

Vitamin D deficiency historically leads to rickets which was common in the 18th century, extinguished in the 19th century and now on the rise in our children in the new millennium. Why?

Vitamin D is not really a vitamin but instead a hormone that requires the active properties of the sun to react to receptor cells in our skin to begin its formulation in our bodies. Therefore, we all need our skin to be exposed to the full spectrum of UV light instead of being blocked by fancy clothing or high SPF OTC sunscreens. Once the Ultraviolet light has triggered the skin receptors, the biochemical pathway is initiated. Vitamin D has begun its creation! In order to continue, Vitamin D needs a healthy digestive tract and gallbladder function. It is absorbed through the small intestine in the presence of bile where it is transported through the lymphatic system. The final step requires healthy kidney function to create the active form our body needs. From there it can be stored in the liver, bone, brain, and back to our skin.

### **Why is this important?**

Hormones, as a rule, perform many diverse functions in our body. Vitamin D is no different. Vitamin D is needed to help maintain healthy strong bones, play an important role in our immune health, mental health, neurological health, help ward off cancer, and keep our skin healthy.

### **So why not just stay out of the sun, and supplement with Vitamin D?**

A small percentage of us do not recognize the prescription or synthetic form of Vitamin D. Meaning, you can take a fairly high dose with no changes in pre and post blood serum levels. Also, we do not yet know if the prescription form of Vitamin D has all the active health, healing properties of *au naturel*. Thirdly, Vitamin D can reach toxic levels and therefore close monitoring; I suggest twice per year, blood serum levels should be obtained (Summer and Winter)

### **Media hype or facts**

The media has done an excellent job of convincing us that sunscreen will perform most of the above protective roles. Is sunscreen really healthy? What does the latest research tell us? [www.ewg.org](http://www.ewg.org) boldly claims, there is no evidence that sunscreens prevent most skin cancers. In fact, melanoma, a deadly form of skin cancer, has TRIPLED over the past 35 years, since the advent and popularity of high SPFs. Sunscreen product sales have increased 4.2 percent per year from 2007 to 2012, generating 1 billion dollars annually. Yet, products sold in the USA are allowed to be labeled broad spectrum despite containing only 3 of the UV filters, where the European products actually do contain a broader spectrum of protection. UVA rays for example do not cause burns but penetrate much deeper into the layers of the skin where it can do its unseen damage. It is much harder to block by our FDA approved ingredients.

## **What should I Do?**

There are a few very simple steps you can take.

### **1. Avoid sunscreen with added toxic chemicals.**

There are healthy vs. unhealthy sunscreen options out there, which ones are which? For a more thorough list, see ewg.com. Devita, a product we carried in our office, made locally, and also maybe available at Island Naturals, made the top of the list. We also carry a sunscreen made by third generation herbalists which is protective and nurturing to the skin.

### **2. Moderation**

20 minutes for very fair skinned individuals per day is all you need to obtain a healthy dose of Vitamin D. With the max amount being 45 minutes for African Americans. Most of us tend to overdo it, thinking the sunscreen will protect us. As a result, excessive radiation and sunburns occur, which leads to cancer years later.

### **3. Natural Vitamin D supplementation**

Is made from foods instead of in a laboratory. It works amazingly well, with many of my patients jumping from a vitamin D level in the 20's to one in the 80's. Supplementation maybe warranted in a few situations;

**Winter Months:** if you work the typical 8-5 pm desk job schedule, it is not uncommon to have no sun exposure as you drive to and from before the sun rises and leave work after the sun sets.

**Residence:** If you live in Alaska or Norway for example during the winter months, you will probably need supplementation.

No response to prescription or over the counter supplementation. The goal is to maintain healthy levels, changed in recent months, to between 50-80. Numbers below 50 are not protective against depression, cancers, and MS. Numbers above 100 have been reported to be toxic.

### **4. Consume healthy foods**

Skin health is really a reflection of internal health. Skin health can be increased by consumption of;

#### **1) Fruits and Vegetables**

in all the colors of the rainbow! They contain carotenoids, Vitamin A, C, and E as well as trace minerals. All of these ingredients protect your skin from the negative effects of free radicals. Think of free radicals as damaging agents to cells, zillions of which stuck loosely together and stacked in layers form the protective barrier we call our skin. Aim for consuming 6 different vegetables a day.

#### **2) Vitamin E**

A natural sun blocker, protecting your skin from UV light and preventing free radical damage. It is a must! 800 IU per day is a healthy dose. The highest Vitamin E containing foods are found in seeds and nuts. Sunflower seeds top the list with almonds, pine nuts, and peanuts rounding out the top 5. Swiss chard, spinach, and turnip greens are the highest vegetable source.

#### **3) Increased consumption of Vitamin D containing foods.**

Vitamin D is primarily found in fish and fish oils. For example, cod liver oil contains 1200 IU per 100 grams in comparison to milk which contains only 100 IUs in a 1 cup serving!

For more information on what other vitamins are needed for overall health or to help you be healthier than you currently are, call the office to make an appointment (808)498-4018.  
Knowledge is power.