

Point-by-Point Response to Reviewer's Comments

We would like to sincerely thank the reviewer for the helpful suggestions. We have considered all the comments and modified the manuscript based on the reviewer's suggestions. All the changes have been highlighted in green through the manuscript. We feel that the quality of the manuscript has been significantly improved with these modifications. We hope our revision and accompanied responses an acceptance of our manuscript for publication ***Sustainability***.

In addition, an English native speaker has reviewed the manuscript to ensure there are not grammatical mistakes.

Sincerely,

Dr. Fernandez-Lazaro

1. Rev: The title is confusing.

Authors: We have now modified the title (please see below). However, if the reviewer has any additional suggestions, we are open to modify it.

Electromyography: A simple and accessible tool to assess physical performance and health during hypoxia training. A systematic review

2. Rev: Why studies with women were excluded?

Authors: We excluded female athletes because they have different intensity and physiological responses to exercise than male athletes, which may directly influence EMG results [11-13].

References

11. Gallo Flórez R. Physiological changes in sports women. Education Fisical Sports. 1995, 17, 1-7.
12. Córdova Martínez A. Sports Physiology (1ed). Madrid: Síntesis. 2013.
13. París CL. Influence of sex in the practice of sports. Biology of sportswomen. Arbor. 2000, 165, 249-263

3. Rev: The paragraph with line 81-90 does not transition well from the previous paragraph, or the paragraph after.

Authors: Thank you for the concern. We have smoothed the transition between paragraphs as follows:

Page 3, lines 86-81: "EMG has multiple potential applications, not least as a diagnostic tool. In some cases, patients are diagnosed after the onset of the first symptoms after a lengthy preclinical phase".

4. Rev: 4.8 seems not fit well with the other discussion

Authors: Thank you for the concern We have modified the discussion section and create a new subsection (5. Application of electromyography for a sustainable lifestyle) in which we discussed the application on EMG related to quality of health and quality of life (pages 10-11, lines 314-325) as well as physical performance (pages 11-12, lines 330-351).