

NOTES

# The Joy of Movement

HOW EXERCISE HELPS US FIND HAPPINESS, HOPE, CONNECTION, AND COURAGE.
KELLY McGONIGAL, PhD
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## **KEY POINTS**

Born to Move: Movement is the only reason you have a brain.

Movement and Brain Health:
Move for your mood.

Born to Move in Nature!

Community Moves, Are vital!

Proprioception:
"To grasp one's own self."

Muscles are Magical: Myokines

THE BEST
MOVEMENT
ADVICE EVER!

"Mine is not an uncommon story. Around the world, people who are physically active are happier and more satisfied with their lives. This is true whether their preferred activity is walking, running, swimming, dancing, biking, playing sports, lifting weights, or practicing yoga. People who are regularly active have a stronger sense of purpose, and they experience more gratitude, love and hope. They feel more connected to their communities, and are less likely to suffer from loneliness or becoming depressed. These benefits are seen throughout the lifespan. They apply to every socioeconomic strata and appear to be culturally universal. Importantly, the psychological and social benefits of physical activity do not depend on any particular physical ability or health status. They have been demonstrated in people with chronic pain, physical disabilities, serious mental and physical illnesses, and even among patients in hospice care. The joys described above—from hope and meaning to belonging—are linked first and foremost to movement, not to fitness."

Kelly McGonigal from 'The Joy of Movement'

In Kelly's book 'The Upside of Stress' I learnt how community and connection are two of the most powerful antidotes to stress. In this book 'The Joy of Movement' I learnt that human happiness flourishes in community and that moving in community has profound benefits for the body. If you want to be vibrant, healthy and happy move yourself with others, while helping others preferably outside in nature. Movement is the very thing that facilitates life. This book is filled with stories about how movement creates health, joy, hope and connection. It is an absolute joy to read and never has a book made me shed so many 'happy tears.' I highly recommend it. Because this book is SO GOOD I have used more direct excerpts than I usually would. I want to make it clear that all quotes highlighted in blue are directly from 'The Joy of Movement' and are Kelly's words. Thank you Kelly for the permission to use your work in this way.

#### **Born to Move**

"Looking at the evidence, it's hard not to conclude that our entire physiology was engineered to reward us for moving. But why would human biology be so finely tuned to encourage us to be active? A reasonable first guess might have to do with the health benefits of exercise. Perhaps the brain is looking out for the body, making sure we

stay active enough to ward off a heart attack. Yet this notion takes too brief a historical perspective on the value of physical activity to human survival. Your doctor might encourage you to exercise to better control your blood sugar, lower your blood pressure, or reduce your risk of cancer. But for most of human existance, the central purpose of movement was not to prevent disease. Physical activity was how we engaged with life. As neuroscientist Daniel Wolpert writes, "The entire purpose of the human brain is to produce movement. Movement is the only way we have of interacting with the world." This is why our biology includes so many ways to reward moving. At the most fundamental level, rewarding movement is how your brain and body encourage you to participate in life. If you are willing to move, your muscles will give you hope. Your brain will orchestrate pleasure. And your entire physiology will adjust to help you find the energy, purpose and courage you need to keep going."

The need to move is the only reason we have a brain. Movement is so fundamental to our existence, without movement there is no life. There is no finding food, there is no mating to ensure the survival of the species, there is no breathing, and there is no eating. I could go on forever but I assume you get this point. Movement is vital for our biological function and so we have a wonderful brain to orchestrate our graceful movement around the world. Movement is what brings all of our systems to life so that they can orchestrate the symphony of processes that keep us moving.

Our habit of breaking the body down into systems dilutes the interconnectedness within us. We talk of physiology and psychology of brain and body. But we are really just one thing and movement is the life that keeps us living.

## Movement and Brain Health

"A meta-analysis of twenty-five randomized clinical trials concluded that exercise has a large and significant antidepressant effect amoung people diagonised with major depressive disorder. Another review of thirteen studies—conducted in the U.S., the UK, Brazil, Germany, Norway, Denmark, Portugal, Italy, Spain, and Iran—found that adding exercise to treatment with antidepressant medication leads to larger improvements than medication only. While there are many ways physical activity can affect mood, its impact on the reward system almost certaintly contributes to antidepressant effects. One way to think about exercise is that it is a kind of do-it-yourself deep brain stimulation. When you exercise, you provide a low-dose jolt to the brain's reward centers."

