I have discussed the importance of taking vitamin D in previous columns. A recent study has encouraged me to revisit this topic and re-emphasize vitamin D supplementation.

Vitamin D is a vitamin that is used by the body in many ways from bone strength to blood sugar control to immune function. Human skin produces vitamin D when exposed to sunshine, so supplementation of this substance has not been considered that important. The problem is that in the winter, most of us in colder climates cover up the skin and stay inside more often, so we don't get a lot of sunshine.

Susan Sullivan, a researcher at the of The University of Maine decided to conduct a study to actually measure vitamin D levels in study participants in this very northern state. They found that in the winter, many people do not produce any vitamin D at all. This can predispose individuals to a wide variety of health problems.

The current recommendation for vitamin D supplementation is 200 IU for people up to 50 years of age, 400 IU for people aged 51 to 70, and 600 IU for anyone over 70. In this study it was found that it took 800 IU in women in their 20s to achieve adequate blood levels of vitamin D. That is 4 times the current recommended amount.

To complicate this issue, not all forms of vitamin D have an equal effect in the body. There are two primary forms: Vitamin D2 or ergocalciferol and Vitamin D3 or cholecalciferol. It is believed that D3 is the form that is most usable by the body, so if you are taking the recommended levels of D2 you still might be deficient.

Another complication is that you can take too much vitamin D. The effects of vitamin D overdose are abnormal calcium deposits in the body tissues, kidney stones, and a variety of nerve and muscle symptoms.

While it can be difficult to know exactly how much vitamin D you should supplement without getting blood tests, it is very important that most people supplement and probably supplement more than the current recommended amount. Not doing so can make you more susceptible to colds and flu, cancer, diabetes, osteoporosis, autoimmune diseases and cardiovascular disease.