

69 **COMPARISON OF EFFECTS OF THREE TYPES OF ENDURANCE, RESISTANCE AND COMBINATION TRAINING ON (CTNT AND CKMB) IN ACTIVE MALES**

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10.1136/bjsm.2010.078725.69

The aim of this present study was to compare three types of endurance (E), resistance (R) and combined (C) exercise on cardiac biomarkers (cardiac troponin T and creatine kinase isoenzymes MB) in active men. 15 healthy and active young men (mean age \pm SD of 23 ± 1.604 years, height 173 ± 3.751 m, weight 69 ± 8.742 kg and $VO_{2max} 51.48 \pm 1.847$ ml/kg/min) voluntarily participated. Each of the subjects did three types of exercise in 7 days interval. All of the subjects using the analysis of blood samples before and immediately after exercise were evaluated. Blood samples for biochemical indicators of cardiac (cTnT and CKMB) were analysed. Statistical analysis was performed using paired T independent and repeated measures analysis of variance ($p \leq 0.05$). Results indicate that CKMB increased significantly after all three types of exercise than before exercise levels. cTnT was also significantly elevated immediately after endurance training than the values before exercise, while they were not significantly different between the levels of cTnT after resistance and combination exercise than the values before exercise. Results show that short-term intense endurance training increased cTnT and CK MB that show the least sign of heart damage or exercise-induced cardiac fatigue, but resistance and combination exercise with the lack of significant change in cTnT levels after exercise do not induce physiologically important degenerative changes in myocardium. However, the clinical significance of these results requires further research.