

4 Key Reasons Why Mobility and Longevity Are Connected

 [web.archive.org/web/20240528224059/https://www.wellandgood.com/mobility-longevity](https://www.wellandgood.com/mobility-longevity)

Erica Sloan

September 20, 2022



Though aerobic exercise and popular fitness indicators like balance and grip strength are regularly touted as essential for supporting a healthy, long lifespan, there's one often-overlooked metric that underscores all of the above: mobility. If you don't keep up your mobility, which simply refers to the ability of your joints to reach their full range of motion, you'll find it much tougher to maintain a cardio or strength-training regimen without injury, and to reap all the physical-health benefits therein. Not to mention, maintaining your mobility as you age can directly boost your mental and emotional health, too, contributing in many different ways to your overall longevity.

For years, science has shown that people who are regularly mobile—clocking around 7,000 to 8,000 steps daily (or the equivalent 30 to 45 minutes of exercise)—live longer than those who don't, and that inadequate physical activity can increase mortality. But recently, more evidence has amassed to show just how negatively impactful being *immobile* can be, too.

“People are realizing that spending a lot of time inactive can nearly wipe out the beneficial effect of doing some exercise.” —Joe Verghese, MD, neurologist

“The flip of being mobile is being sedentary, and now, people are realizing that spending a lot of time inactive can nearly wipe out the beneficial effect of doing some exercise,” says neurologist Joe Verghese, MD, chief of the integrated divisions of Cognitive & Motor Aging at Albert Einstein College of Medicine.

In fact, a recent study involving 3,700 people who wore activity trackers for a week found that those who exercised for 30 minutes a day and also sat for upwards of 10 to 12 hours showed significantly worse measures of cardio-metabolic health than those who similarly exercised for 30 minutes but also stood up or strolled around throughout the day, doing what the researchers called “light activity.” Which is all to say, maintaining your mobility throughout your life may boost longevity through two broad channels: the health benefits to be gained by being mobile and the health detriments to be avoided by *not* being, well, *immobile*.

Below, experts break down exactly how these connections pan out, especially as you age.

4 ways maintaining mobility can boost longevity

1. It allows you to **safely** be active (with a lower fall risk)

Falls are the leading cause of death among people 65 years of age and older—and people who struggle with mobility are at increased risk of falling. By contrast, keeping up your mobility and the full range of motion that it entails can make you a more effective navigator of uneven surfaces, thresholds, and other common trip hazards. This, in turn, makes you less at risk of falling and sustaining the kind of injury that could drastically reduce your lifespan.

The tricky paradox with fall prevention in older people, though, is that if someone *already* suffers from mobility issues or limitations, doing mobility exercises or just being mobile in the form of walking could put them *more* at risk of falling (than, say, sitting in bed all day).

“Slow gait and shuffled steps [which are more common in the elderly and in folks with cognitive decline] are, indeed, predictors of falling,” says Jeannette Mahoney, PhD, associate professor of neurology at Albert Einstein College of Medicine. “So, if a person walks slowly or has an unsteady gait, telling them to walk more for mobility purposes might actually be setting them up for greater risk of falling and mortality.” (That’s why many hospitals actually immobilize older patients, despite the well-known detriments of doing so.)

Reaping the longevity-boosting benefits of mobility, then, requires working ahead of a physical limitation developing. Or, if you already have mobility issues, it could mean doing exercises like wall push-ups, squats, or even just walking under the guidance of a medical professional or while using an assistive device, like a cane or walker, says internal-medicine physician Michael Roizen, MD, author of *The Great Age Reboot*. “No matter what age they are, though, people *are* able to increase their strength and consequently their mobility, which is a very worthwhile thing.”

Once you’re more mobile, you can walk more (and more safely), which comes with a host of longevity-promoting benefits, from improving cardiovascular health to supporting metabolic activity and enhancing mood. And according to recent research, even a little bit of walking can go a long way with age: A study that followed more than 7,000 people aged 85 and older for several years found that those who walked at least one hour per week (just 10 minutes a day, on average) had a 40 percent lower risk of mortality than their inactive counterparts.

