

Don't Underestimate the Power of a Good Walk

Analysis by Dr. Joseph Mercola

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STORY AT-A-GLANCE

- > Daily walking is one of the most effective ways to stay fit and active
- > Regular exercise, including activities as simple as walking, can rejuvenate your mitochondria and reduce the risk of chronic age-related diseases like heart disease, high blood pressure, Type 2 diabetes and cancer
- > Walking outdoors, particularly in a forest, may offer even more significant psychological benefits, including a reduction in negative moods and feelings of depression, tension, anxiety, anger, fatigue and confusion, and an increase in positive mood and vigor
- > Moderate exercise, which includes walking, improves all-cause survival better than vigorous exercise
- > The largest health gains from walking occur when going from being sedentary up to 7,000 or 8,000 steps a day, continuing to about 12,000 daily steps

Daily walking is one of the most effective ways to stay fit and active, yet many overlook it in favor of flashier forms of exercise. Embracing walking can improve both your physical and mental health, however, and is a free, accessible activity that you can do virtually anywhere.

Since walking is a low-impact and moderate-intensity exercise, it's one that people of all ages and fitness levels can do. It doesn't require special skills, equipment or a gym membership and can be integrated into most people's routines easily.

Ideally you would walk around solar noon, which is from 12:30 to 1:30 PM for those on Daylight Savings Time because of the perversion of the time system. Timing your walk during this time allows you to get additional benefits of UVB and near IR solar radiation.

For the last ten years or so it has been my pattern to walk around 45 minutes to one and a half hours around this time on the beach barefoot. I probably am able to do this over 95% of days. While this clearly is not possible for many, I have seen a number of people move so they can engage in this healthy practice. Nevertheless, most all the benefit is obtained by walking at solar noon. Barefoot on the beach is merely the icing on the cake.

What Can You Gain From a Daily Walk?

Blue Zones are areas in the world where people tend to be unusually long-lived, with high concentrations of centenarians. It's revealing that in these regions, which include Okinawa, Japan; Sardinia, Italy; Nicoya, Costa Rica; Ikaria, Greece; and Loma Linda, California, residents often engage in physical activity, including regular walking.

"Regular physical activity, including walking, is a fundamental aspect of a healthy lifestyle and is associated with numerous health benefits, particularly in the context of healthy aging and longevity in the Blue Zones," researchers wrote in GeroScience.²

Their review found that walking is a powerful antiaging intervention that can reduce the risk of chronic age-related diseases like heart disease, high blood pressure, Type 2 diabetes and cancer, while relieving pain and improving function in musculoskeletal disorders.

Other walking benefits include improved sleep and increased resilience, but what was perhaps most astounding was their finding that simple walking may help reverse the underlying cellular and molecular mechanisms of aging.³

Regular exercise, including activities as simple as walking, can rejuvenate your mitochondria. Exercise encourages the creation of new mitochondria and helps the existing ones work better, producing more energy more efficiently. If you don't take steps

to protect your mitochondrial health, your mitochondria can become damaged with age and produce less energy.⁴

This can contribute to muscle weakness, heart issues and less efficient blood flow in the brain, while damaged mitochondria can create harmful byproducts, making these problems worse. "While in-depth studies investigating the effects of walking on mitochondrial function are limited, initial studies have shown promising effects of walking interventions on mitochondrial function," the scientists explained.⁵

One study found, for instance, that regular low-intensity walking can significantly improve the health of mitochondria in people with impaired glucose tolerance.⁶ After the participants engaged in a four-month walking program, researchers observed an increase in the expression of genes related to mitochondria in their skeletal muscle.

These genes are involved in creating new mitochondria and boosting their function. Essentially, walking encouraged the body to produce more and better-performing mitochondria in the muscles.⁷

Walking for Mind and Body

Like many forms of exercise, walking offers profound mind-body benefits. In their initiative to promote walking, the U.S. Centers for Disease Control and Prevention states, "A single bout of moderate-to-vigorous physical activity can improve sleep, memory, and the ability to think and learn. It also reduces anxiety symptoms."

There is, in fact, something therapeutic about a walk that speaks to us on a primal level. Writing in The New Yorker, author Ferris Jabr noted:9,10

"What is it about walking, in particular, that makes it so amenable to thinking and writing? The answer begins with changes to our chemistry. When we go for a walk, the heart pumps faster, circulating more blood and oxygen not just to the muscles but to all the organs — including the brain. Many experiments have shown that after or during exercise, even very mild exertion, people perform better on tests of memory and attention.

Walking on a regular basis also promotes new connections between brain cells, staves off the usual withering of brain tissue that comes with age, increases the volume of the hippocampus (a brain region crucial for memory), and elevates levels of molecules that both stimulate the growth of new neurons and transmit messages between them."

Walking outdoors, particularly in a forest, may offer even more significant psychological benefits, including a reduction in negative moods and feelings of depression, tension, anxiety, anger, fatigue and confusion, and an increase in positive mood and vigor.¹¹

Meanwhile, Deborah Grayson Riegel, who teaches leadership communication at Duke University's Fuqua School of Business, wrote in Harvard Business Review, "Charles Darwin, Friedrich Nietzsche, William Wordsworth, and Aristotle were all obsessive walkers, using the rhythm of walking to help them generate ideas. And while any form of exercise has been shown to activate the brain, walking is a proven creativity booster as well."

