

# Ironman Triathlon Recovery Enhanced By Dietary Supplementation

**BACKGROUND:** Protein/carbohydrate beverages have been used to promote immediate post-exercise recovery, but longer-term recovery strategies (days to weeks) are used less frequently.

**PURPOSE:** We evaluated the effect of dietary supplementation on recovery and mood state following an Ironman-distance triathlon.

**METHODS:** Eighteen subjects were randomly assigned to Supplement (S, n=11) or Control (C, n=7). Subjects performed their “normal” post-race recovery regimen alone (C) or with a morning (AM) and evening (PM) dietary supplement for 14 days following an Ironman-distance triathlon (2.4 mile swim, 112 mile bike, 26.2 mile run). AM consisted of 5 herbal extracts (Cordyceps, Rhodiola, Eleuthero, Ashwagandha, and Eurycoma) and PM consisted of 8 nutrients (Glutamine, Leucine, Valine, Isoleucine, Papain, Bromelain, Beta-sitosterol, and Citrus bioflavonoids). The Profile of Mood States (POMS) questionnaire was used to evaluate Tension, Depression, Anger, Vigor, Fatigue, Confusion and Global Mood State at baseline and 2-weeks. Data were analyzed using unpaired t-tests with significance set at  $p < 0.05$ .

**RESULTS:** S had significantly lower scores for Stress (-21%,  $p=0.037$ ), Tension (-54%,  $p=0.009$ ), Depression (-64%, trend  $p=0.07$ ), Anger (-62%,  $p=0.027$ ), Fatigue (-53%,  $p=0.025$ ) and Confusion (-67%,  $p=0.001$ ) and higher scores for Vigor (+69%,  $p=0.001$ ) and Global Mood (+29%,  $p=0.002$ ) compared to C.

**CONCLUSIONS:** Adequate recovery is important for athletes to support the demands of training and competition, but also for protection from overtraining, illness, and injury. These results strongly indicate that targeted dietary supplementation is effective for enhancing recovery following intense endurance exercise.