D and this is reflected below in two examples.

Someone very close to me was admitted to hospital with abdominal pain which after four weeks would not respond to outpatient treatment. Within days, she was informed that they had Stage 4 colorectal adenocarcinoma with metastasis in the liver, brain, peritoneal and retro peritoneal, and lymph. This was in a 56yo woman who didn't smoke, ate healthily, a jogger, sea swimmer and yoga advocate. AKA turbo cancer, which is increasing at a terrifying rate among those under sixty.

While visiting her in hospital I noticed a that she was receiving an IV drip of antibiotics, so I asked if she had an infection. She said "No", so I talked with her oncologist to ascertain why and was told that it was 'prophylactic' (i.e. preventative). I then asked if her vitamin D levels had been checked and I was told, to my shock, 'No'. When pushed further her oncologist said that there was no need to as they were keeping an eye on her white blood cell count.

The oncologist then informed me that a vitamin D blood test was never performed in the hospital unless there was a 'very obvious reason' to do so and that it must be paid for separately from any of the other 'bloods'. Yet, she was happy to prescribe and administer anti-biotics prophylactically! In case you are not aware, antibiotics decimate the microbiome, and our innate immune system absolutely depends on it to function effectively.

Is it any wonder that so many people catch infections in hospitals? Firstly, they do not check the full extent of your immune systems effectiveness and secondly, they actively destroy your microbiome and therefore your immune response with antibiotics. Madness!". According to the literature "*25(OH)D testing provides a more comprehensive assessment of immune system function*" than a WBC count. See below

Evaluating Immune System Health: White Blood Cell Count vs. Vitamin D Levels

Assessing the health of a patient's immune system is crucial in preventing and managing infections, autoimmune diseases, and other immune-related disorders. Two common methods used to evaluate immune system function are white blood cell (WBC) count and vitamin D levels, specifically 25-hydroxyvitamin D (25(OH)D). While both tests provide valuable information, they measure different aspects of immune function, and one may be more effective than the other in certain contexts.

White Blood Cell Count

A WBC count measures the number of white blood cells in the blood, which includes various types of immune cells, such as neutrophils, lymphocytes, and monocytes. An elevated WBC count can indicate the presence of an infection, inflammation, or immune system activation. However, a normal WBC count does not necessarily mean the immune system is functioning optimally.

Limitations of WBC count:

- Does not provide information on immune cell function or activity
- Can be influenced by various factors, such as stress, exercise, or medications
- May not detect subtle immune system imbalances or deficiencies

Advantages of 25(OH)D testing:

- Provides a more comprehensive assessment of immune system function, as vitamin D plays a role in regulating immune cell activity and cytokine production
- Can detect subtle immune system imbalances or deficiencies, even when WBC count is normal
- Is less influenced by acute factors, such as stress or exercise, and provides a more stable measure of immune system function

Comparison

While both WBC count and 25(OH)D testing provide valuable information, they measure different aspects of immune system function. WBC count is more useful for detecting acute infections or inflammation, whereas 25(OH)D testing provides a more comprehensive assessment of immune system function and can detect subtle imbalances or deficiencies.

In many cases, a 25(OH)D test may be a better measure of immune system health, especially in patients with:

- Autoimmune diseases, such as multiple sclerosis or rheumatoid arthritis
- Chronic infections, such as tuberculosis or HIV
- Immune-related disorders, such as allergies or asthma
- Vitamin D deficiency or insufficiency

In conclusion, while WBC count is a useful test for detecting acute infections or inflammation, 25(OH)D testing provides a more comprehensive assessment of immune system function and can detect subtle imbalances or deficiencies. Healthcare providers should consider using both tests in conjunction to gain a more complete understanding of a patient's immune system health.

The second anecdotal experience I had concerned a 64-year-old woman who is in good health but had recently suffered a fractured ankle. Her GP referred her to a consultant osteopath to have her bone density checked. After the results came back it was determined that she had osteopenia, and it was determined that she was put on supplemental calcium.

Given the critical role that vitamin D plays in the absorption of calcium into the bones I asked her whether her osteopath had asked her to do a vitamin D blood test to which she replied, “No”. I was absolutely flabbergasted by this response from a medical professional whose soul specialisation is the skeleton. I then suggested that she went back to her GP and insisted upon her getting a vitamin D blood serum level check which she did.

