

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 potential competing interests to declare.

The review by Moghadam and collaborators is highly interesting and draws attention to a significant issue: sarcopenia in hospitalized patients due to COVID-19. Although the COVID-19 pandemic is no longer considered a global health emergency, as declared by the WHO, there have been 211,000 new SARS-CoV-2 infections in the past seven days. A significant proportion of these positive cases may experience complications associated with COVID-19, mainly if hospitalized. In this context, it is crucial to acknowledge that a portion of these affected individuals may also have sarcopenia. Therefore, the importance of this topic cannot be understated, making the review article highly valuable.

SARS-CoV-2, like many other viruses, has a great ability to hijack and divert resources from its host to favor its replication. Lopes (<https://doi.org/10.1007/s42770-021-00497-0>), showed that COVID-19 causes extra-pulmonary complications. Severely, SARS-CoV-2 disrupts host metabolism and acts on several catabolic pathways. This fact favors sarcopenia in patients with severe or moderate COVID.

The article has a sequence of sections that make a lot of sense to the reader, despite having duplicated subtopics. Although the text allows a fluid reading, there is a need for revision. I believe that a deeper review could solve most of problems pointed out by the reviewers. Thus, the article will be able to clarify the issues presented to the reader.

Pontual corrections:

Although the reader knows that he will find a review on the subject, the methodology applied in this review was not mentioned. The criteria on the choice of articles is absent.

The authors state, in the abstract section, that COVID-19 and sarcopenia share common pathways. Therefore, in the section "The mechanism between COVID-19 and Sarcopenia", the authors contradict each other.

Were the figures created by the authors of the work or do they come from other works? If it is the second option, it is necessary to include the references referring to the figures.

As already described by other reviewers, the first figure of the article is entitled figure 2. In addition the figure caption needs to be corrected so that the text makes more sense.

Figure 3 has a large amount of information that is little exposed along the article discussion. The caption must be improved

Table 1 has a lot of information. Acronyms were not made available. I noticed that the acronyms are described in the following "Nutrition" section. Perhaps, the sections could be unified.

Duplicated - "Nutrition", "Physical Activity", and "Depression" - topics must be unified

Final considerations:

The article is interesting, presents important issues, has arguments and a significant amount of references. Therefore, I suggest authors to transform the article into a mini-review - more concise and adequate for the format presented so far. Revise the text to improve its flow - if necessary, take the opportunity to use the AI tool.

Kind regards