

# Vitamin D — It's Even More Important than You Think Alan Tyson PT, ATC

We all know that getting adequate amounts of vitamin D is important to our health, but only recently have we realized just how important it really is for all of us especially our developing athletes. I wanted to spend a little time just giving some basic information and then in the next article talk about how this really helps performance.

Vitamin D forms in your body with skin exposure to direct sunlight. In addition, you can obtain vitamin D from fortified foods such as cereal and dairy products. Vitamin D plays a key role in the absorption of calcium. When you don't have adequate Vitamin D stores, your body cannot absorb enough calcium from your diet to meet its needs. This results in calcium depletion and your body then works to take the calcium from your bones to maintain normal blood calcium levels. This depletion can cause muscle and bone pain and well as muscle weakness. Over time this leads to osteoporosis (thinning of bones) which is what our grandmothers have (not good for young people or athletes)

Again, the most common cause of vitamin D deficiency is lack of sunlight. Many Americans are afraid of sun-light due to the fear of skin cancer so they may go outside but cover up with sunscreen. This is the reason many scientists feel Vitamin D deficiency is on the rise. If you are an athlete, this can and must be prevented if you want to achieve your optimal performance level.

#### Research

A prominent sign of vitamin D deficiency in adults and children is muscle pain and weakness. Out of 150 individuals presenting with nonspecific musculoskeletal pain, low levels of vitamin D are present in about 93 percent, reports a study by Plotnikoff and Quigley in "Mayo Clinic Proceedings." You can help prevent vitamin D deficiency by consuming the daily-recommended intake. Individuals from age 1 to 70 require 600 IU per day while those over 70 require 800IU per day, according to the Linus Pauling Institute. Please consult your physician before starting on a supplement to find the right amount for your specific needs.

### **Musculoskeletal Pain**

Muscle pain and weakness are among the most common signs of a vitamin D deficiency. Of 150 patients who visited an inner-city clinic in Minneapolis between 2000 and 2002 with a complaint of musculoskeletal pain, 93 percent were deficient in vitamin D. The December 2009 "Harvard Heart Letter" reported that in a study of 128 people who complained of muscle pain associated with taking statin drugs to lower cholesterol, two-

thirds had low levels of vitamin D. When these people began taking vitamin D, 90 percent of them reported the muscle pain had resolved.

## **Fatigue**

Few studies have examined the role of vitamin D and fatigue. A 2010 Norwegian study of 572 patients who complained of musculoskeletal pain, fatigue and headache found low levels of vitamin D in 58 percent of these patients. Whether the fatigue was a symptom of the vitamin D deficiency or due to the pain was undetermined.

### **Vitamin D Requirements**

The U.S. Office of Dietary Supplements recommends adults get 600 IU of vitamin D daily to age 70, at which time their need increases to 800 IU daily. This may be slightly low as we learn more about all that Vitamin D does for our body but consult your physician to evaluate your levels. If you suffer from a vitamin D deficiency, your doctor may advise you to increase your intake of vitamin D above this level. Fortified milk, fatty fish and egg yolks contain some vitamin D. Your body also makes its own vitamin D from sunlight. Depending on where you live and the time of year, many physicians are recommending 15 minutes of sun light a day which should provide sufficient vitamin D for most people. If you are concerned about sun damage then place sunscreen on your face then after 15 minutes in sun apply to the rest of your body.

If you don't know your Vitamin D levels give your physician a call today to get our blood work scheduled. Now go outside and get some sun! A little bit will help a lot!

### \*\*Remember to

- 1. Always plan ahead for what you are going to eat
- 2. Obtain adequate amounts of protein
- 3. Work on Flexibility
- 4. Supplement your diet with a fish oil and multi-vitamin

Let me know if I can help. Email me at <u>architechsports@gmail.com</u> 704-900-8960

God Bless,

**Alan Tyson** 

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