

**THE (UN)MAKING OF THE MODERN BODY:  
RE-CLAIMING OUR HUMAN POTENTIAL**

Our adaptations developed over millions of years in woodlands and open grasslands, where food was often low in calories and sometimes hard to find, not calorie-dense, plentiful and sitting on supermarket shelves; a place where cats were large and a constant threat to your life, not domesticated house pets; a place where you had to walk or run to get your food, not drive your car or submit an order on Amazon. Most importantly, it was a place where a strong desire for calorie-rich foods and an ability to store them as fat were useful strategies for surviving and passing on your genes, a place where a stress reaction that sends adrenaline rushing through your body could save your life, and a place where you wouldn't have to think about how to sneak in your exercise for the day. As such, we now struggle against our most basic instincts and impulses to maintain our minds and bodies in good health.

## MISMATCH DISEASES

The ailments that come about from the mismatch between how we have evolved and the environments we now inhabit are called *mismatch diseases*. Mismatch diseases result from one of three conditions: (1) too much of something, (2) too little of something, or (3) new things or behaviors we have not yet adapted to. For example, compared to the environments of our ancestors, we have (1) too much fat and sugar, (2) too little movement and exercise, and (3) we aren't biologically adapted to the complexities of modern life, such as complex social networks, economic pressures, media, social media, and many others.

As a result, we suffer from several mismatch diseases related to overeating, lack of exercise, and high stress. Obesity, Type 2 diabetes, cavities, anxiety, depression, high blood pressure and other stress-related ailments that lead to strokes, heart attacks and other illnesses are just a few of the mismatch diseases that might result.

Remember Klaus's stress reaction as he fled from the leopard? The problem is that modern life can potentially induce a series of similar reactions, but while Klaus's situation was brief (a few minutes) with simple decisions and actions (evade the leopard) and a clear ending point (safety back at camp), many of our modern stressors are long-lasting (What am I going to do with my life?, 30-year mortgages), involve complex decisions, may not require any action (and therefore no outlet for all that extra energy and adrenaline), and have no clear ending point. Many people today live with a constant feeling of stress, and the health implications are tremendous. Long-term stress wreaks havoc on our cardiovascular system, which can lead to adult-onset diabetes. Our amygdala, which controls our fear response, grows and becomes hyper-reactive, leading to anxiety disorders. Our dopamine, which controls emotion, is depleted, leading to depression. And our frontal cortex, the place where we make decisions, atrophies, leading to poor judgment. Ultimately, Robert Sapolsky notes, "Most of us will have the profound

Westernized luxury of dropping dead someday of a stress-related disease."

A large number of addictions might also be considered mismatch diseases. We evolved to crave calories, sex, love, friendship, security, comfort, and novelty. Modern technology provides what are known as "supernormal stimuli" in all these areas. A supernormal stimulus takes key features from the natural objects we have evolved to crave and magnifies those aspects that are most stimulating, while offering very little or none of the actual reward we need.

In the 1950s, birds were tricked into preferring fake eggs with more vibrant colors over their own. In the human domain, a glazed donut is a cheap calorie-bomb loaded with a perfect ratio of fat and sugar stimuli encased in a soft form that's as easy to digest as it is to hold in your hand. It gives us all of the pleasure of eating a rich meal with none of the nourishment. We evolved to crave fat and high-calorie foods, and to gorge on them when we could; but the abilities to pack on the fat did not evolve in the context of cheap, plentiful donuts, greasy cheeseburgers, and sugary, high-calorie drinks. Our tastes and ability to store fat are a mismatch for today's environment of abundance, so we now face health risks from being too fat.

But we have "junk food" in other domains as well. Pornography offers supernormal sexual stimuli while providing none of the love, connection, and offspring that may result from real sex. Movies, TV shows, and video games provide a constant onslaught of novelty, excitement, and drama without any need to get out of our chairs. These supernormal stimuli not only exaggerate the things we have evolved to crave (sex, love, novelty, excitement), but do so without us having to put ourselves at any risk, socially or physically.

In short, there is a "junk food diet" available in virtually every domain of our needs and desires. When we feel stressed, lonely, hungry, or any of the other evolutionary triggers that would normally spring us into action to go out into the world to find food or a mate, we can instead gorge on pizza, donuts, porn, and movies. While none of these things will make us "sick" or addicted in moderation, they

are dangerous in excess, and it's worth considering how we might experience life differently without them.

