

rate of GH secretion (immediately and 20 min after exercise) after E and C exercise and there was no significant difference between GH secretion immediately after exercise and 20 min after exercise (E, R, C). There were significant differences between GH secretion immediately and 20 min after exercise (E with R) and (C with R). Exercise directly leads to GH production changing pattern, which in turn results in creation of new tissues. It is believed that GH concentrations can change with exercise. The results of this research showed that GH concentrations was increased after endurance exercise (20 min and immediately after exercise compared to pretest), and combined exercise. It is generally concluded that various types of physical activity has a different effects on the GH responses.

139 THE COMPARISON OF EFFECTS OF THREE TYPES OF RESISTANCE, ENDURANCE AND CONCURRENT TRAINING ON AMOUNT OF GROWTH HORMONE SECRETION IN ACTIVE MALES

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The main purpose of the present study was to compare the effects of three types of endurance (E), resistance (R) and combined (C) exercise on the rate of growth hormone (GH) secretion in active men. Fifteen healthy, active young men (mean age \pm SD of 23 ± 1.604 years, height 173 ± 3.751 m, weight 69 ± 8.742 kg) were participated in research voluntarily. The same subjects were taking part in three types of exercise in three different time with 7-day interval among them. Blood samples taken before, immediately and 20 min after the exercise. t Test and analysis of variance were used to analyse the data ($p < 0.01$). Results show GH secretion rate increased significantly immediately and 20 min after exercise (E) and immediately after exercise (C) compared to pretest. There were no significantly increase in the rate of GH secretion 20 min after exercise (C), immediately and 20 min after exercise (R). There was no significant differences between the