

Vitamin D deficiency is a global health issue for the black community, finds new study

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Vitamin D is made when the skin comes into contact with sunshine; however, we can also get vitamin D from our food intake. It has several important functions within the body, but it is primarily known for



promoting calcium absorption, which makes it a vital nutrient for bone health.

In a paper published by *The European Journal of Clinical Nutrition*, Surrey's researchers conducted a systematic review of the vitamin D and dietary intakes of members of the black community across the globe. The findings suggest that people of African descent should consider taking vitamin D supplements and consume more vitamin D rich foods.

The researchers found that when looking at black individuals who live in low latitude countries (such as Brazil and South Africa), there was vitamin D sufficiency. However, in those who live at higher latitudes, such as in the UK, vitamin D deficiency and insufficiency was common.

The Surrey researchers' findings suggest that awareness of vitamin D deficiency needs to be highlighted in African-Caribbean populations, especially those living in countries like the UK where low dietary vitamin D intake was prevalent.

Rebecca Vearing, Ph.D. research student from the Department of Nutritional Sciences at the University of Surrey, said: "As the majority of our vitamin D comes from exposure to sunlight, for many people getting enough vitamin D may be a real challenge. This research shows that eating a nutritionally balanced diet including foods that provide vitamin D—such as oily fish, red meat, egg yolk and fortified foods such as breakfast cereals—and taking regular supplements are key to boosting vitamin D status."

These findings are supported by a second paper from Surrey published by *The Journal of Nutrition*, where researchers studied how vitamin D supplements and sunlight exposure affect the health of Brazilian women living in both the UK and Brazil.



This first-of-its-kind study examined two groups of the same ethnic identity and sex, living in different countries in an identical way and looked at whether supplements or sunlight altered the vitamin D status of its participants.

Researchers studied 120 healthy Brazilian women in parallel, double-blind, randomised, placebo-controlled trials conducted at different latitudes in Brazil and England. Participants were chosen randomly to receive a daily vitamin D supplement or placebo for 12 weeks during the wintertime.

Researchers found that although vitamin D dietary requirements may vary considerably between participants in each country, a moderate dose of vitamin D supplementation is a remarkably effective strategy for raising and maintaining adequate vitamin D levels over the winter months in both the UK and Brazil.

The participants with the lowest initial vitamin D levels had the most significant increases in response to vitamin D supplements.

Overall, the study found that the effect of vitamin D supplements is not dependent on latitude.

Dr. Marcela Mendes, visiting research fellow from the Department of Nutritional Sciences at the University of Surrey, said: "Our research looks at different ethnic groups, and our findings show that people might benefit from increasing consumption of foods that naturally contain vitamin D or are fortified with it, or even taking an additional supplement, in the autumn and winter, regardless of where they live."

More information: Rebecca M. Vearing et al, Global Perspective of the Vitamin D Status of African-Caribbean Populations: A Systematic Review and Meta-analysis, *European Journal of Clinical Nutrition*



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