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# Proximity to green space increases the propensity for regular walking and physical activity in adults

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# Proximity to green space increases the propensity for regular walking and physical activity in adults

## **Abstract**

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## Proximity to Green Space Increases the Propensity for Regular Walking and Physical Activity in Adults

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Walking, and particularly moderate-to-vigorous physical activity (MVPA), remain the “best buy” for preventing chronic disease. Regular participation in such activities, however, declines across the life course.

**PURPOSE:** To investigate to what extent residential proximity to green space increases weekly participation in and regularity of walking and MVPA in a cohort of Australian adults aged 45 years and older.

**METHODS:** Data were drawn from the baseline survey of The 45 and Up Study, a large-scale cohort study of a range of health and social issues that includes over 265,000 people (45 years and older) from across New South Wales, the most populous state in Australia. Logit and negative binomial regression was used to estimate the degree of association between walking, MVPA, and proximity to green space in a sample of 203,883 adults. Walking and MVPA were measured using the Active Australia Survey. Proximity to green space within a 1 km radius of residence was measured using the Australian Bureau of Statistics meshblock land-use classification. We controlled for a range of individual and neighbourhood characteristics, and accounted for clustering using robust standard errors.

**RESULTS:** 86.6% of the sample walked and 85.8% participated in MVPA at least once a week. These rates fell steeply with age. The majority of participants (68.1%) lived in areas with less than 20% green space land-use, while only 2.6% lived in neighborhoods with over 80% green space. Compared to residents of neighborhoods containing 0-20% green space, those in greener areas were significantly more likely to walk and participate in MVPA at least once a week (trend for both,  $p < 0.001$ ). Among those participating at least once a week, residents of neighborhoods containing 80%+ green space participated with increasingly regular frequency in walking (Incidence Rate Ratio (IRR): 1.09, 95% Confidence Interval (95% CI) 1.05, 1.13) and MVPA (IRR: 1.10, 95%CI 1.05, 1.15).

**CONCLUSIONS:** Increasing the amount of green space available to adults in middle-to-older age could help to promote regular walking and MVPA. Green spaces are a public health resource that should be protected and promoted.