

Influence of exercise in postprandial hiperlipidemia

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Abstract

Background: Obesity, a sedentary lifestyle, changes in lifestyle have focussed the research in latter years on lifestyles and how to change them. Dyslipidemia is considered a cardiovascular risk, being part of the metabolic syndrome.

Aims: The study was aimed at tracking the changes in lipemic profile in relation to acute exercise.

Methods: The study was conducted on male Wistar rats weighting 200g divided into four groups (n=10): two groups receiving standard diet (I, II) and two groups (III, IV) receiving hyperlipaemic food (gavation 2ml of lard). Groups were subjected to acute exercise, on the treadmill until exhaustion. Retro-orbital sinus blood was collected from fasting, 90 minutes postprandial and after exercise. Statistical processing was performed using Microsoft Excel 2003 and SPSS tools 17 and performing the t test, and Spearman correlation index.

Results: After exercise, the decrease of TG in groups II and IV ($p < 0.001$); correlations between exercise duration and TG decrease ($r = -0.564$) and HDL-C increase ($r = 0.783$) were also found, both groups receiving standard food and dysmetabolic groups.

Conclusions: The results revealed changes in lipid levels after exercise.

Keywords: exercise, triglycerides, cholesterol, postprandial dismetabolism.