

Muscle Strength and Muscle Endurance: With and without creatine supplementation

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Abstract

Creatine is one of the legal ergogenic aids which are used by athletes here and there. A number of studies assured that it has a positive effect in high intensity short duration intensity exercise performances. This study tried to evaluate the effect of creatine monohydrate supplements on muscle strength and muscle endurance. Twenty subjects (CG=10 and EG=10) were participated in three months of exercise training. In this study complete randomized design was used. The EG consumed creatine and the placebo (CG) used water 45 minutes before exercise. The results indicated that Muscle endurance was improved better in the EG. In curl up performance, the CG showed 35% change while the EG improved by 87%. In addition, 44% improvement in CG and 91% improvement in EG were recorded for push up performance. However, muscle strength was highly enhanced in the EG. In one repetition maximum test, the CG and EG shown 18% and 41% change, respectively. Bench press performance of the CG and EG were improved by 11% and 39%, respectively. Barbell squat performance was improved by 22% for the CG and 51% for the EG. Hence, supplementation of creatine is useful to improve both muscular strength and muscular endurance.



Biography

Daniel K is working in Addis Ababa University and Debre Markos University in Ethiopia.

Publications

Daniel K and Sangeeta Rani. Muscle strength and muscle endurance: with and without creatine supplementation. 2019. Turkish Journal of Sport and Exercise.

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