The Importance of Vitamin D

Vitamin D has become a popular topic of discussion in both the general and medical community. We have known for years that Vitamin D, along with calcium, is essential for good bone health. However, some recent animal studies have suggested that Vitamin D may play a role in heart disease, diabetes mellitus, multiple sclerosis, colon cancer and asthma in children. While there is still much to be learned about Vitamin D there is much we do know about its importance.

Unlike many other vitamins, there are few foods that are naturally rich in Vitamin D. Fortunately, the human body, specifically the kidney, is able to produce Vitamin D when exposed to sufficient sunlight. Fatty fish such as tuna, salmon and mackerel are rich in Vitamin D, and milk, some cereal, yogurt, and orange juice are fortified with Vitamin D.

Your Vitamin D level can be checked through a simple blood test. Unfortunately, there is no consensus among the medical community about what the optimal Vitamin D level should be, but most would agree a level of 25-30ng/ml is adequate. Recommendations for daily Vitamin D intake are age based, and in healthy people are as follows:

- Under 1 year of age - 400 IU (international units)
- 1 -> 70 years of age - 600 IU
- 70+ years of age - 800 IU

We have known for years that Vitamin D deficiency affects the body’s ability to make strong healthy bones. In the 1930’s, Vitamin D was added to milk to decrease the risk of developing rickets, a disease characterized by soft bones and skeletal deformities such as bowed legs. Today, osteomalacia (soft bones) and osteoporosis are associated with Vitamin D deficiency and can lead to an increased risk of fractures of the spine, hip and wrist. While most think of these of issues in elderly women, there are many people at risk.

Factors that contribute to Vitamin D deficiency include inadequate intake, malabsorption, inadequate exposure to sunlight, and the inability to make Vitamin D naturally. Human milk is a very poor source of Vitamin D so supplementation is recommended for infants who are exclusively breast fed. Illnesses such as cystic fibrosis and Crohn’s disease as well as a history of gastric bypass surgery can decrease the body’s ability to absorb Vitamin D. Obesity, which has become an epidemic in the United States, is a risk factor for Vitamin D deficiency. Vitamin D is a fat soluble vitamin, and fat cells will store it making it unavailable for the body to use. Other factors that contribute to Vitamin D deficiency include kidney disease, the use of sunscreen, air pollution, cloud cover, dark pigmented skin and being institutionalized.

Before you stock up on Vitamin D you need to be aware that you can get too much of a good thing. Excessive Vitamin D intake is associated with decreased appetite, nausea, vomiting, muscle aches, and heart arrhythmias. In addition, excessive Vitamin D can
result in increased calcium levels in the body which can cause damage to the heart, blood vessels, and kidneys.

Vitamin D is essential for bone health and while more research is needed may play a role in many other health issues. The best way to get Vitamin D is naturally, either from your diet or sunlight exposure. If you believe you may be at risk for Vitamin D deficiency talk to your doctor today.