

Here's what I learned living like a caveman for a month



Chris Bailey

Why we're built the way we are

I find history boring. Back in high school, I always tried to avoid studying the subject, opting to take electives like economics and business instead. I usually gloss over the history of pretty much anything when I'm reading a book or article. But there is one aspect of history that I find absolutely fascinating: evolution.

Modern humans evolved from hunter-gatherers over the last 2.5 million years, so our bodies are custom-built to thrive in the wild. In fact, whenever we're wondering why we have some weird trait on our body, we can almost always look back to our evolution for the answer. For example, we get goosebumps when we're cold because they increase the surface area of our skin, letting us soak in more warmth—a helpful feature when we had to survive cold nights outdoors. Eyebrows may seem like superfluous decoration, but they whisk away sweat from our eyes—a helpful feature when we were attacking prey or escaping from a saber-toothed tiger. We have fur hair on our heads because most of our body heat escapes from there—and because hair protected us from the desert sun. Our bodies are a weird mishmash of features, but most of them serve a purpose, if only in some small way.

Our brains and bodies, on the other hand, have barely evolved over the last hundred thousand years. All the while, our living environment has changed completely as we've invented tools to improve our lives. We may have started off rubbing sticks and flint together to make fire, but we very quickly created language, the wheel, surgical instruments, automobiles, contraceptives, telescopes, and transistors. Over the last 10,000 years—especially since the agricultural revolution 9,000 years ago, and the industrial revolution last century—we've molded a new world. But like a concrete statue, our bodies remain frozen in time. We're stuck in a world full of light bulbs, fast food restaurants, and the internet, with bodies custom-built to hunt down prey, survive for days without food, and flee from saber-toothed tigers.

Evolutionary psychologists refer to this as a "mismatch"—a bodily feature that used to serve a purpose, but sets us back today; one that is "mismatched" to the living environment we've created for ourselves. This can make living life tough. For example, take:

Caveman for 30 Days: By the Numbers	
Total Steps	368,400
Total km (mi)	274 (170)
Daily Steps	12,280
Daily km/mi	9.1 (5.7)
Pounds Lost	7.1

- **Fast food.** We crave salt, sugar, and fat more than we crave vegetables. These were rare in the wild, so our bodies evolved to reward us for stocking up on all three whenever we could. Our bodies release more pleasure chemicals when we consume salt, sugar, and fat, but because we're surrounded by an abundance of all three, we find them hard to resist. (One study found that our brain releases as much dopamine when we consume two cheeseburgers as when we orgasm!) While we evolved over millions of years, carbohydrates only became a big part of our diet over the last 10,000. And sugar, "a pure carbohydrate, with all fibre and nutrition stripped out," has only been a part of our diet for 300. It's no wonder obesity rates are sky-high.
- **Anything that's convenient.** Ever since we began creating tools, humans have tried to do more, faster. Today, this mindset gives us less time for physical activity. Many of us save time by commuting to work, and when we get there (so we can make more money), we exercise our brains rather than our bodies. This is because we do more knowledge work for a living. But our bodies are designed to be active. Historically, we've walked between 8 to 14.5 kilometers every single day. Today, we get less physical activity than ever. One sad study found that 28% of Americans got zero physical activity in all of 2014. And in an effort to do more and more, we often compromise on sleep and our diet.

The list of mismatches goes on—and includes other physical ailments like nearsightedness, diabetes, and many types of cancer—but you probably get the idea. The environment we live in today is mismatched to how we evolved, in more ways than we may realize.

One Month of Living Like A Caveman

The idea of mismatches is what motivated me to start this productivity experiment: living like a caveman for a month. My goal was to live exactly the sort of life my body was designed for.

I wanted to know how living like a caveman would impact my energy, focus, and productivity.

