**Supplementary Digital Content 3: Studies included in the analysis examining hunger responses after exercise (*n* = 118)**

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| **Reference** | **Participants (all healthy males)** | **Exercise** | **Mean Hunger Post-Exercise (mm)** |
| **Broom et al (Unpublished)**  Data available on request | *n* = 9; age 23.2 ± 2.1 y; BMI 22.8 ± 1.5 kg/m2; V̇O2 peak 63.4 ± 5.8 mL/kg/min | Treadmill running; 90 min; 69.7 ± 2.2 % V̇O2 peak ; Net EE 5473 ± 699 kJ | Duration of post-exercise observation: 7 h  CON: 32 ± 13  EX: 35 ± 21  *P* = 0.447 |
| **Broom et al (2006) *J Sports Sci (abstract)***  *Control & high-intensity trial used only* | *n* = 9; age 21.4 ± 1.7 y; BMI 24.5 ± 2.4 kg/m2; V̇O2 peak 58.2 ± 5.6 mL/kg/min | Treadmill running; 30 min; 74.9 ± 4.4 % V̇O2 peak ; Net EE 2172 ± 453 kJ | Duration of post-exercise observation: 3h  CON: 55 ± 9  EX: 53 ± 9  *P* = 0.600 |
| **Broom et al (2007) *J Appl Physiol***  doi:10.1152/japplphysiol.00759.2006. | *n* = 9; age 21.2 ± 2.1 y; BMI 22.2 ± 2.4 kg/m2; V̇O2 peak 63.3 ± 6.7 mL/kg/min | Treadmill running; 60 mins; 71.9 ± 6.2 % V̇O2 peak ; Net EE 3603 ± 618 kJ | Duration of post-exercise observation: 8 h  CON: 57 ± 13  EX: 55 ± 10  *P* = 0.543 |
| **Broom et al (2009) *Am J Physiol Reg-I***  doi: 10.1152/ajpregu.90706.2008 | *n* = 12; age 21.2 ± 1.1 y; BMI 23.4 ± 1.6 kg/m2; V̇O2 peak 61.2 ± 6.1 mL/kg/min | Treadmill running; 60 mins; 68.5 ± 5.6 % V̇O2 peak ; Net EE 3488 ± 268 kJ | Duration of post-exercise observation: 6.5 h  CON: 31 ± 21  EX: 32 ± 17  *P* = 0.746 |
| **King et al (2011) *J Clin Endocrinol Metab***  *Control & exercise trial used only*  doi: 10.1210/jc.2010-2735 | *n* = 12; age 23.4 ± 3.4; BMI 22.8 ± 1.2; V̇O2 peak 57.3 ± 4.1 mL/kg/min | Treadmill running; 90 min; 69.8 ± 3.1 % V̇O2 peak ; Net EE 4716 ± 391 kJ | Duration of post-exercise observation: 6 h  CON: 29 ± 13  EX: 28 ± 15  *P =* 0.710 |
| **Deighton et al (2012) *Appetite***  *Control & fasted exercise trial used only*  doi: 10.1016/j.appet.2012.02.041 | *n* = 12; age 23.1 ± 3.0 y; BMI 23.7 ± 2.7; V̇O2 peak 53.5 ± 12.4 mL/kg/min | Treadmill running; 60 min; 71.1 ± 2.1% V̇O2 peak ; Net EE 3247 ± 465 kJ | Duration of post-exercise observation: 4.5 h  CON: 58 ± 10  EX: 62 ± 8  *P* = 0.223 |
| **Wasse et al (2012) *J Appl Physiol***  *Sea-level control and sea-level exercise trials used only*  doi: 10.1152/japplphysiol.00090.2011 | *n* = 10; age 23.8 ± 2.6 y; BMI 24.8 ± 2.4; V̇O2 peak 56.9 ± 6.5 mL/kg/min | Treadmill running; 60 min; 71.21 ± 5.7% V̇O2 peak ; Net EE 3278 ± 428 kJ | Duration of post-exercise observation: 4 h  CON: 44 ± 18  EX: 45 ± 10  *P* = 0.867 |
| **Deighton et al (2013) *Appl Physiol Nutr Metab***  *Control & steady-state exercise trial used only*  doi: 10.1139/apnm-2012-0484 | *n* = 12; age 22.0 ± 3.0 y; BMI 23.7 ± 3.0; V̇O2 peak 52.4 ± 7.1 mL/kg/min | Stationary cycling; 60 min; 59.5 ± 1.6% V̇O2 peak ; Net EE 2451 ± 208 kJ | Duration of post-exercise observation: 3.5 h  CON: 48 ± 9  EX: 42 ± 13  *P*  = 0.206 |
| **Wasse et al (2013) *Appl Physiol Nutr Metab***  *Control & running trial used only*  doi: 10.1139/apnm-2012-0154 | *n* = 11; age 22.7 ± 2.2 y; BMI 23.4 ± 2.4; V̇O2 peak 57.8 ± 10.0 mL/kg/min | Treadmill running; 60 min; 70.1 ± 4.0% V̇O2 peak ; Net EE 2940 ± 786 kJ | Duration of post-exercise observation: 2.5 h  CON: 55 ± 25  EX: 47 ± 24  *P*  = 0.213 |
| **Deighton et al (2014) *Appetite***  *Control & exercise-deficit trial used only*  [doi:10.1016/j.appet.2014.06.003](http://dx.doi.org/10.1016/j.appet.2014.06.003) | *n* = 12; age 23.8 ± 4.7 y; BMI 23.8 ± 2.7; V̇O2 peak 55.4 ± 9.1 mL/kg/min | Stationary cycling; 30 min; 64.5 ± 3.2% V̇O2 peak ; Net EE 1469 ± 256 kJ | Duration of post-exercise observation: 6 h  CON: 42 ± 12  EX: 41 ± 14  *P* = 0.920 |
| **Alajmi et al (2016) *Med Sci Sports Exerc***  *Men used only*  doi: 10.1249/MSS.0000000000000793 | *n* = 10; age 23.4 ± 3.5 y; BMI 23.4 ± 2.1; 61.3 ± 9.6; V̇O2 peak 61.3 ± 9.6 mL/kg/min | Treadmill running; 60 min; 71.9 ± 4.3% V̇O2 peak ; Net EE 3682 ± 690 kJ | Duration of post-exercise observation: 3.5 h  CON: 40 ± 9  EX: 45 ± 8  *P* = 0.076 |

Data = Mean ± SD; participants all healthy males