

Common Questions About Vitamin D, Sunlight, and Your Skin

What is Vitamin D?

Vitamin D3 (cholecalciferol) is produced in the skin. UVB light (sunlight) is needed to produce active vitamin D3 that can be used by our bodies. The second vitamin D, Vitamin D2 (ergocalciferol), is derived from plants.

What are the benefits of Vitamin D?

Vitamin D can help improve bone health, including the prevention of osteoporosis-related fractures. Some studies suggest vitamin D may also play a role in the prevention of certain cancers, such as colon cancer, and reduce the risk of certain diseases such as multiple sclerosis, or type I diabetes. Vitamin D treatment also plays a role in skin diseases such as psoriasis. The benefits of vitamin D are still being studied.

How are Vitamin D levels measured?

A blood test, 1,25-(OH)2 level is used to measure Vitamin D stores in our bodies. Traditionally, the normal range was thought to be 20-150 nmol/L, more recent research suggests at least 80 nmol/L may be a desirable level.

Who is most at risk for Vitamin D deficiency?

An estimated 1 billion people worldwide are thought to be at risk for vitamin D deficiency. Elderly, obese, or home-bound individuals are at greater risk for Vitamin D deficiency. So are people who live in the northernmost latitudes, darker skin types, and those that are fully clothed, head-to-toe, for cultural reasons. People who suffer from malabsorption diseases (such as celiac sprue, Crohn's disease or cystic fibrosis), and those on certain medications (such as corticosteroids, anticonvulsants, rifampin, and cholyestyramine) may also be at risk.

How can I safely get more Vitamin D?

Vitamin D levels can be increased by limited exposure to sunlight, dietary changes or vitamin D supplements. Most experts recommend 5 to 30 minutes of sunlight daily, depending upon the time of day and year, latitude, and skin pigmentation. Good dietary sources of Vitamin D include salmon, mackerel, or tuna or sardines canned in oil, vitamin D-fortified milk and whole eggs. Some experts suggest that adults at high risk for Vitamin D insufficiency or deficiency get 800-1000 IU Vitamin D3 daily, and that adults at low risk get 400-800 IU daily. Please talk to your doctor before starting vitamin D supplementation or changing your diet.

Should I use tanning beds to "get my sunlight"? And do I still have to wear sunblock?

Tanning beds are an unregulated and variable source of cancer-causing UV radiation. Ironically, consumers most likely to use tanning beds are usually those who can most easily obtain enough Vitamin D through safer alternatives. UVA and UVB sun protection is still advised to prevent skin cancer and photo aging, especially during peak hours, prolonged sun exposure, and during swimming and activity that promotes sweating.