Tests to determine the maximum and submaximum aerobic running velocity #66

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The running velocity on the anaerobic threshold (VAT) has been used as an important parameter of training performance. The purpose of this was to relate the VAT with the maximum aerobic velocity (MAV) and VO_2max in two males. Age 26 years (±5.7), body mass 82.0 kg (±5.7) and height 182.5 cm (±4.9). It was applied the Léger-Boucher test on a track to determine the MAV and VO_2max. After 72 hours, a minimum lactate test (MLAC) was applied. The VAT was identified as corresponding to the lower concentration of lactate (LAC), which was determined in portable lactimeter. The heart rate (HR) was obtained through heart rate monitor. The descriptive statistical to data analysis was used. Results showed the mean VO_2max of 51.5 ml.kg.min^{-1} (±7.4), corresponding to a MAV of 15.0 km / h (± 2.2) and mean HR of 185 bpm (± 15.5). The MLAC had an average of 6.3 mmol/L (±5.7) of LAC at 12.3 km/h (±1.1), corresponding to 81.7% (±0.6) of MAV. It was found that regardless of concentrations of LAC, the VAT is in a submaximal level with respect to MAV and the VO_2max. These findings may allow the use of Léger-Boucher test variable as parameters to prescription and control of the running velocity training in various levels of conditioning.

Key words: lactate; anaerobic threshold; running velocity.