

Walking backwards has a surprising number of health benefits

December 1 2022, by Jack McNamara



Credit: izf/Shutterstock

Walking doesn't require any special equipment or gym memberships, and best of all, it's completely free. For most of us, [walking is something we do automatically](#). It doesn't require conscious effort, so many of us fail to remember the benefits of walking for health. But what happens if we stop walking on auto-pilot and start challenging our brains and bodies by walking backwards? Not only does this change of direction demand more of our attention, but it may also bring additional health benefits.

Physical activity doesn't need to be complicated. Whether you're regularly active or not, even a brisk ten-minute daily walk can deliver a host of health benefits and can count towards the World Health Organization's recommended minimum of [150 minutes of aerobic activity a week](#).

Yet walking is more complicated than many of us realize. Remaining upright requires coordination between our visual, [vestibular](#) (sensations linked to movements such as twisting, spinning or moving fast) and proprioceptive (awareness of where our bodies are in space) systems. When we walk backwards, it takes longer for our brains to process the extra demands of coordinating these systems. However, this increased level of challenge brings with it increased health benefits.

One of the most well-studied benefits of walking backwards is [improving stability and balance](#). Walking backwards can improve forward gait (how a person walks) and balance for [healthy adults](#) and those with [knee osteoarthritis](#). Walking backwards causes us to take shorter, more frequent steps, leading to improved muscular endurance for the muscles of the lower legs while reducing the burden on our joints.

Adding changes in incline or decline can also alter the range of motion for joints and muscles, offering [pain relief](#) for conditions such as [plantar fasciitis](#)—one of the most common causes of heel pain.

The postural changes brought about by walking backwards also use more of the muscles supporting our lumbar spine—suggesting backwards walking could be a particularly beneficial exercise for people with [chronic lower back pain](#).

Walking backwards has even been used to identify and treat balance and [walking speed](#) in patients with neurological conditions or following

[chronic stroke.](#)

But the benefits of changing direction aren't just therapeutic—an interest in backwards movement has led researchers to discover various other benefits.

While normal walking can help us maintain a healthy weight, walking backwards may be even more effective. Energy expenditure when walking backwards is [almost 40% higher](#) than walking at the same speed forwards (6.0 Mets versus 4.3 Mets—[one metabolic equivalent \(Met\)](#) is the amount of oxygen consumed while sitting at rest), with one study showing [reductions in body fat](#) for women who completed a six-week backwards walk or run training program.

When we become confident with traveling backwards, progressing to running can enhance the demands further. While often studied as a rehabilitation tool, backward running increases the strength of crucial muscles involved with [straightening the knee](#), which not only carries over to [injury prevention](#) but also our ability to generate power and athletic performance.

Sustained backward running decreases the energy we expend when we run forwards. These [improvements in running economy](#) are even beneficial for experienced runners with an already economical running technique.

If walking backwards seems too easy, but space limitations affect your ability to run backwards, another way to increase the challenge further is to start dragging weights. Increasing the overall load increases the recruitment of the knee extensor muscles while placing heavy demands on your heart and lungs in a short space of time.

Loading a sledge and dragging it backwards carries a low risk of injury,

as the most likely outcome if we're too tired is that the sledge won't move. But with lighter weights, this kind of exercise can produce an appropriate level of resistance to stimulate significant [improvements in lower limb power](#), with dragging weights as little as 10% of total body weight leading to improved sprint times among [young athletes](#).

How to get started

Walking backwards is simple, but that doesn't mean it's easy. So, how can you add walking backwards into your exercise regimen?

When walking backwards, we're more likely to miss obstacles and hazards that we could crash into or fall over, so in the interest of safety, it's best to start indoors where you won't crash into someone or outside in a flat, open area.

Resist the urge to contort your body and look over your shoulder. Keep your head and chest upright while reaching back with your big toe for each step, rolling through the foot from toe to heel.

Once you become more confident walking backwards, you can begin to speed things up and even transition to a treadmill, being sure to use the guide rails when necessary. If using weights, start light. Focus on multiple sets rather than prolonged distances, and remember to maintain the integrity of your technique over no more than a 20-meter distance to begin with.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Walking backwards has a surprising number of health benefits (2022, December 1) retrieved 2 March 2023 from <https://medicalxpress.com/news/2022-12-health-benefits.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.