

# 10,000 Steps: Myth or Fact?

By ACSH Staff — November 30, 2018



Photo: Web Express [1]

There is little doubt that sedentary behavior is [bad for your health](#) [2]. Many people claim that “sitting is the new smoking,” even though the two are not really comparable. Smoking is [orders of magnitude worse](#) [3] than being sedentary, and given the choice, people should opt to do neither.

The interesting thing is that increasing your level of physical activity results in health benefits regardless of what your baseline step count is. In one Canadian [study](#) [4], diabetics were randomized to usual care, or an exercise prescription given to them by their physicians. The intervention group improved their daily step count from around 5,000 steps per day to about 6,200 steps per day. While the increase was less than what researchers hoped for, it still resulted in improvements in sugar control. Another [study](#) [5] found that women enrolled in a walking program for 24 weeks reduced their blood pressure by 11 points; even though they only increased their step counts to about 9000 steps per day. In yet another [study](#) [6], a weekly physical education class was able to increase daily step counts in menopausal women and resulted in improvements of their cholesterol profile even though they too were slightly shy of 10,000 steps per day.

Clearly, increasing your daily physical activity is more important than the actual number achieved. So where did this notion of 10,000 steps per day [come from](#) [7]?

In 1965, Japanese company Yamasa Toki introduced their new step-counter, which they called Manpo-Kei. This translated into “10,000 steps meter” and they marketed their device with the slogan, “Let’s walk 10,000 steps a day.” Japanese walking clubs were fairly popular at that time and the idea of a 10,000-step target seems to have caught on because the slogan was catchy and people tend to like nice round numbers. The rest, as they say, is history.

The idea of 10,000 steps per day may have originally been a marketing slogan, but it does seem

to be roughly useful. A [sedentary](#) [8] but otherwise healthy person who does not exercise regularly might take about 6000-7000 steps per day in the course of their normal every day tasks. This is a rough average and it obviously varies from person to person, but is a useful estimate for our purposes. Now, a [30-minute walk](#) [9] will generally involve about 3000-4000 steps, depending on a person's stride. So if you take a sedentary person, and get them to add 30 minutes of walking to their daily routine, they will likely get to around 10,000 steps.

The official [recommendations](#) [10] are precisely that. Thirty minutes of moderate physical activity at least 5 times per week. Moderate physical activity is usually described as a brisk walk. A good rule of thumb is that you should be a little short of breath while walking or have a little difficulty carrying on a conversation with someone walking next to you for it to count as moderate intensity. So essentially measuring someone's daily step count is a useful way to identify people who are more active from those who are more sedentary, which is why it tends to get used in research protocols where you want or need to measure people's daily physical activity.

There are of course a number of problems with routinely measuring the 10,000 steps a day metric. One is you have to remember to actually wear the pedometer (every day and all the time) for the numbers to be accurate. Studies have shown that compliance with devices like these [waned with time](#) [11]. Smart phones that measure your daily step count might make compliance easier given that most people carry their phones with them everywhere. But here too, leaving your phone on your counter while you do your household chores means that some of your daily steps are going uncounted. Suffice it to say, there is a certain margin of error to measuring step counts and there is a certain variability from person to person because everyone has a slightly different stride.

Finally, increasing your level of physical activity is almost always going to be for the good, regardless of what your initial step count. Increasing from 5000 steps per day to 9000 steps per day will likely yield important health benefits even though you fall short of the 10,000 step threshold. The focus should be on increasing your current level of physical activity, rather than comparing yourself to others. As the saying goes, the race is long and in the end it's only against yourself.

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31

[6]

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[7] <https://www.ncbi.nlm.nih.gov/pubmed/14715035>

[8]

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[9]

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4

[10] [http://www.csep.ca/CMFiles/Guidelines/CSEP\\_PAGuidelines\\_adults\\_en.pdf](http://www.csep.ca/CMFiles/Guidelines/CSEP_PAGuidelines_adults_en.pdf)

[11] <https://jamanetwork.com/journals/jama/article-abstract/2089651?redirect=true>

[12] <https://mcgill.ca/oss/article/health/10000-steps-myth-or-fact>