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Thesis Tittle : The Effects of Aqua Jogging and Aqua High Intensity  
Interval Training on Health Parameters among Obese  
Women

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Date : December 2019

## ABSTRACT

There is several of aqua exercise to reduce weight and to get a healthy body fitness. However, there is limited evidence compare the effectiveness of aqua jogging and aqua HIIT on health-related fitness parameters among obese women. The aim of this study is to compare the effectiveness between aqua jogging and aqua high intensity interval training (HIIT) based on their health-related fitness parameters among obese women. Twenty four obese women (age  $24.0 \pm 3.68$  years, height  $158.67 \pm 4.10$  cm, weight  $80.08 \pm 4.74$  kg) were randomly assigned into control (CON), aqua jogging (AJ) and aqua HIIT (AH) group. Pre and post-exercise measurement were taken on: (1) cardiovascular fitness, (2) muscular strength, (3) muscular endurance, (4) flexibility and (5) body composition before and after eight-weeks of intervention. CON group were not doing any exercise intervention and strict from involved other training program. Both aqua interventions took place three days per week. Aqua HIIT perform TABATA workout consisted of 4 exercise x 4 minute (20 s work: 10 s rest); 1 minute rest between round. The data were analyze using repeated measure ANOVA for pre and post measurement and independent sample t-test between groups. As results, in cardiovascular fitness parameters has significant effect on pre and post of AJ ( $p = .002$ ) and AH ( $p = .001$ ). In muscular endurance, all group has significant effect, AJ ( $p = .015$ ), AH ( $p = .01$ ), and CON ( $p = .033$ ). Muscular strength for upper body on AJ ( $p = .01$ ), AH ( $p = .01$ ) and for lower body all group has significant effect AJ on ( $p = .001$ ), AH ( $p = .002$ ), and CON ( $p = .049$ ). Flexibility parameters has significant effect on AJ ( $p = .001$ ) and AH ( $p = .001$ ). Last parameters is body composition has significant effect on AJ ( $p = .002$ ) and AH ( $p = .001$ ). In conclusion, AJ and AH showed significant effect in pre and post for all health-related parameters. Unfortunately, there was no significance difference between these groups.

**Keywords:** *obese, women, aqua exercise, health parameters*

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