Retraction: Medeiros et al. (2022)

This issue of the International Journal of Sport Nutrition and Metabolism (IJSNEM) includes a letter to the editor (Tiller, 2022) that expresses concern regarding a recently published paper by Medeiros et al. (2022). The expression of concern primarily relates to the maximal oxygen uptake (VO₂-max) data in the study. Specifically, our reader noticed that the magnitude of change in absolute VO₂-max (L·min⁻¹) after 60 days of vitamin D supplementation (i.e. 28% increase) is both physiologically implausible when considering the known responsivity of that parameter to various interventions and, moreover, is mathematically incompatible with the completely stable relative VO₂-max (mL·kg⁻¹·min⁻¹) values reported in the same paper (unless body mass changed by circa 18 kg).

The authors of the original article were asked to provide an explanation for the apparent inconsistencies, along with their source data, in the hope that an erratum might clarify and/or correct any issues. No coherent explanation or adequate response to the expression of concern could be obtained from the authors, although various revised data files were made available. In summary, those revised data still included unprecedented changes in absolute VO₂-max (L·min⁻¹) at both a group and especially an individual level, with no logical reason to account for that variance; whereas the authors now acknowledge that some of the relative VO₂-max (mL·kg⁻¹·min⁻¹) data in their original manuscript were incorrect (it is uncertain how these errors occurred). Unfortunately, it appears that almost one-third of the statistics reported in the manuscript before it is submitted; the number of authors included on scientific papers in the biomedical sciences continues to increase (i.e. “hyperauthorship”; Cronin, 2001), so there should be no shortage of individuals keen to take responsibility for the data/paper at the submission stage.

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References


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