

Current issue**Archival Issues**

Volume 27, 2010
Volume 26, 2009
Volume 25, 2008
Volume 24, 2007
Volume 23, 2006
Volume 22, 2005
Volume 21, 2004
Volume 20, 2003

Search**Newsletter****Authors Pathway****Information for Authors****Journal Abstract**

Serum lipoprotein (a) [Lp(a)] levels in overweight and obese youths – a combined effect of physical activity and low-calorie diet

K Stankiewicz, Ł Szcześniak, T Rychlewski, E Deskur-Śmielecka, Z Kasprzak

Biol Sport 2004; 21 (2):

ICID: 891894

Article type: Original article

IC™ Value: 10.26

Abstract provided by Publisher



The aim of the present study was to determine the effect of low-calorie diet alone and in combination with systematic aerobic exercise on serum lipoprotein (a) levels in obese youths. Obese youths (BMI >30.0 kg/m²) enrolled into the study were randomly divided into three groups. Patients in the Group I (n=20) trained daily on bicycle ergometer at intensity of aerobic threshold for 21 days. Subjects in the Group II (n=23) performed analogous training for 28 days. The ventilatory threshold was determined during bicycle ergometry (Ergo-Line, Germany) with CardioO2 computer system (ECG Exercise System, Medical Graphic, USA). Youths in the Group III (n=16) did not participate in bicycle training. Subjects in all three groups were prescribed a low-calorie diet (average intake 1300 kcal) with restriction of saturated fats and monosaccharides. Prior to starting and after finishing the program, blood samples were taken from basilic vein after an overnight fast and serum lipoprotein (a) levels were measured by an immunoenzymatic assay (Cormay, Poland). Serum Lp(a) levels significantly decreased in obese youths subjected to 21 or 28-day therapy combining low-calorie diet and systematic exercise. Particularly important improvement in serum Lp(a) concentrations was observed in subjects who initially had elevated serum Lp(a) levels. Youths put on low-calorie diet alone did not demonstrate significant change in serum lipoprotein (a) concentrations. These results indicate that systematic aerobic exercise may have a potential to prevent atherogenic action of lipoprotein (a).

ICID 891894

FULL TEXT 319 KB

Related articles

- in IndexCopernicus™
 - € Low-calorie diet [0 related records]
 - € physical exercise [5 related records]
 - € Obese youths [0 related records]
 - € lipoprotein (a) [9 related records]

Search

Back