

Supplementation Using A Commercial Herbal-based Product (Optygen) May Increase Running Performance in Highly Trained Collegiate Distance Runners: a pilot study. Dec 2007

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Summary.

The purpose of this study was to determine the effects on highly trained distance runners of a commercial herbal-based supplement purported to improve endurance performance by increasing oxygen uptake, assisting recovery, and reducing lactic acid production. Though changes in performance variables (VO_2 max, hemoglobin, serum ferritin and salivary cortisol) were similar between groups, time to onset of lactate threshold was nearly 42% greater in E=experimental vs C=control group. These findings suggest that although some performance variables were not directly affected, use of a commercial-herbal based supplement may have helped improve lactate threshold levels significantly.

Importance. Over the course of the study, individuals were randomly placed into control(C, n=4, 20.5±1.0 years, 71.1± 2.55in, 157.75±8.88lb, 70.3±5.92 ml/kg/min) and experimental (E, n=5, 21.2±2.05 years, 70.7±3.15in, 148.44±16lb, 65.68±3.76 ml/kg/min) groups. Supplementation occurred during a 7-week period that corresponded with an increase in training volume in preparation for competition in the fall cross country season. Results do suggest supplementation being effective in reducing lactic acid production and delaying onset of lactate threshold and therefore improving endurance in distance runners.



