

What is the optimal number of daily steps for longevity for TRTA members? For most of us it is not 10,000!

According to a recent meta-analysis, the risk for premature death levelled off at about 6,000-8,000 steps per day for adults 60 and older. Neither more steps nor increased walking speed (step cadence) resulted in a lower risk of death.

Human beings walk (ambulate or move about). Throughout our evolution, we have developed the capacity to walk long distances and build up our metabolisms, cardiovascular fitness, muscular strength and bone structure. As children we walked all over the place. As young adults we often did plenty of walking, especially if our first jobs demanded it. In middle adulthood, many of us in education walked about the campus, but had to augment that with working out or recreational walking. As TRTA retirees, we find ourselves needing to walk for our health's sake.

Researchers became interested in using steps to quantify ambulatory physical activity in the mid-1900s. Beginning in 1995, this research gained momentum with the introduction of reasonably accurate spring-levered pedometers with digital displays. Longitudinal studies using accelerometers are being conducted today to measure the motion and vibration of human walking. A meta-analysis of 15 studies (sample size of 47,471 adults) was funded by the US Centers for Disease Control and Prevention (CDC) in 2022.

The first pedometers for widespread personal use were produced in Japan following the 1964 Olympics. The number 10,000 was adopted as a marketing ploy with no scientific backing. These first measuring devices were worn at the waist.

Interest by the general population in tracking physical activity exploded in 2010. The number of accelerator-based activity trackers by private citizens soared. In 2015, Fit Bit sold more than 21 million wrist worn activity tracking devices. Recently, smartwatches have included accelerator-based measuring components.

The cadence of the steps was not a factor in terms of longevity. Cadence is a consideration for those who follow the Centers for Disease Control and Prevention (CDC) recommendation of 150 minutes of moderate activity per week. Although thirty minutes of walking at a cadence of 100 steps a minute five times a week meets this recommendation, some adults would gain the same benefit from fifteen ten-minute walking segments over the seven days. The key is walking 100 steps each minute of the segment at a speed of 2.8 MPH.

Increasing one's physical activity level from 2,700 steps a day to 4,400 steps a day can have a positive impact on an older adult's health. Increasing the daily steps to 7,000-7,500 can improve one's longevity and quality of life.

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