

Health and Wellness

Provided by Bethany Care Ministry Outreach Program

Vitamin D: *An Introduction*

“Vitamin” D is probably a misnomer. It actually works in the body more like a hormone than a vitamin. It **does not** come from food unless it has been added, except in the case of fatty fish and only then in small amounts. The primary source has to be either sunshine or supplements. It is not a cofactor in the enzyme process, which is true of other vitamins. Its fundamental action is to turn on genes. Every cell type in the body has some stem cells embedded in them. It takes sufficient Vitamin D for that cell type to mature into its intended function, which makes its function more like a hormone than a vitamin. So, what does that mean to us?

First, we should understand a little history about Vitamin D. In the mid 19th century, rickets was a common illness in Europe and the United States as cities became more congested and polluted. In 1900 as many as 80% of the children living in Boston had rickets. Sunshine was known to help cure the disease and children were taken up on top of tall buildings or out on boats in the harbor to be exposed to sunshine, but it was not until the 1930's that the chemical compound of Vitamin D and its link to the disease was discovered. Then Vitamin D began to be added to many foods and was also in cod liver oil, a common “cure-all” for many years. At one time Vitamin D was even added to beer. 400 U of Vitamin D was found to prevent rickets and has remained the recommended daily dose for over 80 years.

How do we make Vitamin D? Our bodies make it from sunshine only. There are also many factors that influence our ability to do so. These include where we live, how much time we spend indoors, skin pigment, age, obesity, how much outdoor activity we do, use of sun block, use of other “cover-ups” due to sensitive skin, and breastfeeding.

Those of us who live in Wisconsin truly have no other sure way to get enough Vitamin D without supplementation. It would take 20 glasses of supplemented milk or orange juice to get the amount that we now believe is necessary. The recommended amount is now 2000 U per day for the average adult, with some elderly and obese people needing up to 5000 U per day. It is best to check with your doctor for a recommendation for you. Other health conditions can affect those needs as well, including kidney disease and being on dialysis. A blood test can be done to determine if you are Vitamin D deficient.

What happens if your Vitamin D level is low? It affects your immune system and your ability to fight infection and deficiencies over time are thought to be involved with many other diseases such as cancer, heart disease, multiple sclerosis, high blood pressure, depression, schizophrenia, and autism. Along with calcium deficiency, vitamin D deficiency also contributes to osteoporosis.

So, with the long dark days of winter coming up, it might be a good idea to check with your doctor and see if you need to supplement your Vitamin D intake. It just might make for a healthier New Year.

Submitted by Julia Buehler, RN, Bethany Community Care Ministry

Source: article by Dr. John Whitcomb provided by Sure-Step, a fall prevention program developed by Dr. Jane Mahoney MD and Terry Shea PT of the UW School of Medicine in Madison. Other resources on the topic are available by request.

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