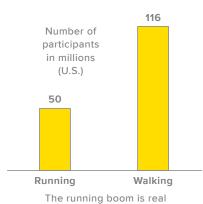


# **WALKING IS HAVING A MOMENT**

Throughout history, people have always walked out of necessity, for exercise, and for pleasure. Due to its accessibility, walking stands apart from other activities in terms of the sheer volume of people that participate. It is the most popular outdoor activity by far; in recent years, nearly three-quarters of America's population reported walking. (1) And when it comes to walking for exercise, the volume of those walking for fitness far outweighs the number who turn to running. According to the Sports & Fitness Industry Association, roughly 115.8 million Americans, age 6 and older, walked for fitness in 2021 compared to running, which claimed 50 million participants. (2)



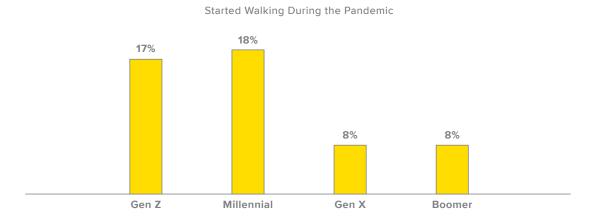
but trails behind walk participation rates. (SFIA)

When the global pandemic led to lockdowns and an increased focus on self-care, the already-popular activity of walking received an unprecedented boost. Participation rates confirm that increasing numbers of people turned to walking during this time. According to the Outdoor Industry Association's 2021 Report, outdoor participants were twice as likely to have started or resumed walking during the pandemic than any other outdoor activity. (3) And when people were walking, they were walking farther, with more than half of **Americans walking 1 to 5 miles more each day compared to before the pandemic**. (4) This shows up in tracking data. Strava, a popular



fitness app, shows walking is more popular now than ever, with walkers logging 668 million miles last year on the app, double the previous year. (5) Vogue magazine has picked up on this trend, naming walking one of the Top 5 wellness trends expected to grow in 2022. (6)

Walking for health wasn't exactly considered "trendy" in years past, but social media has invited a new cohort of walkers into the activity. As walking rates increase, it's clear that walking is shifting younger. According to Mintel's Outdoor Leisure Activity Report 2021, **Gen Z and Millennials were twice as likely as other generations to have picked up walking during the pandemic**. (1)



And there is potential to increase rates even further, with a quarter of Gen Zers who aren't currently active outdoors expressing interest in walking. (1) They are inspired by social media influencers, tracking apps and hashtags, all working together to establish walking as a cultural trend. Examples include Spotify, which partnered with the #hotgirlwalk creator, resulting in the creation of over 7,000 playlists on Spotify as walkers around the world used their time on the trails to self-reflect and set goals. (7) The #stupidwalkchallenge reached more than 73.9 million views and has resulted in a never-ending supply of funny videos of younger participants sharing their own experiences of walking and the benefits it brings. (8)

Walking is also part of a broader cultural shift. As workplaces shift towards more flexible models, walking has become incorporated into the workday. Footwear News calls out that "60% of professional adults plan to take one to three walk breaks per week and 74% of this group [express] no concern about leaving their desk to go for a walk." (2) This speaks not only to the changes we're going to see in how we work but also in how we view the importance of walking.

When people head out to walk, they are looking for physical, mental, cognitive, and social benefits. Two-thirds of walkers agree that walking helps clear their mind and creates a better sense of control over their lives, and a quarter of participants reported using their walks as an opportunity to catch up with family. (1) At a time when our technology use is at an all-time high, half of respondents said they escape screens entirely during their outings, by leaving their phones at home. (4) No matter what they seek to solve, 61% of walkers say they appreciate their daily walks more now than they did pre-COVID. (9)

Hippocrates said, "Walking is man's best medicine," and during the past two years, we naturally turned to this solution, using walking as a salve to escape the home, to connect, to cope with stress, and to feel a sense of agency over our lives during a time of uncertainty and fear. Walking is what we did when we did not know what else to do. A Latin phrase, solvitur ambulando, sums up well what we experienced on our solo and family walks in 2020, "It is solved by walking," an excellent reminder of the healing power of walking in our lives.

