## Is Vitamin D3 helps to fight Covid 19.

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Vitamin D is an endogenously produced steroid which will be absorbed from exposure to sunlight, during which the protein 7-dehydrocholesterol (7-DHC) in our skin interacts with ultraviolet B (UVB) rays and subsequently gets converted into the active sort of vitamin D, which is vitamin D3.

Vitamin D also can get absorbed through various dietary sources including oily fish like salmon and sardines to red meats and egg yolks. As this virus continues to spread at a rapid rate throughout the planet, there remains an instantaneous got to discover health measures capable of reducing the danger of infection by SARS-CoV-2, also as limit its progression and severity.

Little is currently known about the potential role of vitamin D in its ability to stop COVID-19 infection and/or fatalities; however, several studies have evaluated the possible correlations which may exist between this nutrient and therefore the SARS-CoV-2 infection pathway.

These studies concluded that by maintaining the rigidity of bot cell and gap junctions, also as by reducing the consequences of cytokine storm by working on interferon g tumor necrosis factor alpha (TNF- $\alpha$ ), vitamin D can improve cellular immunity and thus decrease the severity of COVID-19.

Additional data suggests that vitamin D may reduce a number of the unfavorable downstream immunological responses to COVID-19 that are related to severe manifestations through the disease. a number of these downstream pathways that vitamin D could also be involved in include preventing the increase of interleukin 6 (IL-6) levels and delaying the interferon-gamma response.

The severity of coronavirus 2019 infection (COVID-19) is decided by the presence of pneumonia, severe acute respiratory distress syndrome (SARS-CoV-2), myocarditis, microvascular

thrombosis and/or cytokine storms, all of which involve underlying inflammation. A principal defense against uncontrolled inflammation, and against virus infection generally, is provided by T regulatory lymphocytes (Tregs). Treg levels are reported to be low in many COVID-19 patients and may be increased by vitamin D supplementation. Low vitamin D levels are related to a rise in inflammatory cytokines and a significantly increased risk of pneumonia and viral upper tract infections. vitamin D deficiency is related to a rise in thrombotic episodes, which are frequently observed in COVID-19. vitamin D deficiency has been found to occur more frequently in patients with obesity and diabetes. These conditions are reported to hold a better mortality in COVID-19. If vitamin D does actually reduce the severity of COVID-19 in reference to pneumonia/ARDS, inflammation, inflammatory cytokines and thrombosis, it's our opinion that supplements would offer a comparatively easy choice to decrease the impact of the pandemic.

Vitamin D plays many important roles in your body, including promoting the health of your system.

Scientific research suggests that supplementing with vitamin D may protect against respiratory infections, especially among those that are deficient within the vitamin.

Recent research indicates that sufficient vitamin D levels may help people with COVID-19 avoid adverse outcomes. Still, we don't know whether taking vitamin D supplements reduces your risk of developing COVID-19 as a result of contracting the coronavirus.

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