

Activity behaviors in lean and morbidly obese pregnant women

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Abstract

Interventions to increase physical activity in pregnancy are challenging for morbidly obese women. Targeting sedentary behaviors may be a suitable alternative to increase energy expenditure. We aimed to determine total energy expenditure, and energy expended in sedentary activities in morbidly obese and lean pregnant women. We administered the Pregnancy Physical Activity Questionnaire (nonobjective) and the Actical accelerometer (objective) to morbidly obese (BMI >= 40kg/m(2)) and lean (BMI <= 25Kg/m(2)) pregnant women recruited in early (< 24weeks), and late (>= 24weeks) gestation. Data are mean (SD). Morbidly obese pregnant women reported expending significantly more energy per day in early (n=140 vs 109; 3198.4 (1847.1) vs 1972.3 (10284.8) Kcal/d, P<.0001) and late (n=104 vs 64; 3078.2 (1356.5) vs 1947.5 (652.0) Kcal/d, P<.0001) pregnancy, and expended significantly more energy in sedentary activities, in early (816.1 (423.5) vs 540.1 (244.9) Kcal/d, P<.0001) and late (881.6 (455.4) vs 581.1 (248.5) Kcal/d, P<.0001) pregnancy, than lean pregnant women. No differences were observed in the proportion of energy expended sedentary between lean and morbidly obese pregnant women. The greater total energy expenditure in morbidly obese pregnant women was corroborated by Actical accelerometer in early (n=14 per group, obese 1167.7 (313.6) Kcal; lean 781.1 (210.1) Kcal, P<.05), and in late (n=14 per group, obese 1223.6 (351.5) Kcal; lean 893.7 (175.9) Kcal, P<.05) pregnancy. In conclusion, non-objective and objective measures showed morbidly obese pregnant women expended more energy per day than lean pregnant. Further studies are needed to determine whether sedentary behaviors are a suitable target for intervention in morbidly obese pregnancy.


Keywords

Author Keywords: [energy expenditure](#); [lean](#); [morbidly obese](#); [pregnancy](#)

KeyWords Plus: [RESTING METABOLIC-RATE](#); [PHYSICAL-ACTIVITY](#); [SEDENTARY BEHAVIOR](#); [ASSOCIATION](#); [OUTCOMES](#); [VALIDATION](#); [OVERWEIGHT](#); [EQUATIONS](#); [EXERCISE](#); [NONOBESE](#)

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