Abstract

**VO₂MAX TEST IS NOT ALTERED BY A SUBMAXIMUM EXERCISE**
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**ABSTRACT**

**INTRODUCTION:** The Maximum Oxygen Consumption (VO₂max) and Ventilatory anaerobic threshold (VT), is measured using progressive exercise protocol until exhaustion, these results can be affected by a previous submaximum exercise. **PURPOSE:** The purpose of this study was evaluate the reproducibility of maximum effort test after a submaximum exercise. **METHODS:** 19 subjects (mean ± SD; age, 21.8±2.5 years; body mass, 71.0±10.6 and height, 175.2±8.1) participated in this study. During two days of assessment separately for at least 24h recovery subjects performed the following tests: Day 1 a maximum effort test and a submaximum exercise at 80% of VO₂max. Day 2 the order of the tests performed on day 1 was reversed. **RESULTS:** No significant differences were found in the VO₂max or ventilatory thresholds determined in both tests of maximum effort. (VO₂max 54.2 ± 6.8 vs 55.1 ± 6.4 (ml·kg⁻¹·min⁻¹) ICC; 0.91, CV; 3.9 ± 2.1); (VO₂RCT 45.6 ± 6.4 vs 45.9 ± 5.7 (ml·kg⁻¹·min⁻¹) ICC; 0.96, CV; 3.0 ± 2.1)( VO₂ VT 35.6 ± 4.7 vs 35.6 ± 4.7 (ml·kg⁻¹·min⁻¹) ICC; 0.87, CV; 4.9 ± 3.9). **CONCLUSION:** The results of the present study showed a high reproducibility of the data obtained when maximum effort test is assessed (i.e., VO₂max and ventilatory threshold), regardless the submaximum exercise.