



# Vitamin D & COVID-19

## VITAMIN D'S CONNECTION TO COVID-19

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Vitamin D deficiency is a worldwide health problem affecting over 1 billion people. About 77% of Americans are considered deficient.

Many studies found a potential link between vitamin D deficiency and various diseases, including compromised respiratory immune function, which can increase the risk of COVID-19 severity and mortality.

Vitamin D reduces the risk of the common cold by: physical barriers, cellular natural immunity, and adaptive immunity. These are potential ways that vitamin D can decrease the risk of COVID-19 infections.

Vitamin D deficiency can eventually lead to cardiovascular disease and reduced lung function, which can result in more severe cases of COVID-19.

## RESEARCH FINDINGS

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There is a lack of clinical trials that look at the preventing role of vitamin D in COVID-19 infections. However, there are some retrospective observational studies that looked at a correlation between the two.

In china, people with chronic respiratory tract disease, cardiovascular disease, hypertension, and diabetes had fatality rates between 6-10%.

One study, found that vitamin D supplementation significantly reduced the risk of respiratory tract infections.

Some studies found a correlation between vitamin D levels and COVID-19 outcomes, while some did not.



## CONCLUSIONS & RECOMMENDATIONS

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There is no clear evidence that vitamin D supplementation will prevent the severity of COVID-19.

Studies have shown that vitamin D supplementation is safe and effective in preventing acute respiratory tract infections.

Improving vitamin D levels can possibly slow disease progression or even improving survival of patients.

People who have a vitamin D level of less than 30 ng/mL are considered deficient and are recommended to increase their levels.

Individuals with co-morbidities, older adults, obese adults, people living at higher latitudes are recommended to have adequate levels of vitamin D.

## SOURCES

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