

## THE ENERGETIC COST AND CARDIORESPIRATORY CHANGES DURING ZUMBA EXERCISE IN MIDDLE AGED WOMEN

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### ABSTRACT

*People try to find new physical activities acceptable for them. Now days, people choosing fancy dance fitness programmes such as Zumba to maintain their fitness. The aim of this study was to assess energy cost and cardiorespiratory changes during Zumba exercise in the middle age women. A group of 6 women (age range 27-37 years) volunteered to participate in the study. To assess the maximal oxygen consumption, we used the running test to individual maximal. Each subjects participated in six Zumba exercises in commercial fitness gym. Each subject measured during the 60 min class. The oxygen consumption of the whole Zumba exercise was  $19.5 \pm 2.2$  ml•kg<sup>-1</sup>•min<sup>-1</sup> that is on the 68.4 % of the maximal oxygen consumption ( $40.1 \pm 7.4$  ml•kg<sup>-1</sup>•min<sup>-1</sup>) during running test. That exactly means 404.8 kcal (resp. 1692.2 kJ) in caloric expenditure for whole Zumba exercise. The intensity of whole class reported by HR was covered by 67.5 % from HRmax and by Borg's rates of perceived exertion (6-20) with rates  $14 \pm 2$  from  $18 \pm 2$  immediately after the maximal running test. In the central phase there was the highest energetic cost (336. 3 kcal, resp. 1405.9 kJ). Therefore the researcher presumes the positive effect on the cardiorespiratory capacity with the frequency of 3-5 days per week to conclude the energy expenditure around 1500 kcal for one week. Regardless of the variety of participants and the apparent effect, there is a growing popularity of Zumba exercises as the new trend of fitness.*