An alien visitor to our planet would be perplexed by modern human life, not least our relationship with physical exertion. After 6 million years of hunter-gatherer existence, humans can be observed sheltering in warm rooms, counteracting the tiresome effects of earth’s gravity by slouching on comfortable seats in front of glowing screens, being whisked effortlessly between floors aboard mechanical staircases, even soaring across continents while seated in warm moving boxes. Confusingly, however, a proportion of these same humans could later be spied spending their ‘free time’ running outside in all weathers for no apparent reason or, stranger still, handing over money to an institution called ‘the gym’ to pass time repeatedly picking up and putting down heavy objects or running on a revolving mat until they were red and sweaty.

How would we explain this peculiarly binary behaviour to our inter-planetary visitor? We might start by describing the ‘globesity’ pandemic where inactivity is estimated to cause 9% of premature mortality worldwide.1 We could extol the virtues of exercise, explaining its vital contribution to physical health and mental wellbeing, and advising that adults complete a minimum of 150 minutes per week of moderate to vigorous physical activity.2 Our alien may nod politely while quietly wondering to herself why the very people dispensing this advice spend the majority of their day languishing in an office chair.

She has a point. Recent research suggests that sedentary lifestyles are themselves a risk factor for cardiometabolic morbidity and all-cause mortality, even when controlling for overall levels of moderate to vigorous physical activity.3 The fact that we can’t erase all-cause mortality, even when controlling for mental health implications (varicose veins, foot pain). It also requires willpower — a finite resource, known to be depleted when completing other mentally demanding tasks.4 Anecdotal reports reflect this, with some users reverting to sitting after the initial enthusiasm fades.

A systematic review of standing and treadmill desks in the workplace found few short-term improvements in physiological outcomes with standing desks. However, greater improvements were associated with treadmill desk use (although treadmill desks also resulted in larger decreases in work productivity and motor abilities). Meanwhile, the findings of the recent Whitehall II cohort study5 suggest that the relationship between sitting and morbidity may be more nuanced. Five different indicators of sitting time were examined over 81 373 person-years of follow-up, finding no associated mortality risk. The authors concluded that this may be due to the protective effect of higher than average daily activity in this cohort (mostly from walking) and postulated that previously reported relationships between sitting time and health outcomes may be due in part to low total daily energy expenditure rather than simply posture.

STRATEGIES FOR GPs

Clearly the bottom line is that sitting still for extended periods is uncomfortable and may come with its own health implications (varicose veins, foot pain). It also requires willpower — a finite resource, known to be depleted when completing other mentally demanding tasks. Anecdotal reports reflect this, with some users reverting to sitting after the initial enthusiasm fades.

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The obvious drawback is that standing still for extended periods is uncomfortable and may come with its own health implications (varicose veins, foot pain). It also requires willpower — a finite resource, known to be depleted when completing other mentally demanding tasks. Anecdotal reports reflect this, with some users reverting to sitting after the initial enthusiasm fades.

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