## WALKING IS GOOD FOR YOU

When people turned to walking during the pandemic to cope, they felt the restorative effects individually and collectively. Numerous studies have confirmed these effects, demonstrating that walking has a positive impact across multiple wellness dimensions, benefiting physical health, mental health, enhancing cognition and creativity, and forming vital social connections.

#### **BENEFITS TO PHYSICAL HEALTH**

Physical health is perhaps the most well-known and well-researched benefit of walking, and with good reason. Studies have shown that inactivity has a profoundly negative impact on the body. The body declines physically in mere weeks when it remains inactive. In a research project called the "Dallas Bed Rest and Training study" from 1966, five healthy 20-year-olds were made to stay in bed for three weeks. Upon the conclusion of the study, the researchers claimed that the young people's muscles and breathing capacity were at the level of 60-year-olds. (10) To build on these findings, research shows that active adults have a 58% reduced chance of developing diabetes, up to a 70% reduction in heart disease risk, and a 43% reduction in mortality risk for moderately fit individuals. (11)

If inactivity has this impact, what does walking do for the body? Research on the physical impacts of walking is compellingly positive. Over the course of a 12-minute walk, 522 metabolites (molecules that affect our heart, breathing, and brain) are altered positively. (12) One literature review from 140 reports and 290 million people across 20 countries found that walking reduces the risk of type 2 diabetes, cardiovascular disease, high blood pressure, and stress (13). And a team of researchers at Harvard found that just 21 minutes of walking per day reduces the risk of heart disease by 30%. (14)

These benefits are not just available to those who walk great distances at a brisk pace — **walking at a moderate or slow pace has many of the same effects on the body**. In 2008, scientists from University College London ran a meta-analysis of peer-reviewed walking research spanning 40 years and 500,000 participants. Controlling for age, alcohol and tobacco use, heart conditions, and death, the analysis determined that walking "reduced the risk of cardiovascular events by 31 percent, and it cut the risk of dying during the study period by 32 percent. Protection was evident even at distances of just five-and-a-half miles per week and at a pace as casual as about two miles per hour." (15)

#### BENEFITS TO MENTAL WELLBEING

The #stupidwalkchallenge may be a recent TikTok trend, but the knowledge that mental health is boosted through walking is nothing new. Hippocrates once advised that "if you are in a bad mood, go for a walk. If you are still in a bad mood, go for another walk." Taking a walk nearly always takes the edge off a problem. Shane O'Mara, neuroscientist and author of In Praise of Walking, sums it up nicely when he says, "walking allows me to walk it off, no matter what it is."

"EVERY DAY I WALK MYSELF INTO A STATE OF WELL-BEING AND WALK AWAY FROM EVERY ILLNESS. I HAVE WALKED MYSELF INTO MY BEST THOUGHTS, AND I KNOW OF NO THOUGHT SO BURDENSOME THAT ONE CANNOT WALK AWAY FROM IT."

- DANISH PHILOSOPHER SOREN KIERKEGAARD

In a Rockport/First Insight study, **57% of respondents said they found walking to be a stress reliever**. (4) Young people are realizing more and more the stress-relieving benefits of walking. With young people's loneliness levels rising, technology taking over, and the stress of multiple global crises, it's not surprising that a top motivation for walking is to relieve stress. (16)

Research backs up the stress-busting power of walking. A study involving 1,843 participants walking for a combined 74,000 hours found a statistically significant drop in feelings of stress and depression among regular group walkers, many of whom also reported greater feelings of satisfaction. (12) And walking in nature specifically has a pronounced effect on stress. One Finnish study found that levels of cortisol, a stress-regulating hormone, significantly dropped after walking among trees (12), reflecting a review of 22 clinical studies, which also identified dramatically lower cortisol levels in the saliva of woodland walkers. (17)

Another study in the American Journal of Preventative Medicine analyzed data from 1,904 50- to 55-year-old women who responded to a series of questions on exercise, physical health, and mental health every three years between 2001 and 2010. In 2001, all of the women had at least 10 depressive symptoms. After 200 minutes (about 3 and a half hours) of walking per week, their mental health, social functioning, and vitality all improved. (18)

