



# You, the Sun *and* Vitamin D

**WE ARE IN TROUBLE.** We are all avoiding the sun like the plague. In the process, we get no sun on our skin and as a consequence we are (almost) all vitamin D deficient. This problem seems to be a worldwide dilemma.

**DR MARIANNE DUVENAGE** elaborates...

**W**e produce vitamin D from cholesterol when our skin is exposed to UVB. If we expose our skin at midday (without burning) for about a half an hour, wearing only a bathing costume and with no sunscreen applied, the skin produces about 10 000 IU` s of vitamin D. Applying sunscreen prevents the formation of vitamin D as sunscreen contains UVB (and other) blockers.

Consuming a piece of salmon yields about 200 IU` s, and an egg about 37 IU` s. Thus we were not meant to eat our vitamin D, but to get it through sun exposure.

So what about the people who live at the poles? Well fortunately, plankton in the sea makes the vitamin D. As Vitamin D is fat soluble, it is passed up the food chain until man eats the fatty fish.

## Why is vitamin D so important?

Vitamin D plays a massive role in your body. It is a builder of strong bones and muscles, protects your skin against skin cancer, protects your internal organs against internal cancers, is an anti-depressant, and it also protects your heart against heart disease. The list goes on and on.

Vitamin D is easily measured with a blood test. Normal values are reported as being 30-100ng/ml. If you want to have optimum wellness, your vitamin D levels should be at around 60ng/ml. Most South Africans accept that they have normal values of vitamin D as we live in a sunny country, and they are usually very surprised when the blood test reveals that they actually have low levels. Ideally, blood levels should be done before embarking on vitamin D

supplementation. Simply using an over-the-counter supplement is not adequate if you are severely deficient in vitamin D. You may need high doses for extended periods of time, for example 10 000 IU` s per day or 50 000 IU` s per week, depending on the level of deficiency.

## Lack of vitamin D: The Dangers

In extreme cases, even young, physically fit and active patients have been known to develop spontaneous fractures due to osteomalacia. This is a condition where the bones of adults become so brittle that they cannot support the weight of the body. Many elderly patients were diagnosed with osteoporosis in the past, when they actually had osteomalacia. The treatment for this is vitamin D - and not the drugs routinely