

The effect of concurrent training (aerobic-resistance) on aerobic power, anaerobic power, health-related quality of life and mental health in patients with type 2 diabetes

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The purpose of this study was to determine the effect of 8 weeks of concurrent training on aerobic and anaerobic power, quality of life and mental health in women with type 2 diabetes. 20 diabetic women (age: 41.15 ± 3.86 years; height: 163.10 ± 5.37 cm; weight: 72.58 ± 8.63 kg; BMI: 27.24 ± 2.56 kg/m²) were selected as the available samples and participated in this study according to inclusion criteria including age range 55-35 years, lack of regular exercise during the 6 months prior to the study, and lack of cardiovascular and articular disease, and randomly divided into 2 groups (experimental and control) of 10 persons. Experimental group performed aerobic and resistance exercises 3 sessions a week; while the control group had no regular activity during this period. Aerobic training included 20 min treadmill running at 60-70% of HRmax. Resistance training consisted of 6 stations, which were performed in 3 sets of 10 repetitions with the intensity of 60% of 1RM. Aerobic power (1-mile Rockport walk test), anaerobic power (Sargent jump, Johnson and Bahamonde equation), quality of life (SF-36 questionnaire), and mental health (GHQ questionnaire) were measured 24h before and after training period. Compared to control group, the amount of VO₂max (approximately 15%; $p=0.004$) and the components of quality of life (approximately 8%; p

Keywords : Concurrent Training, Type 2 Diabetes, Aerobic Power, Anaerobic Power, Quality of Life, Mental Health.

