

Medicine & Science IN Sports & Exercise

The Official Journal of the American College of Sports Medicine

www.acsm-msse.org

... Published ahead of Print

Chronic Adherence to a Ketogenic Diet Modifies Iron Metabolism in Elite Athletes

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Accepted for Publication: 16 October 2018

Medicine & Science in Sports & Exercise® **Published ahead of Print** contains articles in unedited manuscript form that have been peer reviewed and accepted for publication. This manuscript will undergo copyediting, page composition, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered that could affect the content.

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Table 4. Hematology data at Baseline and Adapt for the carbohydrate (CHO) and low carbohydrate high fat (LCHF) groups. Data presented as estimated marginal mean \pm standard error [95% confidence interval]. * Indicates a significant difference from baseline ($p < 0.05$). [†] Indicates a significant difference to CHO ($p < 0.05$).

		CHO		LCHF	
		Baseline	Adapt	Baseline	Adapt
Serum Iron ($\mu\text{mol/L}$)	Pre	22.7 \pm 2.5 [17.8-27.6]	19.1 \pm 2.5* [14.2-24.0]	21.2 \pm 2.7 [15.9-26.5]	17.3 \pm 2.7* [12.0-22.5]
Serum Ferritin ($\mu\text{g/L}$)	Pre	90.6 \pm 7.9 [74.8-106.3]	57.5 \pm 7.9* [41.7-73.2]	85.6 \pm 8.8 [68.1-103.0]	68.9 \pm 8.8* [†] [51.4-86.4]
Hemoglobin (g/dL)	Pre	14.4 \pm 0.2 [14.1-14.8]	14.1 \pm 0.2 [13.7-14.4]	14.4 \pm 0.2 [13.9-14.8]	14.8 \pm 0.2* [†] [14.4-15.2]
Hematocrit (%)	Pre	41.1 \pm 0.5 [40.2-42.0]	40.4 \pm 0.5 [39.5-41.3]	40.6 \pm 0.5 [39.5-41.7]	41.9 \pm 0.5* [†] [40.8-43.0]
IL-6 (pg/ml)	Pre	1.0 \pm 0.6 [-0.1-2.2]	0.7 \pm 0.6 [-0.4-1.9]	0.8 \pm 0.8 [-0.8-2.5]	0.6 \pm 0.8 [-1.0-2.2]
	Post	8.8 \pm 0.6 [7.6-9.9]	6.3 \pm 0.6 [5.2-7.5]	10.2 \pm 0.8 [8.6-11.8]	10.8 \pm 0.8 [†] [9.2-12.5]
Hepcidin-25 (nM)	Pre	0.4 \pm 0.6 [-0.9-1.7]	1.8 \pm 0.6 [0.6-3.1]	1.1 \pm 0.9 [-0.6-2.9]	1.3 \pm 0.9 [-0.4-3.1]
	3 h Post	8.7 \pm 0.6 [7.4-9.9]	5.8 \pm 0.4 [4.5-7.1]	8.6 \pm 0.9 [6.9-10.3]	7.7 \pm 0.9 [6.0-9.4]

All sample analysis was performed on fasted samples, except IL-6 analysis that was performed on fed samples.