

Vitamin D could save Germany €40 billion in health costs

By Stephen Daniells, 02-Apr-2010

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Ensuring the German population gets adequate intakes of vitamin D could save the country about €37.5 billion in health care costs, according to a new review.

Writing in *Molecular Nutrition & Food Research*, Professor Armin Zittermann from Ruhr University Bochum states that up to 45 per cent of the German population could be [vitamin D](#) insufficient, with an additional 15 to 30 per cent deficient, thereby putting them at risk at a variety of health problems.

In addition, current recommendations are not enough and need to be doubled at least, wrote Prof Zittermann, with daily intakes of 25 micrograms required. This would represent a significant increase from current recommendations, which range from 5 to 10 micrograms per day.

"Adherence to present sun safety policy and dietary recommendations would definitively lead to vitamin D deficiency," states Prof Zittermann. *"Therefore, there is an urgent need to change current sun safety policy and dietary vitamin D recommendations."*

The lowdown on D

Vitamin D deficiency in adults is reported to precipitate or exacerbate osteopenia, osteoporosis, muscle weakness, fractures, common cancers, autoimmune diseases, infectious diseases and cardiovascular diseases. There is also some evidence that the vitamin may reduce the incidence of several types of cancer and type-1 diabetes.

The science supporting the muscle function of vitamin D, as well as the vitamin's role in immune health, is sufficiently robust to have merited a positive opinion from the European Food Safety Authority's (EFSA) Panel on Dietetic Products, Nutrition and Allergies (NDA).

Despite such proclamations of support, many people across the world are not getting enough vitamin D. Prof Zitterman reviewed data from the German National Health Interview and Examination Survey (GNHIES), and the German National Health Interview and Examination Survey for Children and Adolescents (KiGGS), and concluded that between 40 and 45 per cent of the general German population is vitamin D insufficient, whiel an additional 15 to 30 per are vitamin D deficient.

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Let's talk money

Using estimates from a recent Europe-wide study, which put the direct and indirect costs of inadequate vitamin D levels at €187 billion for the bloc's 363 million people, Prof Zitterman calculated that Germany could potentially save up to €38 billion annually.

Many see dietary supplements and fortified foods as the best way to boost intakes of vitamin D, but Prof Zittermann laments current national and EU recommendations that limit the concentrations of vitamin D that can be used in nutritional products.

The European Union is currently resolving upper safe limits (USLs) as part of the Food Supplements Directive, but many anticipate they may come in much lower than hoped for.

"It would therefore be of importance to enhance the reference value for vitamin D to at least 25micrograms per day," wrote Prof Zittermann. *"A daily intake of this dose would at least avoid deficient circulating 25(OH)D concentrations."*

"The next step should be the introduction of a more efficient food fortification program in Germany," he added.

The times they may also be a-changing Stateside

The influential Institute of Medicine (IOM) in the US is conducting a review of the available vitamin D science and is due to deliver its findings this summer. Many expect the IOM to recommend RDIs much above the current levels of 400IU. Oprah has been telling her viewers the RDI should be 2000IU or more.

The IOM may also revise upper safe levels (USLs) with some saying 10,000IU per day reflects the scientific literature – this would be a great boon to supplement manufacturers seeking to meet demand for high-dose products.

Source: *Molecular Nutrition & Food Research*

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"The estimated benefits of vitamin D for Germany"

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