

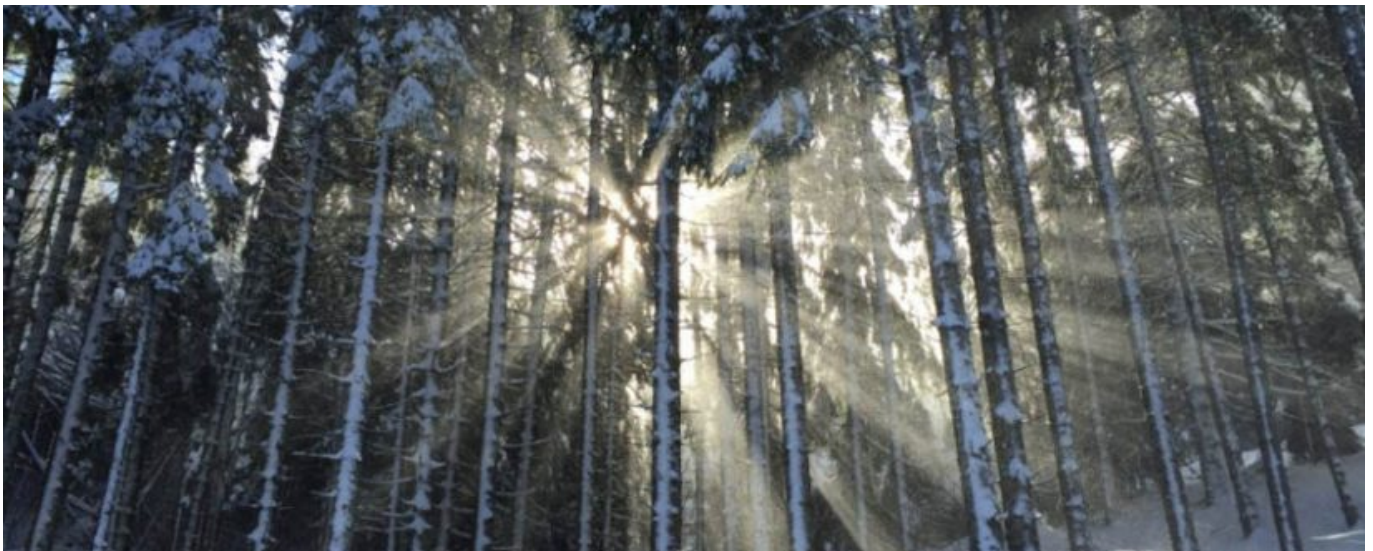


**KARYN SHANKS MD**

*Heart, Hope, Healing*

# Vitamin D: Boost Your Winter Mojo

BY KARYN SHANKS MD | OCTOBER 14, 2016



Many of us feel our energy and mood take a nose dive during the winter months. Yes, it's cold outside and Nature is all but asleep, and perhaps we should take her cue to light our internal fires with cozy blankets, warm socks, and afternoon naps. But when winter brings suffering, we can rise above the darkness by supplementing with vitamin D—the nutrient of light.

Optimal vitamin D levels in the body are absolutely essential for a healthy life. But most foods are not adequate to supply what we need, and most of us don't get enough direct sun exposure to help us manufacture enough internally, even in the summer months. As a result, most of us enter the winter months with vitamin D levels that are already well below what is considered safe and healthy.

Ten million Americans claim to suffer from some degree of seasonal depression and there are studies suggesting that supplementation with vitamin D can be helpful. Our natural vitamin D levels vary seasonally, with lowest levels occurring during the winter months and at the highest latitudes, because it is created when our skin is exposed to the sun's energy. In my own work with clients, supplementing with enough vitamin D to achieve an optimal blood level of 25-hydroxy vitamin D can transform a sluggish, sad winter into a much more vibrant

one.

Vitamin D, the great multi-tasker, also improved our immunity during the winter, reducing our risk of catching the common cold. One study showed that those with 25-hydroxy vitamin D levels less than 10 ng/mL had a 55 percent increased risk of recent cold, and those with levels in the 10-30 ng/mL range had a 27 percent increased risk. Vitamin D supplementation reduces the incidence of influenza A in school children.

As with all nutrients that support and sustain human health, there is no one-size-fits-all recommendation to meet the needs of everyone. The only way to know how much vitamin D you need to take is to have blood levels for 25-hydroxy vitamin D checked.

