In Praise of Walking

THE NEW SCIENCE OF HOW WE WALK AND WHY IT'S GOOD FOR US

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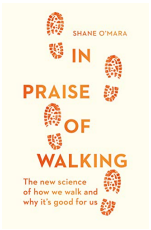
218 PAGES



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NOTES

KEY POINTS

Brains are for Movement!

Minds In Movement!

Not Walking, Is bad for you

Natural environments v. Man made environments!

Back into Nature, Yes Please.

"The core lesson of this book is this: walking enhances every aspect of our social, psychological and neural functioning. It is the simple, life-enhancing, health-building perscription we all need, one that we should take in regular doses, large and small, at a good pace, day in, day out, in nature and in our towns and cities. We need to make walking a natural habitual part of our everyday lives. Pound the pavements; get the wind in your face; let the light of day and street lamps of night dance on your eyes; feel the rain on your face; sense the ground beneath your feet; hear the sounds; talk- if only to yourself; relax into the rhythm of walking and let your mind wander, deliberate, contemplate; journey into your past, delve into your possible futures; or think of nothing at all. Although walking arises from our deep, evolutionary past, it is our future too: for walking will do you all the good that you now know it does."

Shane O'Mara from 'In Praise of Walking'

Walking--it's epic. We all need to be doing it every day, mutiple times per day, sometimes fast and sometimes slow, uphill and downhill. Running is not a substitute for walking. If you run--you still need to walk. Walking is a key part of our biological function. Without walking our physical, psychological, social and spirtual lives aren't as good as they need to be.

"Hippocrates famously claimed that 'walking is the best medicine'. Yet in our modern world, most of us spend all day indoors sitting down, which can have terrible consequences for our health and well-being."

This book is an invitation to get back to your evolutionary roots and walk. If you have been thinking about moving your body more may I suggest that you start with walking?

Brains Are For Movement

"The larger lesson is clear: brains have evolved for movement. If you're going to be stuck, unmoving, then why do you need a costly brain?"

Animals that don't move don't have brains! Enter the sea squirt.

"Eventually, as it grows, the squirt transitions to a fixed stage, sticking itself to a convenient rock. There it consumes its own semi-brain, spinal cord and eye, none of which it now needs. It does this by simply reabsorbing these cells and using them as a meal. The sea squirt becomes

little more than a stomach with some reproductive organs attached. It is a vegetative grabber of whatever food particles happen to tickle its fronds. Now that it is no longer moving, it no longer needs a brain."

Brains are for movement. If you don't move you don't have a brain. Stuart Brown in his great book 'Play' also tells us about the sea squirt. He says...

"The adult sea squirt becomes the couch potato of the sea. In a surprisingly macabre twist, the sea squirt digests its own brain. Without a need to explore or find its sustenance, the creature devours its own cerebral ganglia. It's like something out of a Stephen King book. "All work and no play make sea squirt a brain-eating zombie". The sea squirt is an example of a basic principle of nature: use it or lose it. If a capability is not being used, it becomes an extravagance that is jettisoned or fades away. Either we grow and develop or we waste away."

The neuroscientist Daniel Wolpert also talks about Sea Squirts in his TED talk titled 'The Real Reason For Brains'. In this talk he says, *"It's blindingly obvious why we have a brain. We have a brain for one reason and one reason only, and that's to produce adaptable and complex movements. There is no other reason to have a brain"*

If we have a brain for movement then what happens to our brain when we are sedentary much of the time as we are today. Does our lack of movement today have a negative effect on our brains? You bet....

Here's a quote from Kelly McGonigal's great book 'The Joy of Movement'

"Miriam's doctor told her that movement was the best thing she could do to delay the progression of the disease. He encouraged her to exercise for two hours a day. "It doesn't matter what kind," he said, "as long as you move."

The disease Miriam has is Parkinsons. Indeed Miriam did improve with more movement. She dervied most joy from dancing. Her body still knew how to move to music.

A lack of movement has been linked to so many of our modern ailments: from diabetes to depression and heart disease to Parkinson's. If you want to increase your health--increase your daily amount of movement. It really is that simple. At this point I hope you are listening to the MP3 of this note while you walk. If not jump on your favourite podcast platform, find the Mind In Movement podcast and listen to this while you walk.

Minds in Movement

"But we are not just minds immobile in the silent vat of our skulls: we are minds in movement, and we find movement intrinsically rewarding and motivating. So, the developmental move from crawling to walking illustrates in a deep way the theme of cognitive mobility as necessary for

us to fully understand and participate in our physical and social worlds. The experience of walking, of movement, is the experience of a brain and mind moving through the world. And this movement in turn changes our experience of the world because the mechanisms of brain and mind are more fully engaged by movement."

Our brains are for generating movement and in doing their job they are brought to life by the movement they create.

The brain is for movement and without movement the brain prunes synapses instead of creating new ones. Without movement the brain deteriorates! You are listening to this while you walk now, aren't you?

Not Walking

"Being sedentary is bad for you, even if you are young and fit: your muscles will decrease in volume, quickly and easily, if they are unused. Moreover, loss of muscle mass is also associated with a loss of the production of molecules important for supporting new brain cells in the few regions of the brain that can continue to produce new brain cells through life. As your muscles deteriorate, your brain is also deteriorating. Other malign changes occur too – in personality, in mood, in the very structure of the brain. And yet, we have this wonderful, in-built correction mechanism, a form of self-administered medicine, one without adverse advents: movement."

