

# **The effect of Aphrodit supplementary on blood TNF- $\alpha$ , Liver Enzymes (ALT , AST) and Cortisol hormones responses to a session of progressive resistance training in sedentary men**

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The purpose of this study was to determine the effect of aphrodit supplementary on blood inflammatory hormonal responses following a session of circuit resistance exercise in sedentary men. Therefore, 18 young men ( $25.55 \pm 3.61$  year) were randomly allocated into aphrodit (A, n=9) groups. Supplementary period was 3 weeks and 2 capsules (250 mg) were consumed during this period at morning and night. Resistance training session consisted of 5 exercises including bench press, leg press, lat pull down. Knee extension and biceps curl which performed in 3 cycles with 70, 75 and 80% of 1RM and 8-10 repetitions. Venous blood samples were taken before supplementary period, pre and post resistance exercise session. In relation to TNF- $\alpha$  ( $P=0/513$ ), liver enzyme ALT ( $P=0/105$ ) and AST ( $p=0/103$ ), there were no significant differences between two groups. However, the concentrations of post exercise blood TNF- $\alpha$  were higher than baseline and pre exercise values in both groups (3-4 table). Also, post exercise AST, ALT had not statistically changes in comparison to base line and pre exercise values in both groups. Also in relation to cortisol hormone, there were significant differences between two groups. These findings indicated that aphrodit consumption has not effect on inflammatory markers responses TNF- $\alpha$ , liver enzymes ALT, AST following a session of progressive resistance exercise, but Aphrodit effect on cortisol hormones . .

**Keywords :** Progressive Resistance Exercise. TNF- $\alpha$  ,ALT and AST Liver enzymes , cortisol hormones