### Accepted Manuscript

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Monique E. Francois, Matthew J. Graham, Evelyn B. Parr, Nancy J. Rehrer, Samuel J.E. Lucas, Stasinos Stavrianeas, James D. Cotter

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### ACCEPTED MANUSCRIPT

#### Similar Metabolic Response to Lower- versus Upper-Body Interval Exercise or

#### **Endurance Exercise**

Monique E. Francois<sup>1</sup>, Matthew J. Graham<sup>1</sup>, Evelyn B. Parr<sup>1</sup>, Nancy J. Rehrer<sup>1</sup>, Samuel J.E. Lucas<sup>2</sup>, Stasinos Stavrianeas<sup>3</sup>, James D. Cotter<sup>1\*</sup>

 <sup>1</sup>School of Physical Education, Sport and Exercise Sciences, University of Otago, Dunedin, New Zealand
<sup>2</sup>Department of Physiology, University of Otago, Dunedin, New Zealand,
<sup>3</sup>Willamette University, Oregon, USA

\*Corresponding Author: Associate Professor James Cotter School of Physical Education, Sport and Exercise Sciences PO Box 56 Dunedin 9054 New Zealand jim.cotter@otago.ac.nz

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  $(24 \pm 4 \text{ y})$  completed three trials in randomized order: (1)

repeated sprints (five 30-s Wingate, 4.5-min recovery) on a cycle ergometer (SIT<sub>Legs</sub>); (2)

50-min continuous cycling at 65% VO<sub>2</sub>max (END); (3) repeated sprints on an arm-crank

ergometer (SIT<sub>Arms</sub>). Respiratory gas exchange was assessed before and during exercise,

and at eight points across 22 h of recovery.

#### Results

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