

# HEALTH MATTERS



NATURAL HEALTH  
& WELLNESS CENTRE

Dr. Michael Culp, MA, NMD

## Let There Be Light

I must confess that I am often a bit confused by religion, yet I intuitively understand our ancestor's desire to worship the sun. The radiant energy of our sun provides the fuel for all life, both plant and animal, on this planet. Even the oil and gas reserves that fuel modern civilization are merely left-over carbon from the growth of primordial forests eons ago. If anything may be said to be divine, surely the sunlight that bathes and sustains the whole earth must be. In an age of artificial light, it is difficult for us to imagine the gulf between day and night. Night time held many perils and terrors that were daily chased away with the coming of the dawn. So great was the divide between day and night that light and darkness became synonyms for good and evil. It should not surprise us to discover that the sun plays a big part in many aspects of our health –physical, mental and emotional.

## Sun Exposure

Paracelsus, the father of chemistry and the son of alchemy, once observed that everything is a poison and everything is a remedy - only the dose makes the difference. We should expect this also to be true of sunlight, and it is. Moreover, most substances are helpful and beneficial in some areas of our health but harmful in other. This means that if you look hard enough for something to be a toxin, you will be able to find to support your claim, and similarly, if you look hard enough, you will be able to find evidence of health benefits. The big picture of any health-to-harm ratio can be rather elusive.

Sun exposure has in recent years been vilified by “health experts”, the press, and sunscreen advertisers as a major cause of skin cancer. Almost all of the evidence for a link between sun exposure and skin cancer is [indirect](#), meaning that we are far from certain of the connection, and it applies only to squamous cell skin cancer, which is neither the most common (basal cell), nor the most deadly (melanoma) skin cancer. To complicate the picture even more, there is just as much indirect evidence that [NOT getting enough sun increases](#) your risk of getting non-Hodgkin's lymphoma, breast, prostate, and colon cancers.

A rational person might want to see a slightly bigger picture and ask, “How does sun exposure affect my risk of DEATH”? Swedish researchers followed 40,000 women aged 30-49 for 15 years and found that more [sun exposure dramatically reduces your risk of death](#). Getting sun burns as a child and taking at least 1 week's sun holiday a year each reduced risk of death from all causes by a staggering 30% and reduced the risk of getting all cancer.

I have compiled a handy Paracelsus Chart (my term for any health chart that shows both benefits and risks to any therapy) on sun exposure:

<b>Too Little Sun</b>	<b>Too Much Sun</b>
<a href="#">Depression &amp; Seasonal Affective Disorder</a>	<a href="#">Wrinkles &amp; Skin Ageing</a>
<a href="#">Hypertension</a>	<a href="#">Cataracts</a>
<a href="#">Breast, Prostate, &amp; Colon</a> Cancers	Skin Cancer*
<a href="#">Osteoporosis</a>	
<a href="#">Multiple Sclerosis</a>	
<a href="#">Death</a>	

\* Only Squamous Cell Carcinoma is associated with total exposure. Basal Cell Carcinoma and Melanoma are associated with sunburns, especially in childhood, but total sun exposure appears protective.

[www.NHWC.co.uk](http://www.NHWC.co.uk)

Registered Company #5248830

# HEALTH MATTERS



NATURAL HEALTH  
& WELLNESS CENTRE

Dr. Michael Culp, MA, NMD

## Vitamin D – The Sunshine Vitamin

Many but not all of sunlight's beneficial effects are due to its ability to stimulate Vitamin D synthesis in your skin. Vitamin D is, of course, not a vitamin at all since your body is perfectly capable of making all it needs for health as long as your skin is exposed to direct sunlight. Vitamin D's actions in the body were once widely thought to be limited to improving the absorption of calcium from the gut, but vitamin D is a true steroid hormone, along with oestrogen, testosterone, DHEA and cortisol, and it affects every cell in your body. Its main known functions are:

- Bone Health via improved calcium and phosphorous metabolism
- Cell Proliferation and Differentiation (repair and cancer prevention)
- Immune Function

## Sun Beds: The sun's little helper or Apocolypse-in-a-box?

In 1903, the German lighting manufacturer Heraeus discovered that high pressure halide lamp bulbs they were developing also emitted ultraviolet radiation, and in the 1920s-1930s they developed the first commercial tanning beds. These devices emitted almost exclusively UVA radiation, which does not help make vitamin D in the skin. Not until 1979 did Friedrich Wolff, another sun-loving German, patent a fluorescent bulb with a phosphor lining that emits both UVA and UVB radiation similar to sunlight (~95% UVA & 5% UVB). Studies show that modest sunbed tanning, i.e., no red skin, increases serum vitamin D levels, but that any increase disappears within 4 weeks after you stop tanning:

- [Blood vitamin D increased levels by 40%](#) on average
- Even very low-intensity weekly treatments allowed average [Vitamin D blood values increased from 65nm to 80 nm](#), or roughly from winter to summer blood levels

**Caveat Emptor:** all of this sounds promising but the Swedish prospective study that found that more sun exposure reduced risk of death by 30% also found that chronic solarium use (>1X/month for 20-30 years) increased risk of death by 90%! Occasional sunbed use (<1X/month for <10 years) showed no increased risk. One plausible explanation is that those who frequently used tanning beds were also those who rarely got natural sun exposure, but it certainly suggests that mild sunbed use is healthy but excessive chronic use is harmful (as Paracelsus would have told us 500 years ago).



[www.NHWC.co.uk](http://www.NHWC.co.uk)

Registered Company #5248830

# HEALTH MATTERS



NATURAL HEALTH  
& WELLNESS CENTRE

Dr. Michael Culp, MA, NMD

## Health Action Guide

1. Sunlight and suntans are good for you, get over it. Better wrinkled than dead, I always say! Even sunburns in childhood appear to provide far more benefits than risks over a lifetime, but it is safe to say that it is better to tan than to burn.
2. Take at least one week's holiday every winter in a sunny clime (if you need a doctor's note, I am happy to provide one).
3. Sunbed tanning is probably safe and even healthy when used in moderation – like once a week during the winter months, especially if you live on this drear island, but REAL SUN is ALWAYS better for you (refer back to point #2)
4. Modest vitamin D supplementation is probably a good idea for most people living in the UK in the range of [400IU](#) (10mcg) per day for lighter skinned individuals up to [1000IU](#) (25mcg) once or twice a day for darker skinned individuals, especially during the winter months.
5. Any infant born in the winter months should get [400IU](#) (10mcg) per day of vitamin D orally. Any infant born in the summer should spend time in direct sunlight.

## Vitamin D – Fun Facts for Cocktail Parties

- [Chronic muscle pain](#) is often the first sign of vitamin D deficiency
- Vitamin D deficiency is common and gets worse with age and the darker your skin colour. Researchers in Boston found that even at the end of August [30% of Whites, 42% of Hispanics, and 84% of Blacks](#) were deficient in vitamin D.
- Breast milk contains almost no vitamin D! An infant's skin should be exposed to moderate sunlight or [supplemented with ~400IU \(10mcg\) per day](#) of vitamin D3.
- The best dietary source for maintaining blood vitamin D levels is [eating fatty fish](#) several times per week, especially in the winter months.
- If you are exposed to enough sun to make your skin pink (“an erythematous dose”), it is equivalent to taking about [15,000 IU](#) (375 mcg) of vitamin D supplement (but it lasts longer in your body than oral vitamin D – 4 weeks longer).
- With any size oral dose of vitamin D, your blood levels return to baseline [in about 2 days](#) – whereas vitamin D from sun exposure maintains high serum levels for significantly longer periods.
- [Fat people need more vitamin D](#) since fat cells absorb vitamin D and render it inactive for the rest of the body.