I'm sounding like a stuck record here. 'As your muscles deteriorate, your brain is also deteriorating'. The mind and the body are movement and without movement the brain and the body function less optimally.

"Standing leads to immediate changes in blood pressure, blood flow around the body, and the rate at which we consume energy and generate heat (our 'metabolic rate'). Walking entrains changes across widespread brain and body systems, from the production of new molecules all the way to beahviour. Regular, up-tempo, walking is a simple and straightforward way of exercising the heart, and this in turn provides great benefits for the head-heart axis, because about 20% of the output of the heart is directed towards the oxygen-hungry and energy-hungry brain. Similar effects occur in the gut, which is also oxygen-hungry and energy-hungry. The cure is right in front of us: to get up and walk."

Ok. Here's one more quote on the importance of walking--this time it's from Vybarr Cregan- Reid in his amazing book 'Primate Change'

"Walking remains the miracle cure it always was. It's something that links us to those grassland species of millions of years ago and is good across the whole spectrum of being human. It decreases lordotic loading on the back and may stimulate disc health—this is really significant, as a larger, healthier disc will help shield the apophyseal joints. And most important of

all, it is not a sedentary activity. Everyone agrees that remaining static for extended peroids of time is bad for us all"

Natural Environments versus Man Made Environments

"Walking is one thing: where we walk is quite another."

Flat surfaces made of concrete rule our modern world. These surfaces are far from natural and far from what the feet (and the entire body above them) were expecting. When we walk on flat surfaces each step is the same. When we walk on natural uneven terrain each step is different, and each different step represents a miriad of different loads for the body. The body loves a huge variety of movement and starts to break down when it receives large volumes of repetitive movement or worse no movement at all.

Here's Vybarr Cregan-Reid again

"The world we have made is easy to negotiate in appropriately cushioned shoes. The concrete epidemic of the last two centuries has made most public spaces either challenging or completely inaccessible while barefoot. The cultural taboo of bare feet is odd, too; for the sakes of our bodies, we would be better off if we spent a lot more time without our shoes."

Flat man made surfaces and stiff man made shoes are wreaking havoc on our feet and bodies and yet from within our current cultural lense some of us find it hard to see this. 'Shoes are normal' people say, I am here to tell you they are not normal. Shoes are common in our western culture but it is not normal for a human to wear a shoe.

And let's finish of this idea with some wisdom from Nassim Taleb.

"Finally, an environment with variability (hence randomness) does not expose us to chronic stress injury, unlike human-designed systems. If you walk on uneven, not man-made terrain, no two steps will ever be identical---compare that to the randomness-free gym machine offering the exact opposite: forcing you into endless repetions of the very same movement. Much of modern life is preventable chronic stress injury."
Nassim Taleb from 'Antifragile'

Our environment no longer provides us with the movement experiences our body needs. We therefore must choose and take responsibility for how we move through our environments. We need to think carefully about how to create environments, which allow us to move, as we should. We need variety in our movements but the surfaces we design are all flat. Walking on a flat surface does not move the foot like a natural uneven surface so our feet become stiff. We need to deep squat to keep our ankles, hips and spines mobile and yet we have taken out the need to squat from our daily lives by using charis (including toliet chairs). This means we no longer express the full range of motion of these body parts and so they become stiff.

Transitioning into minimal shoes and choosing challenging uneven surfaces to walk on: transitioning into a standing/ dynamic workstation: choosing to walk rather than drive: buying a squatty potty and spending more time sitting on the floor are simple ideas that can bring more movement to more parts of your life.

Back into Nature

"It may turn out, for example, that extended experience of wild nature, involving long peroids trekking or walking, might be a viable treatment for depression (at least in its milder forms) and, perhaps, even other stress- and anxiety- related conditions."

We evolved in nature and so to me it makes complete sense that we enjoy being in nature. Nature is part of our extended being and without it we suffer. Does this idea make sense to you too?

" 'Attention restoration theory' is the idea that the natural environment has profound restorative effects on our wellbeing, and that the human experience of the natural world markedly assists in maintaining and fostering a strong sense of subjective well-being."

It's funny how we no longer trust our instincts and have to rely on studies to prove that what we feel is accurate.

I know that being in nature makes me feel good and that moving in nature makes me feel even better. Moving in nature is how my ancestors evolved and so it intuitively makes sense to me. I don't need a study to prove it. I know that when I am feeling low, a walk on the beach with a friend will put a smile back on my face. What do you know? What do you feel when you are in nature? Do you need a research study so that you can know that your own feelings are true? I hope not.

There are so many studies telling us that spending time in nature is vital for our welll-being. Are you walking in nature right now? I hope so.

About the Author of 'In Praise of Walking'

Shane O'Mara

Shane O'Mara is a Professor of Experimental Brain Research at Trinity College Dublin, the University of Dublin. He explores brain systems supporting learning, memory, and cognition, and brain systems affected by stress and depression. He also explores the policy implications of the behavioural and brain sciences. He loves long walks, and especially enjoys long urban walks in walkable cities. That's adapted from the back cover of his book and from his website which is www.shaneomara.com.

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Hazel Boot

Hazel has a degree in Exercise and Sports Science. She is also an Anatomy Trains Structural Integrator and a Restorative Exercise Specialist. She works with clients to improve movement and reduce pain. She loves reading and geeking out on movement books. She writes notes on the books she loves to help others learn faster.

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I hope you enjoyed the content of this note but please remember that it is not medical advice and should not be used as such.