Introduction: Epidemiological evidence supports that menopause transition is associated with an increased coronary heart disease (CHD) risk, and thus mortality. The American College of Sports Medicine has recommended 30 minutes or more of moderate-intensity physical activity on most, preferably all, days of the week to reduce CHD risk and mortality (ACSM, 1998). In this regard, walking was considered as the commonest and most feasible form of sustainable dynamic aerobic exercise for sedentary individuals (Asikainen et al., 2002). However, the dose of exercise remains unclear and depends on initial fitness level, duration and length of exercise session, and participants’ characteristics. Aim of this study is to evaluate benefits of an active walking program on postmenopausal women’s cardiorespiratory fitness (CRF) and body composition, once adherence to the program and exercise intensity are considered.

Methods: A non-randomized training program in which 159 moderately obese (body mass index, BMI = 30 ± 4 kg/m²) sedentary (VO2max = 19 ± 6 mlO2/kg/min) postmenopausal women (60 ± 6 yr-old) were subjected to 3 sessions/week of 45 min-walking, at 60% of their heart rate reserve (HRR), during 16 weeks. Two out of three weekly walking sessions were supervised by an exercise physiologist, and women were asked to maintain their usual dietary habits during the program. Following measurements were performed before and after the 16 weeks: 1) height, weight (BMI calculated) and waist girth; 2) fat mass and lean mass determined by a standard bioelectrical impedance technique (BodyStat 1500); and 3) CRF (estimated VO2max) assessed by the 2-km walking test.

Results: Women displayed a good adherence to the program attested by mean practice rate of 77%, and walking HR intensity of 58% HRR. Their body weight, BMI, and waist girth decreased while estimated VO2max increased after training (P<.0001). Statistical analysis taking into account tertiles of practice rate (<71%, 71-87%, >87%) revealed that women displaying the greatest one were characterized by the highest reduction in adiposity and the best improvement in CRF (P<.05). A similar analysis based on tertiles of walking HR intensity (<56%, 56-63%, >63% HRR) did not show any difference between groups. Conclusion: In contrast to walking intensity, a firm adherence to exercise reflected by a high practice rate appears to be the most important factor for CRF improvement and ameliorations in body composition.