As I suspected, her vitamin D levels where on the floor or in NHS speak, “deficient”. Her levels were 11ng/mL which is just over half of what is recommended by the NHS. To put this into context a substantial number of doctors who are aware of the powerful benefits of vitamin D and have done the studies and through their experience in private practise suggest that a healthy individual should have levels of approximately 50 to 60ng/mL.

Her GP prescribed her a course of vitamin D which consisted of her taking 50,000 IU of vitamin D3 once a week for approximately 3 months. This I found quite unbelievable. People with extremely low vitamin D levels can safely consume 25,000 IU of vitamin D per day for a period of weeks in order to get their blood serum levels up to a level that provides them with a robust innate immune system and most importantly in her case the ability for her body to take the calcium from her blood and deposited back into her bones.

The second thing that shocked me was even with this diagnosis of chronically low vitamin D her GP never suggested that she would take zinc or most importantly vitamin K2 along with the 50,000 IU of vitamin D. As a result of both these experiences I seriously question whether the medical profession has any real interest in curing patients”.

History of Vitamin D: From Ancient Civilizations to Modern Research

Vitamin D, often referred to as the "sunshine vitamin," has a rich and fascinating history that spans thousands of years. From ancient civilizations to modern research, the understanding and appreciation of vitamin D have evolved significantly over time. In this comprehensive review, we will delve into the history of vitamin D, exploring its discovery, the evolution of our understanding of its role in human health, and the current state of research on this essential nutrient.

Ancient Civilizations and the Early Understanding of Vitamin D

The concept of vitamin D dates back to ancient civilizations, where people recognized the importance of sunlight for overall health. In ancient Greece, for example, physicians like Hippocrates (460-370 BCE) noted that exposure to sunlight could cure a range of ailments, including rickets, a disease characterized by softening of the bones.

Similarly, in ancient Rome, the physician Galen (129-216 CE) observed that people who lived in sunny regions tended to have stronger bones and better overall health than those living in cloudy or shaded areas. While these early physicians did not specifically identify vitamin D as the key factor, they laid the groundwork for later researchers who would uncover the mysteries of this essential nutrient.

The Discovery of Vitamin D

The modern discovery of vitamin D is attributed to Edward Mellanby, a British physician who, in 1914, conducted a series of experiments on dogs. Mellanby demonstrated that a diet lacking in fat-soluble vitamins led to the development of rickets in dogs. He also showed that cod liver oil, which is rich in vitamin D, could prevent and cure rickets.

Around the same time, Elmer McCollum, an American biochemist, was conducting similar research on the role of fat-soluble vitamins in animal health. McCollum's work led to the discovery of vitamin A, and he also identified vitamin D as a separate entity.

Vitamin D's Role in Human Health

Throughout the 20th century, researchers continued to unravel the mysteries of vitamin D. One of the key findings was the discovery of vitamin D's role in calcium metabolism and bone health. In the 1920s and 1930s, researchers like Harvey Williams and Charles Funk demonstrated that vitamin D was essential for the absorption of calcium from the gut and its deposition into bone tissue.

The 1950s and 1960s saw significant advances in our understanding of vitamin D's role in human health. Researchers like Hector DeLuca and Anthony Norman elucidated the mechanisms of vitamin D's action, including its conversion to active forms in the liver and kidneys, and its interaction with specific receptors in target tissues.

The Recognition of Vitamin D Deficiency and Its Consequences

As our understanding of vitamin D's role in human health grew, so did the recognition of the consequences of vitamin D deficiency. Rickets, a disease once thought to be a rarity, was found to be prevalent in many parts of the world, particularly in regions with limited sunlight and poor dietary sources of vitamin D.

In addition to rickets, research has also linked vitamin D deficiency to a range of other health problems, including osteoporosis, diabetes, cardiovascular disease, and certain types of cancer. These findings have highlighted the importance of maintaining adequate vitamin D levels throughout life.

Vitamin D Deficiency in the UK: Prevalence and Variation by Ethnicity

Despite its importance, many people in the UK and around the world do not have sufficient levels of vitamin D. In the UK, for example, it is estimated that around 1 in 5 adults has low levels of vitamin D, with certain groups being at higher risk.

