

Appendix 1. REE (kcal/d) for each modality and time. (Mean \pm SD).

Modality	Treatment	Base	IP	30min	60min
AEE	CHO	1746 \pm 214	2026 \pm 240	1649 \pm 173	1573 \pm 190
	PRO	1704 \pm 247	2149 \pm 230	1806 \pm 193	1763 \pm 175
	Mean	1725 \pm 231	2088 \pm 235	1728 \pm 183	1668 \pm 183
HIIT	CHO	1681 \pm 312	2805 \pm 469	1840 \pm 279	1750 \pm 281
	PRO	1546 \pm 301	2828 \pm 599	1750 \pm 265	1728 \pm 267
	Mean	1614 \pm 307	2817 \pm 534* [#]	1795 \pm 272*	1739 \pm 274*
HIRT	CHO	1638 \pm 281	2073 \pm 340	1699 \pm 311	1623 \pm 294
	PRO	1688 \pm 305	2189 \pm 292	1879 \pm 198	1786 \pm 188
	Mean	1663 \pm 293	2131 \pm 316	1789 \pm 255	1705 \pm 241

* Indicates significant difference between AEE and HIIT (p<0.0001-p=0.0022)

Indicates significant difference between HIIT and HIRT (p<0.0001)

REE = resting energy expenditure (kcal/day), AEE = aerobic endurance exercise, HIIT = high-intensity interval run, HIRT = high-intensity resistance training, CHO = carbohydrate, PRO = protein, Base = baseline measurement, IP = immediately post-exercise measurement, 30min = 30 minutes post-exercise measurement, 60min = 60 minutes post-exercise measurement

Appendix 2. RER for each modality, treatment, and time. (Mean \pm SD)

Modality	Treatment	Base	IP	30min	60min
AEE	CHO	0.82 \pm 0.05	0.88 \pm 0.06	0.83 \pm 0.05	0.83 \pm 0.05
	PRO	0.86 \pm 0.08	0.87 \pm 0.06	0.80 \pm 0.04	0.80 \pm 0.04
	Collapsed	0.84 \pm 0.07	0.88 \pm 0.06	0.82 \pm 0.05	0.82 \pm 0.05
HIIT	CHO	0.83 \pm 0.06	0.96 \pm 0.07	0.74 \pm 0.05	0.80 \pm 0.05
	PRO	0.84 \pm 0.04	0.97 \pm 0.10	0.73 \pm 0.05	0.75 \pm 0.03
	Collapsed	0.84 \pm 0.05	0.97 \pm 0.09* [#]	0.74 \pm 0.05* [#]	0.78 \pm 0.04*
HIRT	CHO	0.85 \pm 0.06	0.88 \pm 0.05	0.78 \pm 0.05	0.81 \pm 0.04
	PRO	0.84 \pm 0.05	0.86 \pm 0.06	0.76 \pm 0.07	0.77 \pm 0.05
	Collapsed	0.85 \pm 0.06	0.87 \pm 0.06	0.77 \pm 0.06 [§]	0.79 \pm 0.05 [§]

* Indicates significant difference between AEE and HIIT (p<0.0001-p=0.0020)

Indicates significant difference between HIIT and HIRT (p<0.0001-p=0.0169)

§ Indicates significant difference between AEE and HIRT (p=0.0004-0.0265) RER = respiratory exchange ratio, AEE = aerobic endurance exercise, HIIT = high-intensity interval run, HIRT = high-intensity resistance training, CHO = carbohydrate, PRO = protein, Base = baseline measurement, IP = immediately post-exercise measurement, 30min = 30 minutes post-exercise measurement, 60min = 60 minutes post-exercise measurement