**ASSESSMENT OF ENERGY EXPENDITURE DURING PILATES EXERCISES**

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The Pilates Exercise is an interesting method to improve muscular strength and endurance, flexibility and posture. It was referred by American College of Sports Medicine as a fitness trend and has been used in cardiac rehabilitation. However, was not established it energy cost, which is important information for planning appropriate exercise programs.

Purpose: To evaluate the energy cost of Pilates exercises.

Methods: Five healthy women (27±6 years, 51±5 kg, 173±11 cm) performed three Pilates exercises (Foot work, Going up front and Arm spring), with moderate intensity. Data gas (oxygen intake, carbon dioxide production and minute volume) were collected by gas analyzer VO2000 (Medical Graphics Corporation, USA) five minutes before, during one set (twelve repetitions) and three minutes of recovery for each exercise.

Results: Mean of energy expenditure values were 13.4±2.3 Kcal (1.46 Kcal/min) for Going up front, and 9.4±2 Kcal (1.08 Kcal/min) for Arm spring, and 13.2±1.9 Kcal (1.3 Kcal/min) for Foot work.

Conclusions: Some of the Pilates exercises with moderate intensity have low energy expenditure and seem to be safe for cardiac patients. However, this may represent a small contribution to reduce or control body weight. Future researchers should explore the effects of load and volume management of Pilates exercises on energy expenditure in different groups of cardiac patients.