Studies have shown that vitamin D deficiency is more common in certain ethnic groups, particularly those with darker skin. This is because melanin, the pigment responsible for skin colour, reduces the skin's ability to produce vitamin D from sunlight.

In the UK, research has shown that:

- Around 30-40% of adults from African and African-Caribbean backgrounds have low levels of vitamin D, compared to around 10-20% of white adults.
- Adults from South Asian backgrounds are also at higher risk of vitamin D deficiency, with around 20-30% having low levels.

These disparities are likely due to a combination of factors, including:

- Reduced skin synthesis of vitamin D due to melanin
- Limited dietary sources of vitamin D
- Reduced exposure to sunlight, particularly during the winter months

Difficulties in Absorbing Vitamin D

Some people may have difficulties absorbing vitamin D, which can increase their risk of deficiency. These difficulties can arise from a range of factors, including:

- Gastrointestinal disorders: Conditions such as celiac disease, Crohn's disease, and ulcerative colitis can impair the absorption of vitamin D from food.
- Liver and kidney disease: Certain liver and kidney diseases can affect the conversion of vitamin D to its active form, reducing its effectiveness.

Modern Research and the Future of Vitamin D

Today, research on vitamin D continues to evolve, with scientists exploring new aspects of its biology and clinical significance. Some of the current areas of investigation include:

1. Genetic variations and vitamin D response: Researchers are studying how genetic variations affect an individual's response to vitamin D supplementation and their risk of developing vitamin D-related disorders.

2. Vitamin D and immune function: Scientists are exploring the role of vitamin D in regulating immune cell function and its potential implications for autoimmune diseases and infections.
3. Vitamin D and cancer prevention: Research is ongoing to investigate the potential of vitamin D in preventing and treating various types of cancer, including colorectal, breast, and prostate cancer.
4. Vitamin D and brain health: Studies are examining the relationship between vitamin D levels and cognitive function, as well as the potential role of vitamin D in neurodegenerative diseases like Alzheimer's and Parkinson's.

As our understanding of vitamin D continues to grow, it is likely that we will uncover new and exciting aspects of its biology and clinical significance. For now, it is clear that vitamin D plays a vital role in maintaining human health, and that ensuring adequate levels of this essential nutrient is crucial for preventing and treating a range of diseases.

- Obesity: Excess body fat can reduce the availability of vitamin D, making it more difficult for the body to absorb.
- Medications: Certain medications, such as anticonvulsants and steroids, can interfere with vitamin D absorption or metabolism.
- Aging: Older adults may have reduced skin synthesis of vitamin D and impaired absorption from food, increasing their risk of deficiency.

Overall, vitamin D deficiency is a significant public health concern in the UK and around the world. It is essential to be aware of the risks and take steps to maintain adequate levels of vitamin D, particularly for those groups at higher risk. This can involve a combination of dietary changes, supplements, and increased exposure to sunlight.

Vitamin D3

Vitamin D3, also known as cholecalciferol, is a fat-soluble vitamin that is essential for maintaining several bodily functions. While it is primarily recognized for its role in calcium absorption and bone health, Vitamin D3 also plays a pivotal role in supporting the immune system, muscle function, and brain health.

Vitamin D3 is unique among vitamins because it can be synthesized by the body when the skin is exposed to sunlight. Specifically, ultraviolet B (UVB) rays from the sun convert a cholesterol derivative in the skin into Vitamin D3.

This process is influenced by factors such as geographic location, skin pigmentation, and the use of sunscreen. Despite its ability to be synthesized naturally, many people do not get enough sun exposure, leading to deficiencies. The simple reason being that we rarely get enough sunshine in the northern hemisphere, even at the height of summer.

According to general guidelines you would need spend 5-15 minutes in the sun with 25% or more of your body exposed, at least three times a week during peak hours (11 am to 3 pm), the exact amount of time varies depending on several factors, such as your skin type, time of day, and season.

- Fair Skin: If you have fair skin, you can generate sufficient vitamin D with 15 minutes of sun exposure on your hands, arms, face, or back, two to three times a week, from April to September.

- Darker Skin: However, if you have darker skin, you may need up to 30 minutes to an hour of sun exposure to generate the same amount of vitamin D.

