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Effect of Brisk Walking Training Programme on Pulse rate among Obese Men

Jayakumar. M

Assistant Professor in Physical Education, Government Engineering College, Kozhikode, Kerala.

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Abstract

The purpose of the study was to determine the effects of 12 weeks of brisk walking on pulse rate of obese men. 30 obese men were selected as subjects randomly from Kozhikode, Kerala within the age group of 30 to 45 years The subjects were randomly assigned to two groups that is an experimental group (N=15) and a control groups (N=15). The experimental group participated in brisk walking programme for a period of 12 weeks. The control group did not participate in any sort of physical activity during the same period. Pulse rate was assessed using sphygmomanometer. The data pertaining to selected physiological variables were analysed by ANOVA to determine the difference between initial and final mean for experimental and control group at 0.05 `level of significance. Pulse rate was reduced as a result of participation in 12 weeks of brisk walking programme.

Keywords: Walking, Training, Pulse rate.

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Introduction

Lack of physical activity and an uncontrolled diet cause excessive weight gain, which leads to obesity and other metabolic disorders. Increased time spent on sedentary activities and decreased time spent on physical activities of moderate-to-vigorous intensity have been reported to be independently associated with the risk of developing metabolic syndrome and its components. Physical activity is a vital part of a comprehensive weight loss and weight control program. It can decrease abdominal fat, increase cardiorespiratory fitness, and lead to weight loss in overweight and obese adults (Arslan, 2011). Elevated body mass index (BMI) and abdominal obesity are associated with a number of diseases and metabolic abnormalities that have high morbidity and mortality. Obesity is defined as excess accumulation of body fat and is a heterogeneous disorder with a final common pathway in which energy intake chronically exceeds energy expenditure. Obesity is a multifactorial condition influenced by the combined effect of genes, the environment, and the interactions between these 2 factors. The prevalence of obesity has risen steadily over the past decades in adults and children to become a global epidemic and represents a major public health challenge (Shea, 2012).

Correspondence Jayakumar.M E.Mail: jayanpvk@gmail.com, Ph. +998464 55050

Methodology

The purpose of the study was to determine the effects of 12 weeks of brisk walking on pulse rate of obese men. 30 obese men were selected as subjects randomly from Kozhikode, Kerala within the age group of 30 to 45 years The subjects were randomly assigned to two groups that is an experimental group (N=15) and a control groups (N=15). The experimental group participated in brisk walking programme for a period of 12 weeks. The control group did not participate in any sort of physical activity during the same period. Pulse rate was assessed using sphygmomanometer. The data pertaining to selected physiological variables were analysed by ANOVA to determine the difference between initial and final mean for experimental and control group at 0.05 `level of significance. Pulse rate was reduced as a result of participation in 12 weeks of brisk walking programme.

Results

The data pertaining to pulse rate for both experimental and control group were tested using ANOVA. The level of significant chosen was 0.05 level.

Test		EXP	CG	SOV	SS	df	MS	F ratio
Pretest	Mean	71.26	70.667	B W	2.700	1	2.700	0.819
	SD	1.387	2.160		92.267	28	3.295	
Post test	Mean	67.200	70.733	B W	93.633	1	93.633	15.125*
	SD	3.028	1.791		173.00	28	6.19	
Adjusted Post test	Mean	67.210	70.723	B W	89.925	1	89.925	14.016*
					173.227	27	9.416	

Table 1. Analysis of Covariance on pulse rate of experimental group and the Control Group

*Significant at 0.05 level of confidence

Table 1 shows that the pre test means of brisk walking training group and the control group on pulse rate are 71.26 and 119.86 respectively. The obtained F ratio of 0.819 for the pre test mean is lesser than the table value 4.19 for df 1 and 28 required for significance at 0.05 level. The post tests mean of brisk walking group and control groups are 67.20 and 70.73 respectively. The obtained F ratio of 15.12 for post test mean is higher than

the table value 4.19 for df 1 and 28 required for significance at 0.05 level. The adjusted post test mean of brisk walking group and the control group are 67.21 and 70.72 respectively. The obtained F ratio of 14.01 for adjusted post test mean is higher than the required table value 4.21 for df 1 and 27 required for significant at 0.05 level.

Figure I. The pre, post and adjusted post test mean values of brisk walking Group and Control Group in pulse rate



Conclusion

Pulse rate was reduced as a result of participation in 12 weeks of brisk walking programme.

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