

## **FIELD TESTES AS PREDICTORS OF VO2 MAX AND ANAEROBIC THRESHOLD: IN YOUNG SOCCER PLAYERS.**

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### **Abstrac**

The field tests are used worldwide with the purpose of evaluation the aerobic power in athletes. However in the literature are few studies with young soccer players that can validate the most used field tests compared with the direct measurement of maximum oxygen consumption (VO2 max) and a anaerobic threshold (AT).

**Purpose:** To analyse the correlation between the average speed of Cooper Test (CT) and the average speed of 4000 meters run (R4000) with the VO2 max and AT in the treadmill measured by gas exchange.

**Methods:** Sixty-three young soccer players, aged 15-20 years. Treadmill tests with vista cpx (Vacumed) and heart rate polar system to detect VO2 max (ml/kg/min) and AT (km/h). Field tests (CT and R4000) performed in a 400 meters track. Statistical analysis made by the Pearson correlation test.

**Results:** AT versus average speed of CT ( $r = 0.6$   $p < 0.05$ ). AT versus average speed of R4000 ( $r = 0.74$   $p < 0.05$ ) and VO2 max versus CT ( $r = 0.27$   $p > 0.05$ ).

**Conclusion:** The results suggest that we can use the field tests to predict the AT, with a greater correlation with the R4000 than the CT. The CT was not a good predictor of VO2 max for young soccer players.