

- Vitamins

Sunscreen isn't giving you a vitamin D deficiency

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Sunlight is the best disinfectant, or so the saying goes, but does sunscreen prevent you from getting a healthy dose of it?

The question has been the subject of academic papers and studies stretching back several decades. Some health websites have started telling people they should go out into the sun without sunscreen so that they can get enough vitamin D.

Vitamin D is linked to all kinds of good things that happen in our body, including bone health, so it is easy to see why people are so focused on increasing their exposure to it.

It's also easy to see why they have come to the conclusion that sunscreen might stop us from producing it. Sunlight produces two different types of ultraviolet rays, ultraviolet 'A' and ultraviolet 'B' rays (UVB). When UVB rays hit our skin cells produce vitamin D.

Ultraviolet rays from sunlight are responsible for the vast majority of vitamin D our bodies create, but the whole point of sunscreen is blocking out those ultraviolet rays.

So, doesn't it stand to reason that wearing sunscreen will reduce the amount of vitamin D our bodies produce? That would be true if people applied sunscreen in a centimetres-thick layer. However, repeated scientific studies show that people do not put on enough sunscreen to make much of a difference to vitamin D levels.

Researchers also note sunscreen doesn't block out all UVB rays. Another point is we don't need to be exposed to the sun for very long to produce healthy levels of vitamin D – just five minutes in the summer or 30 minutes in winter, although this timing is likely to differ if you have darker skin.

About 27% of people have levels of vitamin D below the recommended standard but only 5% of New Zealanders have a real, provable, deficiency of vitamin D. This does vary by skin tone though – rates of vitamin D deficiency among Pacific people are twice that of the general population.

Wearing sunscreen is unlikely to meaningfully reduce the amount of vitamin D our body produces when kissed by the sun. But if you go out in the sun without sunscreen you do run the very real risk of contracting skin cancer.

For people who are diagnosed with a real deficiency, vitamin D supplement pills are cheap (and available on prescription) and safe.

This story was written with expert advice from Waikato Clinical Campus adjunct associate professor Amanda Oakley, University of Auckland Medical School associate professor Mark Bolland, and Dr Mark Foley at Skin Clinic Marlborough. It was reviewed by The Whole Truth: Te Mā ramatanga expert panel member Dr Jason Gurney.