

# Review of: "[Review] Sarcopenia in Coronavirus Disease (COVID-19): All to Know from Basic to Nutritional Interventions from Hospital to Home"

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**Potential competing interests:** No potenIn this review, Sarcopenia in Coronavirus Disease (COVID-19): All to Know from Basic to Nutritional Interventions from Hospital to Home " This review will focus on The mechanism of sarcopenia can be so close to COVID-19 pathology that requires special care. Even though including recent and relevant literature, could be structured more clearly and follow a line of thought. Comments: 1. Sarcopenia may largely impact patients' in-hospital prognosis as well as the vulnerability to the post-COVID-19 functional and physical deterioration. This may include both pathological changes in organ systems and functional deterioration in patients exemplified by the inability to cope with the daily life tasks or development of the psychologic disturbances. Additional information should be added by focusing on Main physiopathological mechanisms involved in the development of post-covid sarcopenia. 2. Aging is also associated with the increase of the reactive oxygen species (ROS) generation in mitochondria, their vacuolization and enlargement. Age-related changes in mitochondria and mitochondrial pool add to the susceptibility to the development of sarcopenia. A new question regarding the origin for these subsets also need to be attention in this review. 3. One of the ways by which the acute inflammation of COVID-19 may augment processes leading to sarcopenia is by potentially winding-up inflammation. Inflammation is characterized by the increased levels of proinflammatory cytokines i.e. IL-1, IL-6, TNF- $\alpha$  and CRP. Just mention more regarding cytokines in COVID-19. 4. As the results of further research will become available, new insights will inform better practices to recognize, evaluate and both prevent and treat acute sarcopenia of COVID-19 additional information should be added. tial competing interests to declare.

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