The Benefits of Walking, Doug Hayhoe, April 2024

Research shows that walking pays off physically. It also has mental, social and spiritual benefits.

I grew up in a busy family of eight children. No wonder our parents went out every night for an evening walk. I was never curious enough, unfortunately, to ask them what they talked about as they walked. No doubt, my father shared disappointments with his business, and my mother talked about her challenges at home. Perhaps they discussed problems that our local Christian congregation was facing. Maybe they just needed the quietness of the evening, away from a busy job and family, while at the same time getting good physical exercise. I don't blame them!

In the introduction to his book, *In Praise of Walking* (2019), Shane O'Mara, Professor of experimental brain research at Trinity College Dublin (Figure 1), writes:

"Walking is hugely beneficial for our minds, our bodies and our communities. Walking is holistic: every aspect of it aids every aspect of one's being. Walking provides us with a multisensory reading of the world in all its shapes, forms, sounds, and feelings, for it uses the brain in multiple ways. Walking together can be one of the best experiences of walking (p. 3).

This paragraph motivated me to write the essay. O'Mara does an excellent job at explaining the scientific basis of walking as well as its physical, mental, and social benefits. Unfortunately, he omits the spiritual benefits of walking. Although he's for social walking, he is careful to say he "would almost certainly never" walk a pilgrimage (p. 165), referring perhaps to the *Camino de Santiago*.



Figure 1 Shane O'Mara (<u>WW Norton</u>) (Photo by *Brid O'Donovan*)

Physical benefits

Walking benefits the body in many ways: brain, heart, arteries, organs, gut, as well as muscles. Most of these benefits can be backed up by substantial research. O'Mara discusses some of these in his book. Concerning the heart, for example, O'Mara summarizes the research this way.

"We can safely and reasonably conclude that high levels of activity (principally walking) can, along with dietary change, markedly help protect the heart against factors that promote heart disease. Moreover, these factors can be reversed both by activity (for the better) and inactivity (for the worse) ... these malign changes can be reversed quickly, by walking, and walking lots, whereas a sedentary lifestyle worsens them" (p. 23).

The average person walks 5000 steps a day, according to a 2017 analysis of people who carried smartphones (p. 25). In his book, O'Mara notes, "I always want to hit at least 9,500 steps per day, which my phone records, but I prefer getting above 12,000 steps per day ... and am really happy with more than 14,000 steps per day" (p.26). My brother-in-law Randy has not read O'Mara's book, but he averages 14,000 steps per day. I'm happy if I do 9,000 steps a day.

In 2023, a large European research project on the health benefits of walking was published. It involved 227,000 participants, who were followed over 7 years. The results were striking confirmation of O'Mara's conclusion. Walking 4000 steps a day significantly reduced mortality rates, not just from cardiovascular (CV) conditions but mortality from all causes. Any additional 1000 steps, led to a further decrease of 15% for mortality of all causes (Figure 2).

This 2023 study was a wake-up call that reverberated around the world. Prominent news outlets in North American and Britain, such as <u>CNN</u>, <u>Newsweek</u>, and <u>The Guardian</u>, all reported on it. Then, in 2024, an <u>Australian research report</u> provided further evidence for this clear conclusion.

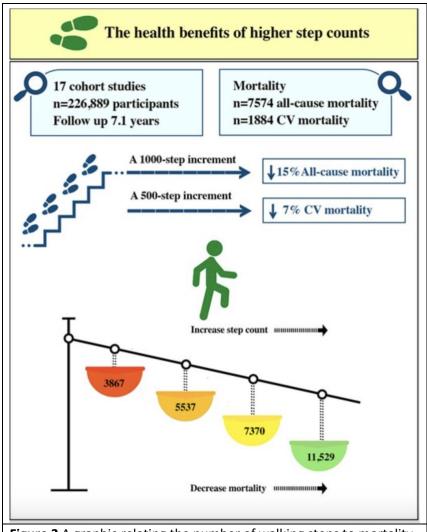


Figure 2 A graphic relating the number of walking steps to mortality

Mental and emotional benefits

When my mother-in-law suffered from depression, her doctor prescribed walking outside as the best medicine. In his chapter, "A Balm for Body and Brain," O'Mara explains why this works: "'Attention restoration theory' is the idea that the natural environment has profound restorative effects on our well-being, and that the human experience of the natural world markedly assists in maintaining and fostering a strong sense of subjective well-being" (p. 130). He then lists three factors necessary for a walk to be truly restorative to the brain. It should take you away from your normal surroundings, it should contain interesting "visual elements and sensory elements," and "it should be expansive ... with some degree of extension."

