** RESTING METABOLIC RATE IN ADOLESCENT ATHLETES: **
The development and validation of new equations, and comparison to previous models

**ENERGY BALANCE**
is an important factor not only for performance and recovery, but also for the growth and maturation of adolescent athletes

**RESEARCH**
on RMR (and associated prediction equations) in adolescent athletes is sparse.

Are current RMR Prediction Equations valid for adolescent athletes?

126
COMPETITIVE ATHLETES
97
FEMALE
29
MALE
13 - 19
YEARS OLD
8
DIFFERENT TEAM & INDIVIDUAL SPORTS REPRESENTED

**DEXA TESTING RMR**

Most Existing prediction equations underestimate RMR in adolescent athletes
Mass (BM, FFM and FM) and sex were the greatest determinants of RMR
Including maturity (assessed as years to peak height velocity) did not improve prediction of RMR

R
M
R
= 11.1 x BM (kg) + 8.4 x height (cm) – (340 Male, or 537 Female)


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