

How to protect yourself from COVID-19 infection

Your immune system - your mask on the inside

Adequate Vitamin D levels - (90-120nmol/L in the blood) are critical for strong anti-viral immunity.

Skin exposure to sunlight provides production of Vitamin D in the skin, which must be activated in the body by magnesium. In winter, lack of sun exposure in higher latitudes > greater than 35 degrees South or North creates a higher likelihood of Vitamin D deficiency, even moreso in the elderly and dark-skinned people. Vitamin D deficiency increases one's risk of viral infections such as influenza and Covid-19.

In Australia, Qld and NT had much lower rates of infection with Covid-19, particularly in winter when Melbourne had its worst problem.

Recommended doses of Vitamin D3 to protect against viral infections.

Adults and teenagers:

Vitamin D3 5000iu & K2 1 daily-average. If not already taking Vitamin D3, or if blood test indicates deficiency, a loading dose of 10,000iu daily for 5 days, is recommended.

An optimal target range for Vitamin D is 90 – 120nmol/L in blood tests. Obese people may require a 50% higher dose to reach optimal levels. In summer, half above doses should be adequate.

Children:

Vitamin D3 2000iu daily in tablet or liquid form. Double daily dose if symptoms develop.

Infants & toddlers:

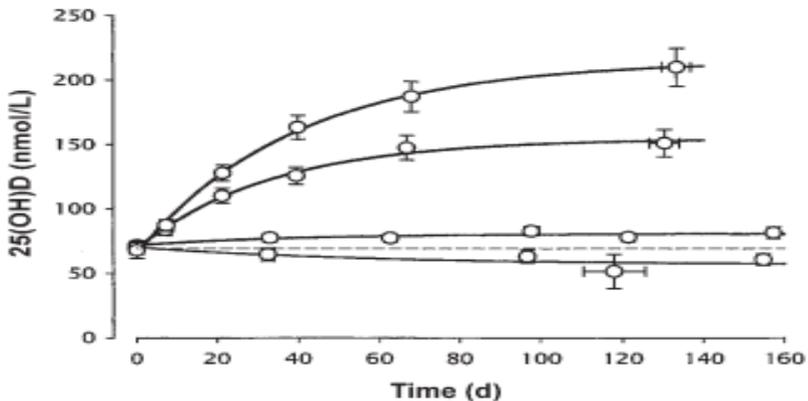
Vitamin D3 1000iu daily in liquid form. Double daily dose if symptoms develop.

MAGNESIUM is a necessary cofactor for activation of Vitamin D and its optimal action in the body.

Dose: **Adults:** 200-400mg daily in tablet or powder form;

Children: 100mg.; Babies: 50-100mg.

VITAMIN D3 – Dose-Response Curves



Time course of serum 25-hydroxycholecalciferol [25(OH)D] concentration for the 4 dosage groups. The points represent the mean values, and error bars are 1 SEM. The curves are the plot of Equation 1, fitted to the mean 25(OH)D³ values for each dosage group. The curves, from the lowest upward, are for 0, 25, 125, and 250 mcg cholecalciferol (labeled dose)/d.

The horizontal dashed line reflects zero change from baseline.

Units: 25mcg = 1000iu; 125mcg = 5000iu; 250mcg = 10,000iu

Ref: Heaney RP, et al. Am J Clin Nutr, 2003; 77(1):204-210. PMID: 12499343

Use of VITAMIN C to protect against and treat viral infections

Adults and teenagers:

Tablets : 1000mg – 1500mg twice daily (eg. as Ester Cal C)

Powder : Buffered vitamin C powder - 1 flat teaspoon twice daily

Children:

Tablets : 500mg twice daily or Buffered vitamin C pdr - ½ teaspoon twice daily

Infants and toddlers:

Powder: Buffered vitamin C pdr - ¼ to 1/3 flat teaspoon twice daily.

*In the event of infection increase these preventative doses to hourly.

Other Nutrients: Zinc 25mg/day - adult dose;

Children 10mg/day; **Babies** – 5mg/day.

Vitamin A is also necessary for optimal immune response.

Adults 5000iu daily. Children 2000iu daily.

Vitamin D toxicity has not been recorded at levels below 330nmol/L, which would require sustained doses in excess of 15,000iu/day of Vitamin D₃. Short-term loading doses of 7000iu -10,000iu daily for 3-4 weeks to correct deficiency are perfectly safe.