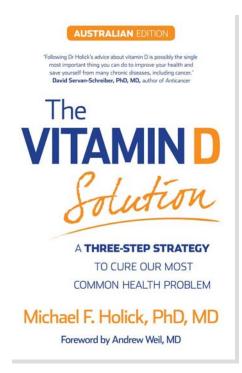
The Vitamin D Solution



The Vitamin D Solution Michael F Holick Scribe 2010

ISBN: 9781921640520

\$35

336 pp including bibliography and index

At the outset I need to declare a possible conflict of interest: I work part-time for a company in Melbourne that manufactures vitamin D supplements in oral and injectable form. However, that, and my sixteen years working for the Australasian College of Nutritional and Environmental Medicine, gives me the knowledge and insight to read this book intelligently and review it.

In Australia, vitamin D is receiving a lot of press space and air time and rightly so – more and more evidence is coming forth about the importance of this substance. While it is commonly referred to as a vitamin, some scientists and doctors point out that it is more like a hormone in its actions and because the body can synthesize it. Michael Holick, both a scientist and a medical doctor, is one of those.

However, he is happy to use the common parlance.

Dr Holick is a globally recognised expert in this field – he was the first person to describe the mechanisms of the conversion of cholesterol to vitamin D under the action of the sun in the skin, and had earlier (in the 1970s) identified the active form of vitamin D. He continues to investigate it in the laboratory and clinically.

Although the book was written and originally published in the USA, this Scribe edition has been carefully adapted by the author for Australian and New Zealand readers. He quotes extensively from local antipodean studies and demonstrates familiarity with local conditions here, making the book totally relevant to Australian and New Zealand readers. This is rare for an American book and very welcome.

What I also appreciated about this book is its language and tone. It is neither dumbed down for lay readers nor is it full of jargon and technical language. It is accessible to everyone and should be read by all healthcare professionals and those who consult them.

The author starts with a number of chapters which explain what vitamin D is, how it works and why it is important for our health. He explains, for instance, that all cells in the human body have vitamin D receptors (which means that all cells have evolved to be affected by vitamin D) and that vitamin D has the ability to modulate the expression of around 2000 human genes (6% of the genome). Both of these facts indicate the importance of this substance and its hormone-like action.

Vitamin D has roles in immunity, bone health and muscle health, and it can reduce cancer risk. Deficiency may also be related to schizophrenia, allergies, asthma, depression, inflammatory conditions (such as gum disease and pancreatitis), preeclampsia and impaired growth and brain development in children. Dr Holick points out that the majority of people in North America, Australia and New Zealand are deficient; for instance "... 87 percent of dermatologists in Australia ... have been shown to be deficient in summer ..." Ricketts, a gross symptom of vitamin D deficiency, is again being seen in children in well-to-do countries.

Although Dr Holick advocates adequate sun exposure (the risk of cancer, including skin cancer, is higher in people who avoid the sun), he also recommends high-dose supplementation to rapidly reverse the deficiency and to then consider regular maintenance supplementation. Other

researchers/clinicians have pointed out that the incidence of melanomas may be high in Australia but, interestingly, it is also high in the Czech Republic and increasing in the UK. For instance, Prof Thomas Tallberg in Finland suggests that the common factor in the higher incidence of melanomas is a deficiency in those nutrients necessary to the body to allow it to fight cancer. In his research and clinical work he has been reversing cancer growth mainly by dealing with nutritional deficiencies, extending people's lives and improving their quality of life far beyond the predictions of their orthodox doctors.

There is now plenty of evidence that regular, unprotected exposure to the sun, in moderation, is essential for our health and, on balance, will protect us from a host of cancers rather than be the cause of cancer. Dr Holick advocates this and provides readers with tables to assist in working out how much sunlight is necessary and the importance of safe exposure to sunlight. He also lists those foods that will provide vitamin D through the diet, while pointing out that most people will still have to supplement regularly for optimum health.

While advocating that people be guided by their healthcare professionals, Dr Holick devotes whole chapters to advice on overcoming vitamin D deficiency. He speculates that the increase in vitamin D deficiency has to do with a bunch of factors: people spending less time outside, some groups covering themselves up for religious or ethnic reasons, people with very dark skin of African and other origins living in areas with less sun, the wide-scale scare about skin cancer, and ignorance amongst healthcare professionals and health authorities. He maintains that vitamin D toxicity is rare and easily addressed and that it is safe and effective for most people to take very high doses of the inactive form as supplements. Such supplements are readily available.

Two of the cancers the author talks about are breast cancer and prostate cancer. He quotes research that indicates that those people who have adequate vitamin D levels before diagnosis of their cancer, have a better prognoses and a lower incidence of metastases.

It is unusual to come across a book written by a world-renowned expert in a field of medicine that is so easy to read and is so informative. The author is also not afraid to criticise those who have been slow to bring this information to people who need it. His style makes it possible (even a pleasure) to read this book from cover to cover. There are some light diversions in the book, such as his suggestion that the dinosaurs may have died out because of chronic vitamin D deficiency caused by dust from a meteorite blocking the necessary sunlight. The good index and the 'take-home messages' scattered throughout the text, make it easy to also use this as a reference book to dip into from time to time. The author has included tables and graphs to illustrate his points and many lists to assist the reader with summaries of important information and refers extensively to research and studies other than his own.

I recommend this book to everyone, as it points to a simple approach to address something that affects the health of most of us. Vitamin D is certainly not a panacea. However, ensuring that you are not deficient in this one important nutrient can make a huge difference in your efforts to maintain or regain your health. When something is this straightforward, it makes no sense to ignore it. It's in your hands.