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Self-selected Walking Intensity Of Healthy Older Women (65-74yr) During Treadmill And Over-ground Walking: 2486: Board #131 May 29 9:00 AM - 10:30 AM

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BACKGROUND: Current exercise guidelines for older adults recommend at least 30 min of physical activity (PA) on most days of the week ($\geq 4/\text{wk}$) performed at 55-90% of maximum heart rate (HR_{max}). While the recommended frequency and duration of PA can be easily self-selected, it is unclear if older adults are able to select the recommended exercise intensity.

PURPOSE: To determine if healthy women (65 - 74 yr) are able to self-select a walking intensity that is within the current recommendations for daily PA during treadmill (TM) and over-ground (OG) walking.

METHODS: Nine healthy older women (age = 68.5 ± 3.2 yr, BMI = 26.2 ± 5.7 kg/m², peak O₂ uptake (VO_{2peak}) = 22.7 ± 4.7 mL/kg/min) performed four, 30-min walking trials (two TM and two OG) in a counterbalanced, randomized order. For the initial TM and OG trials, subjects self-selected their walking speed. Walking speed, heart rate (HR) and ratings of perceived exertion (RPE) were recorded during these trials. For the second TM and OG trials, walking speed was controlled to match the speeds selected during the initial TM and OG trials. During the second TM and OG trials, pulmonary gas exchange was measured using a COSMED K4b2, in addition to HR and RPE.

RESULTS: Exercise intensity during self-selected TM and OG walking were within the current guidelines for daily PA (TM = 70% HR_{max}, 95%CI = 66 - 75%; OG = 73% HR_{max}, 95%CI = 67 - 79%). Differences in the HR and VO₂ responses for TM and OG walking were not significant (%HR_{max}, $p = .06$; %VO_{2peak}, $p = .08$), while walking speed during OG was significantly greater than TM walking ($p = .01$).

CONCLUSION: Healthy older women are able to self-select a walking intensity that is suitable for meeting the current recommendations for daily PA during both TM and OG walking.

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