REPLY

Response to comments on “Effect of high-intensity aerobic exercise on aerobic fitness and HbA1c in patients with type 2 diabetes”

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Lucas Helal, Daniel Umpierre, and Ruy Silveira Moraes commented on our article “Effect of high-intensity aerobic exercise on aerobic fitness and HbA1c in patients with type 2 diabetes”.

We appreciate the interest for and comments on our work.

Helal et al. have expressed concern on the lower baseline HbA1c level in MIT compared to the HAIT group. As described in the article, this may have concealed a potential effect of MIT on HbA1c adaptations. Although the HAIT results were corrected for skewness and still were more improved than the MIT results, we can of course not categorically ignore the impact of the lower MIT baseline values.

Helal et al. also commented on the minor differences in total exercise time between the two intervention groups. The total amount of training time in the MIT group was 31% higher than in the HAIT group. These numbers include the habitual activity levels of the participants. The intervention training was to be a supplement, and not a substitution for the habitual activity already performed. The actual difference in the total amount of intervention training is, however,

50% between the two groups, which is more than we aimed for. This means that the MIT group exercised 173 min per week more than they used to, while the HAIT group only exercised 88 min per week more than they used to. Most important, there was a 93% difference in high aerobic intensity volume between the groups. This clearly expresses the difference between the two training groups. We thus do not agree that the interventions should need to differ more clearly. On the contrary, we aimed to perform two intervention training regimes matched for total work to differ in intensity but not differ in kilocalories spent. We agree that it would also be interesting to compare an even lower amount of HAIT with an even higher amount of MIT, but that was not the aim of the present study.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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