

Script – Print – The link between vitamin D supplements and high blood pressure in older people

If you've read anything on the importance of vitamin D, you know that its many benefits range from making your teeth and bones strong, to supporting your muscles, nerves and immune system.

And now new [research](#) published in the Journal of the Endocrine Society has found that vitamin D supplements may lower blood pressure in older adults with obesity.

The study followed 221 older people who are considered obese taking vitamin D supplements at either 600 international units a day or 3,750 units a day, for an entire year. They found that the supplements decreased their blood pressure and that the higher doses of vitamin D did not provide additional health benefits.

It's difficult to draw a conclusion from the study without knowing certain variables, such as where these people live and what their diet consists of. But there's little doubt that vitamin D can affect blood pressure in several ways, according to Dipti Sabharwal, DO, a family practice physician with OSF HealthCare.

"The main role of vitamin D is it helps with calcium homeostasis. So that's maintaining your calcium levels in the body," she says. "Calcium has many roles. It helps contract your blood vessels, and then it helps relax them as well. If we have normal amounts of vitamin D, then the calcium is working well, so the muscles can continue working normally."

Dr. Sabharwal adds that vitamin D also helps with the renin-angiotensin-aldosterone system (RAAS), a hormone system that helps in regulating blood pressure.

Past research has found that vitamin D deficiency can cause an increased risk of falls in older adults, bone fractures, a risk of cardiovascular disease, some autoimmune diseases including Type 1 diabetes and even depression.

"So very commonly, we use it for patients who have seasonal affective disorder or depression, especially during the winter months," says Dr. Sabharwal. "We give them photo therapy or light therapy to help with the vitamin D levels in the body, and that has also shown to help with depression."

The recommended daily amount of vitamin D varies, but Dr. Sabharwal says healthy adults should get between 600-800 international units per day. For people with a deficiency or experiencing osteoporosis, a doctor might recommend a higher dose. But too much isn't always a good thing.

"If you have a lot of calcium, it can increase the risk of kidney stones. It can cause constipation and belly pain," says Dr. Sabharwal. "Those are some common side effects."

Dr. Sabharwal says the first step is getting a blood test to find out if you are low in vitamin D and following your doctor's advice regarding dosage, especially if you are older or obese.

Additionally, any supplements should be used in combination with a healthy diet, exercise and weight management. Foods rich in vitamin D include fatty fish, fortified dairy products and eggs. Sun exposure is another good way to absorb vitamin D, but that's not always possible in the Midwest with its unpredictable winters.

One thing to keep in mind is that vitamin D supplements alone are not going to help lower blood pressure," says Dr. Sabharwal. "It's really exercise and diet. Those are the two things that someone can do on their own to help lower blood pressure naturally."

The bottom line, she adds, it's better to take control of your blood pressure now before it becomes a problem down the road.