With 79% of global consumers now considering their mental health as important as their physical health, and with a growing number of crises for humans to cope with daily, we anticipate walking for mental health to become an increasingly important part of life. (19)

#### THE BRAIN BOOSTING POWER OF WALKING

Albert Einstein, Steve Jobs, and Henry David Thoreau all knew the power of walking when it came to solving problems and increasing creativity. These men all walked to better work through problems, to talk through solutions, and to expand their thinking.

"THE MOMENT MY LEGS BEGIN TO MOVE, MY THOUGHTS BEGIN TO FLOW."

- HENRY DAVID THOREAU

Research recently published in the Journal of Experimental Psychology validates that these practices are founded in science. Using the Guilford Alternative Uses Test, which measures cognitive flexibility and divergent thinking, researchers set out to measure the impact of walking on creativity. Each of the participants completed the GAUT in two conditions, sitting and standing on a treadmill. The results indicated that 81% of them improved their creativity scores when they were walking compared to the scores obtained when completing the test sitting. (20)

Further, in a Stanford University study from 2014, "researchers found that creativity increased by up to 60 percent for those who walked for between six and fifteen minutes, compared with others who sat down for the same period of time." (9)

These benefits are most clear when looking at those with a sedentary, "couch potato" lifestyle and the impact walking has on them. Walking at their own pace for three, 40-minute walking sessions per week resulted in enhanced brain circuit connectivity, a decrease in declines of brain function, and increased performance on cognitive tasks. (21)

These cognitive benefits stick with us as we age, with a strong correlation between regular walking and brain health. A study of 70-year olds who walk 2-3 hours a week demonstrated that because of their walking activity, they have retained the mental sharpness of people several years younger. Non-walkers, in contrast, have a higher rate of dementia. (9)



#### **SOCIAL BENEFITS OF WALKING**

Walking is not just about reduction in cortisol, decreased rates of depression, and increased creativity. It's more than just counting steps and reaching goals. It's more than the sum of a list of advantages for physical and mental wellbeing. It connects us to another fundamental human need: togetherness.

During the pandemic, an already rising, ongoing epidemic of loneliness has been exacerbated. 41% of people globally reported becoming lonelier over a 6-month period in 2021. (19) Mothers and younger individuals were most likely to be impacted, with 51% of and 61% of 18-25-year olds reporting serious Ioneliness. The organization Making Caring Common spells out how serious this epidemic is and how great the consequences of not alleviating it are, saying "loneliness is a bellwether not only of our country's emotional and physical but also moral health." (22)

There is a reason so many people joined family and friends outdoors during the pandemic. Walking is central to our sense of connection to other people and the world around us. For thousands of years, and humans have walked together en masse on pilgrimages, to find asylum, to protest for their rights, to raise money for causes. On a more intimate scale, they walk with partners, friends, and children to find connection and solace.

Walking together allows for interpersonal synchronization, "an indicator of social interaction," say cognitive neuroscientists at Caltech. This type of movement synchrony... can be a sign of "shared feelings of rapport, an affective state of mutual attention and positivity." (15) One recent major study of the elderly concluded that those who spend approximately 150 minutes (about two and a half hours) walking per week are "more socially active and have a sense of better overall well-being than those who are less active." (20)

"THE LOSS OF WALKING AS AN INDIVIDUAL AND A COMMUNITY ACT HAS THE POTENTIAL TO DESTROY OUR DEEPEST SPIRITUAL CONNECTIONS, OUR DEMOCRATIC SOCIETY, OUR NEIGHBORHOODS, AND OUR FREEDOM."

