



Walk 4,400 steps daily towards a better, longer life



Ten thousand steps works out to around 8km of walking in a day, a figure that can seem quite daunting. PHOTO: ST FILE

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SINGAPORE - Some 700,000 people took part in the National Steps Challenge last year, a programme launched by the Health Promotion Board to get people to move more and get healthier.

When it comes to step counting, the goal of reaching 10,000 steps a day seems to be the default. Ten thousand steps works out to around 8km of walking in a day - roughly the distance between Orchard MRT and Paya Lebar MRT - a figure that can seem quite daunting.

The 10,000 steps a day goal has become a meme in the popular consciousness, perpetuated by the popular press and smart device manufacturers. It traces back to the trade name of an early Japanese pedometer in the 1960s, which was named Manpo-kei, which translates to "10,000 steps meter". The trade name for the device became so popular in Japan, it is now the generic name for all pedometers in Japan.

But Professor Lee I-Min from Harvard's Medical School and the TH Chan School of Public Health has found that the 10,000 steps a day goal has little scientific basis. According to her, one reason people do not move more is that they may think health benefits accrue only when one hits the 10,000 steps on his pedometer or smart device.

The epidemiologist's recent research has been to quantify how many daily steps are really needed for people to see health benefits. She wrote about this in her end-May paper published in the highly respected Journal of American Medical Association Internal Medicine.

While in the United States a few weeks ago, I took the chance to chat with Prof Lee, who has dedicated her life to studying how physical activity improves health and longevity. If she is successful, she hopes her patients will "live longer and have a good quality of life".

Prof Lee grew up in Penang and came to study medicine at the National University of Singapore. After her medical training, she pursued graduate studies in Harvard, intending to come back to Singapore to practise after a few years overseas. But a few years became a few decades and she has since built her career and life around her research at Harvard. Her parents still live in Penang and she has a sister who practises medicine in Singapore.

Using data from a long-term observational study on 18,000 older women, where women wore accelerometers from 2011 to 2015, she found that one does not need to do commando levels of physical activity to enjoy significant health and longevity benefits of movement.

She observed that more steps a day brought steady declines in death rates up to approximately 7,500 steps a day, beyond which rates levelled.

A person who took 4,400 steps a day was 40 percent less likely to die during the study, than the person who took 2,700 steps a day. Similarly, a person who took 7,500 steps a day was 65 per cent less likely to die during the study.

In other words: More steps, live longer.

In her past studies, she also found a significantly lower incidence of cardiovascular disease, diabetes and cancer among those with more, as compared with less, physical activity. More movement, healthier life.

Prof Lee might indeed be onto something. While 10,000 steps a day might be too intimidating, health benefits can be seen at a more approachable 4,400 steps a day, which is roughly the distance from Orchard MRT to Raffles Place MRT. She told The New York Times she was surprised that "such a relatively small number of steps would be associated with such a substantial reduction in mortality".

Given that the average number of steps taken globally is 5,000 steps a day, the number of steps that people are taking is likely already giving them a health benefit. Singapore recently unseated Japan as the world champions of life expectancy, according to the US Institute for Health Metrics and Evaluation.

It would appear that many Singaporeans might already be getting enough steps to live a longer and healthier life - so relax.

Prof Lee encourages her patients to make small lifestyle changes to be more physically active. Her point is that one does not need to go out for a run to get an additional 2,000 steps each day.

Simple habits such as parking in the first parking lot you find in a carpark and walking to the mall entrance, rather than circling the area to find a closer parking lot; or walking to the MRT station instead of taking the shuttle bus can help to beef up the number of steps taken during the day.

The United Kingdom's Academy of Medical Royal Colleges calls physical activity the "miracle cure". Last year, the Physical Activity Guidelines Advisory Committee in the US did a detailed review of the state-of-the-art research on physical activity and essentially came to the same conclusion.

The US study pointed out that some benefits of physical activity happen immediately. A single bout of moderate-to-vigorous physical activity can improve that night's sleep, reduce anxiety symptoms, improve cognition, reduce blood pressure and improve insulin sensitivity on the day it is performed. Most of these improvements have greater impact with regular moderate-to-vigorous physical activity.

Prof Lee's passion to bring the "miracle cure" to all is palpable when you speak to her. She also practises what she preaches and runs five times a week. On the days she does not run, she walks everywhere and uses public transport.

She keeps up the routine even in harsh Boston winters. She is proud of how walking keeps her on time during the winters, when traffic is crawling due to snow on the roads. Her secret for winter walking - good boots.

When asked what advice she would give to the readers of this column, she quoted her late mentor Ralph Paffenbarger from Stanford University, the father of physical activity research: "Anything that gets worse as you grow older, gets better with exercise."