

Second - Review in:

Influence of 4-week lower extremity high-intensity interval training on energy metabolism and maximal oxygen uptake of elite swimmers.

I would like to extend my sincere congratulations to the authors for their dedication, ethical approach, and evident passion demonstrated throughout this research. Following the major revisions already undertaken, I believe that addressing a few remaining minor corrections will render the manuscript ready for publication.

General Comment:

Format the text and correct the font and various other details that need attention

The **introduction** is more clarity and flow.

Comment 1:

Line 91 – 93: “Training mode also plays a role; for example, *Twist (2023) and Wist et al. (2023) (Twist, 2023)* found that running-based HIIT induced greater cardiovascular load than cycling-based HIIT.” This sentence needs some formatting because the authors are not listed in the references. Please clarify and complete the references if necessary.

Comment 2:

Line 105 – 108: The last sentence of the introduction should state the hypotheses of this research.

Materials and Methods

Comment 3:

Line 105: “effect size ($f = 0.25$)” f is written with a capital F. Please corrected it.

Line 174: The flow chart study should be a reference to the number of participants (N=24). It could be better structured and refer to the total number of participates, who were excluded from the study (due to injury or illness, etc.) and the division into experimental and control groups with N.

Line 215: I think that figure 3 is unnecessary because the Borg scale is known. If you want, please make a reference to it.

Results

Comment 4:

Line 247: The values presented in Table 2 require verification, particularly the P-values, which should be reported accurately and in accordance with established statistical reporting guidelines. Report exact P-values (e.g., $P = .032$).

Comment 5:

Line 250: “Note. Values are presented as mean \pm standard deviation (SD).” It should be written (\pm SD). Please, correct it.

Line 251: the term “Statistical comparisons” should be replaced with “Statistical analysis” to more accurately reflect the content of the section. Please, correct it.

Line 300: “analyses” should be replaced with “analysis”. Please, correct it.

The **discussion** is better structured but needs some corrections to flow into the text.

Comment 6:

Where numerical values are currently presented, they should be replaced with a descriptive summary detailing the behavior of the parameters following the intervention programme (e.g., indicating whether they increased, decreased, or remained unchanged).

Comment 7:

Line 401 – 408: This paragraph should be placed at the end of the discussion.

Line 417 – 422: It could be linked to the previous paragraph in the discussion text.

Comment 8:

In references

Line 539 – 552: Check the reports because they have been written twice.

Once again, I would like to express my respect for your positive comments and I hope that when you continue to contribute to science with new innovative research, I will feel proud to have collaborated with you.