Junk food, porn and Netflix have become so common in our culture as to become the norm. About 74% of American men and 64% of American women are overweight. On average, we watch over five hours of TV every day. And while few people admit to watching porn, a recent study by the Max Planck Institute estimated that 50% of all Internet traffic is sex-related.

Most people would probably not even consider the idea that we can be "addicted" to something as mundane and normalized as junk food, porn, or Netflix. We tend to reserve the word "addiction" for hard drugs and alcohol. But recent studies in the science of addiction are demonstrating that there are deep and important changes inside the brain of those who have behavioral addictions that are similar to those with drug addictions.

At a biological level, our cravings are driven by dopamine, a neurotransmitter in the reward circuitry of the brain that plays a key role in elevating our motivation to take action. Dopamine levels rise in anticipation of a reward or when under high stress, encouraging us to act. Supernormal stimuli make dopamine levels spike, which is why they are so difficult to resist. However, when we indulge in these supernormal stimuli too often, we become desensitized to dopamine. Everyday pleasures seem bland and unsatisfying. We lack motivation, and when normal stimuli are no longer enough, we're forced to seek out supernormal stimuli to give us that rush of dopamine, and key brain changes emerge that are similar to those we see in substance addicts. There is reduced activity in the areas of the brain that control willpower and reduced abilities to handle everyday stresses, which often trigger more relapses into the addictive behavior. This can lead to a vicious cycle in which we feel very little pleasure and lack the willpower to avoid our "junk food diet" when we face even a minor stress. We take the edge off with a little indulgence, which only makes us want more while reducing our willpower and stress-resistance.

Most importantly, we become more and more numb to the pleasures of everyday life.

## DISEASES OF CAPTIVITY

The dorsal fin of a killer whale in the wild stands strong and straight, an awe-inspiring symbol of their power as it crests over the water. But if you've ever seen a killer whale at SeaWorld, you'll notice that their fins curl lazily over to one side, a condition sometimes called "floppy fin syndrome." Scientists hypothesize that lack of movement, constant turning in tight spaces, dietary changes, and other aspects of captivity cause the condition. Though it's not life-threatening, it *is* a powerful symbol of how artificial environments can shape a biological body.

Our bodies are no different. We have crafted an artificial environment with soft chairs, beds, and pillows where the ground is always firm and perfectly flat, complete with transport devices that allow us to sit in comfort as we transport ourselves from one artificial comfort pod to the next, and the temperature is always about 72 degrees. We prepare food on counters, not squatting on the ground. We sit on toilets rather than squatting in the woods. We walk on sidewalks while wearing padded shoes with raised heels.

As a result, our bodies are like the floppy fins of SeaWorld. Katy Bowman, an expert in biomechanics and author of several bestselling books on natural human movement, refers to the floppy fin as a "disease of captivity," and claims that so are our "bum knees, collapsed arches, eroded hips, tight hamstrings, leaky pelvic floors, collapsed ankles" and many more modern ailments. These diseases of captivity are a special subclass of mismatch diseases that affect the alignment and function of our bodies.

As a quick test of just how much of your own basic ability to move like our ancestors has been lost, try to sit in a deep squat with your feet flat on the ground. This is a natural rest position for humans. You see children playing in this position for long periods

without experiencing any discomfort. People all over the world who live in environments with few chairs can rest in this position well into old age. Most Americans have lost the ability to get into this position by age 20, and only a very small percentage find the position comfortable and restful. In a survey of resting positions worldwide, anthropologist Gordon Hewes found that deep squatting "has a very wide distribution except for European and European-derived cultures."

While this may seem like an unimportant skill, it's a quick demonstration of our lost potential and has serious implications for our health, abilities, and longevity. An inability to squat may indicate weak glutes or a weak core, which are essential to balance and basic human movements like running, walking, and jumping. Your hips might lack the flexibility and mobility they once had. Hip mobility is essential for stability and balance, so tight hips put you at risk for serious injury. And the movements we make to adjust for tight hips often lead to back pain and other ailments. As you age, these conditions become a matter of life and death. As Katy Bowman points out, "the more you need to use your hands and knees to get up from the floor, the greater your risk of dying from all causes." Perhaps it's a telling sign of just how damaging our comforts might be that Katy Bowman chooses to live in a house with almost no furniture.

