
Title : Effect of 12 Week Zumba Program and Healthy Diet on Anthropometry, Body Composition and Fitness Parameters in Working Women

Author(s) : Preeti K. Jain, Madhuri R. Nigudkar

Institution : Department of Food And Nutrition, SVT College of Home Science, SNDT Women's University, SNDT Vidyavihar, Juhu, Mumbai

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Introduction:

The ZUMBA program is Latin inspired, dance fitness class that incorporates some of the basic principles of aerobic, interval and resistance training to maximize caloric output, cardiovascular benefits, and total body toning. A need was felt to find out whether this dance fitness program really has an effect on anthropometry, body composition and fitness parameters. The objective of the present study was to assess and compare the effect of Zumba program alone and Zumba Program coupled with a healthy diet on anthropometric measurements, body composition and fitness parameters in the participants pre and post intervention.

Methodology:

A total of 60 working women aged 20-50 years participated in the study for duration of three months. 30 participants followed only the Zumba program ('Z' group) and remaining 30 participants followed a healthy diet along with the Zumba program ('ZD' group). Diet modification was given by a qualified nutritionist. The data was collected through a written questionnaire. Effect of Zumba program alone and Zumba program combined with healthy diet on anthropometric measurements, body composition and fitness characteristics was studied. The two groups were compared with respect to changes in this parameters using paired t test. Macro nutrient intake by two groups before and after intervention was also compared by using paired t test.

Results:

Both the groups showed no difference in anthropometric, body composition and fitness parameters at baseline. Post intervention change in anthropometric measurements, body composition and fitness characteristics was higher in Zumba with diet group ('ZD') than only Zumba ('Z') group. Decrease in weight was 3.2 % in 'Z' group and 10.5% in 'ZD' group. Decrease in BMI was only 0.3 % in 'Z' group whereas in 'ZD' group it was 10.98%. Decrease in fat % was 6.53% in 'Z' group and 10.98% in 'ZD' group. There was no change seen in waist to hip ratio in 'Z' group whereas improvement by 1.1% was seen in 'ZD' group. Thus improvement in anthropometric parameters was more in 'ZD' group than 'Z' group. Cardiovascular endurance increased by 66% in 'Z' group whereas it increased by 55% in 'ZD' group. Muscle endurance increased by 18.5% in 'Z' group whereas it increased by 33.43% in 'ZD' group. Flexibility increased by 22.2% in the 'Z' group and by 35.66% in 'ZD' group.

Conclusion:

In the present study, Zumba coupled with a healthy diet has proven to be an effective program to improve fitness levels and reduce obesity and adiposity in working women.