For 30 days, I:

- **Ate like a caveman.** For the month of April, I ate zero processed foods—cutting out potatoes, sugar, alcohol, and dairy. I ate mostly unprocessed vegetables and meats.
- **Slept like a caveman.** Regardless of whether I was sleeping at home, at my girlfriend's place, or at a hotel, I slept on the floor—usually on top of a yoga mat, with a couple of pillows and one or two thin blankets on top of me.
- **Worked like a caveman.** Every day, I got at least two hours of sunlight—including on days it was snowing or raining. This was a pain in the ass in Ottawa, where you can often experience all four seasons in one day at this time of year. But I stuck with it, in the name of the experiment.
- **Moved like a caveman.** Every single day, I walked and ran 8 to 14.5 kilometers—the amount hunter-gatherers moved. By the end of the month, I walked a total of 274.04 kilometers (170.28 miles), and took 368,400 steps (an average of 12,280 a day).
- **Walked and ran barefoot.** Halfway through the month, I also ponied up for a pair of barefoot running shoes—those weird looking shoes that show the outline of your



toes. They're meant to simulate walking and running barefoot, while offering some protection from the elements.

As I quickly began to learn, our bodies are not built to thrive in the world we live in today. Curiously, the best place to turn to see why this is the case is our brain.



April 6, 2016 in Ottawa. Two weeks later, on April 21, it was 23°C in Ottawa (73.4°F).

A Fine Balance

Every second of every minute of your every day, your neurons crackle like thunder, and electrochemical impulses travel through your brain like lightning. Each second, each cell of the elaborate chemistry set that is your brain—that's full of weirdly-named neurotransmitters like dopamine, serotonin, oxytocin, adrenaline, cortisol, GABA, and endorphins—reacts hundreds of thousands of times, like a giant storm. Our brain is full of so many of these neurotransmitters that it's tough to make sense of them all.

The chemicals that reside in your brain can (and do) make or break your happiness, mental health, and productivity. But at the end of the day, you really only need to know two things:

- 1 The more balanced the chemicals in your brain are, the healthier, happier, energetic, and more productive you'll be.
- 2 Everything you do, and everything that happens to you, affects the chemical balance in your brain.

Our brains have evolved alongside our bodies over the last 2.5 million years and, as such, our brains and bodies are connected in innumerable ways. Research shows our brain is chemically balanced when we get enough of the good stuff our bodies were built for, which I experimented with this month:

- Physical activity
- Good food
- Sunshine
- Social interaction
- Sleep

Take physical activity, which literally rebalances the chemicals in your brain. It ups the amount of dopamine in your brain—the neurotransmitter of accomplishment. Close your eyes and think about the last devilishly delicious meal you ate, what it felt like the moment you received your last promotion, or the greatest thing you've ever accomplished. Just now, you released dopamine in your brain, and chances are it felt pretty good. Exercise does this, too. It also releases serotonin—the neurotransmitter that gives you a sense of confidence, happiness, pride, and a feeling that the world



Eating out was tough, but doable.

is conspiring in your favor. Exercise also releases endorphins (which give you an amazing energy and motivation rush, and make you feel unstoppable), and BDNF (which helps you remember a whole lot more).

It's easily one of the best things you can do for your brain. As John Ratey put it in his book *Spark*, a book about how exercise affects your brain, "keeping your brain in balance can change your life." This is why the idea that so many people "don't have time" for exercise is bogus: exercise, just like sleep, nutrition, sunshine, and social interaction, improves your mental performance and wellbeing in pretty much every measurable way. According to Ratey, it even improves "alertness, attention, and motivation", which quite literally allows you to get the same amount of work done in less time.

This research underscores a massive point: **When you take care of your body, you also take care of your brain.** And when you don't take care of your body, by not getting enough sleep, nutrition, and exercise, you miss out. Big time. Even something we might not expect to make much of a difference—like getting ample social interaction—affects the chemical balance in our brain. When we spend time with other people, our brain releases oxytocin, the feel-good chemical of intimacy and safety that's also released when we get a massage—one of the myriad reasons a massage can be so relaxing.

The benefits of getting a good amount of nutrition, sunshine, social interaction, sleep, and exercise are not just physical. Because of how we evolved, they're mental, too, and this can make all the difference in the world.

