



## **Position Statement: vitamin D The Skin Cancer Foundation**

Ultraviolet (UV) radiation from the sun and tanning beds is a proven human carcinogen and is responsible for DNA damage that can result in skin cancer as well as depressed immunity and photoaging. About 90 percent of nonmelanoma skin cancers are associated with UV from the sun, and many cases of melanoma have been attributed to UV radiation.

At the same time, ultraviolet B (UVB) is the portion of sunlight that stimulates human skin to produce vitamin D. Inadequate levels of vitamin D have been associated with immune-related disease such as type I diabetes, hypertension and rheumatoid arthritis as well as certain cancers. However, it should be emphasized that no causal relationship has been established between vitamin D levels and these diseases.

There are three sources of vitamin D: exposure to UVB radiation, certain foods, and vitamin D supplements. The limited benefits of exposure to UVB radiation cannot be separated from the harmful effects. Therefore, The Skin Cancer Foundation's position is that the safest and recommended way to obtain adequate vitamin D is through a combination of diet and vitamin D supplements. Vitamin D can be obtained from oily fish (salmon, mackerel, sardines) and cod liver oil as well as from fortified orange juice and milk (both with 100 IU per 8oz), yogurts, and some cereals such as Kashi, Grape Nuts and Total (100 IU per serving). Supplements are readily available and inexpensive.

The Institute of Medicine has formed a committee to assess relevant data and update the Daily Recommended Intake for vitamin D by May 2010. In the meantime, based on current data, The Skin Cancer Foundation's Photobiology Committee is revising their recommendation for adults **who have limited sun exposure or those who practice photoprotection** to 1,000 IU vitamin D daily which can be obtained from a combination of dietary sources and a vitamin D supplement. For children under the age of 18, including infants, the American Academy of Pediatrics recommends 400 IU of vitamin D per day.

### **Vitamin D and Skin Cancer**

Practicing a comprehensive sun protection regimen to avoid the risk of skin cancer is essential. The Skin Cancer Foundation's prevention guidelines include: seeking the shade between 10 AM and 4 PM, daily use of an SPF 15 or higher sunscreen and wearing sun-protective clothing including wide brimmed hats and UV-protective sunglasses. For the full guidelines, visit [www.skincancer.org](http://www.skincancer.org).



## **FREQUENTLY ASKED QUESTIONS**

### **How do I know how much vitamin D I should be taking?**

The Skin Cancer Foundation recommends that you obtain 1000 IU a day through a combination of food and supplements. You should discuss your adequate vitamin D supplement intake with your physician. A blood test that measures one's vitamin D level (assessed as 25-OH Vitamin D) is widely available.

### **Can too much vitamin D (via supplements) cause problems?**

Vitamin D can be toxic in high doses. The U.S. Food and Nutrition Board states that an intake of 2000 IU per day is the upper limit for safety. If you are concerned that you might be getting too much vitamin D consult with your doctor. A blood test that measures one's vitamin D level (assessed as 25-OH Vitamin D) is widely available.

### **If I use sunscreen, will it make me deficient in vitamin D?**

Proper sunscreen use and other photoprotection practices may decrease vitamin D synthesis. However, there are significant proven benefits from protecting your skin against the harmful effects of UVB radiation. That is why the safest and recommended way to obtain adequate vitamin D is through a combination of diet and vitamin D supplements.

### **Isn't a little sun every day OK?**

Damage to your skin from the sun can happen in just a few minutes. While very limited exposure to UVB (how much varies based on skin type, season, time of day and geographical location) will synthesize vitamin D, it is easier and safer to obtain the adequate amount of vitamin D through food and supplements. Too much exposure to UVB actually reduces vitamin D, breaking it down to inactive compounds.

### **Don't tanning beds help with vitamin D?**

That's what they would like you to believe. While most tanning beds mainly emit ultraviolet A (UVA), radiation some do emit low levels of UVB radiation which does synthesize vitamin D. However, UV radiation from the sun and tanning beds is a proven human carcinogen and is responsible for DNA damage that can result in skin cancer as well as depressed immunity and photoaging. The limited benefits of exposure to UVB radiation cannot be separated from the harmful effects. Therefore, The Skin Cancer Foundation's position is that the safest and recommended way to obtain adequate vitamin D is through a combination of diet and vitamin D supplements.