Another test: try walking or running barefoot – but go easy on this one. Don't try to go out and run 100 miles like a Raramuri, or even one mile if it's your first try in a while. The muscles and tendons that hold up your arch and give you the spring you need to run barefoot are probably weak with underuse. You might seriously injure yourself because of your dependence on shoes. You probably won't get very far anyway because of the pain on your skin. Without the natural callouses of barefoot humans, every little pebble and stick will deliver piercing pain, and you may find many surfaces either too hot or too cold. Your feet are like prisoners trapped in the dark, sensory-

deprived caves of comfortable shoes, coming out into the light for the first time. It will take a while to adjust to the light.

It's worth it, though. Over time your feet will adapt and regain much of their lost potential. Your skin contacting the Earth will deliver key signals to your brain to make you more sure-footed and balanced. Your posture and flexibility will improve as you stand flat-footed without an artificially raised heel or supported arch, and over 100 muscles and 33 joints that have weakened in their captive state will be set free to strengthen and unleash their full potential, helping you become stronger, faster, injury-resistant, and more agile. Harvard anthropologist Dan Lieberman notes that in the Kenyan villages where he works, most people grow up barefoot and he has yet to encounter a fallen arch or many of the other foot ailments that plague many Americans.

"We aren't really sick," says Katy Bowman, "we are just starved." We are missing key nutrients, "movement nutrients." Our bodies are made up of cells. When cells get activated, they get fed with oxygen, which flushes out cellular waste and revitalizes them. We feed our cells by using them, by putting them under load. Those muscles and tissues we put under more load grow and stay healthy, while those we don't use wither and die. When it comes to body tissues, you either use it or lose it. Your body changes shape as some parts grow stronger and others wither. The alignment of your body parts shifts as some muscles pull more strongly on your joints than others. Ultimately, the shape and alignment of your body is the result of how you move.

Instead of "exercise," Katy Bowman suggests that we need a steadier and balanced diet of movement. Someone who exercises regularly works out for about 300 minutes per week. But our ancestors were moving 3,000 minutes per week; and their movements fed all their body tissues, not just a few select spots. Bowman suggests moving away from modern comforts that restrict movement and reduce muscle load, such as shoes, chairs, desks and sidewalks. She recommends incorporating as much natural movement into your

everyday life as possible. Replace that short drive with a nice walk or run. Even better, run it barefoot. Even better than that, get off the sidewalk and let your feet and legs receive the rich movement nutrients of balancing along uneven surfaces with small surprises at every step.

Recent headlines point out that "sitting is the new smoking," with consequences for your health that are *worse* than smoking. The problem is that many people are replacing sitting with standing by using standing desks, but this is only slightly better than sitting. "Standing is the new sitting," Bowman says. We need to move.

A steady diet of rich and varied movements will strengthen your full body and bring it into alignment. When your body is in alignment, your muscles can work together with your joints and the elastic power of your tendons to get the most out of every movement. Tom Myers, an expert in human anatomy, suggests it might be worth considering the entire human body not as a collection of 600 muscles, but just one, held together by a stretchy rubbery tissue connected throughout your body known as the fascia. The fascia is "a crisscross of fibers and cables, an endless circulatory system of strength," he told Chris MacDougal. "Your body is rigged like a compound archery bow ... left foot to the right hip, right hip to the left shoulder, and it's tougher than any muscle." Such power is the result of millions of years of evolution. Our bodies are exquisitely crafted for complex, precise, and powerful movements such as running long distances, throwing with great precision, and fine tool making. Yet few humans ever utilize even a fraction of this potential, and the potential withers before it can be materialized.

## **RECLAIMING OUR HUMAN POTENTIAL**

French Naval Officer Georges Hebert traveled the world and noticed that he found the fittest and most capable people in the most remote French colonies. Of the indigenous people of Africa and the mountain tribes of Vietnam, he famously noted that "Their bodies

were splendid, flexible, nimble, skillful, enduring, resistant, and yet they had no other tutor in Gymnastics but their lives in Nature." He found strong, fit women in such places that assured him that gendered differences in strength were largely cultural.

