

CORTISOL AND TESTOSTERONE LEVELS ANS MARATHON

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Abstract

Wu know by the literature that cortisol and testosterone serum values are altered during hand and continuous training programs. The purpose of this study was to compare in 7 marathon runners the serum cortisol (CORT) and testosterone (TEST) levels in three different situations: C1 – basal condition, C2 – immediately after a marathon run and C3 – 20 hours after the marathon run. The marathon time for the runners ranged between 2 hours 45 minute and 3 hours 47 minute. The runners were absolutely all clear of using any kid of drugs that could modify the hormone results.

Group	Cortisol (mcg/dl)	Testosterone (ng/dl)	Cort/Test x 1000
C1	19.7 ± 2.9	871.0 ± 184.0	23.39 ± 4.93
C2	40.8 ± 10.0*	698.4 ± 257.7*	7348 ± 51.05*
C3	19.4 ± 4.2	681.7 ± 161.3*	28.93 ± 5.74

* p < 0.05 (paired t test Student)

The Cort/Test relationship remaining increased just after the marathon run can suggest a intense catabolic stimulus. By the other hand 20 hours after we could not detect a overcompensation effect as could be expected.

Gatorade and GSI Support.