- ERLING KAGGE

Increasingly, people want walkable lives in order to improve their health, general life satisfaction, and to feel like they are part of a living, breathing community. Millennials and Gen Z are driving this movement. They are choosing to move to walkable cities before lining up careers in those cities. Millennials are also moving away from the allure of the car. Since the 1970s, the number of 19-year-olds choosing not to get a driver's license has tripled, from 8 to 23 percent. (15)

"THE SHIFT [TO WALKING] ISN'T JUST A DESIRE FOR BETTER HEALTH AND THE ABILITY TO GO PLACES WITHOUT A CAR; IT'S ALSO THAT WE WANT TO REMEMBER WHAT IT FEELS LIKE TO BE PART OF A COMMUNITY AGAIN - VARIED, HETEROGENEOUS, SOMETIMES CONTENTIOUS, BUT A NECESSARY AND INTEGRAL HUMAN SUPPORT SYSTEM, TRIBUTARIES TO AND FROM OUR INDIVIDUAL LIVES."

- ANTONIA MALCHIK

With America facing ongoing, overlapping crises, and the never-ending onslaught of the algorithm that seeks to divide and bias, walking to foster togetherness and community will be key to feeling connected to our world.



#### WHY DON'T WE WALK MORE?

Despite an increase in rates of walking relative to recent decades, when we take a closer look, it's clear that we are still walking less than we should.

A pedometer study confirms this, showing that Australian adults average 9,700 steps each day, Swiss 9,650, Japanese 7,150, Canadians 6,700, and Americans 5,100 (23), around half of the standard 10,000 recommended by activity monitors and pedometer apps. It makes sense that our number of steps fall short; we are partaking in fewer occasions to walk. For instance, in the 1970s, 1 in 10 Americans walked to work. Today, fewer than 1 in 40 do. (24) And it is not just adults who are reducing their walking occasions. In that same, five-decade timeframe, the number of American children who walked to school dipped to 13%, down from 50% in 1969. (24)



Even when they live close enough to walk to a store, public park, school, or work, most choose alternate modes of transportation. For example, in an Ipsos 2021 study of 2,000 U.S. adults, 38% say they live close enough to walk to a grocery store, yet only 18% use their feet to get there. (25)

So why do we walk less than we should? Despite humans being built to walk, we've also been hardwired to conserve our energy. While this served us during our hunter and gatherer phase, reserving energy for when we needed to traverse long distances —perhaps without a meal — it no longer serves us today. Our world is constructed around reducing effort and maximizing ease. The default is always to hop in the car: to take the elevator or escalator. Our cities are built to make driving from A to B as efficient as possible, all without considering the needs of walkers in the same community. With the rise of a carcentric culture nearly 100 years ago and the continued emphasis on capitalism and productivity, we have been shaping our world around modes of transportation and ways of being that remove us from our long history as walkers.

"WALKING SHOULD BE ENGINEERED INVISIBLY INTO OUR LIVES. WE'VE MADE IT EASIER FOR THE DEFAULT TO BE TO GET INTO YOUR CAR. WHAT WE SHOULD DO IS AT ALL THE POINTS OF THE DAY, WHENEVER YOU ARE MOVING AROUND, WE SHOULD MAKE IT EASY TO JUST PUT ONE FOOT IN FRONT OF THE OTHER WITHOUT THINKING ABOUT IT."

- SHANE O'MARA



#### BARRIERS TO EXPERIENCING THE BENEFITS OF WALKING

Walking is often described as a free, low-skill activity that requires nothing but shoes and time, but this perspective is overly simplified based on a host of factors. Individually, personal health, ability, and fear of stigma can limit or altogether prevent people from walking. Structurally, lack of safe and walkable environments as well as racial, ethnic, and gender violence can keep people from experiencing the joy of going on a walk.

A first step to getting more people out walking is to make the environment conducive to the activity. But even cities that are considered walkable have a multitude of issues that prevent people from walking. Take a city like Denver, for example. Only "5% of Denver's 3,000 miles of sidewalk meet its own design standards." (24) When sidewalks and crosswalks don't meet design and safety standards, walking becomes more hazardous. It's important to call out that design standards are less likely to be fulfilled in lower-income neighborhoods, where walking is more likely to be a primary mode of transportation and where the need for safe, walkable infrastructure is high. Those with less than \$25,000 income are two times as likely to consider travel a financial burden and are, as a result, more likely to walk. Yet, sidewalks are best maintained in areas where residents have a higher income. The ramifications are significant. In Oregon, data on traffic and pedestrian injury and death rates make clear that higher household incomes correlate with fewer pedestrian crashes. (26) As a result of these and other challenges (such as increased aggression amongst drivers), unnecessary pedestrian deaths continue to climb each year, with 6,516 in the U.S. in 2021 alone, a 150% increase from the number of pedestrian fatalities in 2011. (27)