She notes that she likes to walk with purpose, sometimes using walks for learning and productivity, including conducting walking coaching calls or listening to a podcast, and other times using walks to form connections with others and find gratitude and perspective:¹³

"On days when I need some perspective, I'll stroll while looking at the sun, the trees, or the water. Those views remind me to reflect on the expanse of the universe, to appreciate the beauty of nature, and prompt me to consider how much world there still is for me to explore (when it's safe to do so).

... As someone who has experienced both chronic and acute back pain, I often walk with a focus on how lucky I feel to be able to walk — and the relief of being pain-free. I will focus on the gift of feeling safe (most of the time) as a woman walking alone. Or that I have a clean, hot shower waiting for me at the end of my walk. Or I might even focus on the gift of being alive right now, when so many have died."

Walking May Be a Sweet Spot for Exercise

While most Americans don't get enough exercise, it's also possible to overdo it. In fact, too much vigorous exercise backfires and can actually harm your health instead of help it. A landmark study that radically changed my views on exercise was published by Dr. James O'Keefe, a cardiologist with the Mid-America Heart Institute at St. Louis Hospital in Kansas City, and three coauthors.¹⁴

If you're sedentary and begin to exercise, you get a dose-dependent decrease in mortality, diabetes, depression, high blood pressure, coronary disease, osteoporosis, sarcopenia, falls and more. But people who are doing the highest volume of vigorous exercise start losing longevity benefits. If you're doing full-distance triathlons when you're in your 40s and 50s, your risk of atrial fibrillation increases by 500% to 800%.

However, an important point is that in the case of moderate exercise — loosely defined as exercising to the point where you're slightly winded but can still carry on a conversation — there's clear evidence that more IS better and cannot be overdone. Perhaps even more surprising, moderate exercise, which includes walking, also improves all-cause survival better than vigorous exercise — about two times better, according to O'Keefe.

Other research has shown that even a modest amount of walking offers significant longevity benefits. In a study of 3,101 adults, those who took 8,000 steps or more just one or two days a week had significantly lower all-cause and cardiovascular mortality risk.

"The study's findings suggest that for adults who face difficulties in exercising regularly, achieving the recommended daily steps only a couple days a week may have meaningful health benefits," researchers wrote in JAMA Network Open.¹⁵

How Many Steps a Day Should You Aim For?

The average American walks about 3,800 steps a day, which is just short of 2 miles. It's about 2,000 steps per mile, and every 1,000 steps you get on average per day reduces your mortality by 10% to 15%, O'Keefe notes. In our interview, he explained:

"There's been more and more studies on this all the time, using activity trackers. We're getting big data, like the UK biobank, which is a half a million people, and there's a sizable subgroup of them who have been wearing activity trackers and been followed for 10 years now.

Clearly, more is better. You get the big gains going from sedentary lifestyles — 2,000 to 3,000 steps a day — up to 7,000 or 8,000. [Here] you have this very steep reduction in mortality, improvement in survival. It continues to about 12,000 steps a day. Most of the studies show that it plateaus at 12,000."

I do recommend tracking your steps using a **fitness tracker** like the Oura ring. Most cellphones also have free activity trackers, so in a pinch you could carry your phone with you. It's not ideal due to the electromagnetic fields (EMFs) emitted, but you could put it in airplane mode or, better yet, in a Faraday bag.

Ideas to Change Up Your Walking Routine

If you're a seasoned walker and want to add some variety to your walking routine, Nordic walking, sometimes referred to as Nordic pole walking, is one way to do so. It involves walking with fixed-length ski poles using a movement similar to cross country skiing but without the snow.

Nordic walking originated in Finland, where it's commonly used by cross country skiers for training during the off-season. While typical walking or running activates about 40% of your muscles, Nordic walking uses 90% of your muscles, providing a lower and upper body workout in one. It also requires about 18% to 25% more oxygen consumption compared to walking without poles at the same speed. 17

Nordic walking may be an ideal form of exercise for people with coronary heart disease, as it leads to greater increases in functional capacity — or the ability to carry out

activities related to daily living — compared to other forms of exercise, including high-intensity interval training (HIIT) and moderate-to-vigorous intensity continuous training (MICT).¹⁸

Like regular walking, Nordic walking is low impact, making it suitable for people of all fitness levels. For instance, in a systematic review, Nordic walking programs were found to be an effective modality for weight loss in overweight and obese patients, with additional benefits to risk factors for cardiovascular diseases. The use of poles also makes Nordic walking appealing for those with mobility impairments, including Parkinson's disease.

Walking backward is another challenge you can try, in a safe, obstacle-free setting, of course. In a study published in the journal Cognition, researchers from the University of Roehampton (UR) in London found walking backward can even boost your memory.²⁰

Plus, it puts less strain on and requires less range of motion from your knee joints, making it ideal for those with knee problems or injuries. Also, because backward walking eliminates the typical heel-strike to the ground, it can lead to changes in pelvis alignment that may potentially alleviate pressure associated with low back pain.²¹

The bottom line is, make a point to schedule time for a regular walk into your routine. It's a simple, accessible way to significantly improve your overall health and well-being.

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