Vitamin D supplements may reduce the duration of the common cold

December 20 2021, by Sophie E Harrison, Neil Walsh, Sam Oliver

Credit: Pixabay/CC0 Public Domain

After a couple of years of mask-wearing, social distancing and hand sanitizing, the common cold is back. And—according to some people—back with a vengeance. Some are calling it a "super cold "—others, "the worst cold ever." Fortunately, there may be a way to reduce the duration of a cold: vitamin D supplements.

We may suffer more common colds during the winter because we spend more time close to each other indoors. But vitamin D levels might also influence the risk of getting a cold. There are more colds during winter when vitamin D levels are lowest, and fewer colds during summer when vitamin D levels are highest.

We get most of our vitamin D from the sun's rays (80 percent–100 percent) and only a small amount from our diet. For people living at latitudes above 30 degrees, such as in the UK, there is a higher risk of having low vitamin D levels (vitamin D insufficiency) in the winter. People who spend most of their time indoors, or with their skin covered, are also at a higher risk of vitamin D insufficiency. More than half of the UK population is considered to have insufficient vitamin D levels in winter.

In the UK, the sun's rays are too weak to provide enough vitamin D between October and March. This means that from October until March, people's vitamin D levels are likely to fall.

Lowering your risk of colds

Research shows that vitamin D influences the risk of catching common colds and other respiratory infections. People with lower vitamin D levels are more likely to have a common cold, and people supplemented with vitamin D are less likely to get a common cold.

As well as reducing the chance of getting a common cold, our recent research shows that vitamin D supplementation reduces the severity and duration of common colds.

First, we found that vitamin D-sufficient military recruits were less likely to have a common cold than vitamin D-insufficient recruits during 12 weeks of basic military training. Then we examined the effect of

vitamin D supplementation during winter on common colds. We supplemented recruits with either simulated sunlight (UV radiation by a whole-body irradiation cabinet) or oral vitamin D_3 tablets (1,000 IU per day for four weeks to restore vitamin D to normal levels and then 400 IU per day for eight weeks to maintain healthy vitamin D levels). Both supplements similarly achieved vitamin D sufficiency in almost all recruits.

We found that vitamin D supplementation did not reduce the likelihood of getting a common cold, but it did reduce the number of days a participant had a common cold by 36 percent. It also reduced the peak severity of common cold symptoms by 15 percent.

How to increase vitamin D

Our findings support the UK government's recommendation to maintain vitamin D sufficiency all year round, and they show a potentially beneficial role of wintertime vitamin D supplementation.

It is not possible to get enough sunlight in the UK between October and March, so it's advisable to take a 10 microgram vitamin D supplement daily during this period (this value is sometimes shown as 400 IU on the label). If you can't get any sunlight at all, or you have not supplemented with vitamin D from October onwards, you may need to take 25 micrograms (1,000 IU) of vitamin D for four weeks to restore your vitamin D to a healthy level.

To ensure that you get enough vitamin D during the summer, make sure you get short periods of regular sunlight exposure. Safe sunlight exposure for people living at latitudes between 30 and 60 degrees north involves being in the sun for 15 minutes between 10am and 3pm while wearing a T-shirt and shorts.