

A new meta-analysis conducted by Swedish researchers confirms that supplementing with D may reduce the risk of respiratory tract infections.

## Vitamin D supplementation may reduce the risk of respiratory tract infections

Inadequate vitamin D levels have been associated with an increased risk of respiratory tract infections (RTI), although much of the research has been inconclusive. In a new study published in the journal *PLoS ONE*, researchers conducted a systematic review of the literature and a meta-analysis to determine the effect of vitamin D supplementation on RTI.

For this meta-analysis the researchers selected 11 randomized, placebo-control trials that included a total of 5,660 subjects. The average daily dose of vitamin D was 1,600 IU and follow-up periods ranged from 3 months to 3 years.

Overall, vitamin D showed a protective effect against RTI, reducing the risk by 36% when compared to placebo. When examining the results of studies using daily dosage regimens only, the protective effect of vitamin D resulted in a 49% lower risk of RTI in comparison with the placebo. Large bolus doses taken monthly or less frequently were not as effective.

Results from this study provide evidence that vitamin D may have a protective benefit against respiratory tract infections, and that daily dosages are more effective than less frequent, very high dosages. Researchers state that additional studies of varying target populations and dosages are needed before drawing definite conclusions.

Bergman P, Lindh AU et al. Vitamin D and Respiratory Tract Infections: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *PLoS One*. 2013 Jun 19;8(6):e65835.