"IN CITIES WITH SUBSTANTIAL POVERTY, MY EXPERIENCE IS THAT THE RICH SEPARATE THEMSELVES FROM THE POOR BY NOT HAVING TO WALK IN THE STREETS."

- ERNST KAGGE

In a country with structural and systemic racism, walking can also be stigmatizing and downright dangerous. Depending on how someone is dressed, their skin color, their gait, and where they are walking, people draw conclusions about who they are. Our nation has seen far too many news stories of Black men and women killed while walking or running. Michael Brown, Trayvon Martin, and Ahmaud Arbery are all recent reminders of the dangers young, Black men face when heading out on their own two feet. Our social and socio-economic systems make it more likely that people of color will need to walk as a necessary form of transportation, and our ongoing issues of systemic racism makes it more likely that they will be injured or killed for trying to get from one place to another.

"YOU CAN'T WANDER LONELY AS A CLOUD WHEN YOU'RE ALWAYS CHECKING TO SEE
WHETHER YOU'RE BEING FOLLOWED, OR BRACING YOURSELF IN CASE THE PERSON PASSING
GRABS YOU. I'VE BEEN INSULTED, THREATENED, SPAT ON, ATTACKED, GROPED,
HARASSED, FOLLOWED."

- REBECCA SOLNIT

Gender violence also plays a big role in one's comfort level while walking. Women and LGBTQIA+ individuals experience personal safety and harassment fears when walking. 92% of women across 12 countries state that they fear being sexually assaulted while walking at night. (28) This leads to more than two-thirds of women changing their walking behavior as a result. (28) In the same study, non-binary

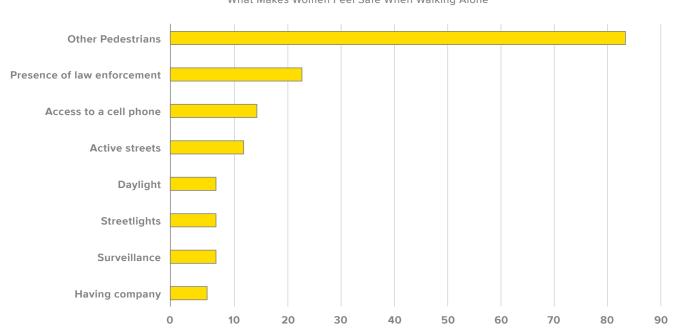


people ranked sexual assault as a top concern while walking. None of the surveyed men considered it to be their biggest fear. (28) The concern of violence for women and non-binary individuals is so real that there are now several personal safety apps aimed to provide peace of mind when walking alone.

"MEN AND WOMEN BOTH FEEL LESS SAFE AFTER DARK BUT THE EXTENT TO WHICH WOMEN FEEL UNSAFE IS SIGNIFICANTLY GREATER. DISABLED PEOPLE TOO ARE MORE LIKELY TO FEEL UNSAFE, EVEN IN THE DAYTIME IN BUSY PUBLIC PLACES."

- NICK STRIPE, HEAD OF CRIME STATISTICS BRANCH, OFFICE FOR NATIONAL STATISTICS

In order for walking to be truly accessible to all, we individually, collectively, and societally have a great deal of work to do to improve infrastructure and to reduce risk to walkers. A primary way to increase safety for all is to get more people walking. Studies show that the more pedestrian presence there is, the more likely everyone is to feel safe in their community. (29) One study, which analyzed risk levels of walkers and bikers in 129 cities in the US and Europe, showed that risk of injury decreases as rates of walking and biking increase. (29) Another study demonstrates that beyond urban design factors such as street lights, the number one factor that increases a sense of safety while walking is having "other walkers" present and this factor is far more important than others like presence of law enforcement. When people feel unsafe walking, more than two-thirds choose longer, safer routes and change sidewalks from one side of the street to another. Because of this, it's critical we have safe and abundant sidewalks for walkers to utilize. (28)