### **Natural Production of Vitamin D**

Our skin makes vitamin D when it is exposed to a pinkish dose of sunlight. How much vitamin D we make depends on our age, how much skin is uncovered, and our skin tone. Without sunblock and with arms and legs exposed, our skin will make 10,000 to 15,000 units of vitamin D in one pinkish sun exposure, on average. Sunblock with an SPF of more than 15 blocks 100% of vitamin D production in the skin.

In the northern latitudes, which includes Iowa, we may only get enough radiation from the sun for vitamin D production between May and October. The darker our skin, the more sun is needed to make enough vitamin D, so darker-skinned individuals run a higher risk of severe deficiency without supplementation.

### **Use Blood Levels of 25-Hydroxy Vitamin D to Determine Your Need**

**<15 ng/mL:** Severe Deficiency–increased risk of rickets.

**<20 ng/mL:** Severe Deficiency–75% greater risk of colon cancer.

**<30 ng/mL:** Deficient–increased risk of depression and seasonal affective disorder, bone loss, poor wound healing, muscle pain, joint pain, diabetes, schizophrenia, migraines, autoimmune diseases, allergies, preeclampsia, inflammation.

**30-50 ng/mL:** Suboptimal Levels–twice the risk of heart attack, increased incidence of high blood pressure, three times the risk of multiple sclerosis (MS).

**50-80 ng/mL:** Optimal Levels–50% reduction in risk for breast cancer, decreased risk of all solid cancers, slower cancer growth.

**100 ng/mL:** Excessive–increased risk of toxicity symptoms due to elevated blood calcium levels.

### **Vitamin D Supplementation Doses**

Dosing of vitamin D depends on our blood levels. We can approximate treatment doses of vitamin D needed to get blood levels into the optimal range of 50-80 ng/ml based on starting blood levels:

**<10 ng/mL:** 10,000 IU per day

**10-20 ng/mL:** 10,000 IU per day

**20-30 ng/mL:** 8,000 IU per day

**30-40 ng/mL:** 5,000 IU per day

**40-50 ng/mL:** 2,000 IU per day

### **Vitamin D Toxicity**

In spite of the widespread fear about getting too much vitamin D, it is actually very hard to do. People can take many thousands of units of vitamin D per day for long periods of time with no adverse effects. I routinely use daily doses in the 5,000-10,000 IU range in my medical practice, and have never seen a single case of vitamin D toxicity in my 25 years of practice.

Who should take caution about using vitamin D supplements? Those with sarcoidosis, tuberculosis, lymphoma, or kidney disease should work closely with their doctors as they are at much greater risk for toxicity from high blood calcium levels.

### **Rechecking Your Vitamin D Level**

I recommend that you have your 25-hydroxy vitamin D level rechecked four to six weeks after starting supplementation. If high dose therapy is being used or if you are at risk for vitamin D toxicity, other lab tests for calcium, ionized calcium, magnesium, and parathyroid hormone (PTH) can be done as well.

### **Dietary Sources of Vitamin D**

We can get vitamin D in our diets, though most of us don't get enough this way. I've had one patient in all my years of practice have a robust level without supplementation. She ate a can of sardines for lunch every single day.

Wild-caught salmon (3.5 oz): 600-1000 IU vs. Farmed salmon (3.5 oz): 100-250 IU vs. Canned salmon(3.5 oz): 300-600 IU; Sardines, canned (3.5 oz): 300 IU; Mackerel, canned (3.5 oz): 250 IU; Tuna, canned (3.5 oz): 230 IU; Cod liver oil (1 tsp): 400-1000 IU; Shiitake mushrooms, Fresh (3.5 oz): 100 IU; Shiitake mushrooms, sun-dried (3.5 oz): 1600 IU; Egg yolk: 20 IU.

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Karyn Shanks, MD, is a physician who lives and practices in Iowa City. Her work is inspired by the science of Functional Medicine, body-mind principles, and wisdom gleaned from the transformational journeys of thousands of clients over her twenty-five-year career. Her work honors each individual and the power of their stories, their inner wisdom, and innate healing potential. She believes that the bones of healing are in what we do for ourselves. She is the author of *Liftoff*, a manual of energy recovery and healing through essential self-care practices.

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