2. It helps prevent frailty

Though it’s characterized in different ways, the concept of frailty generally refers to an “accelerated decline in physiological reserve”—which is medical speak for several systems of the body becoming weak or dysfunctional, so that even a minor infection, fall, or injury becomes difficult to recover from. “This often shows up in someone who walks slowly, loses muscle strength, and becomes less active, and it’s associated with being more vulnerable to everyday stressors that we encounter in our environments,” says Dr. Verghese. “You can build a buffer against frailty by being more mobile, as this helps maintain muscle strength.”

┆ “You can build a buffer against frailty by being more mobile.” —Dr. Verghese

Regularly activating your muscles then also has downstream effects on a host of other body systems. “When you stress a muscle, you improve the function of blood vessels such that they dilate and constrict better,” says Dr. Roizen. “That also allows your heart to respond more effectively to stressful events, meaning you’re better able to tolerate rapid heart rate whenever it occurs.”

Putting muscles to work at their full range of motion can also increase lung capacity, improve blood flow to the brain, and support bone health, says Dr. Verghese. And all of the above reinforces the body against the kind of frailty metrics that are common with aging, therefore boosting longevity.

3. It improves cognitive function

For years, researchers have been gathering evidence that aerobic exercise, even including light to moderate physical activity, can reduce a person's risk of cognitive decline and dementia—which can, in turn, help them live longer. And a recent study that followed about 80,000 participants in the UK Biobank for seven years found that these benefits extend even to walking: Those who walked just under 10,000 steps per day reduced their risk of developing dementia by 50 percent. All of which makes another compelling argument for maintaining mobility—in this case, as a way to protect the brain.

Much of this mobility-cognition connection is likely tied to the hippocampus, a region of the brain that's associated with memory and spatial navigation, and which has been shown to be smaller in folks with both slow gait *and* cognitive decline. On the flip side, walking and aerobic exercise may actually increase the size of the hippocampus, based on studies of people with multiple sclerosis and older folks with mild cognitive impairment. As for how? That's likely thanks to a particular hormone released during exercise called irisin.

“When you stress a muscle—so, for example, when you walk—you turn on a gene that makes irisin, which then moves across the blood-brain barrier, and itself turns on another gene that produces brain derived neurotrophic factor (BDNF), causing the hippocampus, or brain's memory center, to grow,” says Dr. Roizen. The result is a unique brain-supportive benefit to moving your body that'll also allow you to keep doing so for longer in life.

4. It increases quality of life and relationships

When you're more mobile, there's a higher chance that you're getting out of the house and that you're not homebound, says Dr. Mahoney, which can support emotional health.

Not only does being able to walk around without trouble grant you your independence and freedom, but it also increases the likelihood that you'll connect with your local community and maintain friendships and other social ties—all of which can help you retain a sense of purpose in life and boost your well-being. By contrast, a 2013 study of about 700 older adults found that those with low mobility were significantly *less* likely to participate in social engagement than those with high mobility, putting them at greater risk for the depressive effects of social isolation than their mobile counterparts.

“The interconnection between being mobile, being independent, keeping your brain active, and meeting other people is what promotes a healthy lifestyle into old age,” says Dr. Mahoney. “And all of these facets play a big part in a person's continued will to live, which is a critical factor in longevity.”

How to maintain your mobility as you age

In addition to regular walking, which Dr. Roizen says is one of the best mobility exercises, he recommends practicing some combination of lunges, squats, and wall push-ups within your fitness routine. But even outside regular workouts, there's also a deceptively simple way to put your mobility to the test every time you get up out of a chair: Do so without using your hands or arms, he suggests, in order to seamlessly activate key core and leg muscles.

To flex your body's full range of motion in new ways, check out this 12-minute mobility workout:

Our editors independently select these products. Making a purchase through our links may earn Well+Good a commission.