What Makes Women Feel Safe When Walking Alone

#### TAKE ACTION

We know that in addition to providing a sense of safety, walking together creates and sustains communities, combats loneliness, and improves the physical, mental, and cognitive well-being of everyone who participates. So how can we get more people out walking? And how can we take action to ensure that individually, collectively, and societally, we all benefit from walking?



#### **GET WALKING**

Just 12 minutes of walking can provide myriad health benefits.

- Get a pair of shoes that get you excited to walk. Most people turn to running shoes for walking because
  they are readily available, provide support, and are stylish, but there are now shoes built specifically for
  walking that can up your walking game.
  - Start using a tracking watch or app to see how many steps you are walking and to challenge yourself to hit the recommended 10,000 steps per day. Measure your own walking and connect with friends to encourage each other to walk.
- Make walking the default. Choose the stairs instead of the elevator. Park your car farther away from the store entrance. Walk while you work...schedule walking meetings or listen into a webinar instead of watching it.
- If you are a runner, try walking. Pay attention to what is different and enjoy the opportunity to notice your surroundings at a slower pace.
- Start a 30-day walk challenge. A great example jumpstart checklist can be found at Girl Trek.

#### HAVE FUN WALKING

Fitness-motivated people are reluctant to spend their time moving slowly when they can get more steps in and burn more calories running. And until recently, for a younger generation, walking evoked images of mall walkers and orthopedic shoes. Even the word pedestrian is used to describe things that are boring, lacking inspiration, or dull. But walking should never be boring. If it is, you are doing it wrong!

- Try new ways of walking. One day, take a rain walk. Another, take a silly walk or an awe walk. For more ideas on new and interesting ways to walk, check out 52 Ways to Walk by Annabel Streets.
- · Turn to a walking podcast for inspiration or learn a new skill, have a laugh, or be inspired while you walk.
- <u>Try walking meditation</u> to enhance the benefits of walking for well-being.
- Walk with others. Create a walk "pool" that commits to walking together to class, the store, or work. To walk with support groups, check out groups like walkwithadoc.org or meetup.com.
- Sink your teeth into a good book about walking
  - 52 Ways to Walk by Annabelle Streets
  - In Praise of Walking by Shane O'Mara
  - Born to Walk by Dan Rubinstein
  - A Walking Life by Antonia Malchick
  - Walking One Step At A Time by Erling Kagge
- Walk to protest, fundraise, or support a cause that matters to you.

### HELP MAKE COMMUNITIES MORE WALKABLE

Failing or insufficient infrastructure, lack of adequate street lighting, dangerous intersections, and fears about walking alone are all contributing factors to feeling unsafe as a pedestrian. Taking action to improve walkability and safety in communities is key to ensuring walking is truly accessible to all.

- Organize and conduct a formal walk audit or a walkability checklist to document issues of walkability in your neighborhood. Download the <u>AARP Walk Audit Toolkit here</u> or a <u>Walkability Checklist from NHTSA here</u>.
- Donate to advocacy organizations such as <u>America Walks</u>, <u>Leading Cities</u>, or <u>Ramblers</u>.
- Find a <u>local walking organization</u> or start an organization of your own with the aim of making walking safe, routine and enjoyable.
- Participate in or donate resources to groups like <u>GirlTrek</u> that work to share the power of walking with 700 million Black women worldwide in an effort to heal intergenerational trauma, fight systemic racism, and transform Black lives.
- Walking together provides safety and security. Organize a walking event (ideas at <u>AmericaWalks.org</u>).



