

# **New study highlights how little we know about the vitamin D status of ethnic minorities in Ireland**

February 16 2023

---



Credit: Unsplash/CC0 Public Domain

The study provides the most up to date findings on vitamin D intake and factors affecting vitamin D status of adults in Ireland, and has been

published in the *British Journal of Nutrition*.

The study identifies groups most at risk of vitamin D deficiency and has highlighted gaps that exist in our understanding of why people are getting tested for vitamin D (a practice the researchers believe is often unnecessary and wasteful) along with how little we know about the vitamin D status of our ethnic minorities.

Vitamin D is needed for absorption of calcium and for normal bone and immune health. Vitamin D deficiency can result in softening of the bones and increase the risk of osteoporosis. Vitamin D is made by our skin after sunlight exposure, though in Ireland none can be made from about Halloween to St Patrick's day, increasing the risk of deficiency. Of concern, food sources of vitamin D are very limited and not commonly eaten; these include oily fish, [egg yolk](#) and specific fortified foods such as fortified milk and breakfast cereals.

Currently 300,000 people in Ireland have osteoporosis (according to the Irish Osteoporosis Society), ensuring adequate vitamin D intake in early life can decrease the risk of osteoporosis/ fractures in later life.

The study investigated 383 participants, with a mean age of 56.0 years.

## **Key findings**

- The majority of adults (81%) not taking supplements did not meet the recommended daily allowance (RDA) for vitamin D and this was the biggest risk factor for deficiency.
- Those with dark skin are nearly four times more likely to be vitamin D deficient.
- Participants with low vitamin D intakes, darker skin and who avoid the sun are most at risk of deficiency.
- Knowledge of recommended intakes was poor amongst

participants yet there were high levels of inappropriate vitamin D testing. Half of those tested were unaware of the recommended daily allowance for vitamin D.

- Better awareness of vitamin D and need for adequate intakes should be promoted.
- More than a third (40%) of adults had their vitamin D levels tested for non-clinical reasons.

In [a previous study](#), the research team have found that approximately €60k was wasted per year in a Dublin hospital in unnecessary testing. This places unnecessary burdens on laboratory and staff resources.

In the published study, it was found that more than a third (40%) of adults had their vitamin D levels tested for no valid clinical reason with most being carried out as part a "routine" clinic check. Only a minority (12%) were aware of the correct recommended daily amount and nearly half had no knowledge of any recommendations. While a minority (30%) felt they were familiar with vitamin D, the majority (86%) did still recognize it as important for bone health and 66% for immunity.

Researchers state that those "most at risk" including adults with dark skin or with very poor intakes (those who don't eat fortified foods or supplements) and with little sun exposure may need more vitamin D to optimize their levels than recommended by the Food Safety Authority of Ireland. Findings highlight the need for promotion of better awareness of vitamin D and of foods /fortified products that contain vitamin D and or supplements to improve status. They believe that fortification of staple food groups could also help address this issue and has been successful in other countries such as Finland.

Helena Scully, Mercers Glanbia Bone Research Fellow, MISA Institute, St James's Hospital/ School of Medicine Trinity College and lead author of the study said, "We know that people living in Ireland are at-risk of

vitamin D deficiency, particularly in the winter when we don't get much sun. Our research indicates that those most at risk have inadequate vitamin D intake, dark skin types and avoid sun exposure. Choosing foods such as milk and cereal products with added vitamin D, and taking a supplement (15 micrograms or 600units per day), particularly in the winter can help prevent low vitamin D levels."

Dr. Eamon Laird; Research Fellow Trinity College Dublin and University of Limerick and co-author, says, "This study highlights the gaps we have in why people are getting tested and how little we know about vitamin D and nutrition status of our ethnic minorities. There should be a real research focus now with proper funding to investigate these groups as the long term benefits in terms of reduced chronic disease burden is huge."

Dr. Kevin McCarroll, Consultant Physician at St James's Hospital, and Clinical Senior Lecturer at Trinity and co-author says, "The study shows that dietary vitamin D intake is inadequate in the majority of adults and is big risk factor for deficiency. Improving the consumption of vitamin D rich / fortified products and taking supplements, especially in the Winter is advisable. This research also shows a high level of inappropriate vitamin D testing whereas greater emphasis instead should be placed on increasing [vitamin](#) D intakes."

**More information:** Helena Scully et al, Vitamin D: determinants of status, indications for testing and knowledge in a convenience sample of Irish adults, *British Journal of Nutrition* (2023). [DOI: 10.1017/S0007114523000168](https://doi.org/10.1017/S0007114523000168)

Provided by Trinity College Dublin

Citation: New study highlights how little we know about the vitamin D status of ethnic minorities in Ireland (2023, February 16) retrieved 8 May 2024 from <https://medicalxpress.com/news/2023-02-highlights-vitamin-d-status-ethnic.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.