

## Post COVID 19 Patients: Chronic Fatigue Syndrome and Rejuvenation Through Nutrients Supplementation

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### How to cite this article:

Neelesh Kumar Maurya. Post COVID 19 Patients: Chronic Fatigue Syndrome and Rejuvenation Through Nutrients Supplementation. *Int J Food Nutr Diet.* 2020;8(3):137-138.

A novel coronavirus was first identified in Wuhan, China, in December 2019. The World Health Organization named coronavirus 2 acute respiratory syndromes (SARS-CoV-2) and is responsible for coronavirus disease in 2019 (COVID-19).<sup>1</sup> Globally, 33,998,571 recorded cases of COVID-19, including 1035636 fatalities, were announced to the worldometers.info on 3 October 2020.<sup>2</sup> Present coronavirus disease (COVID-19) has been global health and economic pandemic. Infection with extreme acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) is known to cause severe respiratory symptoms to acute respiratory distress syndrome (ARDS). The highest mortality rates have been reported in patients with underlying cardiovascular disease and elevated cardiac troponin levels. This high inflammatory load is believed to be co-responsible for ARDS growth, vascular inflammation, myocarditis, and other cardiac events.<sup>3</sup> Scientists observed that patients who contracted COVID-19 displayed 'cytokine storm' patients had elevated levels of IL-2, IL-7, granulocyte-colony stimulating factor, and tumor necrosis factor. The virus is associated with delayed expression of type I interferon (IFN) signaling, a central part of the innate defense against viral infections. A previous study has demonstrated a complicated relationship between immunity and genetic expression where the infectious agent enhances proinflammatory cytokines, such as interleukin (IL)-1, IL-6, and tumor necrosis factor, with modifications in T-cells and natural killer cell function.<sup>4</sup> Over expression of these immune modulators induces fatigue so that the host retains the resources required to battle

the infection. An example of this is when we used viral hepatitis interferon. Few patients may have endured this medication due to impaired fatigue and stress-induced by interferon. The previous research indicates a history of hyper inflammation that was consistent with problems such as multi-organ failure.<sup>5</sup>

COVID-19 is not a short-term critical health care problem that would go down and not return. Recovered COVID-19 patients are incapable to perform normal routine task and feel lack of energy. Additional organ structures that may be impaired include the brain, liver, and kidneys. Depression, fear, and post-traumatic stress injury are also possible long-term sequels to COVID-19.<sup>6</sup> The continuous process would comprise of an interminable number of patients with compromised functional status and quality of life who should be treated as super specialties physicians through health multidisciplinary teams. It should be remembered that chronic fatigue is a complicated condition, and no recovery plan works for everyone. Multi-faceted treatments are usually used to effectively control the syndrome's effects, including incapacitating exhaustion and discomfort. Studies indicated that these nutrient supplements help combat post-COVID 19 fatigue in patients.<sup>7</sup>

- Vitamin B12, folic acid as RDA
- Selenium as RDA
- Vitamin D: 10 mg per day
- Magnesium malate 1000 mg, 150 mg of El. Three a day.
- Zinc gluconate 15 to 30 mg per day
- Acetyl-L-carnitine 0.5 to 2 g twice daily (may be increased to 2 g three times daily if required in extreme cases)
- Fish oil (EPA / DHA) 2 g a day
- Co-Q 10, 100 to 200 mg per day

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## References

1. World Health Organization. Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases: interim guidance, 2 March 2020. World Health Organization; 2020.
  2. <https://www.worldometers.info/coronavirus/> [assessed on 3 October 2020].
  3. Khiali S, Khani E, Entezari-Maleki T. A Comprehensive Review of Tocilizumab in COVID-19 Acute Respiratory Distress Syndrome. *The Journal of Clinical Pharmacology*. 2020 Sep;60(9):1131–46.
  4. Islam MF, Cotler J, Jason LA. Post-viral fatigue and COVID-19: lessons from past epidemics. *Fatigue: Biomedicine, Health and Behavior*. 2020 Apr 2;8(2):61–9.
  5. Itsui Y, Sakamoto N, Kurosaki M, Kanazawa N, Tanabe Y, Koyama T, Takeda Y, Nakagawa M, Kakinuma S, Sekine Y, Maekawa S. Expressional screening of interferon-stimulated genes for antiviral activity against hepatitis C virus replication. *Journal of viral hepatitis*. 2006 Oct;13(10):690–700.
  6. O'Connor, Christopher M. "COVID-19 Fatigue: Not So Fast." 2020: 592–594.
  7. <https://www.practiceupdate.com/content/persistent-symptoms-after-acute-covid-19/103996> [assessed on 3 October 2020].
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