

# Winter Blues and Broken Bones

## Getting Enough of The Protective Power of Vitamin D 3

By Kristin Grayce McGary LAc., MAc., CFMP®, CSTcert, CLP.

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MY FAMILY AND I lived in a suburb of Chicago when I was a child. The weather was often overcast and gloomy. When it was sunny, my parents applied sunscreen. Unfortunately, when I

was 10 years old I fell off a jungle gym and fractured my right arm. It wasn't a big fall, I shouldn't really have broken any bones, but looking back I suspect my vitamin D levels weren't optimal.

Vitamin D is often referred to as the “sunshine vitamin.” It is produced in your skin in response to sunlight and is a vital organic compound supporting the absorption of calcium and protecting bone strength, supporting immune function, and regulating mood. Deficiencies in vitamin D can lead to weakened bones, autoimmunity and conditions like osteoporosis, and mental illness such as Seasonal Affective Disorder, more commonly known as SAD.

Vitamin D-inefficiency can also lead to:

- Type 1 Diabetes
- Cardiovascular disease including heart attack
- High blood pressure
- Cancers of colon, prostate, ovaries, esophagus, and lymphatic system.
- Muscle and bone pain

- Broken bones
- Autoimmune diseases such as Hashimoto's Thyroiditis, Multiple Sclerosis, Rheumatoid Arthritis
- Allergies

There are two forms of vitamin D; ergocalciferol (vitamin D2) and cholecalciferol (vitamin D3). Of the two, vitamin D3 is the preferred form for human consumption.

### VITAMIN D3 IS GOOD FOR YOUR BRAIN

D3 helps regulate the conversion of tryptophan to serotonin, which is the essential neurotransmitter affecting a variety of cognitive functions including mood, decision-making, social behavior, impulsive behavior, and social decision-making. Many psychological disorders associated with brain chemistry and function, such as autism spectrum disorder (ASD), ADHD, schizophrenia, bipolar disorder, and depression, show low brain serotonin. Seasonal Affective Disorder (SAD) is positively impacted by combining light therapy with vitamin D3.

So how can you help your body get the right amount of protective vitamin D?

While sun exposure is helpful, it is often not enough.

It is worth considering a daily dose of a good quality vitamin D3 supplement. Obviously, dosing Vitamin D3 depends on your weight and current vitamin D3 status. The first order of business would be to get tested and look at the data. Generally, children need less than adults.

In my experience, most doctors order 25 dihydroxyvitamin D test but this is the inactive form and may not give you all the information. I suggest also getting your Calcitriol 1,25 dihydroxyvitamin D blood levels checked and if required ask your doctor or holistic health care provider to recommend an appropriate dose of vitamin D3 for supplementation.

A healthy vitamin D blood level is about 45-75 ng/ml, depending on an individual's unique biological needs. The Vitamin D Counsel recommends an average of 50 ng/ml. As part of my practice, I've learned to individualize things, some people do better with vitamin D levels that are 75 ng/ml, and others lower. People with known autoimmunity, autoimmune disease, immune dysfunction or those living in northern states should have their levels tested regularly.

In order to work optimally, it is worth supporting vitamin D3 supplementation with other important

mineral cofactors that help the body to utilize D3 properly. In addition to the D3 supplementation I also suggest adding magnesium, boron and zinc. Here's why:

Magnesium is necessary for your body to make energy from the food you eat. It helps to control blood pressure, blood sugar levels and it keeps your heart beating regularly.

The Vitamin D Council believes that the daily amounts of magnesium recommended by the Food and Nutrition Board aren't enough to keep your body healthy and supplementation is recommended. Some research studies show that your body needs between 500 and 700 mg a day.

Zinc is a mineral mainly found in the muscles and bones. It helps the body perform many vital functions such as fighting infection, healing wounds, making new cells, facilitating the use of carbohydrates, fat and proteins in food, promoting strong growth and development especially in babies and young children through adolescence and helping with taste and smell.

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Zinc isn't stored long-term in the body so it's vital to eat foods that contain it or to supplement. Zinc helps vitamin D work in cells as well as strengthening bones. Oysters have a high concentration of zinc.

(\*If you are taking any medications that are intended to suppress your immune system consult your doctor before taking zinc.)

Boron is a trace mineral needed in small amounts by the body. Fruits, leafy vegetables and nuts contain boron. It works with vitamin D to help bones use the minerals they need such as calcium.

To reiterate, vitamin D3 plays a central role in a healthy mind and body which is why a balanced diet and supplementation is vital.

## SUPPLEMENT RECOMMENDATIONS

There are a few on the market that have a very healthy carrier oil called Medium Chain Triglycerides (MCT)

or olive oil. Look for this in your supplement. Avoid products that contain soy, cotton seed, rapeseed, and safflower oil.

Some doctors believe an adult dose of 2000 IU/day is adequate, others promote 5000 IU/day, some individuals may temporarily need as much as 10,000 for a short period of time to help boost their levels.

*Kristing Grayce McGary LAc., MAC., CFMP®, CSTcert, CLP is a highly sought-after health and lifestyle alchemist. She is renowned for reversing annoying and debilitating health conditions and helping people to live with clarity and vitality. Kristin Grayce is also a speaker and author of Ketogenic Cure; Heal Your Gut, Heal Your Life.*



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