In 1902, he was stationed at Martinique when a violent volcano eruption turned the normally idyllic island retreat into a living hell. A black cloud moved out from the volcano at 420 mph, and superheated steam of over 1,000 degrees shot into the nearby city of Saint-Pierre, killing 30,000, the entire population of the city, in a matter of minutes. There were only two survivors in the main city. Thousands continued to fight for their lives where the initial blast had spared them. It was a horror of hot steam, scorched earth, and fiery rain, with pit vipers slithering violently about as they were chased off the mountain by the coming heat.

Hebert's job was to go into that hell and rescue as many people as possible. He coordinated the rescue of over 700. Afterwards, he would reflect on what allowed some people to survive while others perished. He learned that those who survived had a remarkable capacity to move spontaneously and creatively to avoid danger, while those who perished simply froze in fear and hopelessness.

Driven by a desire to train people for future calamities, he dedicated himself to understanding human movement. He watched children play and identified "10 natural utilities" (walking, running, crawling, climbing, balancing, jumping, swimming, throwing, lifting, and fighting), and created outdoor training facilities where people could practice these basic skills. They looked like playgrounds for adults. He had one firm rule: No competing. He felt that competition would encourage people away from true fitness. Once people start competing, they start focusing on specializing some movements over others, and end up out of balance and unable to perform with the spontaneity and creativity of our full human potential.

He called his method "methode naturelle," the natural method, and it was based on one simple mantra: "be fit to be useful." Hebert saw no use in appearing physically fit, with large biceps and large

chest muscles. He simply wanted his navy recruits and anyone else who used the method to be able to perform when it mattered. Though he was averse to competition, he wanted to prove the worth of his methods, so he put a bunch of ordinary navy recruits through the program and soon had them performing as well as world class decathletes.

He also released a short film demonstrating his own talents. In the film, he leaps out of his dining room chair, runs outside, and scales a 30-foot tree in seconds, leaps down from branch to branch, and then proceeds to climb up the sides of buildings with equal speed, first by himself and then with a child on his back. He then races to catch a moving train and leaps off of the moving train from a towering bridge into the water below.

Unfortunately, all of his recruits died, along with his method, in the grim and deadly days of World War One. By the end of the Second World War, the methods were all but forgotten.

As Europe and America rebuilt into increasingly post-industrial economies with more and more jobs that required sitting for long hours, people sought the most efficient ways possible to exercise, trying to squeeze their daily dose of movement into smaller time frames and smaller spaces. Specialized weight machines, treadmills, and stationary bikes transformed gyms into big business where steroid-injected hard-bodied men and impossibly skinny women were the icons of good health. (Think back to the "Nacirema.")

The machines are not designed to make us useful. They are designed to shape our bodies toward cultural ideals that are displays of superficial fitness rather than true health and wellbeing. Women are encouraged to lose weight, so they tend to focus on fat-burning aerobic exercises rather than strength and agility. Men are encouraged to build broad shoulders and large chests, so they focus on lifting heavy weights with their upper bodies, often losing mobility in their shoulders and making them more prone to injury and less able to do basic human movements.

Many of our gym exercises pull our bodies more and more out of alignment, like the floppy fins of SeaWorld. Overwork your chest, and your shoulders shift forward. Artificially isolate your quads, and you create imbalances in your legs that can lead to knee problems. A healthy, functional body is a body that is aligned through a healthy mix of diverse movements.

The worst effect of this focus on appearances is that the body itself becomes alienated from our being. It becomes an object to be manipulated and shaped to fit this ideal, rather than an integral part of our being. We focus on how we look rather than the simple joy of moving.

Recently, Hebert's methods are being rediscovered and reinvented in a number of different movements. Free-running parkour groups are spreading all over the world and look to Hebert as one of their founding fathers, taking his mantra of "be fit to be useful" as a core gospel. Erwan Le Corre, founder of Movant, is perhaps the most dedicated student of the method. He tried to track down any remaining ancestors of Hebert's method, and then set about immersing himself in studying those who had inspired Hebert.

Ido Portal, who studies movement practices all over the world – from Afro-Brazilian Capoeira to the many martial arts of Asia – incorporates a vast range of movements into his everyday life to explore the boundaries of human movement potential. Portal sees this as a deeply human pursuit, tied to our evolution. "Movement complexity is by far the reason why we became human," he says, "The reason for our brain development is related to movement complexity."

