Vitamin D

The Vitamin D and Sunshine Dilemma

By Thomas C. Balshi, MD

There has been recent controversy among dermatologists and other health care providers about whether UV sun light is a necessary and beneficial source of vitamin D.

Vitamin D is fundamental to bone development, maintenance, and prevention osteoporosis. It has been reported to help prevent hypertension, heart disease, diabetes, depression, chronic fatigue, rheumatoid arthritis, multiple sclerosis as well as cancers of the colon, breast and prostate. It also appears to increase survival of those diagnosed with malignant melanoma.

According to US standards insufficiency occurs when our blood level of vitamin D is less than 30ng/ml. Some physicians practice want the level to be closer to 50ng/ml to ensure patients obtain the maximum protective effect.

A simple blood test for "25(OH) Vit D" can be ordered by your physician and will help judge if there is a need to increase it.

Vitamin D bears the name of the sun because it is the only vitamin that is made by the body. Our rates of vitamin D deficiency have increased over the years as we spend less time outdoors, and by wearing sunscreen, which block UV A and B rays.

Many physicians are telling patients to soak up some sunlight. "It's good for you." But for the thousands of vitamin D deficient people in the U.S., can obtain this so-called "vitamin sunshine" actually endure get their health?

Vitamin D is fundamental to bone development, maintenance, and prevention osteoporosis. It has been reported to help prevent hypertension, heart disease, diabetes, depression, chronic fatigue, rheumatoid arthritis, multiple sclerosis as well as cancers of the colon, breast and prostate. It also appears to increase survival of those diagnosed with malignant melanoma.

According to US standards insufficiency occurs when our blood level of vitamin D is less than 30ng/ml. Some physicians practice want the level to be closer to 50ng/ml to ensure patients obtain the maximum protective effect.

A simple blood test for "25(OH) Vit D" can be ordered by your physician and will help judge if there is a need to increase it.

We obtain vitamin D from sunlight but only UV-B (ultraviolet B) exposure, our diet and supplements. Sunshine advocated believe sunlight is the most cost-effective and reliable method of preventing vitamin D deficiency. However, UV radiation is an officially recognized carcinogenic agent. There has been "a new epidemic" - skin cancers with more than 1.3 million diagnosed yearly in the U.S. An important source of vitamin D is our diet.

Foods rich in vitamin D include oily fish (salmon), seafood, trout, and cod liver oil as well as fortified orange juice, milk, yogurt, and cereals.

Supplementation is an alternative way to get the important vitamin D. This current recommended daily dose of vitamin D is 300 IU for people up to age 50, 400 IU for people aged 51 to 70, and 600 IU for people over age 70. Even higher amounts may be necessary for vitamin D deficient patients and can be managed with the help of your doctor.

Obtaining vitamin D from sunlight is not as simple as it may seem. Season, latitude, time of day, skin pigmentation, age, sunscreen use, and glass all influence the skin production of vitamin D. The proposed "sensible sun exposure" in the infectious discoloration of 10% of our skin (face, neck, arms, and legs), without sunscreen, three times a week, for roughly 10 minutes daily during the mid-day hours. While UV A is present throughout the entire day, the amount of UV B present to do the angle of the sun's rays. UV B is most plentiful during mid-day hours, so sun exposure before 10 am or after 2 pm can cause sunburn and photo damage from UV-A before it will supply adequate to Vitamin D from UV-B. This finding may surprise you, as did it the researchers. It means that unprotected tanning should occur around noon, the time you have been told to avoid to prevent skin cancer. Parasolically, this limited and controlled amount of sun exposure will yield the greatest amount of vitamin D and may actually help prevent melanoma skin cancer.

The current recommended sun exposure can provide 10,000 IU of vitamin D per day. Beyond 10 min., further UV exposure will lead to progressive DNA damage but will not produce more vitamin D. In fact, the enzyme which converts vitamin D into its active form becomes overwhelmed and the reverse effect, breaking down vitamin D into inactive compounds occurs. In addition skin is further damaged by UV radiation and the photo destructive effects, such as skin deactivation, leathery skin, age spots, and wrinkles develop. Prolonged sun exposure also leads to immune system suppression, cataracts and skin cancer.

Concerns about vitamin D should not lead people to foreign sun screens, as most people apply for less than the FDA recommended quantity, and some UV light will penetrate and become absorbed by the skin. Concerns however should prompt a conversation with a physician about how to ensure adequate and safe vitamin D intake while guarding against skin cancer. It is best to obtain vitamin D safely by non-sunlight methods such as vitamin D fortified foods and/or vitamin supplements rather than from the sun and tanning devices. If sunshine is the route you take to obtain your vitamin D, the proper exposure during the right time of the day would seem to be the most sensible way.