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EFFECTS OF EXEMPLARS OF MODERATE-TO-VIGOROUS PHYSICAL ACTIVITY ON CARDIOMETABOLIC HEALTH: IMPLICATIONS FOR MEDIA CAMPAIGNS

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Objectives

Walking and gardening appear in media campaigns as exemplars of moderate-to-vigorous physical activity (MVPA). We investigated the cardiometabolic effects of substituting one type of MVPA for another

Methods

2008 Health Survey for England data were analysed (n=1575). Self-reported MVPA provided the following categories: housework, manual/DIY, short walking (<30 min bouts), long walking (≥30 min bouts), exercise/sport and occupational activity. Sitting and TV watching provided markers of sedentary time. Accelerometers measured 4 days of MVPA. Framingham risk was calculated as an index of cardiometabolic health. Self-reported sedentary and MVPA categories were entered into regression models with a total activity variable, predicting Framingham risk and accelerometeric activity. In each model, one MVPA category was excluded. The coefficients described the change in the dependent variable associated with replacing the excluded activity

Results

Only exercise/sport and short walking predicted improvements in Framingham risk when replacing both sedentary behaviours (β =2.11 to .92; p<.05). Exercise/sport and short walking were associated with reduced Framingham risk when replacing all other MVPA categories, except housework (β =.13 to .06; p<.05). Substituting other MVPA categories with short walking predicted an increase in total moderate physical activity (p<.05). Substituting other MVPA categories, except short walking, with exercise/sport predicted an increase in vigorous activity (p<.05)

Conclusions

Short walks and exercise/sport may accumulate more MVPA and more positively impact cardiometabolic health than other MVPA exemplars