Today there is a new emergence of natural training methods around the world often going under the name "functional fitness." Cross Fit, the world's most successful and fastest-growing fitness movement, encourages their trainers to eliminate mirrors and focus on helping people be more functional rather than just looking good. Others, like the BarStarrz and other "body weight warriors" are

finding ways to use nothing but their own body weight and the objects in their environment for their training.

By 2015, America's fastest growing sport was obstacle racing. *American Ninja Warrior* became one of America's most popular TV shows, and hundreds of thousands tested themselves in Tough Mudders, Warrior Dashes, and Spartan Races, intense obstacle races that require a diverse array of human movements and endurance. Though there is a competition element to many of these events, most people are simply there to see if they can complete the course, and cooperation is often essential. Many of the obstacles cannot be overcome without the aid of others. Once someone receives aid, they usually pay it forward. And as they do, they seek to find that same joy in moving through the world that Hebert witnessed around in remote African villages, that Coach Vigil saw as the Raramuri ran, and that I saw among my friends in New Guinea.

## **THE POWER TO CHANGE OUR HABITS**

By my mid-30s, I was well on my way to falling victim to any one of the many mismatch diseases that plague our time, and I had already developed several diseases of captivity. I could not sit in a squat. I could not even run. At 29, I tore my meniscus and developed a mysterious hip pain that no doctor could explain. Every time I tried to go for a run, I would wake up the next day with a swollen knee and an immovable leg. So I gave it up. I became mostly sedentary, dedicating myself to my work. By 35, my body had adapted to life in a chair. My weight was creeping upward. I couldn't touch my toes. A couple of flights of stairs started to feel like a chore. I also started developing a number of other health issues, such as high cholesterol and high blood pressure. Our bodies not only evolved to run, throw, and squat, we had to conserve energy every chance we could, so we evolved to rest and seek comfort. I found comfort in abundance and gorged on it.

Fortunately, we not only developed adaptations to seek comfort, store fat, and feel stress, we also developed the power to intentionally reflect on our activities and change them. The core of our humanity, the ability to ask questions, make connections, and try new things offers a way out.

These abilities are reflected in the evolution of the brain. The oldest part of the brain lies at the core of the brain at the stem: the basal ganglia. Named the "reptilian complex" by neuroscientist Paul MacLean, it evolved hundreds of millions of years ago. It guides our basic autonomic body processes and is responsible for instinctual cravings and behaviors. On top of this is what MacLean calls the "paleomammalian complex," sometimes simplified as the "mammal" brain. It evolved along with the first mammals and is responsible for emotions, long-term memory, and more complex behaviors. Surrounding all of this is the newest part of the brain, the neocortex. It is responsible for higher order cognition, complex behavior, language, and spatial reasoning. In humans, the neocortex has grown to become 76% of the brain.

As our neocortex expanded, we became less and less controlled by nature and more by culture, less by impulse and more by reason, less by instinct and more by habit.

Habit is the compromise between being completely controlled by our instinct and being completely free to make intentional decisions about whatever we want to do. It is the trade-off we have made between instinct and reason in order to maintain speed and efficiency. Though we have become more and more adept at making complex decisions, it would be too slow and inefficient to have to make decisions about every single thing we ever did on a day-to-day basis. To improve speed and efficiency, our brains developed the ability to do our most repetitive routines without making any decisions at all. We could do them by habit.

Habit formation works by passing control over the most routine behaviors to the more primitive basal ganglia. As we do a routine over and over again our brain can determine what prompts the

routine to begin ("the cue") and what prompts it to end ("the reward") and creates a "chunk" of automatic behavior. Brushing your teeth is a "chunk." You get the cue (time for bed) and without wrestling with any complex decisions simply go through the motions of putting the toothpaste on the brush, brushing your teeth, and rinsing the brush. "Chunking" allows complex activities to be controlled by the super-efficient "lizard brain" of the basil ganglia.

Habits were essential to our evolutionary success, but as we know, not all habits are good. Because habits are controlled by the same region of the brain as our instincts and impulses, some habits can feel like unchangeable urges that are out of our control, but we *can* change them.

In *The Power of Habit*, Charles Duhigg tells the story of a woman named Lisa, an overweight smoker who struggled to hold a job and pay off her debts. When her husband left her for another woman, she hit rock-bottom. Alone, depressed and without any feeling of self-worth, she decided she needed some kind of goal to straighten out her life. She set the goal of trekking across the deserts of Egypt. She had no idea if such a trip were even possible, but she did know that the only way to make such an arduous journey would be to quit smoking. She gave herself one year to prepare.