What I Discovered

I started this experiment with pretty good habits—like getting a solid amount of sleep and social interaction every day—but the amount of physical activity, nutrition, and sunshine I received at the start of the month were lacking. I worked out two or three times a week, but moved nowhere near as much as our ancestors did. I ate well, but like most people, I ate too much salt, sugar, and fat. And living in Canada, I got almost no sunshine—unlike our ancestors, who, each day, roamed the great outdoors in search of food and love. At the beginning of the month, my mood was volatile, and I felt myself dragging my feet quite a bit to get stuff done.

A week into this experiment, all of that changed.

The positive effects I began experiencing as I adopted these habits were staggering. I began walking 10 kilometers a day, using my feet to get everywhere I would regularly bus and Uber, like getting groceries and meeting friends across town. Every day I made sure I got at least two hours of sunlight (even when that required wearing a toque). While I'm more of an introvert, I about doubled how much social interaction I got on any given week. And from the start of the experiment, I ate like a caveman—eating mainly vegetables and some meat—and felt absolutely incredible after just a few days. Eating out was a chore, but I could almost always find something that fit with my weird eating regimen.

The problem with this experiment, like many of my other ones, is that it was anything but scientific; it's impossible to know which habits most contributed to my energy boost. But it was almost certainly some combination of them all, as I've discovered in past experiments.

While adopting the habits my body is built for, I had more energy than I recall ever having. While these habits took up time—especially getting enough sunshine, physical activity, and social interaction—I more than earned that time back in how much additional energy I was able to bring to my work and life. I felt healthier than I have in years—and even lost 7.1 pounds. And it's no wonder: in adopting the habits my body was built for, it would probably have been a bigger surprise if my weight *didn't* change. With a balanced brain, I became more calm, patient, focused, motivated, and even productive—looking through the logs of the experiment, I accomplished a lot more than I usually do over the course of a month, even though many elements of the experiment, like walking around town, ate up a lot of time. And I felt about as happy as a preppy, high-fiving, khaki-wearing dad out of an Old Navy commercial.

I also felt a lot less stressed. Today we deal with more stressors in a given day than we did in *weeks* living in the wild. While our ancestors had to fend off a predator every once in a while, we're inundated with notifications, deadlines, interruptions, and distractions almost every moment of every day—all of which cause stress (and cortisol, the stress hormone) to

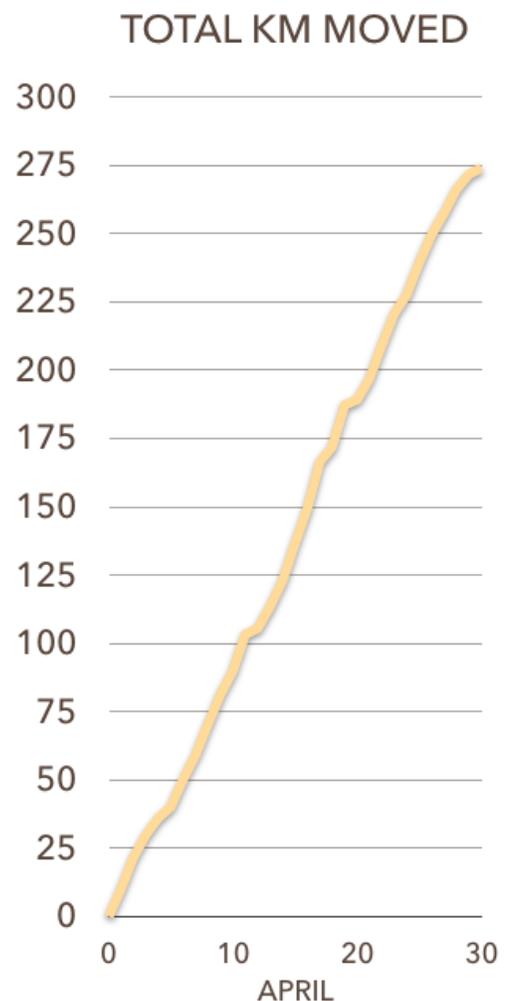
accumulate over time. You've probably heard of the idea that our automatic response to stressful situations is to fight, flee, or freeze. Physical activity helps us deal with this head-on by allowing us to channel stress in an incredibly productive way. Instead of fighting or fleeing from a saber-toothed tiger, we step up to fight the treadmill. And when we do, our brain releases a concoction of—you guessed it—neurotransmitters that give us energy, motivation, and drive to keep going. This is not some hippy-dippy, eat-your-vegetables sort of advice. This is cold hard science, baby.

