

ABSTRACT

EFFECT OF CHRONIC L-ARGININE SUPPLEMENTATION ON OXYGEN UPTAKE AND VENTILATORY THRESHOLD IN TRAINED CYCLISTS

Recently, L-arginine has been studied as a potential ergogenic aid. The majority of investigations on L-arginine supplementation have been conducted on special populations (e.g., heart failure, peripheral artery disease) with limited research examining its effects on healthy subjects. The purpose of this study was to examine the effect of chronic oral L-arginine supplementation during a graded exercise test in trained male cyclists. Eighteen volunteers were randomly assigned to one of two groups in a double-blind, cross-sectional design: L-arginine supplementation (4 weeks at 12 g·day⁻¹) or placebo (cornstarch). During each graded exercise test VO_{2max} and ventilatory threshold (VT) were measured. A baseline graded exercise test was conducted after which pre-packed supplements were given to the subjects to ingest, a second test was conducted 4 weeks later. No significance ($p>0.05$) was found in either variable with the use of the L-arginine supplement compared to placebo.

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