Non-Communicable Diseases Watch

July 2022





The Beauty of Walking

Key Messages

- Walking is man's best medicine. Having an optimal 'daily dose' of walking would confer various health benefits, protect against chronic noncommunicable diseases and reduce the risks of premature death.
- * Adults are recommended to gradually increase their daily step goal to 10 000 based on their own physical conditions, abilities, pace and individual circumstances. Even if the goal cannot be achieved, any amount of walking is better than none.
- * Those who are used to be sedentary or living with a chronic illness can start out with short distances and slow speeds, and then build up the walking distance and intensity gradually. They can also consult their family doctors for recommendations on walking speed, duration and frequency.



The Beauty of Walking

As Hippocrates (a Greek physician who is traditionally regarded as the "Father of Modern Medicine") stated 2 400 years ago, "walking is man's best medicine". Whether it is a morning stroll or causal walk after dinner, going to work or back home on foot, walking to local shops or mall-shopping, taking the stairs or pacing around in the household, walking would confer various health benefits (Figure 1).

Health Benefits of Walking

Epidemiological studies have shown that having an optimal 'daily dose' of walking would reduce the risks of chronic non-communicable diseases and premature death^{2, 3}. Walking at a faster pace burns body fat^{4, 5}, increases cardiorespiratory fitness and reduces the risk of cardiovascular diseases (including hypertension^{4, 6}, coronary heart disease and stroke, elevates insulin sensitivity and prevents the new onset of type 2 diabetes^{9, 10}, as well as reduces the risk of some cancers (such as liver cancer¹¹, postmenopausal breast cancer¹² and endometrial cancer¹³). Besides, walking aids digestion, increases gut motility and decreases bowel transit time. By lowering the exposure of cancer-causing substances in the stool at the colonic mucosal surface, it can reduce the risk of colon cancer development¹⁴. As a weightbearing activity, walking increases muscle strength (including calf, thigh and gluteal muscles), improves balance and prevents loss of bone mineral density, thereby reducing the risk of falls¹⁵, osteoporosis (such as at femoral neck in postmenopausal women¹⁶) and related fractures. Besides, walking also helps relieve symptoms of anxiety and depression^{17, 18}, improve memory and enhance creative thinking (especially walking outdoors) 19, protect against deterioration of brain functions and reduce the risk of cognitive impairment in late adulthood²⁰. For many people, walking improves sleep quality or beats insomnia^{21, 22}. As a form of transportation, walking rather than driving motorised vehicles helps reduce carbon emissions, air pollution and traffic noise²³.



How Much Walking Should Adults Aim For

As shown in Table 1, taking 7 500-9 999 steps a day is generally classified as 'somewhat active', while 10 000 -12 499 daily steps is regarded attaining 'active' level of physical activity through walking²⁴. According to scientific evidence, the health benefit (in terms of reducing all-cause mortality) increases substantially from sedentary 2 000 daily steps level at around to reaching a level with the range $7 \ 500-10 \ 000 \ daily \ step \ counts^{3, 25}$. By walking 9 000-10 000 steps per day, studies found that mortality risk would reduce $41-56\%^{26, 27}$. Among adults aged 60 years and older, risk of mortality progressively lower with creasing daily number of steps to 6000-8000 steps per day²⁸. Among adults younger than 60 years, progressively lower risk of mortality was observed with 8 000-10 000 steps per day²⁸. Even a modest increase in steps per day could reduce the risk of death. Studies showed that each additional 1 000 daily steps count was associated with an estimated 6-36% reduction in mortality risk 26, 27, 29.

Overseas and Local Guidelines

Given some evidence supports that the "10 000 step per day" goal is an effective intervention strategy to increase physical activity, some overseas health authorities (such as Ireland³⁰, Singapore³¹ and Australia³²) recommend their citizens taking 10 000 steps of walking per day. The World Health Organization Regional Office for Western Pacific also promotes a goal of 10 000 steps a day as a strategy for increasing physical activity among adults³³.

Taking into account available scientific evidence, overseas and international guidelines as well as the baseline daily step counts of local population, adults are recommended to gradually increase their daily step goal to 10 000 based on their own physical conditions, abilities, pace and individual circumstances. Even if the goal cannot be achieved, any amount of walking is better than none.

Table 1: Levels of physical activity by daily walking steps

Level of physical activity	Steps per day
Sedentary	<5 000
Low active	5 000–7 499
Somewhat active	7 500–9 999
Active	10 000–12 499
Highly active	≥12 500

Source: Tudor-Locke et al, 2008.

Walk More and Safety Tips

Walking is one of the most versatile forms of physical activity that can easily be incorporated into routine. Beyond a pair of comfortable shoes, walking does not require gym membership, specialised equipment or attire. Being a self-regulated low-impact activity, walking is generally safe. For those who are used to be sedentary or living with a chronic illness, walking is a good starting point to lead a more active lifestyle. They can start out with short distances and slow speeds, and then build up the walking distance intensity gradually. People in and need can also consult their family doctors for recommendations on walking speed, duration and frequency. Nowadays, many electronic devices are equipped with the built-in function to track the steps taken. In order to monitor progress motivated, walkers step counter applications (apps) smartphones or other wearable devices (such as smart watches and fitness trackers).

For safety, walkers should walk on sidewalks and walk in well-lit streets or areas where possible; stay hydrated, especially in hot weather or if going for hiking; be sun smart by wearing appropriate clothing, putting ultraviolet (UV) blocking sunapplying sunscreen glasses and walking outdoors. Besides, starting and finishing each moderate, vigorous or long walk with warm up and cool down activities (such as stepping on the spot and doing some stretching exercises for the lower legs) would help reduce the risk of soreness and injury. For more information about walking, please visit www.change4health.gov.hk/ en/physical activity/walk for health/ index.html. While the Hong Kong SAR Government keeps on developing Hong Kong into a walkable city and foster a pedestrian-friendly environment, DH will continue organising health promotional campaigns to raise public awareness about the benefits walking. For health, let's walk more!

Key Health Messages

- ♦ Adults are recommended to gradually increase their daily step goal to 10 000 based on individuals own physical conditions, abilities, pace and circumstances.
- Even if the goal cannot be achieved, any amount of walking is better than none.



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The Leisure and Cultural Services Department (LCSD) will hold the Sport For All Day 2022 on 7 August 2022 (Sunday). This year, the slogan will remain "Stay Active, Healthy and Happy!" to encourage people of all ages and abilities to engage in regular sports and physical activities, and promote the benefits of exercise for the body and mind. The electronic virtual sports will be the focal sport this year. On the event day, a series of free sports and recreation programmes will be offered at designated LCSD venues across the 18 districts, while most of the LCSD leisure facilities will be open for free use by the public. Sports demonstrations will also be webcasted through this dedicated webpage and online platforms on that day. These fitness exercises are suitable for practice by any people at any place. Viewing and participation by members of the public are welcome. For details of the Sport For All Day 2022, please visit the website at www.lcsd.gov.hk/en/sfad/2022/index.html.

Non-Communicable Diseases (NCD) WATCH is dedicated to promote public's awareness of and disseminate health information about non-communicable diseases and related issues, and the importance of their prevention and control. It is also an indication of our commitments in responsive risk communication and to address the growing non-communicable disease threats to the health of our community. The Editorial Board welcomes your views and comments. Please send all comments and/or questions to so_dp3@dh.gov.hk.

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