Some changes I experienced were purely physical.

When the month was over, I grew to really like the barefoot shoes. But while I'm sure they would lead me to have fewer foot problems over time, I'd prefer to not look like a doofus walking around town in them. And there was one part of the experiment that flat-out didn't work at all: sleeping on the floor. I *hated* this part of the experiment. The bed is a modern invention that has made our lives better; they help us fall asleep faster and regulate our body temperature.

There were also some mental aspects I *didn't* experiment with. Take the internet, as an example. Our brain has a built-in novelty bias that rewards us with dopamine (that sweet, sweet pleasure chemical I mentioned earlier) every time we focus on something new, and releases adrenaline when we search for stimulation external to us. This let us survive longer in the wild. The opposite is true today. When we do things like multitask on the internet, it feels so damn good, because it stimulates our brain. But it invariably makes us less productive in the modern office, because it leads us to do a mediocre job of pretty much everything.

While this is a purely mental modern-day mismatch, **all of the big mismatches I found during the month were both mental and physical.** Those are easily the ones that affect our lives the most.





My bed for the month—a yoga mat that I kept on the floor beside my bed.

Discovery Mode

On top of discovering how habits like getting enough exercise, food, sunshine, social interaction, and sleep influence our energy—especially when done in tandem—I discovered one other lesson I didn't anticipate: it's downright hard to continually invest in how much energy we have.

The bodies we occupy today were created over millions of years to thrive under a specific set of conditions: enough sleep, physical activity, social interaction, sunshine, and good food. **Unfortunately, the world we live in today seems to value convenience more than health.** That makes getting enough of these things an uphill battle. While we need eight hours of sleep a night, we may need to work late and still want to spend time with friends afterward. While we know we should eat less processed junk to have more energy, some foods are too tasty to resist, especially when we're tired.

Luckily, just as we can look to evolution to see why we have certain traits—goosebumps, eyebrows, hair on our head—we can also look back to see how much of these activities we need, and compare simple things like:

- The number of steps you get each day (which your phone probably tracks), to the daily recommendation of 10,000 steps. That equals about 8 kilometres, which is on the low end of the 8 to 14.5 kilometres we've moved historically. But it's still worlds better than the average 5,900 steps in the U.S.
- Your diet, in contrast to the hunter-gatherer diet of eating nothing processed, along with little sugar, potatoes, alcohol, or dairy.
- How much sleep you get each night, relative to the eight hours a night we're wired to need.
- The amount of sunlight and social interaction you receive each day, compared to a hunter-gatherer, who would have spent most of their time outdoors and with other people.

In addition to looking back, it's also very helpful to think about how much time you spend in "discovery mode" versus "defensive mode." According to Caroline Webb, who wrote the brilliant book *How to Have a Good Day*, "every moment of the day, our brain is busy scanning the environment for unpleasant things we should avoid and pleasant things we should rush toward." She uses the two terms to refer to the times we spend feeling like we're protecting ourselves (defensive mode), and the times it "feels as if the world is on

our side" (discovery mode). The key, she argues, is to spend less time in defense mode, and as much time as possible in discovery mode, "where we're focused on the rewarding aspects of an experience rather than the potential threats it poses to us."

I can't think of a better way to frame the feeling I had during this experiment. A week or two in, as my energy began to increase, and as I brought more of myself to my work and life, I felt as though a switch had flipped. I had more stamina and resiliency, and felt as though the world was conspiring in my favor. My mind was clear, calm and, perhaps most importantly, balanced. And whenever I felt myself slipping back into defensive mode, a brisk walk around town, a good night's sleep, or more social interaction did the trick to flip the switch back again.

By taking advantage of the way our body is programmed to thrive—getting enough physical activity, nutrition, sunshine, social interaction, and sleep—we can be happier, healthier, calmer, and more productive.

Our bodies and brains are incredibly intertwined—and they became that way over the span of 2.5 million years. It's hard to fight against a force as powerful as evolution. But when we work with it, as I found, the results can be absolutely remarkable.

