

# Capsule Summary

## Does Zinc help in the Mitigation of COVID-19 ?

The ongoing COVID-19 pandemic has put a tremendous burden on the healthcare system of countries around the world. Although the of nutrition in the fight against COVID-19 has not been strongly emphasised, researchers have proposed zinc supplementation as an adjuvant for the management of patients with COVID-19. A recently published study evaluated the role the effectiveness of zinc supplementation in the prevention and mitigation of COVID-19. We have summarised the study findings below.

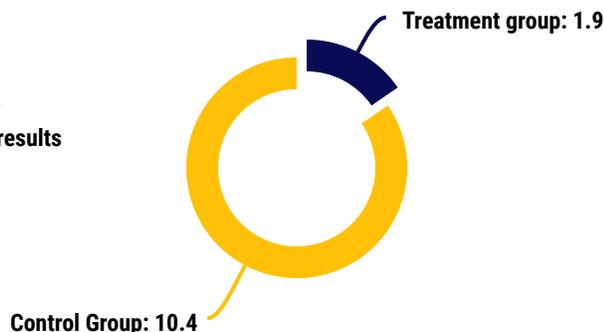
### Study Population

This was an ambulatory, interventional, prospective, single-blind study. The case group included 104 participants who were randomised to receive 10 mg, 25 mg, or 50 mg zinc picolinate daily while the control group included paired according to their demographics and clinical parameters

### Study Findings

#### % of Patients developing COVID-19 Infection

Statistically Significant results  
 $p = 0.015$



Controlling for co-morbidities, participants in the control group were 7.38 (95% CI: 1.80, 50.28) times more likely to develop symptomatic COVID-19 infection when compared with individuals in the treatment group ( $p < 0.01$ ).

### Conclusion

- Supplementation in all three doses (10, 25, and 50 mg) may be an effective prophylaxis of symptomatic COVID-19 and may mitigate the severity of COVID-19 infection
- Data from this study needs to be replicated in other populations and locations
- Public health and nutrition services need to be engaged on the emergent need to use zinc supplementation or fortification of staple foods in the prevention and mitigation of COVID-19 infection severity.

### Key Opinion Leader's Viewpoint

Zinc, a trace element found in food, has multiple functions. In addition to impairing replication of RNA viruses, it is also essential in cell division, growth, protein synthesis, tissue repair, wound healing, immune responses, and also has anti-inflammatory and antioxidant properties. Consequently, zinc deficiency has been associated with an increased susceptibility to infectious diseases, including viral infections. Some studies have shown that zinc levels have a positive correlation against certain viral infections.

However, there are limited well-designed clinical studies (both in number of studies and number of patients) to routinely advocate zinc supplementation in COVID-19, over and above the recommended daily allowance (RDA). National Institute of Health (USA), in its COVID-19 Treatment Guidelines (21st April 2021), recommends against supplementing zinc above the RDA, until the results of (several of which are underway) larger, placebo-controlled trials are available

**Given the paucity of research on zinc in COVID-19, it is prudent to recommend zinc at the RDA of 11 mg per day for men and 8 mg per day for women.**



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### Reference

The published manuscript can be accessed at -  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8711630/pdf/fmed-08-756707.pdf>

#### Information Source:

Gordon AM and Hardigan PC (2021) A Case-Control Study for the Effectiveness of Oral Zinc in the Prevention and Mitigation of COVID-19. *Front. Med.* 8:756707. doi: 10.3389/fmed.2021.756707

### Disclaimer

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