



To: Place Directorate

From: Adrian Davis

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Subject: Essential Evidence on a page: No. 119 Walking to Work:
Does it contribute to increasing total physical activity time?

Top line: Walking to work can make a substantive contribution to daily physical activity, contributing to reducing preventable deaths, and improving health in the workplace.

There is compelling evidence that regular physical activity is effective in the prevention of chronic diseases (eg cardiovascular disease, type 2 diabetes, some cancers, hypertension, obesity, depression) and premature death, with the greatest improvements in health status seen when people who are least active become physically active. It is recommended that adults should aim to undertake at least 150 minutes of moderate intensity physical activity in bouts of 10 minutes or more through-out the week¹ but many adults in the UK and other high-income countries do not achieve this. Increasing physical activity levels, particularly among the most inactive, is an important aim of current public health policy in the UK.

One approach to increasing physical activity levels is to promote active travel ie walking and cycling. There is increasing evidence of the link between adult obesity levels and travel behaviour, one indicator of which is that countries with the highest levels of active travel generally have the lowest obesity rates.² Walking has been described as near perfect exercise. It is a popular, familiar, convenient and free form of exercise that can be incorporated into everyday life and sustained into older age. It is also a carbon neutral mode of transport. Even walking at a moderate pace of three miles/hour expends sufficient energy to meet the definition of moderate intensity physical activity. Hence there are compelling reasons to encourage people to walk more.

A Bristol-based study sought to increase walking through the commute. Workplaces were recruited to the study: 8 small (≤ 50 employees), 5 medium (51–250 employees) and 4 large (>250 employees).³ Eligible employees were adults living within 2 miles of their workplace and capable of walking to work regardless of their current mode of transport for commuting. Physical activity was measured objectively using accelerometers worn on a waist belt during waking hours for seven days, along with a Global Positioning System (GPS) receiver to allow identification of routes travelled, as well as completing travel diaries. Of the 103 participants (57% female) 70 were categorised as walkers and 33 as car users. Participants were largely white, well educated and desk-based. Physical activity levels were 44% higher in participants who walked to work than those travelling by car, and accumulated 57% more moderate to vigorous physical activity. No differences were seen in physical activity during working hours or at weekends between participants. Difference between walkers and car users in weekday physical activity largely occurred during commute hours. GPS showed that the journey to and from work was responsible for the majority of the difference in weekday physical activity between those who walked to work and those who travelled by car.

¹ Department of Health: Start Active, Stay Active, 2011 *A Report on Physical Activity for Health from the Four Home countries' Chief Medical Officers*. London: Department of Health.

² Bassett D, Pucher J, Buehler R, Thompson D, Crouter S. 2008 Walking, cycling, and obesity rates in Europe, North America and Australia. *Journal of Physical Activity and Health*, 5:795–814.

³ Audrey, S., Procter, S., Cooper, A. 2014 The contribution of walking to work to adult physical activity levels: a cross sectional study, *International Journal of Behaviour Nutrition and Physical Activity*, 11: 37.