

# Should melatonin be used as prophylaxis for COVID-19?

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This rapid review summarizes the available evidence on the efficacy and safety of melatonin in treating patients with COVID-19. This may change as new evidence emerges.

### **KEY FINDINGS**

- Currently, there is no sufficient evidence to support the use of melatonin as prophylaxis for COVID-19 as there were no published clinical trials nor on-going trials found.
- Prevention measures
  - Wash your hands often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing.
  - Avoid touching your eyes, nose, and mouth
  - Avoid close contact
  - Wear facemask if you are sick
  - Clean AND disinfect frequently touched surfaces daily using detergent or soap and water prior to disinfection.
- Melatonin may have an indirect anti-viral effect due to its anti-inflammatory and anti-oxidant properties.
- It was reported that it indirectly targets Human coronavirus (HCoV) cellular targets involve in the viral infection of HCoV including SARS-COV-2
- Currently, there is no sufficient evidence to support the use of melatonin as prophylaxis for COVID-19. There were no published clinical trials nor on-going trials ound.
- Only mild adverse effects were found in short term and long-term use of melatonin.
- There were no guidelines found recommending the use of melatonin for prevention of COVID-19.

#### RESULTS

There is no sufficient evidence to support the use of melatonin as prophylaxis for COVID-19 as there were no published clinical trials nor on-going trials found.

#### **CONCLUSION**

There is no evidence that melatonin can be used as prophylactic treatment for COVID-19. High quality randomized controlled trials are needed.

**Disclaimer:** The aim of these rapid reviews is to retrieve, appraise, summarize and update the available evidence on COVID-related health technology. The reviews have not been externally peer-reviewed; they should not replace individual clinical judgement and the sources cited should be checked. The views expressed represent the views of the authors and not necessarily those of their host institutions. The views are not a substitute for professional medical advice.

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## **Declaration of Conflict of Interest**

No conflict of interest

#### REFERENCES

- Coronavirus Disease 2019 (COVID-19) Prevention & Treatment [Internet]. Centers for Disease Control and Prevention. 2020 [cited 2 April 2020]. Available from: https://www.cdc.gov/coronavirus/2019-ncov/prevent-gettingsick/prevention.html?CDC\_AA\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019 -ncov%2Fprepare%2Fprevention.html
- 2. Zhang R, Wang X, Ni L, Di X, Ma B, Niu S, Liu C, Reiter RJ. COVID-19: Melatonin as a potential adjuvant treatment. Life Sciences. 2020:117583.
- 3. Zhou Y, Hou Y, Shen J, Huang Y, Martin W, Cheng F. Network-based drug repurposing for novel coronavirus 2019-nCoV/SARS-CoV-2. Cell Discovery. 2020;6(1):1-



