

Supplemental Digital Content 5. Summary of metabolic variables and perceived exertion during the metabolic tests.

		Habitual Diet					Ketogenic Diet				
		Stage 1	Stage 2	Stage 3	Stage 4	Max	Stage 1	Stage 2	Stage 3	Stage 4	Max
Velocity (km·h⁻¹)	Pre	9	10.5	12	13.5	18.81 ± 0.88	9	10.5	12	13.5	19.31 ± 0.96
	Post					18.93 ± 0.94					18.31 ± 1.07*
	ES (± 90% CI)					0.13 ± 0.15					-0.92 ± 0.52
VO₂^b (L·min⁻¹)	Pre	2.14 ± 0.18	2.50 ± 0.14	2.88 ± 0.22	3.25 ± 0.27	4.35 ± 0.49	2.16 ± 0.26	2.47 ± 0.27	2.79 ± 0.35	3.08 ± 0.39	4.30 ± 0.55
	Post	2.14 ± 0.18	2.47 ± 0.20	2.85 ± 0.26	3.27 ± 0.26	4.32 ± 0.46	2.13 ± 0.25	2.50 ± 0.19	2.93 ± 0.23	3.37 ± 0.27*	4.38 ± 0.43
	ES (± 90% CI)	0.00 ± 0.41	-0.20 ± 0.73	-0.16 ± 0.51	0.07 ± 0.37	-0.05 ± 0.14	-0.10 ± 0.48	0.09 ± 0.40	0.34 ± 0.31	0.66 ± 0.22	0.13 ± 0.25
RER^{a,b}	Pre	0.84 ± 0.03	0.87 ± 0.04	0.89 ± 0.04	0.93 ± 0.04	1.12 ± 0.05	0.85 ± 0.05	0.88 ± 0.03	0.90 ± 0.04	0.93 ± 0.04	1.14 ± 0.04
	Post	0.84 ± 0.04	0.88 ± 0.04	0.90 ± 0.03	0.94 ± 0.04	1.13 ± 0.06	0.74 ± 0.17	0.76 ± 0.03	0.78 ± 0.02	0.81 ± 0.02	1.00 ± 0.05**
	ES (± 90% CI)	-0.03 ± 0.59	0.06 ± 0.57	0.18 ± 0.52	0.07 ± 0.30	0.16 ± 0.44	-1.90 ± 0.72	-3.43 ± 1.06	-3.01 ± 0.78	-3.23 ± 0.76	-2.84 ± 1.06
EE^b (kJ·min⁻¹)	Pre	44.2 ± 3.8	51.7 ± 3.0	59.9 ± 4.5	67.7 ± 5.6	94.4 ± 10.5	44.6 ± 5.5	51.2 ± 5.5	58.0 ± 7.3	64.2 ± 8.1	93.5 ± 12.0
	Post	44.1 ± 3.8	51.1 ± 4.2	59.1 ± 5.3	68.2 ± 5.5	94.0 ± 10.1	43.5 ± 5.2	51.1 ± 3.9	59.9 ± 4.7	69.3 ± 5.6*	95.3 ± 9.4
	ES (± 90% CI)	-0.01 ± 0.37	-0.19 ± 0.69	-0.15 ± 0.48	0.07 ± 0.37	-0.03 ± 0.16	-0.18 ± 0.46	-0.02 ± 0.40	0.24 ± 0.31	0.56 ± 0.28	0.13 ± 0.25

HR^b	Pre	120 ± 6	134 ± 8	143 ± 7	154 ± 10	186 ± 8	123 ± 11	135 ± 12	145 ± 11	155 ± 12	186 ± 10
(beats·min⁻¹)	Post	121 ± 7	132 ± 7	143 ± 10	156 ± 11	184 ± 10	124 ± 12	137 ± 10	148 ± 11	160 ± 10	188 ± 11
ES (± 90% CI)		0.07 ± 0.30	-0.22 ± 0.26	-0.05 ± 0.41	0.11 ± 0.28	-0.19 ± 0.16	0.07 ± 0.33	0.15 ± 0.31	0.26 ± 0.21	0.32 ± 0.24	0.16 ± 0.28
RPE^b	Pre	9.0 ± 0.8	10.6 ± 0.9	12.0 ± 0.8	13.3 ± 1.0		9.3 ± 0.7	10.5 ± 0.8	11.8 ± 0.7	13.3 ± 0.9	
	Post	9.3 ± 0.7	10.8 ± 0.9	11.8 ± 1.0	13.0 ± 1.2		9.4 ± 0.7	10.9 ± 1.4	12.5 ± 0.9	14.1 ± 1.0	
ES (± 90% CI)		0.29 ± 0.54	0.12 ± 0.79	-0.32 ± 0.56	-0.23 ± 0.40		0.15 ± 0.84	0.35 ± 1.23	0.91 ± 0.38	0.87 ± 0.23	

Values are presented as mean ± SD. ES = Cohen's *d* effect size as interpreted according to <0.2, >0.2, >0.6, >1.2, >2.0 and >4.0 for *trivial, small, moderate, large, very large* and *extremely large*, respectively. VO₂ oxygen uptake; RER respiratory exchange ratio; EE energy expenditure; HR heart rate; RPE ratings of perceived exertion.

Significantly different in the post-KD compared to pre-KD test (**P* < 0.05; ***P* < 0.01).

Diet x training interaction; lower in the post-KD compared to pre-KD test across stages 1 - 4 (^a*P* < 0.001).

Main effect of intensity; incremental increase from stages 1-4 (^b*P* < 0.001).