Which Came First: Lupus, or My Vitamin D Deficiency?

by BARBARA LEECH

Lupus and Vitamin D Deficiency

As a lupus warrior there is one thing I look forward to after a long dark winter, and that is sunshine. No, I cannot actually go out and absorb the sun's rays like someone without lupus, but I can enjoy the brightness from afar and feel the effects that moderate temperatures and longer hours of daylight have on my health and mood.

I really miss the sunshine on my skin and the warmth it brings (as well as the tan), but spending time in direct sunlight is something I must avoid unless I was to feel physically ill and break out in a rash.

But I am learning that this sunshine avoidance, which I do for my health, actually may negatively affect my lupus. The reason: vitamin D deficiency.

There has been a lot of recent studies focusing on the connection between vitamin D levels and the immune system and how it responds. The findings are interesting to me, having been in a lupus flare for quite a while now and being desperate to figure out some way to help myself out of it.

And having a vitamin D deficiency is something that is so simple to determine (a simple blood test) and treat (your doctor will recommend the proper dosage for your condition, taking in mind any other health issues you may have) with a daily supplement.

I recently learned from my rheumatologist that I am vitamin D deficient and that this can play a role in my disease activity. And I have to admit, I am someone who avoids getting direct sun exposure and who is horrible at remembering to take supplements. My lupus and thyroid medications are on a strict schedule, which is the only reason I remember to take them, but my supplements are not.

With my lupus brain fog I forget many things, so I tend to think of my supplements of B12, B6, fish oil, biotin and vitamin D at random moments, usually when I am out the door and cannot actually act on it.

After learning about the relationship to this sunshine vitamin and lupus, I think I need to find a way to remember my supplement.

Interest has been growing in the role of vitamin D in all sorts of diseases and medical conditions, including autoimmune diseases and chronic pain. And the studies my doctor pointed me to indicate I should be more diligent in taking my supplement.

Some studies have shown that more than 67 percent of patients with lupus also have a vitamin D deficiency, and that it has a direct role in immune system activity.

Another study from the University Of Oklahoma Health Sciences Center discovered a possible link between SLE and low vitamin D levels. Several other studies found that people with low levels of vitamin D are more prone to develop SLE than those with higher levels.

How You Get Vitamin D

Typically you get vitamin D by either absorbing it through the skin from sunshine or through a very select number of foods. Some foods have been fortified with vitamin D in recent years, like milk and orange juice. The only other way is by taking a vitamin D supplement daily.

Why Do We Need Vitamin D?

Vitamin D within the human body turns it into a hormone called calcitriol and affects many systems within the body. Here are just a few necessary things it does:

- Helps the body use calcium from dietary intake
- Promotes good muscle function
- Supports cellular growth and changes

Next page: why we need vitamin D, and what recent research has revealed about lupus and vitamin D.

Why Do We Need Vitamin D?

- Promotes a healthy circulatory and cardiovascular system (in the right dosage — experts believe that too large a dose it is actually dangerous to the cardiovascular system)
- Is thought to have antibacterial and anti-inflammatory properties
- It supports the immune system's T-cells and dendritic cells, which play an important role in the body's protective immunity

The Research

Numerous studies have found there is a correlation between vitamin D deficiency and lupus disease activity. One study from the University of Florence in Italy tested the vitamin D levels of 36 female Caucasians with lupus and compared the results to those of 109 patients without SLE.

The participants who had the lowest levels of vitamin D were the ones with lupus. Additionally, those who had the lowest levels of vitamin D were the ones with the most active disease. Their bone density was lower in the spine, too.

Why would this occur? Well, since many lupus patients are photosensitive (have a reaction to UV rays) avoidance of the sun is typical behavior. We either stay out of the sun, cover up, or wear high SPF sunscreen. Other reasons may include chronic use of steroids or hydroxychloroquine, which may affect the way the body absorbs the vitamin.

But, this study also indicates that there might be more to it. It discovered that the more vitamin D in the blood, the lower the lupus disease activity (fewer flares or symptoms) and those with low levels of the vitamin demonstrated increased disease activity (more flares and greater symptoms).

What We've Learned From Studies On Lupus and Vitamin D

- People with lupus were more likely to have low levels of vitamin D.
- Those who had lupus and but had high levels of vitamin D typically had fewer lupus symptoms.
- Lupus patients with low levels of vitamin D had an increase in risk factors for heart disease.
- There was an increased risk for high blood pressure and elevated lipids for lupus patients with a vitamin D deficiency.
- A few studies supported that giving vitamin D supplements to SLE patients reduced the chances and

incidents of lupus flares.

What Should I Do?

Don’t assume that you need more vitamin D, since extra high doses have negative side effects and can actually be dangerous. What you should do is ask your doctor to order blood work to test your vitamin D levels.

Ask your doctor to specifically give you the 25(OH)D blood test. This particular test is the only way to test whether or not you are getting enough vitamin D.

The Vitamin D Council offers good information and even offers an at-home test you can order online and test your levels yourself. These tests are pretty simple and involve you pricking your finger to get a small blood sample. You then send your test to a laboratory for results. One kit costs $50.

So what's a good level of vitamin D, and how do you achieve it?

The experts recommend that all people with lupus continue to use sunscreen and avoid sun exposure if they are photosensitive. The solution for those with lupus is taking a supplement.

Your doctor needs to determine the quantity of your supplement, and it could contain anywhere between 400-2000 international units (IU) per day depending on your deficiency, your other health conditions, risk factors and your age.

I have decided I will take my supplement at dinner, since a study at the Cleveland Clinic showed that if you take your vitamin D with the biggest meal each day, you can increase the level of vitamin D in the blood by an average of 50 percent. It also helps me remember it!