Can you remember a summer where the sun shone brightly for a minimum of three days a week, every single week between May and September? And you were in a position where you could lie out in it, around midday? No, me neither. This is why supplementing with vitamin D3 all year round makes so much sense.

Another consideration is a person's body weight, as vitamin D is fat soluble. Therefore, if you are carrying excess fat most of the vitamin D that your body produces because of sun exposure can end up in your fat cells and not be bioavailable in your blood. Is it any wonder that up to 40% of young people in northern Europe have insufficient levels of vitamin D?

Innate and Adaptive Immunity

One of the primary functions of Vitamin D3 is to enhance the absorption of calcium from the digestive tract. Calcium is crucial for the formation and maintenance of strong bones and teeth. Without sufficient Vitamin D3, the body cannot efficiently absorb calcium, leading to weakened bones and conditions such as rickets in children and osteomalacia in adults. However, the benefits of Vitamin D3 extend far beyond bone health.

The immune system is a complex network of cells, tissues, and organs that work together to defend the body against harmful pathogens such as bacteria, viruses, fungi, and parasites. It consists of two main components: the innate immune system, which provides immediate but non-specific defence, and the adaptive immune system, which provides a targeted response to specific pathogens. Vitamin D3 plays a crucial role in both components of the immune system.

Innate immunity is the body's first line of defence against pathogens. It includes physical barriers such as the skin and mucous membranes, as well as immune cells such as macrophages and neutrophils. Vitamin D3 enhances the pathogen-fighting effects of these immune cells. For example, it boosts the production of antimicrobial peptides, which are small proteins that can destroy bacteria, viruses, and fungi. Additionally, Vitamin D3 helps regulate inflammation, ensuring that the immune response does not become excessive and damage the body's own tissues.

Adaptive immunity involves the activation of lymphocytes, including T cells and B cells, which provide a targeted response to specific pathogens. Vitamin D3 influences the activity of these cells in several ways. It promotes the differentiation of T cells into regulatory T cells, which help prevent autoimmune reactions by suppressing the

immune response against the body's own tissues. Vitamin D3 also enhances the production of antibodies by B cells, which are crucial for neutralizing pathogens and preventing infections.

Autoimmune diseases occur when the immune system mistakenly attacks the body's own tissues. Examples include rheumatoid arthritis, multiple sclerosis, and lupus. Research suggests that Vitamin D3 may help reduce the severity of certain autoimmune diseases. By promoting the differentiation of regulatory T cells and suppressing excessive inflammation, Vitamin D3 can help prevent the immune system from attacking the body's own tissues. However, more research is needed to fully understand the potential benefits of Vitamin D3 in the prevention and treatment of autoimmune diseases.

Respiratory infections, such as the common cold, influenza, and pneumonia, are a major cause of illness and death worldwide. Studies have shown that individuals with low levels of Vitamin D3 are at increased risk of respiratory infections. Vitamin D3 enhances the immune system's ability to fight these infections by boosting the production of antimicrobial peptides and regulating inflammation. Supplementing with Vitamin D3 may help reduce the risk and severity of respiratory infections, although more research is needed to confirm these benefits.

In addition to its role in immunity, Vitamin D3 may also play a role in the prevention of chronic diseases such as cardiovascular disease, diabetes, and certain cancers. Low levels of Vitamin D3 have been associated with an increased risk of these conditions. For example, Vitamin D3 helps regulate blood pressure and insulin production, which are important for cardiovascular health and diabetes management. Additionally, Vitamin D3's anti-inflammatory effects may help reduce the risk of cancer.

Given the importance of Vitamin D3 for immunity and overall health, it is crucial to ensure adequate intake. Sunlight is a natural source of Vitamin D3, but factors such as geographic location, skin pigmentation, and sunscreen use can affect the synthesis of Vitamin D3 in the skin.