The only significant intentional decision she made was to quit smoking, and she did so by going for a jog each time she felt the urge to light up. As Duhigg points out though, this one simple change changed everything. It "changed how she ate, worked, slept, saved money, scheduled her workdays, planned for the future, and so on." She made that trip to Egypt, and within four years she was a happily engaged home-owner and marathon runner with a steady job as a graphic designer.

The key to changing our habits is understanding how they work. A habit is made up of three parts, which together make up what Duhigg calls "the habit loop." First, there is a cue – a trigger that tells your brain to follow a chunk of automatic routine behavior. The second piece is the routine itself. The final piece is the reward. If the

reward is strong, the habit is reinforced and becomes more and more engrained and automatic.

What allowed Lisa to change is that she did not attempt to change the cue (the urge to light up). Cues come from outside of our control. They are in our environment or deeply embedded in our brain. After years of smoking she could not remove the urge or sit idle and simply resist it. Her brain was telling her that she had to act, so she did. But she changed *how* she acted. She replaced the "chunk" or routine of smoking with running. Importantly, running offered her brain a sufficient reward – a runner's high, a feeling of good health, and a sense of accomplishment – so the new routine received additional reinforcement each time she did it. Eventually, it became a habit and she no longer needed to make a conscious decision to go running. It became automatic.

To change a habit, you have to study the cues that trigger the habit and understand the true reward that you seek. For example, if you have a habit of eating ice cream every night with your friends, it might not just be the satiating taste of ice cream that you crave. The true reward might be that it's a break from the stress of studying, or time out with friends. Carefully note the time and circumstances of your next ice cream craving. Are you stressed or overwhelmed by your work? Are you feeling lonely? Are you hungry? Do an experiment to see if just a walk down the hall and a chat with friends fulfills your needs, or if you are just hungry, grab a healthy snack and see if that gets you past the urge. Whatever creates a sufficient reward can become your new habit.

Sometimes you have to do more and actually change the environment around you. Make it easy for yourself to engage in good habits and more difficult to engage in bad habits.

For example, as I adapted to my inactive life of chairs and cars that was leading to the demise of my health, my bike ended up stored away on a hard-to-reach hook in the garage overhanging my car. In this environment, the bike was simply too far out of reach to seem like a reasonable possibility. Removing the bike would require

backing the car out, getting out a ladder, and then trying to keep my weak and stiff body balanced on the ladder while lifting the bike off the hook and down onto the ground. It would have never happened had my neighbor not given me a new bike seat for my two-year-old old son that I felt obligated to try out to show that I appreciated the gift.

After trying out the bike seat, I was too lazy to put the bike back on the hook, and just stuffed the bike back into the garage behind the car. Suddenly there was a shift in my environment. When I walked out to my car to drive to work the next morning, the bike was behind the car. As I was moving the bike out of the way, I remembered the fun I'd had on it with my son the day before, and the next thing I knew, I was riding the bike to work.

I parked the bike behind the car again that day and every day. Every morning for several weeks I would struggle with the decision of whether or not to bike or take the car. Taking the car involved moving the bike out of the way, driving the car out of the garage, and then re-parking the bike in the garage before leaving for work. It was complicated, so the bike kept winning. Within a few weeks, I wasn't even asking myself whether I should take the bike or the car. It was a habit. And it stuck. No amount of snow or cold weather could break it. The next year I didn't even bother buying a parking pass. Two years later I sold the car.

I started looking at my other habits. At work, I often found myself checking Facebook and cruising the Internet. I found that the cue was stress. Each time I felt stressed and overwhelmed, I sought relief on the Internet. I decided to replace the routine of Internet surfing with push-ups. So each time I started feeling stressed, I did push-ups. It cleared my head, gave me a quick rush of endorphins, and I could get back to work.

I started making a habit of breaking habits and trying new things. My body started to transform. Before long, I looked and felt as good as I had when I was twenty years old. But soon I surpassed even that and started feeling stronger, lighter, and more agile than I ever

thought possible. I started thinking back to my friends in New Guinea and the remarkable things they could do. *Could I do those things?* I wondered.

I learned to do handstands, then some basic gymnastics, and then turned to people like Erwan Le Corre and Ido Portal, who were exploring the limits and potential of human movement.

