

Effects of Long Term Whole Body Vibration Training on Lipid Profile of Young Men

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Abstract : Background: The use of whole body vibration (WBV) as an exercise method has rapidly increased over the last decade. The aim of this study was to evaluate long term effects of different amplitudes of whole body vibration training with progressive frequencies on lipid profile of young healthy men. Materials and methods: Thirty three healthy male students were divided randomly in three groups: high amplitude vibration group (n=11), low amplitude vibration group (n=11), and control group (n=11). The vibration training consisted of 5 week whole-body vibration 3 times a week with amplitudes 4 and 2 mm and progressive frequencies from 25 Hz with increments of 5 Hz weekly. Concentrations TG, HDL, LDL, cholesterol, and VLDL before and after 5 weeks of training were measured in plasma samples. Statistical analysis was done using one way analysis of variance. $P < 0.05$ was considered statistically significant. Results: The most important result of the present study is finding no favorable changes of 5-week vibration training with different amplitudes on blood lipid profiles. Discussion and conclusions: It was emphasized that in vibration training there should be a relationship between intensity and volume of exercise and lipid responses in order to improve blood lipoprotein profiles.

Keywords : long term, body, vibration training, lipid

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