

Supplementary material

Table S1. Individual RMR, RQ, MFO, FATmax, VO₂(FATmax), Speed (FATmax), RE, HR(RE), VO₂max and 5-km TT of eight participants for pre-intervention

N=8	RMR (kcal/d)	RQ (CO ₂ /O ₂)	MFO (g/min)	FATmax (%VO ₂ max)	VO ₂ (FATmax) (ml/ kg·min ⁻¹)	Speed _(FATmax) (km/h)	RE (ml/kg·min ⁻¹)	HR _(RE) (t/min)	VO ₂ max (ml/kg·min ⁻¹)	5 km-TT (s)
N1	1231.10	0.85	0.33	0.67	27.62	6.8	36.71	167	41.12	1620
N2	1640.81	0.89	0.34	0.71	23.73	6.8	38.49	156	47.19	1140
N3	2145.07	0.83	0.26	0.60	30.73	10.4	33.38	130	50.98	1013
N4	1804.28	0.74	0.54	0.73	34.39	10.4	32.07	123	33.60	1500
N5	2369.79	0.78	0.48	0.46	17.48	6.8	34.04	156	38.22	1500
N6	2299.30	0.85	0.43	0.53	28.78	6.8	39.05	149	54.55	1020
N7	2119.73	0.96	0.23	0.64	36.80	11.6	38.68	129	57.47	950
N8	2135.40	0.86	0.23	0.57	30.32	9.2	36.11	127	53.49	940

Table S2. Individual RMR, RQ, MFO, FATmax, VO₂(FATmax), Speed (FATmax), RE, HR(RE), VO₂max and 5-km TT of eight participants for FACR

N=8	RMR (kcal/d)	RQ (CO ₂ /O ₂)	MFO (g/min)	FATmax (%VO ₂ max)	VO ₂ (FATmax) (ml/ kg·min ⁻¹)	Speed _(FATmax) (km/h)	RE (ml/kg·min ⁻¹)	HR _(RE) (t/min)	VO ₂ max (ml/kg·min ⁻¹)	5 km-TT (s)
N1	1865.83	0.82	0.44	0.67	26.20	6.8	33.93	146	39.19	1680
N2	1796.38	0.78	0.49	0.71	25.90	6.8	38.08	147	53.63	1155
N3	2027.57	0.87	0.52	0.48	24.76	6.8	33.39	129	51.81	968
N4	2495.30	0.88	0.48	0.66	35.44	11.6	32.22	115	36.49	1500
N5	2250.96	0.74	0.52	0.58	25.89	8.0	35.16	136	44.54	1618
N6	2524.02	0.86	0.41	0.62	30.40	9.2	36.59	143	49.19	1050

N7	2052.17	0.80	0.34	0.77	33.48	14.0	37.08	126	56.30	960
N8	1397.45	0.79	0.47	0.70	37.49	12.8	30.71	133	53.82	1000

Table S3. Individual RMR, RQ, MFO, FATmax, VO₂(FATmax), Speed (FATmax), RE, HR(RE), VO₂max and 5-km TT of eight participants for HCHO

N=8	RMR (kcal/d)	RQ (CO ₂ /O ₂)	MFO (g/min)	FATmax (%VO ₂ max)	VO ₂ (FATmax) (ml/ kg·min ⁻¹)	Speed _(FATmax) (km/h)	RE (ml/kg·min ⁻¹)	HR _(RE) (t/min)	VO ₂ max (ml/kg·min ⁻¹)	5 km-TT (s)
N1	1962.37	0.79	0.62	0.58	24.68	6.8	34.92	144	42.29	1620
N2	1617.61	0.83	0.29	0.64	23.64	8.0	41.81	151	48.95	1020
N3	1671.31	0.84	0.44	0.48	25.13	8.0	33.54	135	51.88	970
N4	2714.93	0.73	0.58	0.65	31.90	8.0	35.83	118	37.11	1500
N5	2277.27	0.92	0.12	0.45	20.20	6.8	33.73	124	44.60	1651
N6	2199.16	0.83	0.69	0.56	26.90	8.0	38.00	146	48.40	1039
N7	2147.78	0.91	0.37	0.61	43.14	11.6	38.96	157	55.26	982
N8	1552.07	0.81	0.49	0.65	32.84	11.6	32.06	131	50.37	1002

Table S4. Comparing results of RMR, RQ, MFO, FATmax, VO₂(FATmax), Speed (FATmax), RE, HR(RE), VO₂max and 5-km TT for pre and post-intervention (FACR or HCHO) ($\bar{x} \pm SD$)

	Pre-intervention	Post-intervention (FACR)	Post-intervention (HCHO)
RMR (kcal/d)	1968.19±383.68	2051.21±375.68	2017.81±397.00
RQ(CO ₂ /O ₂)	0.84±0.07	0.82±0.05	0.83±0.06
MFO(g/min)	0.36±0.12	0.46±0.06*	0.45±0.19
FAT _{max} (%VO ₂ max)	61.27±9.26	64.74±8.87^{##}	57.79±7.57
VO ₂ (FATmax) (ml/ kg·min ⁻¹)	28.73±6.05	29.94±4.98	28.55±7.23
Speed _(FATmax) (km/h)	8.60±2.03	9.50±2.92	8.60±1.92

RE(ml/kg·min ⁻¹)	36.07±2.65	34.64±2.54[#]	36.11±3.26
HR _(RE) (t/min)	142.13±16.75	134.38±11.01[*]	138.25±13.54
VO _{2max} (ml/kg·min ⁻¹)	47.08±8.59	48.12±7.30	47.36±5.78
5 km-TT(s)	1210.38±281.98	1241.38±306.45	1223.00±307.88

*Significantly different to pre-intervention (p<0.05). [#]Significantly different to HCHO control(p<0.05). ^{##}Significantly different to HCHO control (p<0.01).