As I was writing this chapter, I started another new habit: running. I made a simple rule for myself: *If I'm taking the kids, take the bike. If not, run.* I strapped on a backpack and started running everywhere. I ran slow, easy, and smooth, using the light barefoot step of our ancestors that I had seen in New Guinea and that MacDougal saw among the Raramuri. My body immediately began to adapt. My muscles ached for a few days, but quickly grew stronger to adjust to the new loads. Within just a few weeks it was a habit. I didn't even bother to go to the garage anymore to grab the bike. I just stepped out into the cold morning air and let it rip.

I was most concerned about how the experiment would affect my bad hip and knee. As I expected, they ached through the first two weeks, and I was sure that I would be giving up on running for good after 28 days. But by week three, the pain seemed to be subsiding.

By Day 28 I felt so good I couldn't stop. I kept running. I had come to enjoy the freedom of moving through the world without a car or bike to worry about. Everything I needed was always right with me. I felt free, fast, light, and agile. And I enjoyed the steady stream of endorphins that came with the ongoing "runner's high" I received in little bits throughout a day of running here and there.

One day, while listening to a good book on my headphones, I ran for 90 minutes – only stopping because I had to run to a meeting. I was sure that after a long run like that, I would soon be feeling the familiar hip and knee pain that would leave me immobile for a day or so. But I woke up the next day with no pain. I started running longer and longer distances, blissfully absorbing audiobooks as I ran. Using the light, elastic gait of our ancestors, I skittered along trails just as my friends in New Guinea do. Even after a 20-mile day, I didn't feel

tired or winded. Instead I felt a blissful calmness. I started wondering where my limit might be.

So one ordinary Wednesday, I set off running into a brisk 36-degree morning. My feet skittered across the earth with ease, and I felt as if I were being carried gently along by the continuous whirl of my feet doing what they were meant to do. My breath was steady and easy. I lost myself in the deep thought of a good book. Three hours later, I noticed that my friend's class was getting out, so I stopped in to visit with him. I had already run 18 miles and I wanted to know, *Could I run a marathon?*

After a brief chat with my friend, I hit the trail again. The next 8 miles were as blissful as the first 18. It was a strange experience. I have been enculturated to believe that running 26.2 miles is almost superhuman, and most certainly extreme and dangerous. I have been led to believe that you have to be crazy to do it, that you only do it when you really have "something to prove." I would never have thought that it could be fun, enjoyable, or relaxing.

*Relaxing?* Strange as it may seem, that is what I felt above all other feelings as I finished. I felt deeply relaxed. My friends were amazed, and said they couldn't believe that I was able to train for a marathon. I felt confused by the word "train." At no point did I ever feel like I was "training" for anything. I realized that instead of "training," I had simply slowly been changing my habits over the past six years. I went from a lifestyle that involved a lot of sitting in cars, at desks, and on sofas to a lifestyle of constant movement. By the time I ran the marathon, I was habitually moving a minimum of 8 to 10 miles per day.

The best way I can describe it is that I just got into the habit of moving, and one day I just happened to run 26 miles.



## **LEARN MORE**

- ❖ Natural Born Heroes by Chris McDougall
- ❖ Move Your DNA by Katy Bowman
- ❖ The Power of Habit by Charles Duhigg

## Challenge Three: The 28 Day Challenge

Your challenge is to try something new or change a habit by dedicating yourself to doing it every day for 28 days.

Objective: Practice trying new things, experience more, and to reflect more deeply on how humans learn and create new habits, as well as how you, specifically, can better identify what conditions or techniques work best for you when you are trying to learn something new or change your habits.

Step 1: Choose something you would like to do (or stop doing) over the next 28 days. Take a picture of yourself doing this thing and post it to Instagram #anth101challenge3

Ideas: Slow Media Diet, Slow Carb Diet, running, a new instrument, movement, exercise, gratitude, writing, or stop doing something (smoking, sugar, alcohol, video games, Netflix, porn)

Step 2: Post regular updates of your progress. Post videos of your progress if possible. It is always fun to really see how much you have learned.

Step 3: At the end of 28 days, reflect on the following:

- How successful were you?
- Under what conditions were you most successful?
- What were your barriers to success
- How can you get past them?
- What did you learn about how you learn?

For details and inspiration go to [anth101.com/challenge3](http://anth101.com/challenge3)