## **SOURCES**

- (1) Mintel Outdoor Leisure Activities US 2021
- (2) Bell, Jennie. "Why Walking Shoes Are Still an Untapped Opportunity in the Athletic Market." Footwear News, May 18, 2022, <a href="https://footwearnews.com/2022/focus/athletic-outdoor/walking-shoe-market-opportunity-1203288672/?\_hst-c=143860138.5e379ce484de24b078afed6eaba572cf.1660752479565.1660752479565.1660790216663.2&\_hssc=143860138.1.1660876696276&\_hsfp=3294283283&hsCtaTracking=39d3f2f3-da5d-4277-8483-a2ce13b01c03%7Cada56a63-7da7-4b37-9c8d-91a64245cef8
- (3) 2021 Outdoor Participation Trends Report, commissioned by the Outdoor Foundation
- (4) "Walking With Purpose: Rockport Data Finds Americans Walking More Amid the Pandemic Cite Physical and Mental Health Benefits." PR Newswire, The Rockport Company, April 7, 2021, <a href="https://www.prnewswire.com/news-releases/walking-with-purpose-rockport-data-finds-americans-walking-more-amid-the-pandemic-cite-physical-and-mental-health-benefits-301263076.html">https://www.prnewswire.com/news-releases/walking-with-purpose-rockport-data-finds-americans-walking-more-amid-the-pandemic-cite-physical-and-mental-health-benefits-301263076.html</a>
- (5) "Strava's Year In Sport 2021 Charts Trajectory of Ongoing Sports Boom." Strava Press, December 7, 2021, <a href="https://blog.strava.com/press/yis2021/">https://blog.strava.com/press/yis2021/</a>
- (6) Valenti, Lauren. "The 5 Wellness Trends That Are Only Set to Grow in 2022." Vogue, December 17, 2021, <a href="https://www.vogue.com/article/wellness-trends-2022">https://www.vogue.com/article/wellness-trends-2022</a>
- (7) "The Self-Care and Wellness Listening Trends on Spotify That We're Taking Into 2022." For the Record, Spotify, January 12, 2022, <a href="https://newsroom.spotify.com/2022-01-12/the-self-care-and-wellness-listening-trends-on-spotify-that-were-taking-into-2022/">https://newsroom.spotify.com/2022-01-12/the-self-care-and-wellness-listening-trends-on-spotify-that-were-taking-into-2022/</a>
- (8) Moniuszko, Sara. "TikTok trend hilariously captures how it can feel to take care of our 'stupid mental health'." USA Today, January 26, 2022, <a href="https://www.usatoday.com/story/life/health-wellness/2022/01/26/tiktok-stupid-mental-health-trend-videos/6608813001/">https://www.usatoday.com/story/life/health-wellness/2022/01/26/tiktok-stupid-mental-health-trend-videos/6608813001/</a>
- (9) First Insights Rockport Study. Fielded March 26-28, 2021 among a demographically representative US sample of 1,265 adults 18 years of age and older.
- (10) Kagge, Erling. Walking One Step At A Time. New York. Pantheon Books. 2019.
- (11) Peter Kokkinos, Helen Sheriff, Raya Kheirbek Cardiol Res Pract. "Physical Inactivity and Mortality Risk." 2011; 2011: 924945. Published online 2011 Jan 20. doi: 10.4061/2011/924945
- (12) Streets, Annabelle. 52 Ways to Walk. The Surprising Science of Walking for Wellness and Joy, One Week at a Time. New York G.P. Putnam's Sons. 2022.
- (13) Rubinstein, Dan. Born to Walk. The Transformative Power of a Pedestrian Act. ECW Press. 2015.
- (14) Walking for Health Harvard Health
- (15) Rubinstein, Dan. Born to Walk. The Transformative Power of a Pedestrian Act. ECW Press. 2015.
- (16) Bell, Jennie. "Forget Running Why Walking Is a Big Opportunity for Footwear Brands Right Now." Footwear News, April 8, 2021, <a href="https://footwearnews.com/2021/business/retail/walking-shoes-market-growth-1203128733/">https://footwearnews.com/2021/business/retail/walking-shoes-market-growth-1203128733/</a>
- (17) Kobayashi H, Song C, Ikei H, Park BJ, Kagawa T, Miyazaki Y. "Combined Effect of Walking and Forest Environment on Salivary Cortisol Concentration." Front Public Health. 2019 Dec 12;7:376. doi: 10.3389/fpubh.2019.00376. PMID: 31921741; PMCID: PMC6920124.
- (18) Kristiann Heesch, Yolanda van Gellecum, Nicola Burton, Jannique van Uffelen, Wendy Brown. "Physical Activity, Walking, and Quality of Life in Women with Depressive Symptoms." American Journal of Preventative Medicine. 2015 Jan 13. <a href="https://doi.org/10.1016/j.amepre.2014.09.030">https://doi.org/10.1016/j.amepre.2014.09.030</a>
- (19) Pearson, Natalie and Atkinson, Simon. "World Mental Health Day 2021." Ipsos. October 8, 2021, <a href="https://www.ipsos.com/en/world-mental-health-day-2021">https://www.ipsos.com/en/world-mental-health-day-2021</a>



