

Title: Vitamin D replacement in fibromyalgia patients does not improve pain.

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Abstract:

This handout is a basic education tool for patients regarding Vitamin D deficiency. It highlights the importance of Vitamin D in healthy bones, describes sources of Vitamin D and comments briefly on the current evidence regarding the link between Vitamin D deficiency and chronic pain.

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# Vitamin D: The Sunshine Vitamin

## Questions & Answers for Patients with Chronic Pain

### Why is Vitamin D important?

Vitamin D is needed in order for your body to use the calcium you eat. Without Vitamin D, your body cannot absorb calcium from the foods you eat, even if you eat many dairy products or even take calcium pills. If you do not get enough calcium from food, your body will take calcium out of your bones. This can cause weak bones that can lead to fractures, a condition called osteoporosis.

If Vitamin D levels in your body get very, very low, you may develop a condition called osteomalacia. (Children who do not get enough Vitamin D may have rickets.) Osteomalacia causes pain in your bones. Recently, some doctors have noticed that people with many types of chronic pain have low Vitamin D levels. They think that *moderately* low levels of Vitamin D might be linked to chronic pain even in people who do not have osteomalacia.

### Where does Vitamin D come from?

You can get Vitamin from foods or from the sun. Vitamin D is added to foods like milk and cereal. It is also found in eggs and fish. As people get older, it is harder for their body to get Vitamin D from food. The sun is an important source of Vitamin D for older people. You should try to spend 10-15 minutes in the sun 3 times each week. **Vitamin D cannot be absorbed if you are wearing sunscreen.** People who live in colder climates (like Minnesota!) have a harder time getting enough sun, especially in the winter.

You can also get Vitamin D from supplements. Many calcium pills also have Vitamin D. If you are taking a calcium pill, check the label to see if your pill has Vitamin D in it.

### How much Vitamin D do I need?

The FDA recommends that all adults get **400 IU of Vitamin D daily**, either from food or from the sun. Some doctors think 400 IU is not enough, especially for older people. Some doctors are recommending 800 to 1000 IU of Vitamin D daily for their patients.

### **How do I know if I am getting enough Vitamin D?**

Your doctor can do a blood test to find out how much Vitamin D your body has stored. You should know that not all doctors agree about how much Vitamin D is 'normal.' Most doctors agree that a Vitamin D level less than 25 ng/mL is too low. If your Vitamin D level is low, your doctor may recommend taking a high dose of Vitamin D (50,000 IU) one time per week.

### **Does low Vitamin D cause pain?**

The answer right now is: We don't know! Many studies are being done to try to answer this question. Many people who have chronic pain have low Vitamin D levels. But this does not mean that low Vitamin D levels cause pain. People who are in pain may spend less time in the sun than people who do not have pain, and that can cause a low Vitamin D level.

Some people who have low Vitamin D levels think that their pain is better after taking extra Vitamin D. But a recent study did not find a link between Vitamin D and pain. People with chronic pain and low Vitamin D were asked about their pain. Then they took extra Vitamin D for several weeks, until their Vitamin D level was above 30 ng/mL. They were asked about their pain again, and most said that their pain was just as bad as before the extra Vitamin D. In the next few years, doctors will continue to study the connection between Vitamin D and pain. Talk to your doctor about whether he or she thinks you need a test for Vitamin D deficiency.

### **Vitamin D & Your Bones**

Vitamin D is very important to keep your bones healthy, so everyone should try to get enough Vitamin D, even if they do not have pain. Talk with your doctor about how much Vitamin D you need and how you can make sure you are getting enough Vitamin D every day. Keeping your bones healthy will help you prevent painful bone fractures in the future. Exercise is also important for bone health, so a short walk outside each day can help your bones stay healthy in two ways!