Our physiology drives our psychology. Movement literally 'sets into motion' many biological processes that help our brains. Whenever I am feeling low psychologically, the first thing I do is to go for a big walk. Walking is my main physiological and psychological intervention. 'Walking is man's best medicine," Hipprocates is famous for saying. But I don't agree with him entirely. Walking is a necessity for our biological function. Without it our body can't carry out the processes that rely on our movement

#### **Born to Move in Nature**

"The human brain evolved in an environment that was defined by constant contact with and reliance on the natural world. The emotions that modern humans tend to feel in nature—awe, contentment, curosity, wanderlust—contributed to early humans' ability to thrive as a species that had to find its place in a complex and constantly changing landscape. These emotional responses to nature are still deeply ingrained in us, and the more frequently we experience them, the more fulfilled we are. Across the planet, individuals who feel a stronger connection to nature report greater life satisifaction, vitality, purpose, and happiness. People who make more frequent visits to natural spaces are also more likely to feel that their lives are worthwhile. This effect is even stronger than the benefits of being in good health, and equal to being happily married or living with a partner. One study tracked the daily movements and mood of over 20,000 adults, using GPS on their smartphones. After collecting over a million data points, the researchers concluded that people are happier in natural environments. And yet typical Americans spend 93 percent of their time indoors, creating what some call a nature deficit."

It seems so obvious to me that any animal would do better in its natural environment. We all know that animals suffer in zoos and yet we don't think of ourselves as 'zoo animals' despite that fact that we no longer live in any way shape or form like we did for most of our evolution in nature. 'Green exercise' and 'Forest Bathing' have been discovered using scientific research as ways to increase human flourishing. But do we really need research to tell us that it might be good to spend some time in our natural habitat. "It's hard to rest in a human Zoo" Erwin La Corre The founder of MovNat says. And he's right. It's so easy for me to feel relaxed in nature and much harder for me to relax in a car stuck in traffic.

## Community

"We rowed our hearts out", Sogge told me. "That was a moment of pain, hard work, mastery, and oneness that none of us will ever forget." The crew crossed the finish line in twenty minutes and thirty-seven seconds, coming in thirty-first out of thirty-eight teams. They were thrilled with the results; they has achieved their goal of working together to complete an excellent technical race."

The highlights of this book include all the wonderful stories that Kelly shares about the power of movement to bring people together to achieve what they could not have done alone. Being together, training together, learning together created the joy of this peak experience for these rowers. I recently witnessed another example. Rising Tides is an event put on by the World Surf League before every event on the Championship Tour. Rising tides invites local young surfers to come and surf with their heros. Watching it is beautiful; there are smiles and 'stoke' all around. What surprised me was how much of a buzz I got out of simply watching it. It reminded me of a study I read years ago that showed that when someone does something kind for someone else the giver and receiver both get a boost of hormones that increase happiness. An unexpected and exciting result of the study showed that people watching the act of kindness got an even bigger boost of feel good hormones. Perhaps as I watched these professional surfers giving their time and enthusiasm, their kindness caused my body to feel good too. Moving in community is a powerful way to boost so many aspects of wellbeing. If you need more joy in your life may I suggest you join a supportive and loving community to move with!

# Proprioception- "to grasp ones own self"

"The ability to perceive your body's movement is called propriception, from the Latin roots for "one's own self" and "to grasp". Proprioception, sometimes refered to as the "sixth sense," helps us move through space with ease and skill. But it also plays a surprisingly important role in selfconcept—how you think about who you are and how you imagine others see vou."

"The importance of proprioception in constructing your self-image goes far beyond knowing that your arm is your arm. When you participate in any physical activity—sports, dance, running, weight-lifting—your moment-to-moment sense of self is shaped by the qualities of your movement. When you move with grace, your brain perceives the elongation of your limbs and the fludity of your steps, and realizes, "I am graceful." When you move with power, your brain encodes the explosive contraction of muscles, senses the speed of the action, and understands, "I am powerful." When you move in a way that requires strength, your brain senses the resistance in your muscles and the force on your tendons, and concludes,"I am strong."

