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Effect of aerobic training on selected bio- chemical and anthropometrical variables of college men

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Abstract

The purpose of the study was to find out the effect of aerobic training on bio- chemical and anthropometrical variables of college men. For this purpose 50 college men were selected from Sri Ramakrishna Vidyalaya College of Arts and Science. The age of the subjects was ranged between 18 to 23 years. Body Weight and Body Fat were selected as a anthropometrical variable and Low Density Lipo protein, High Density Lipo protein and Very Low Density Lipo Protein were selected as Bio- chemical variables. 12 weeks of aerobic training program were given to the subjects, and pre and posttest were conducted to the subject before and after 12 weeks of time with the use of standard test and qualified medical personal. The collected data were statistically analyzed by using Paired sample t test. From the statistical result it was concluded that the Aerobic dance was significantly improved the Bio- chemical and Anthropometrical characteristic namely Body Weight, Body Fat, Low Density Lipo protein, High Density Lipo protein and Very Low Density Lipo Protein in 0.05 level of significance

Keywords: Aerobic, bio-chemical, anthropometrical

Introduction

“Aerobic” basically means living or working with oxygen. Aerobics or endurance exercises are those in which large muscle groups are used in rhythmic repetitive fashion for prolonged periods of time. Aerobics refers to a variety of exercises that stimulates heart and lungs activity for a time period sufficiently long to produce beneficial changes in the body. Running, swimming, cycling and jogging are typical aerobic exercises. Aerobics is a good way to decrease our percentage of body fat and to attain the other metabolic benefits of fitness. Aerobics is also a very good way to develop muscular skeletal fitness while building strength, flexibility, co- ordination. Aerobics is a progressive physical conditioning programme that stimulates cardio respiratory activity for a time period sufficiently long to produce beneficial changes in the body. To do any work we need energy and even while at rest some physiological functions have to be carried within our body and for that purpose some calories of energy will be burnt. As the intensity and duration of work increases the demand for the fuel in the working muscles also increases. The organs which supply the needful should cope with the demand. Aerobics and calisthenics are performed to the rhythmic pulse of disco music and strength together in what amounts to a modern dance form, so as to make the exercise more enjoyable and encouraging without extra effort. By doing exercise, the whole system of our body carries oxygen-rich air enters the organs and tissues of the muscles has been called “the aerobic system” and for this reason training the system for stamina is called aerobic training.

Methodology

The purpose of the study was to find out the effect of aerobic training on bio- chemical and anthropometrical variables of college men. For this purpose 50 college men were selected from Sri Ramakrishna Vidyalaya College of Arts and Science. The age of the subjects was ranged between 18 to 23 years. Aerobic training was selected as a independent variable and Body Weight, Body Fat, Low Density Lipo protein, High Density Lipo protein and Very Low Density Lipo Protein were selected as Dependable variables. 12 weeks of aerobic training program were given to the subjects. The pre and posttest were conducted to the subject before and after 12 weeks of time with the use of standard test and qualified medical personal. Paired sample t test was used to find out the significant difference between the tests.

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Statistical interpretations and results

Table I: Computation of t- ratio for dependable variables

S. No	Variable	Test	Mean	Standard Deviation	T Test
1	Body Weight	Pre	72.9	9.95	6.55*
		Post	66.4	9.03	
2	Body Fat	Pre	23.46	5.75	4.30*
		Post	21.12	5.61	
3	Low Density Lipo protein	Pre	96.71	7.58	5.20*
		Post	90.06	5.63	
4	High Density Lipo protein	Pre	40.16	3.74	4.30*
		Post	42.68	2.57	
5	Very Low Density Lipo protein	Pre	20.12	3.22	7.91*
		post	19.06	2.83	

*significant at 0.05 level

The above table shows the obtained T values of physical fitness and physiological variables namely Body Weight (6.55), Body Fat (4.30), Low Density Lipo protein (5.20), High Density Lipo protein (4.30) and Very Low Density Lipo protein (7.91) are more than the table T value of 2.009

Discussions on Finding

The result of the study it was finding that the Aerobic training was significantly improving the Anthropometrical variable namely Body Weight and Body Fat and Bio Chemical variables namely Low Density Lipo protein, High Density Lipo protein, and Very Low Density Lipo protein. R. Kalaiselvan (2015), stated that the aerobic exercise was reduced body weight and body fat.

Conclusion

From the finding of the study it was concluded that the 12 weeks of aerobic training was significantly improve the anthropometrical variables namely Body Weight and Body Fat and bio-chemical variables namely Low Density Lipo protein, High Density Lipo protein, and Very Low Density Lipo protein.

Reference

1. Cooper Kenneth C. The New Aerobics, Iowa: Prairie Wind, 1969.
2. Kalaiselvan R, Ranjithkumar P. Effect of aerobic training on selected physiological variables among obese corporate men. Prospective approaches and application of yoga and physical activity for better life 978-81-910811-4-5, 2015.
3. Aellen R, Hollmann W, Boutellier U. Effect of Aerobic and Anaerobic training on plasma lipoproteins”, International journal of Sports Medicine. 1993; 14:7
4. Chindambara raja S. Effect of Aerobic exercise program on different terrains on blood pressure and vital capacity Prospective approaches and application of yoga and physical activity for better life 978-81-910811-4-5, 2015.
5. Mughul MA. The effect of Aerobic Exercise Training on resting blood pressure in Hypertensive patients, Journal of Pakistan Medical Association, 2001, 51:222.
6. Govind K Kadam, Shashikant Pardeshi, Gaus Ahamad Mulani, Kamalakar Kadam. The Effect of six week yoga and aerobic exercise on selected biomechanical parameters in 20 -28 age group college women. Prospective approaches and application of yoga and physical activity for better life. 978-81-910811-4-5, 2015.