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BOOK OF ABSTRACTS

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to 306±95, p=0.03 and control 386±97 to 418±97 meters, p=0.02, respectively). Heart rate and VO_2 in the end 6W RCO and no-RCO did not show statistic differences (HF: HR, 93±11 to 92±10 bpm; VO_2, 10.6±3.5 to 10.4±3 and control: HR, 90±4 to 91±5 bpm; VO_2, 11.6±2 to 12.7±2).
DISCUSSION & CONCLUSION Respiratory response during 6W was increased in HF when compared with control. The ergoreflex activity in the leg and 6W exhibited a non-significant contribution to recovery period in both HF and control. Over activation of the ergoreflex seems not contribute to an excessive ventilation response during 6W, that reflect daily activity, in optimized BB HF.
KEYWORDS Exercise, heart failure, muscle ergoreflex

Interval exercise training benefit on body composition and physical fitness in young obese women

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OBJECTIVE Exercise training is one of the main interventions in overweight people in order to reduce and maintain the gained weight. We aiming to demonstrate that interval exercise training programs based on cardiopulmonary exercise test (CPX) recommendation of Training Zones increase physical fitness and improve body composition in young obese women.
METHODS 40 young obese women university students (average BMI of 30.7 kg/m2) from 18 to 25 years old, were included the study. Physical fitness and aerobic capacity of subjects was determined performing a maximal CPX (Cortex Metalyzer 3B) on bicycle ergometer. We measured peak oxygen uptake (VO_2 peak) and oxygen uptake corresponding to anaerobic threshold (VO_2 AT). Multifrequency segmental bioimpedance device (InBody 720) was used to analyze body composition and recording PBF, visceral fat area (VFA) and waist to hip ratio (WHR). All subjects participated in a 6 months interval exercise training consisted in 3 times per week of 60 minutes at extensive and intensive endurance intensity zone, completed by 1 minute interval in development intensity zone for every 5 minutes of training.
RESULTS Using the paired t test to compare the data at baseline and at the end of the study, we noticed a significant improvement in body composition: PBF decreased (from 42.4±6.5 to 40.2±7 %, p=0.023) along with VFA (from 116±52 to 103±48 cm2, p=0.002) and WHR (from 0.87±0.05 to 0.86±0.05, p=0.013). We also noticed a very significant improvement of physical fitness (VO_2 peak increased from 1.78±0.3 to 2.07±0.37 l/min, p<0.0001) and aerobic capacity (VO_2 AT increased from 1.24±0.27 to 1.49±0.28 l/min, p=0.0002).
DISCUSSION & CONCLUSION 6 months of interval exercise training increase physical fitness and improve body composition in young obese women. Adjusting the physical training according to CPX recommendation of Training Zones together with the feedback offered by using heart rate monitors, leads to an important increase of aerobic capacity.
KEYWORDS Interval exercise training, obese women

Aerobic performance and morphological modifications after 4 months's phisycal activity program in elderly women

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OBJECTIVE Research clearly shows that physical activity (PA) is an important factor to develop and maintain good health and adequate body functions in older people. In this context, the purpose of this study was to determine aerobic performance and morphological modifications after a 4 month physical activity program (PAP) in elderly.
METHODS Forty subjects divided in two groups (control, n=20; and experimental, n=20) were evaluated twice, at the beginning and after a 4-month-activity program period. This program called "+ age + health" consists of 3 week sessions of one hour each, based on walking and aerobic exercises. The control group had, at its first evaluation, the followings characteristics: average body mass 68kg±15, 28±5 BMI, 37%±5 body fat, 2.2kg±0.4 bone mass, 42%±9 lean body mass and did 129 repetitions ± 46 on a 2-Minute Step Test (2MST). The assessment of anthropometric and morphological variables was measured through an electrical bioimpedance scale (TANITA - BC 545). Aerobic endurance was evaluated from a 2MST [1].