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ABSTRACT

Purpose

To compare energy use and substrate partitioning arising from repeated lower- versus upper-body sprints, or endurance exercise, across a 24-h period.

Methods

Twelve untrained males (24 ± 4 y) completed three trials in randomized order: (1) repeated sprints (five 30-s Wingate, 4.5-min recovery) on a cycle ergometer (SIT_{Legs}); (2) 50-min continuous cycling at 65% $\dot{V}O_2$max (END); (3) repeated sprints on an arm-crank ergometer (SIT_{Arms}). Respiratory gas exchange was assessed before and during exercise, and at eight points across 22 h of recovery.

Results