- (20) O'Mara, Shane. In Praise of Walking. A New Scientific Exploration. New York. Random House Group Ltd. 2019.
- (21) University of Illinois at Urbana-Champaign. "Attention, couch potatoes! Walking boosts brain connectivity, function." ScienceDaily. ScienceDaily. 27 August 2010. <a href="https://www.sciencedaily.com/releases/2010/08/100826141327.htm">www.sciencedaily.com/releases/2010/08/100826141327.htm</a>
- (22) Richard Weissbourd, Milena Batanova, Virgina Lovison, and Eric Torres. "Loneliness in America. How the Pandemic Has Deepened an Epidemic of Loneliness and What We Can Do About It." Making Caring Common Project. Harvard Graduate School of Education. <a href="https://static1.squarespace.com/static/5b7c56e255b02c683659fe43/t/6021776bdd04957c455">https://static1.squarespace.com/static/5b7c56e255b02c683659fe43/t/6021776bdd04957c455</a>
  7c212/1612805995893/Loneliness+in+America+2021\_02\_08\_FINAL.pdf
- (23) Bassett DR, Wyatt HR, Thompson H, Peters JC, Hill JO. <u>Pedometer-measured physical activity and health behaviors in U.S. adults.</u> Med Sci Sports Exerc. 2010.
- (24) Malchick, Antonia. A Walking Life. Reclaiming Our Health and Our Freedom One Step at a Time. United States. Da Capo Press. 2019.
- (25) Newall, Mallory. "Americans will face more traffic and complexity in hybrid work world." June 17, 2021. Ipsos. <a href="https://www.ipsos.com/sites/default/files/FINAL\_What\_the\_Future\_Commuting\_PR.pdf">https://www.ipsos.com/sites/default/files/FINAL\_What\_the\_Future\_Commuting\_PR.pdf</a>
- (26) Roll, Josh. "Pedestrian Injury and Social Equity in Oregon." Oregon Department of Transportation. January 19, 2021. <a href="https://www.oregon.gov/odot/Safety/Documents/Pedestrian\_Safety\_and\_Social\_Equity.pdf">https://www.oregon.gov/odot/Safety/Documents/Pedestrian\_Safety\_and\_Social\_Equity.pdf</a>
- (27) National Highway Traffic Safety Administration. "Traffic Safety Facts." U.S. Department of Transportation, May 2022, <a href="https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813310">https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813310</a>
- (28) Shagun Sethi and Juliana Velez-Duque. "Walk With Women. Gendered Perceptions of Safety in Urban Spaces." Leading Cities, 2021, <a href="https://static-media.fluxio.cloud/leadingcities/CjGjwG7p.pdf">https://static-media.fluxio.cloud/leadingcities/CjGjwG7p.pdf</a>
- (29) Jaffe, Eric. "Why It's Safer to Walk and Bike Where More People Walk and Bike." Bloomberg. July 3, 2015, <a href="https://www.bloomberg.com/news/articles/2015-07-03/it-s-safer-to-walk-and-bike-where-more-people-walk-and-bike">https://www.bloomberg.com/news/articles/2015-07-03/it-s-safer-to-walk-and-bike-where-more-people-walk-and-bike</a>

