The Effects of A Supplement (Body Rush) On Responses to a Maximal Stress Test.

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Abstract

Body Rush is a nitric oxide booster supplement that claims to dramatically improve strength, stamina, and focus. The active ingredients that are projected to change the dynamics of one's output are: L-Carnitine to turn fat into energy, BCAAs which are amino acids that are metabolized in the muscles instead of the liver, and L-Arginine which has the ability to release growth hormone and support healthy cholesterol. A maximal graded exercise test (GXT) will be performed via Bruce protocol to determine if maximal oxygen consumption (VO_2 max), rate of perceived exerction (RPE), respiratory exchange ratio (RER), rate of respiration (RR) and total time will have a significant difference during incremental exercise.

Purpose

The Purpose of this research is to determine the effects the supplement *Body Rush* has on an individual during a maximal stress test.

Methods

Five men (mean age 21.8 ± 1.94 years, height 69.4 ± 2.87 cm, weight 77.78 ± 7.09 kg) that attend The University of Texas at Arlington volunteered to participate in this study. Each subject had body composition assessed by a hand-held bioelectrical impedance analysis machine (mean BF% 10.92 ± 2.99). Before each subject performed a graded exercise test on the treadmill, they had the informed consent form read to them and they were given the PAR-Q questionnaire to determine risk of injury. Upon completion of the questionnaire each subject signed the informed consent form. Next, each subject was given either the supplement (Body Rush) or the control

Methods (cont'd)

(Kool-Aid) and had to wait 30 minutes before the graded maximal test could be performed. While waiting, resting measurements of heart rate (HR), blood pressure (BP) were taken. During each test heart rate (HR), blood pressure (BP), and rate of perceived exertion (RPE) were recorded. The subjects went through the same protocol with the other enhancement on a separate day.

Results

The five male subjects that performed the GXT showed no significant differences between VO_2 max, RR, and RER and total time of test ($p > 0.050$), only RPE showed a significant difference. Subjects had a VO_2peak t-test score of (4) -0.943 with p value of 0.399. The RPE scored t-test at (4) -3.207 and of p value of 0.033, which shows a significant difference. RER had a t-test score of (4) 0.232 and p value of 0.828. RR had t-test score of (4) -0.528 and p value of 0.594. Finally, total time had a t-test score of (4) 2.372 with a p value of 0.077.

Results (cont'd)

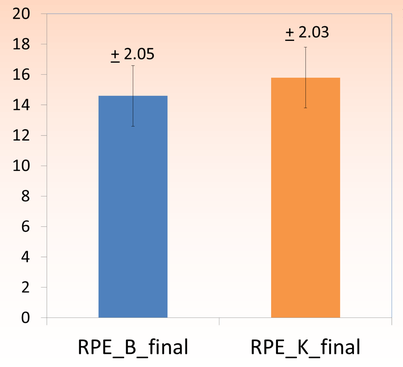

Fig. 1

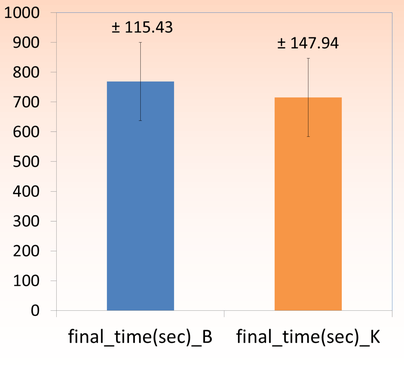

Fig. 2

Figure 1: Final RPE was the only variable which had a significant difference. Subjects had a lower perceived rate of exertion when they ingested the supplement Body Rush in correlation to the placebo.

Figure 2: The final time of the test was most important variable of the entire research project because it was the definitive indicator of the performance. However, there was not a significant difference between the supplement Body Rush and the placebo.

Conclusions

This experiment suggests there are no significant differences between the supplement Body Rush and the placebo Kool-Aid for VO_2 peak, RR, and RER and total time. The study did however show that the subjects perceived rate of exertion is diminished significantly.