

# Influence of step aerobics training on percentage of body fat of Arts College Untrained Boys

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## ABSTRACT

To achieve the purpose of the study fifteen students studying in the Alagappa Government Arts College, Alagappapuram, Karaikudi were selected as subjects at random and. The age of the selected subjects ranged between 19 to 22 years. Experimental group was called step aerobics training group. Group-I underwent one hour aerobic training .step aerobics training for three sessions per week for twelve weeks. The experimental group underwent the following step aerobic training. The data were collected prior and immediately after the training programme on percentage of body fat .The percentage of body fat was measured by skin fold calliper (Brozek et.al 1963). The collected data of experimental group was statistically analyzed by using mean standard deviation and t-test and present table I. The level of significant was fixed at 0.01 level of confidence. The result of the study reveals that due to effect to twelve weeks of step aerobic training on percentage of body fat has significantly decreased of Arts College untrained boys.

**KEYWORDS:** Step aerobic training and percentage of body fat.

## INTRODUCTION

The word training has been a part of human language since ancient times. It denotes process of preparation of some task. Sport training is done for sports performance. Sports training is a pedagogical process, based on scientific principles, aiming at preparing sports man for higher performance in sports competition(singh 1991).Aerobic training appears to be one of the major factors determine the long-term success of weight loss programs. Regular exercise has been recommended as an important strategy in the prevention and management of obesity(Philips et al.,1996).Step aerobics is a form of exercise stepping up and down on to a stable bench.Dr.Kenneth Cooper known as **father of aerobics** founded the cooper clinic in the early 1970s to investigate the effects of physical activity and fitness on health and longevity to help the people to develop healthy life style. Step aerobics was developed by Gin Miller around 1989 and main objectives of step aerobics training is burn calories. It is a high intensity cardio exercise. It is a combination of cardio and resistance (own body weight act as a resistance) training. The height of the bench is range from 4 inches to 12 inches .subjects are instructed to do the exercise step up, around and down from the platform in different patterns . It improves over all fitness .It helps to burn large amount of calories and improves the confidence level. The human body consists of several components including fat mass, lean muscle mass, skeletal bone mass etc. All fat is not bad. We need some amount of fat to function daily that fat is called essential fat.

Percentage of body fat is made up of essential fat and storage fat. Essential fat is needed to maintain life and reproductive function.

## REVIEWS

The effect of 8 weeks of step aerobic dance on body composition of middle aged sedentary obese women (Fatma Arslan, 2011) studied 49 healthy sedentary obese women participated in this study. They were equally divided into two groups. Group –I underwent step aerobic dance programme for one hour, three days per week for eight weeks. Group-II acted as control group. The subjects BMI, weight, waist circumference, waist to hip ratio, four site skin fold thickness, fat percentage, basal metabolic rate and lean body mass were assessed by before and after training. This programme proved to be useful exercise modality for obese women in terms of composition. There was a clear response to 8 weeks of aerobic dance programme in sedentary obese Turkish women.

Sayed et.al (2013) evaluated the effect intensity of aerobic training on body composition and blood lipid in obese/overweight female. 45 middle aged obese /over weight female (age 25-40) were selected as subjects. They were randomly assigned into three groups. Group I underwent light aerobic training. Group II underwent moderate aerobic training. Group III acted as control group. Training programme lasted for 10 weeks, three sessions of 60 minutes per week. Body composition and serum lipid were measured prior and post training. Both light and moderate aerobic significantly improved weight, BMI, fat percent, lean body weight, waist to hip ratio, high density lipoprotein. Our findings support the application of aerobics for obese/over weight female. Initially they can start with light programs and proceed to more intense programme.

## METHODOLOGY

To achieve the purpose of the study fifteen students studying in the Alagappa Government Arts College, Alagappapuram, Karaikudi were selected as subjects at random and. The age of the selected subjects ranged between 19 to 22 years. Experimental group was called step aerobics training group. Group-I underwent one hour aerobic training. Step aerobics training for three sessions per week for twelve weeks. The experimental group underwent the following step aerobics training. The step aerobics programme consists of one hour warming up and limbering down are included. The step aerobic exercise consists of Basic right, Basic left, A step, V step, I step, corner to corner, Grapevine, Jumping jack, Turn step, Charleston, Mambo, Box and step. The height of the bench is 4 inches. However individual differences were taken into account which fixing load. The over load principle was applied. Progressively workload was increased in four weeks once. The data were collected prior and immediately after the training programme on percentage of body fat. The percentage of body fat was measured by skin fold calliper (Brozek et.al 1963). The collected data of experimental group was statistically analyzed by using mean standard deviation and t-test and present table I. The level of significant was fixed at 0.01 level of confidence.

**TABLE-I**

The mean, standard deviation and t- value of experimental groups

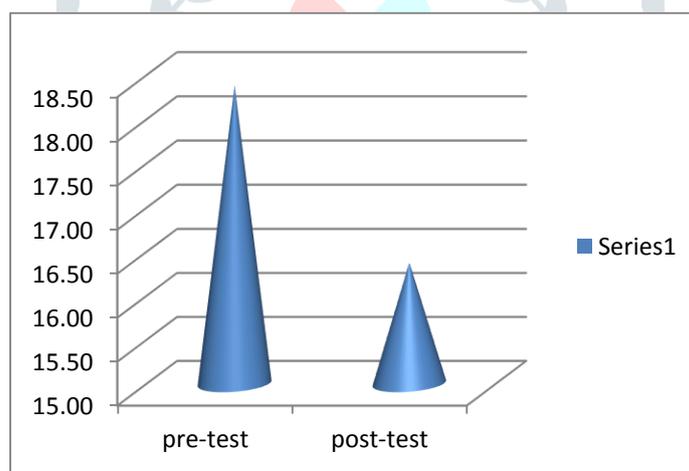
S.No	Body composition Variable	Mean	S.D	S.E	t- Value
1.	Pre test	18.38	0.86	0.33	6.21*
2	Post test	16.33	0.94		

\* Significant at 0.01 level of confidence this table value for the significance of 2.58

Table –I reveals the mean, standard deviation, standard error and t- value of pre and post test scores of experimental group. The t- values of the percentage of body fat was significantly altered and it showed the efficiency of step aerobics training. In the value of selected Percentage of body fat was greater than the table value of 2.58 and it was found to be statically significant.

**Figure I**

Comparison of mean difference on Percentage of body fat



## Conclusion

From the analysis of the data the following conclusions were drawn.

There was a significant difference found between pre and post test of Step aerobics training group on percentage of fat. The result of the study reveals that due to effect to twelve weeks of step aerobics training on percentage of body fat has significantly decreased of Arts College untrained boys. The significant reduction of percentage of body fat caused by step aerobics training was supported by (Fatma arslan 2011) and (Sayyed et al., 2013). It is a good method to reduce your body weight and keeping your body fit. This kind of exercises improves the efficiency of the cardio vascular system in absorbing and transporting oxygen, burn calories (increase HDL good cholesterol and decrease LDL bad cholesterol ) etc.

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