

# VITAMIN E SUPPLEMENTATION'S ROLE IN COVID-19

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To the Editor,  
we read with great interest the article by Oscanoa et al. on the effect of 25(OH)D3 levels on the incidence and severity of COVID-19 [1]. Other authors [2] have confirmed the existence of a link between low levels of 25(OH)D3 [2]. Vitamin D supplementation in SARS-CoV-2-positive patients has the potential to positively impact patients with both mild and severe symptoms [3]. However, we should not only concentrate on vitamins D and C [4, 5], but also on others such as vitamin E — a fat-soluble vitamin that is necessary for good health. It plays a role in maintaining the integrity of cell membranes, protecting cells from oxidative stress, and supporting the immune system. With the COVID-19 pandemic affecting millions of people worldwide, there has been increased interest in the potential role of vitamin E in mitigating the effects of the virus.

Vitamin E is a powerful antioxidant that can neutralize harmful free radicals and protect cells from oxidative stress [6]. During infections, including COVID-19, the body's immune response produces reactive oxygen species that can damage cells and tissues. Antioxidants like vitamin E can help mitigate this damage by neutralizing these reactive oxygen species. Vitamin E might also have anti-inflammatory properties that make respiratory infections less severe.

In addition to its antioxidant properties, vitamin E has been shown to support the immune system by increasing the production of cytokines, which are substances produced by immune cells that regulate the immune response. This can be especially impor-

tant for people with COVID-19, as the virus can suppress the immune system, making it harder for the body to fight the infection.

However, it is important to note that while vitamin E may have potential benefits for COVID-19, there is limited evidence to support its use for this purpose. There have been several studies exploring the potential role of vitamin E in COVID-19, but these studies have had conflicting results [7, 8], making it difficult to draw conclusions about its potential.

The recommended daily dose of vitamin E is 15 milligrams (22.4 international units) for adults, which can be easily obtained through a balanced diet that includes foods such as nuts, seeds, and leafy greens [9]. Vitamin E is also available in supplement form, but taking high doses of vitamin E supplements can be harmful and may increase the risk of certain health problems, such as bleeding and stroke.

In conclusion, while there is some evidence to suggest that vitamin E may have potential benefits for COVID-19, it is important to remember that it is only one aspect of overall health and should not be relied upon as a sole treatment for the virus. The best way to improve overall health and maybe make COVID-19 symptoms less severe is to eat a balanced diet with a wide range of vitamins and nutrients and follow the advice of public health organizations [10].

It is always advisable to consult with a doctor before starting any new supplement regimen, especially if you have underlying health conditions or are taking any medications. Taking excessive amounts of vitamin E can be harmful and may increase the risk of adverse

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effects, so it is important to follow recommended daily allowances and not rely on supplements alone for good health.

### Conflict of interest

All authors declare no conflict of interest.

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