



# Corrigendum: Triceps Surae Muscle Architecture Adaptations to Eccentric Training

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# A Corrigendum on

## Triceps Surae Muscle Architecture Adaptations to Eccentric Training

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Geremia JM, Baroni BM, Bini RR, Lanferdini FJ, de Lima AR, Herzog W and Vaz MA (2020) Corrigendum: Triceps Surae Muscle Architecture Adaptations to Eccentric Training. Front. Physiol. 11:627. doi: 10.3389/fphys.2020.00627 In the original article, an incorrect abbreviation for muscle thickness, "ML," was used instead of "MT." A correction has been made to the **Abstract**, subsection **Results**:

"Fascicle lengths (GM: 13.2%; GL: 8.8%; SO: 21%) and MT (GM: 14.9%; GL: 15.3%; SO: 19.1%) increased from pre- to post-training, whereas PAs remained similar. GM and SO FL and MT increased up to the 8th training week, whereas GL FL increased up to the 4th week. SO displayed the highest, and GL the smallest gains in FL post-training."

In addition, the training responsiveness was mistakenly calculated considering the Pre-training and Post-12 moments. Thus, "Pre-training and Post-12" was published instead of "Baseline and Pre-training," which is the correct calculation. Corrections have been made in the following places:

The Materials and Methods section, subsection Statistics, the final paragraph:

"Responsiveness to the eccentric training (percent change from pre- to post-training) was determined by the typical error (TE) criteria (Cadore et al., 2018). The TE was calculated by the equation  $TE = SD_{diff}/\sqrt{2}$ , where  $SD_{diff}$  is the standard deviation of the differences between the evaluation time-points of Baseline and Pre-training. Non-responsive participants were defined as those that did not achieve an increase that was two times higher than the TE with respect to zero."

The **Results** section, paragraphs 2-4:

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"All triceps surae muscles increased their FL in response to eccentric training (GM: p < 0.001, ES = 0.90; GL: p < 0.001, ES = 0.51; SO: p < 0.001, ES = 1.00; **Table 1**). The three muscles increased their FL in the first four training weeks. GM and SO continued to increase their FL from Post-4 to Post-8, while GL did not. None of the three muscles had FL changes between Post-8 and Post-12 (**Table 1**). The individual responsiveness analysis showed that 60–90% of the participants responded to eccentric training with FL increases (**Table 2**).

Pennation angle did not change along the training period for any muscle (p > 0.05; ES < 0.2; **Table 1**). According to the individual responsiveness analysis, 35–50% of the participants presented changes on PA in response to the eccentric training (**Table 2**).

TABLE 2 | Individual responsiveness to eccentric training.

		Typical error	Responders n (%)	Non-responders n (%)
GM	FL	0.21	14 (70)	06 (30)
	PA	0.72	10 (50)	10 (50)
	MT	0.04	18 (90)	02 (10)
GL	FL	0.30	12 (60)	08 (40)
	PA	0.48	08 (40)	12 (60)
	MT	0.02	19 (95)	01 (05)
SO	FL	0.22	18 (90)	02 (10)
	PA	0.59	07 (35)	13 (65)
	MT	0.03	17 (85)	03 (15)

GM, gastrocnemius medialis; GL, gastrocnemius lateralis; SO, soleus; FL, fascicle length; PA, pennation angle; MT, muscle thickness.

# **REFERENCES**

Cadore, E. L., Pinto, R. S., Teodoro, J. L., da Silva, L. X. N., Menger, E., Alberton, C. L., et al. (2018). Cardiorespiratory adaptations in elderly men following different concurrent training regimes. *J. Nutr. Health Aging* 22, 483–490. doi: 10.1007/s12603-017-0958-4

Muscle thickness increase was consistent among the muscles assessed in this study (GM: p < 0.001, ES = 1.08; GL: p < 0.001, ES = 1.29; SO: p < 0.001, ES = 1.40; **Table 1**). Just as observed for FL, the three muscles increased their MT in the first four training weeks, and GM and SO continued to increase from Post-4 to Post-8. None of the three muscles had MT changes between Post-8 and Post-12 (**Table 1**). The individual responsiveness analysis shows that 85–95% of the participants responded to eccentric training with MT increases (**Table 2**)."

Finally, as the training responsiveness was miscalculated, **Table 2** needs to be corrected. The corrected **Table 2** appears above.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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