In 2011, a study was done in Ottawa, showing that walking outside restores our mood. The weather there can be very cold in winter, and hot in summer. So, the large campus of Carleton University, situated in that city, has an extensive underground tunnel system for students to use. 150 students walked between the same points on opposite sides of the campus. One group, randomly assigned, took the underground tunnel route; the other took the outside route, walking in a naturalized urban space, past trees, plants, and along a riverbank. Both trips took 17 minutes.

When participants rated their moods, before and after the walk, the results were clear. Those who took the outside naturalized path experienced an improvement of approximately one third in their self-rated mood scores, relative to those who took the underground tunnel route. O'Mara reports on other experiments in recent years that give the same result. Walking in a natural or naturalized environment positively impacts our mood and emotions.

It's even more interesting to read that "walking and other forms of aerobic exercise can also have a profound effect on learning and memory" (p. 136). With his experience in brain research, O'Mara's discussion of this topic comes with a certain amount of authority. But he also draws simple conclusions: "Use it or lose it' is a primary rule that muscle cells obey, and the same is true of brain cells" (p. 142). And walking uses brain cells as much as it does muscle cells.

Social benefits

The social benefits of walking with a friend are obvious! You get physical exercise, which body and brain both need, and you enjoy social interaction, which we also need.

My sister Alice has walked and hiked with friends for quite a few years, since retiring. She walks on urban trails and sometimes on the Bruce Trail or other Conservation Area trails. She also goes on a special hiking trip overseas or "out West" each year. It doesn't matter whether it's warm and sunny, cold and snowy, or even raining. She always enjoys it (Figure 3).



Figure 3 Alice (in green) hiking with friends

In his chapter, "Social Walking," O'Mara describes the complexity of walking with friends, from the point of view of how the brain and body are functioning. It's worth quoting a little:

"Social walking ... involves coordinated and simultaneous action in multiple brain regions to control one's own trajectory and direction of motion, and predict the trajectory and direction of movement of those who you are walking with. Critically, each individual must use these predictions to try and simultaneously synchronize their movement with that of the other person or group while often doing something else – like talking, or singing, or chanting. This is a difficult problem – so much so that robots can't yet do it!"

Spiritual benefits

A walk is a great time to reflect on the day ahead of you, especially if walking increases the functioning of the brain, as research seems to suggest. You can also reflect backward, thinking about the day behind. And if you're a Christian, you can use this time to pray. A retired pastor living near us is a great example. As he walks, he's so involved in prayer and petition that he often doesn't see me until I almost run into him! He may have retired from leading a large church, but he hasn't retired from praying for all the people there, and in many other places.

You can also use your walks as an opportunity to sing songs and hymns that warm your heart. This is especially useful if you don't have a singing voice! The only person who will hear you is God, assuming you don't shout at nearby houses, and he doesn't care how you sing. If you're short on memory, you can have the lyrics ready to look at on your smartphone. But beware of talking on the phone! Research has shown that walking while talking on a phone is bad for your health.

Something I've found useful for my walks is having the Scripture read into my hearing aids. Many Bible apps can send readings to earbuds or hearing aids. There's nothing like the big picture you get when five chapters are read to you in twenty-five minutes! In addition to listening to Scripture, some people listen to Christian podcasts, on their walks, to keep them aware of important truths and perspectives. When I walk with my wife in the afternoon, however, we usually talk together, and pray for family.



Figure 4 <u>Altobello Melone</u>, The Road to Emmaus, c. 1516-1517. National Gallery, Northern Italy.

One of the most famous walking stories in the Bible is about two disciples traveling to a town 11 kilometers away (Luke 24:13-32). It was just after Christ's death and resurrection and they didn't know what to make of the events. Then a stranger joined them, in their walk. He began to explain the events in terms of Messianic prophecies in Scripture.

The climax came when they persuaded the stranger to stop with them for a meal, rather than going on as he had planned (Figure 4). When he broke the bread and gave it to them (so they saw the nail prints in his hands?), they immediately recognized that he was the Messiah himself, Jesus risen from the dead. For them, that was no doubt the greatest walk of their life!

So, get out walking. Keep your body in tune, your mood upbeat, and your mind sharp. Invite friends to join you. Or if alone, "walk with God." Meditate on his promises, listen to his word, pray to him and praise him, even while observing nature, flowers, animals, trees and clouds!

Credits In this essay I've only referred to a few chapters of Shane O'Mara's book, *In Praise of Walking*. There are many other interesting chapters such as Walking out of Africa, How to Walk: The Mechanics, Walking the City, and Creative Walking. The entire book is worth reading.