Spartan Race is a phenomenon that is currently sweeping the globe. In these events people run though a number of challenging obstacles. If they fail any of the challenges they have to do 30 burpees. The tag line for evey spartan race is "you'll know at the finish line". What will you know at the finish line? You'll know that you are stronger, more powerful and more capable than you were before your 'Spartan adventure.'

When you train and move your body in more challenging ways you 'feel' the changes in what you are now capable of. You literally 'grasp your own self, from within.' If you want to feel differently you have to move differently. To feel confident as a surfer you have to move like a surfer, you have to surf. The hours of practicing, change how you 'grasp yourself from within' and with hours of practice you will 'feel' like a powerful, graceful

surfer.

Do you want to feel strong, powerful, graceful or you want to feel here): then start moving in strong, powerful, graceful or ways. The more you practice the more the feeling of strength or power or grace will grow.

## Muscles are Magical

"In the early 1800s, philospher Thomas Brown argued that our muscles constitute an "organ of sense" through which we come to understand ourselves as individuals. Through movement and muscluar contraction, we literally sense our "self" as someone who exist in and interacts with the world"

Muscles are magical. They help us to sense 'our own self' in the world, they carry us around from place to place and when we use them they also release hormones called myokines. Myo means muscle and kine means "set into motion by". So myokines are set into motion by the movement of our muscles. Muscles are in fact endocrine organs!

"One of the greatest recent scientific breakthroughs in human biology is the realization that skeletal muscles act as an endocrine organ. Your muscles, like your adrenal and pituitary glands, secrete proteins that affect every system of your body. One of these protenis is irisin. Following a single treadmill workout, blood levels of irisin increase by 35 percent."

Have you ever wondered why moving your body produces so many beneficial outcomes? In days gone by our movement was the only way we could get life done. Finding food, making shelter, moving to a new environment all required huge amounts of movement. Evey time we did these things our bodies gave us a natural helping hand, which made it more likely that we would succeed again. Getting half way through building a shelter to protect you from a fast approaching storm but running out of oooooopmh and perishing in the storm would not have ensured the survival of our species. So instead the body helped out. The movement of making the shelter surged myokines into the system. These myokines helped to mobilise energy, and ensured the shelter got finished and you survived. Myokines help us to keep going. In our past the ability to keep going was what ensured the survival of our species. In this day and age we have cars and machines to do our movement for us but that does not mean that we no longer have a biological requirement for movement. Our lack of movement is one of the leading factors in our general poor health. That's why returning your body to a perpetual movement machine is one of the most foundational ways you can help your body. Muscles are magical. Use them!

"Irisin is not the only beneficial myokine your muscles dispatch into your blood stream when you exercise. A 2018 scientific paper identified thirtyfive proteins released by your quadricepts during a single hour of

bicycling. Some of these myokines help your muscles grow stronger, while others regulate blood sugar, reduce inflammation, or even kill cancer cells. Scientists now believe that many of the long-term health benefits of exercise are due to beneficial myokines released during muscle contraction."

## THE BEST MOVEMENT ADVICE EVER!

"There's no training formula you have to follow. There is no one path or prescription except to follow your own joy. If you're looking for a guideline, it's this: Move. Any kind, any amount, and any way that makes you happy. Move whatever parts of your body still move, with gratitude. Move by yourself, and in community. Move in your home. Move outdoors. Move to music or in silence. Set goals that are personally meaningful. Take baby steps, then conquer a big stretch. Seek out new experiences and explore new identities. Pay attention to how activities make you feel and how they change you. Listen to your body. Give yourself permission to do what feels good. Revel in metaphor and meaning. Look for places, people and communities that inspire you and make you feel welcomed. Keep following the thread of joy as long as you can"

This is the best movement advice ever

# **About the Author of 'The Joy of Movement'** Kelly McGonigal

"Kelly is a health psychologist and lecturer at Stanford University, and a leading expert in the new field of "science-help." She is passionate about translating cutting-edge research from psychology, neuroscience, and medicine into practical strategies for health, happiness, and personal success." That's from her bio on the Standford University website. To find out more check out www.kellymcgonigal.com

## About the Author of this Move Note **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