



## Is Vitamin D Deficiency an Epidemic?

*Dr. Charles Shaffer*

If you've been a patient at the Weigh Station you know we ask about vitamin D levels. Some individuals do not understand why it's so important and don't realize they're deficient until it's too late. Symptoms are often subtle and are confused with "normal aging". Nonetheless, these signs and symptoms should be checked out and evaluated. Fatigue or constant tiredness can have many causes, but vitamin D is often among them. Patients who present with low vitamin levels generally experience low energy levels. Depressive moods are also a common side effect of deficiency, especially in older adults. Additionally, the feeling of irritability is usually present. Vitamin D supports brain functions, such as mood and cognition, and plays a crucial role in maintaining healthy bones by supporting calcium absorption and bone metabolism. The majority of women who experience bone loss believe they need more calcium.

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Very often they are vitamin D deficient. Maintaining a strong immune system is extremely important. The immune system directly interacts with cells responsible for warding off pathogens, so if you find yourself sick often please make an appointment with your primary care physician to have your vitamin levels checked.

Muscle pain and weakness are other tell-tale signs of vitamin D deficiency. This is because there are not enough vitamin receptors in your nerve endings and muscle discomfort will begin. The human body produces vitamin D in response to ultraviolet rays. While our bodies are designed to spend time outdoors, most people spend their time under fluorescent lighting. It is important to get up, stay active, and bask in the sun's rays.

Vitamin D deficiency can go undetected in its early stages. It is vital to catch this before it progresses as deficiency plays an important role in supporting overall longevity, energy, mental clarity, and optimal health.

When it comes to restoring your vitamin levels to a healthy balance, there are two options: direct sun exposure or daily supplements. For many, daily supplements are necessary and helpful. Recommendations for supplements are 1,000 to 2,000 IUs of vitamin D per day, which is D3.

The natural form of D3 is simply vitamin D, also known as cholecalciferol. Recent research has shown it to consistently and effectively raise blood levels and significantly increase health benefits. Vitamin D2, which is synthetic, may be tempting to take since it is less expensive but be warned! Manufacturers look for ways to cut corners and costs, there is a reason why it's less expensive! The current recommended dosage the federal government has laid out is 600 IU, which many experts have agreed is woefully inadequate. A healthy adult with a deficiency should supplement 5000 IUs of D3 daily, a whopping eight times the recommended amount. However, many agree this is correct and will achieve homeostasis.

Did you know Vitamin D can aid in weight loss? It can also help maintain your blood pressure, improve your quality of sleep, and enhance medications (such as thyroid). Last but not least, vitamin D is a group of fat-soluble secosteroids responsible for increasing intestinal absorption of calcium, magnesium, phosphate, and other biological effects.

A few other pointers: there are only few foods, such as the flesh of fatty fish, that naturally contain significant amounts of vitamin D. Fortified cow's milk and plant-based milk substitutes contain some vitamin D, but not enough. Mushrooms exposed to ultraviolet light contribute useful amounts of vitamin D.

Vitamin D is in fact not a vitamin but considered to be a hormone. Once activated it results in the form of calcitriol, which then produces effects in the nuclear receptors in multiple locations.

It is impossible to list all of the benefits of this vitamin. We urge you to regularly check your levels and either be active outdoors or take a supplement.

Blessings,  
Chuck Shaffer MD

# The Recipe of the Month

## *Broccoli and Cheddar Cheese Soup*

*\*4 servings*

### *Ingredients*

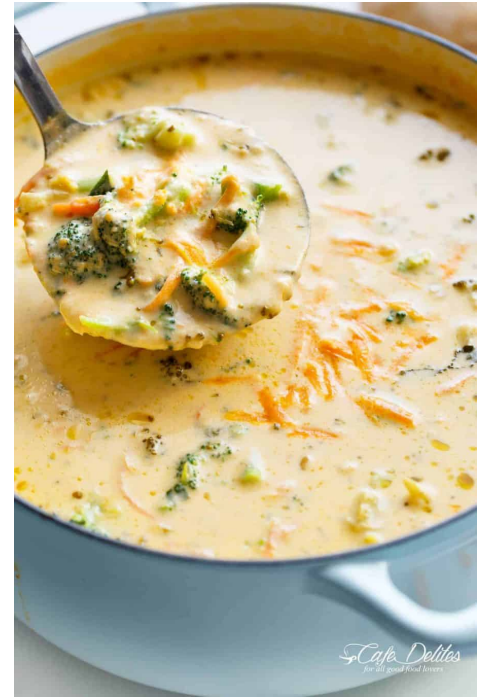
- 1 tbsp olive oil
- 2 stalks celery, chopped
- 2 cloves garlic, minced
- 1 onion, chopped
- 1 head of cauliflower
- 1 bunch of broccoli, thinly sliced
- 1/4 C heavy whipping cream
- 1/4 tsp ground nutmeg
- 6 ounces 2% cheddar cheese

### *Directions*

Chop cauliflower heads and steam, then process in food processor or blender, set aside. Heat 1 tbsp olive oil in a large saucepan over medium heat.

Add the celery, garlic, onion, cauliflower puree, broccoli stalks, salt and pepper and cook covered while stirring occasionally, until just tender, 5 - 6 minutes. Meanwhile, cut the remaining broccoli into small florets. Add the florets and 3 cups water to the vegetables, cover and bring to a boil.

Once boiling, the broccoli should be just tender, if not, simmer 1 - 2 minutes more. Remove from heat and use hand blender to puree veggies. You may want to do this in batches. Add the heavy cream and nutmeg and simmer to heat through, about 2 minutes. Add the cheese and stir until melted.



**Delicious,  
Hearty, Yum.**