Vitamin D3 is indispensable for maintaining several bodily functions, with a particular emphasis on supporting the immune system. It enhances the pathogen-fighting effects of immune cells, regulates inflammation, and helps prevent autoimmune reactions. Ensuring adequate levels of Vitamin D3 through sunlight, diet, and supplementation is essential for maintaining a robust immune response and overall health. Regular monitoring and appropriate intake can help prevent deficiencies and promote optimal health. Learn more

Vitamin D3 plays a pivotal role in regulating the immune system. It enhances the pathogen-fighting effects of monocytes and macrophages—white blood cells that are important parts of your immune defence—and decreases inflammation. Low levels of Vitamin D3 have been associated with increased susceptibility to infections, autoimmune diseases, and even certain cancers. Ensuring adequate levels of Vitamin D3 can help maintain a robust immune response.

This immune-boosting property is particularly important during flu season or in times of increased exposure to pathogens. Dr. Eric Berg also highlights the immune benefits of vitamin D3, stating, "Vitamin D intake recommendations vary widely, with some healthcare providers suggesting that 600 IU of vitamin D per day is adequate, while others advocate for 5000 IU or more. Higher doses of vitamin D supplements, generally defined as exceeding 4000 IU daily, are typically used to address vitamin D deficiencies or specific health conditions".

This underscores the importance of personalized healthcare and regular monitoring. Learn more

Understanding Vitamin D: Recommendations, Units, and Levels

Vitamin D is an essential nutrient that plays a crucial role in maintaining strong bones, immune function, and overall health. With the increasing recognition of vitamin D's importance, there is growing interest in understanding vitamin D levels, including what is recommended, how to measure them, and why some medical authorities advocate for higher levels.

The recommended vitamin D levels vary considerably, depending on the medical authority from which you take your recommendation. Here are some guidelines:

- The Institute of Medicine (IOM) recommends a serum 25-hydroxyvitamin D (25(OH)D) level of at least **20 ng/mL** (50 nmol/L) for optimal bone health.
- The NHS & HSE state that a level of just **20ng/mL** is considered 'Sufficient', 15mg/mL as 'Insufficient' and 10ng/mL or less to be 'Deficient'.
- The Endocrine Society recommends a level of **30-50 ng/mL** (75-125 nmol/L) for optimal health.
- The American Academy of Paediatrics recommends a level of **20-50 ng/mL** (50-125 nmol/L) for children and adolescents.

Units of Measure

Vitamin D levels are typically measured in nanograms per millilitre (ng/mL) or nanomoles per litre (nmol/L). The most commonly used measure is 25(OH)D, which reflects the body's storage of vitamin D.

Getting Levels Checked

Vitamin D levels can be checked with a simple blood test. This is usually done in the following situations:

- Routine health check-ups
- Diagnosis of vitamin D deficiency or insufficiency

- Monitoring of vitamin D levels in individuals with conditions that affect vitamin D metabolism, such as kidney or liver disease

Higher Recommendations?

While official recommendations suggest relatively low levels of vitamin D, some medical authorities advocate for much higher levels. Here are some quotes from MDs who recommend higher levels:

- "I *recommend that my patients aim for a vitamin D level of 50-70 ng/mL (125-175 nmol/L). This is based on the latest research, which suggests that higher levels are associated with improved health outcomes*." - Dr. Joseph Mercola, MD

- "*The current recommendations for vitamin D are woefully inadequate. I recommend that my patients aim for a level of 60-80 ng/mL (150-200 nmol/L) to optimize their health."* - Dr. Michael Holick, MD, PhD

These MDs and many others recommend higher levels of vitamin D based on several factors, including:

- The recognition that vitamin D plays a role in many bodily processes beyond bone health, including immune function and cardiovascular health.
- The observation that many people, particularly those with darker skin or limited sun exposure, may require higher levels of vitamin D to maintain optimal health.
- The concern that official recommendations may be based on outdated or incomplete research.

Understanding vitamin D levels is essential for maintaining optimal health. If you're concerned about your vitamin D levels, consult with your healthcare provider to determine the best course of action.

Conclusion

Daily consumption of 4,000 IU or more of vitamin D3 can offer numerous health benefits, from stronger bones and enhanced immune function to improved mental health and heart health. While official recommendations suggest relatively low levels, some medical authorities advocate for higher levels based on the latest research and clinical experience.

If you found this document useful, I would greatly appreciate if you would circulate it to your family and friends.

