

# Effectiveness of Zumba and Resistance Training on Anthropometric Standardization and Bioimpedance Analysis in Overweight Young Women

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## Abstract

*Background of the study:* Overweight is a universal disorder due to lifestyle modifications and improper food habits. According to WHO the prevalence of overweight is 39% of adults aged 18 years and over. According to WHO, Overweight is defined as abnormal or excessive fat accumulation that presents a risk to health. The body mass index (BMI) over 25 is considered overweight and above 30 is obese.

*Methodology:* Group of 30 participants aged 18 to 25 who are overweight were chosen. participants into groups A and B (control group and experimental group). Group A was given walking and Group B was given Zumba and resistance training. Pre-tests were conducted using BIA and anthropometric standardization.

*Results:* The Mann-Whitney U test results confirm significant differences between Group A and Group B in the reduction of arm, chest, abdomen, and thigh sizes from pre- to post-test. The mean ranks for each outcome measure consistently indicate that Group B had significantly greater reductions compared to Group A, supporting the rejection of the null hypothesis (H<sub>0</sub>). The experimental intervention led to more substantial improvements in anthropometric measurements and body fat percentage.

*Conclusion:* We conclude Group B is effective in Anthropometric Standardization and BIA in Overweight Young Women.