Summer Sun Can't Sustain Vit. D Levels Year-round

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Counting on the sun alone for vitamin D will leave most people deprived of adequate amounts of this nutrient, especially during the winter in the northern parts of the US, researchers report.

This is true even for people who work outside during the summer and get plenty of sun in the warmer months but not in the winter, according to study results presented here at the annual meeting of the American Society for Bone and Mineral Research.

Vitamin D is formed in the skin, but it requires ultraviolet rays of the sun to activate it to a form the body can use. Vitamin D, which assists the intestines in absorbing calcium and phosphorus, is also contained in some fortified foods.

For the study, Janet Barger-Lux, senior research associate, and Dr. Robert Heaney, both from Creighton University, Omaha, Nebraska, calculated the daily skin dose of vitamin D that 26 men who worked outdoors during the summer would have received.

They brought the men back about 6 months later to assess how much vitamin D they may have lost over the winter. The team estimated that the amount of vitamin D that the group had received from the sun during the summer was equivalent to approximately 2800 international units (IU) of vitamin D a day, "which is a pretty big dose," Barger-Lux noted in an interview with Reuters Health.

Recommended daily doses of the vitamin are 200 IU per day for adults aged 19 to 50, 400 IU for those aged 51 to 70, and 600 IU for those over 70.

When the men were reassessed during February and March of the following year, vitamin D levels had fallen to less than 80 nanomoles per liter (nmol/L) in roughly half of the group. Vitamin D levels of at least 80 nmol/L are recommended to ensure optimal cellular health.

"We don't want to promote excessive sun exposure, but from the standpoint of making vitamin D naturally in the skin, we need to expose greater areas of the body for shorter periods of time--for example 15 minutes--because it's the first 15 minutes that does it," Bargert-Lux said.

Dietary sources of vitamin D are relatively limited and include fatty fish and fortified milk, while multivitamins tend to contain trivial amounts of vitamin D.