If you are interested in a potent vitamin D3 supplement our ImmuneX365 formulation offers a potent blend of essential nutrients crucial for bolstering your immune function. With Vitamin D3 and K2 for bone health, Vitamin C for antioxidant support, Quercetin for inflammation modulation, and Zinc for immune regulation, it is a comprehensive solution for enhancing natural defence and overall well-being. It is a formulation that is unique to us and by having everything in one capsule, it is much more convenient than taking several others as well as being very cost effective. The formulation contains;

- Vitamin D3 – (4,000IU)
- Vitamin K2 MK7 – 200mcg
- Quercetin – 500mg
- Vitamin C – 800mg
- Zinc – 30mg

If you have any comments to make about this essay or just want to get in touch, please contact me directly at contact@NutraHealth365.com.

Thank you for reading,

Eamonn Blaney
Founder, NutraHealth365.com Ltd

References

Critical Appraisal of Large Vitamin D Randomized Controlled Trials.

Table 1. Baseline and follow-up 25(OH)D concentrations and vitamin D dosing regimens of selected recent large vitamin D RCTs.

Study Acronym or First Author	Study Population	Baseline 25(OH)D in the Entire Cohort (ng/mL)	Baseline 25(OH)D in the Placebo Group (ng/mL)	Follow-Up 25(OH)D in the Placebo Group (ng/mL)	Baseline 25(OH)D in the Vitamin D Group (ng/mL)	Follow-Up 25(OH)D in the Vitamin D Group (ng/mL)	Vitamin D Supplement Dose	Study Duration
VITAL	Older general population	30.8 ± 10.0	30.8 ± 10.0	minus 0.7 from baseline	30.9 ± 10.0	41.8 (mean)	2000 IU per day	5.3 years (median)
ViDA	Older general population	25.3 ± 9.5	24.4 ± 9.6	26.4 ± 11.6	24.4 ± 9.6	54.1 ± 16.0	Initial 200,000 IU, followed by 100,000 IU per month	3.3 years (median)
DO-HEALTH	Older general population	22.4 ± 8.4	22.4 ± 8.5	24.4 (mean)	22.4 ± 8.4	37.6 (mean)	2000 IU per day	2.99 years (median)
D2d	Patients with prediabetes	28.0 ± 10.2	28.2 ± 10.1	28.8 (mean)	27.7 ± 10.2	54.3 (mean)	4000 IU per day	2.5 years (median)
MDIG	Pregnant women	11.0 ± 5.7	11.1 ± 5.5	9.5 ± 5.6	11.0 ± 5.7, 11.5 ± 5.6, 10.8 ± 5.9	27.9 ± 7.8, 40.4 ± 9.4, 44.3 ± 11.2	4200 IU per week, 16,000 IU per week, or 28,000 IU per week	From 17 to 24 weeks of gestation until birth
VIOLET	Critically ill patients	Not reported	11.0 ± 4.7	11.4 ± 5.6	11.2 ± 4.8	46.9 ± 23.2	Single enteral dose of 540,000 IU	90 days
CAPS	Postmenopausal women	32.8 ± 10.5	32.7 (95% CI: 32.1 to 33.3)	30.9 (95% CI: 30.2 to 31.6)	33.0 (95% CI: 32.3 to 33.6)	42.5 (95% CI: 41.7 to 43.3)	2000 IU plus 1500 mg calcium per day	4 years
Ganmaa	School children	11.9 ± 4.2	11.9 ± 4.2	10.7 ± 5.3	11.9 ± 4.2	31.0 ± 9.1	14,000 IU per week	3 years (median)
EVITA	Patients with heart failure	14.6 ± 6.7	14.1 (10.3 to 19.7)	16.3 (12.5 to 23.2)	12.5 (8.6 to 17.9)	37.2 (25.0 to 51.4)	4000 IU per day	3 years
Burt	Older general population	31.3 ± 7.8	No placebo group	No placebo group	30.6 ± 8.4, 32.5 ± 8.0, 31.3 ± 7.4	31.0 (mean), 52.9 (mean), 57.8 (mean)	400 IU per day, 4000 IU per day, 10,000 IU per day	3 years

Data are shown as mean ± standard deviation (SD) or as medians with 25th to 75th percentile, if not otherwise indicated; for the MDIG trial, only groups with no postpartum intervention are shown.

Source: https://www.mdpi.com/2072-6643/14/2/303

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