

ABSTRACT

CHANGES OF HDL LEVEL AND LDL LEVEL AS RESPONSE TO AEROBIC EXERCISE IN SONIA THE AEROBIC AND FITNESS CENTER BANDAR LAMPUNG

By

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Higher Low Density Lipoprotein (LDL) level and lower High Density Lipoprotein (HDL) level can increase risk of atherosclerosis and the other cardiovascular diseases. Exercise is one way to maintain our health and fitness. Raising metabolism when we are doing exercise can influence HDL and LDL level, for example doing aerobic. The aim for this research is to determine the increasing of HDL level and the decreasing of LDL level as a response to aerobic exercise.

This research is an experimental research by pretest dan posttest approach. Samples in this research was 32 aerobic participants in Sonia The Aerobic and Fitness Center Bandar Lampung. Blood samples were taken on the first day and the last day of aerobic exercising during six weeks.

The results showed increasing of response's HDL level as 13% and decreasing LDL level as 9%. The mean of HDL level before and after exercise was $57,68 \pm 10,12$ mg/dl and $65,40 \pm 10,99$ mg/dl. The mean of LDL level before and after exercise was $124,28 \pm 34,94$ mg/dl and $112,90 \pm 35,90$ mg/dl. Statistical analysis showed significant differences between HDL and LDL level in responses before and after aerobic exercise. This suggests that aerobic exercise can increase HDL level and decrease LDL level.

Key words: aerobic exercise, HDL level, LDL level