## Vitamin D



## The Vitamin D and Sunshine Dilemma

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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.

There have been concerns about vitamin D status in the U.S. because of increasing reports of deficiencies, with an estimated 10 million Americans over age 50 diagnosed with osteoporosis. Many physicians are telling patients to soak up a little sunshine, "It's good for you". But for the thousands of vitamin D-deficient people in the U.S., can obtaining this so-called "sunshine vitamin" actually endanger their health?

Vitamin D is fundamental to bone development, maintenance, and prevention of 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 then 30ng/ml. Some physician practices want the level to be closer to 60ng/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 advocates believe sunlight is the most cost-effective and efficient method of preventing vitamin D deficiency. However, UV radiation is an officially recognized environmental carcinogen. There has been "a near epidemic" of 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, mackerel, sardines) and cod liver oil as well as fortified orange juice and milk, yogurts and cereals.

Supplementation is an alternative way to get the important vitamin D. The current recommended daily dose of vitamin D is 200 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, aging, sunscreen use, and glass all influence the skin production of vitamin D. The proposed "sensible sun exposure" is the intentional exposure of 30% of our skin (face, neck, arms and legs), without sunscreen, three times a week, for roughly 10 minutes/day during the noontime sun. While UV-A is present throughout the entire day, the amount of UV-B present has to do with the angle of the sun's rays. UV-B is most plentiful during midday 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 vitamin D from UV-B. This finding may surprise you, as it did the researchers. It means that unprotected sunning should occur around noon, the time you have been told to avoid to prevent skin cancer. Paradoxically, 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 suggested 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 assaulted by UV radiation and the photodestructive effects, such as skin discoloration, 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 forego sun screen, as most people apply far 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 in-

take while guarding against skin cancer. It is best to obtain vitamin D safely from non-carcinogenic 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.

Dr. Balshi is double board certified by the American Board of Internal Medicine and the American Board of Physician Specialties for Dermatology. His educational background includes extensive training in both medical and surgical disciplines. Because of his expertise in internal medicine, Dr. Balshi approaches all cosmetic surgery from the standpoint of whole body wellness. His many fortes include esthetic skin cancer removal and cosmetic-enhancing dermatologic procedures such as chemical peels, laser skin rejuvenation, Botox, Dysport, Juvederm, Restylane and Perlane treatments and painless authentic tumescent liposuction. Dr. Balshi is the founder and medical director of the Dermatology and Liposculpture Center located at 2605 W. Atlantic Ave., C-101, Delray Beach, FL. He can be reached at 561-272-6000. Visit his website at www.southFLderm.com.









36 | December 2009 | Atlantic Ave | www.AtlanticAveMagazine.com