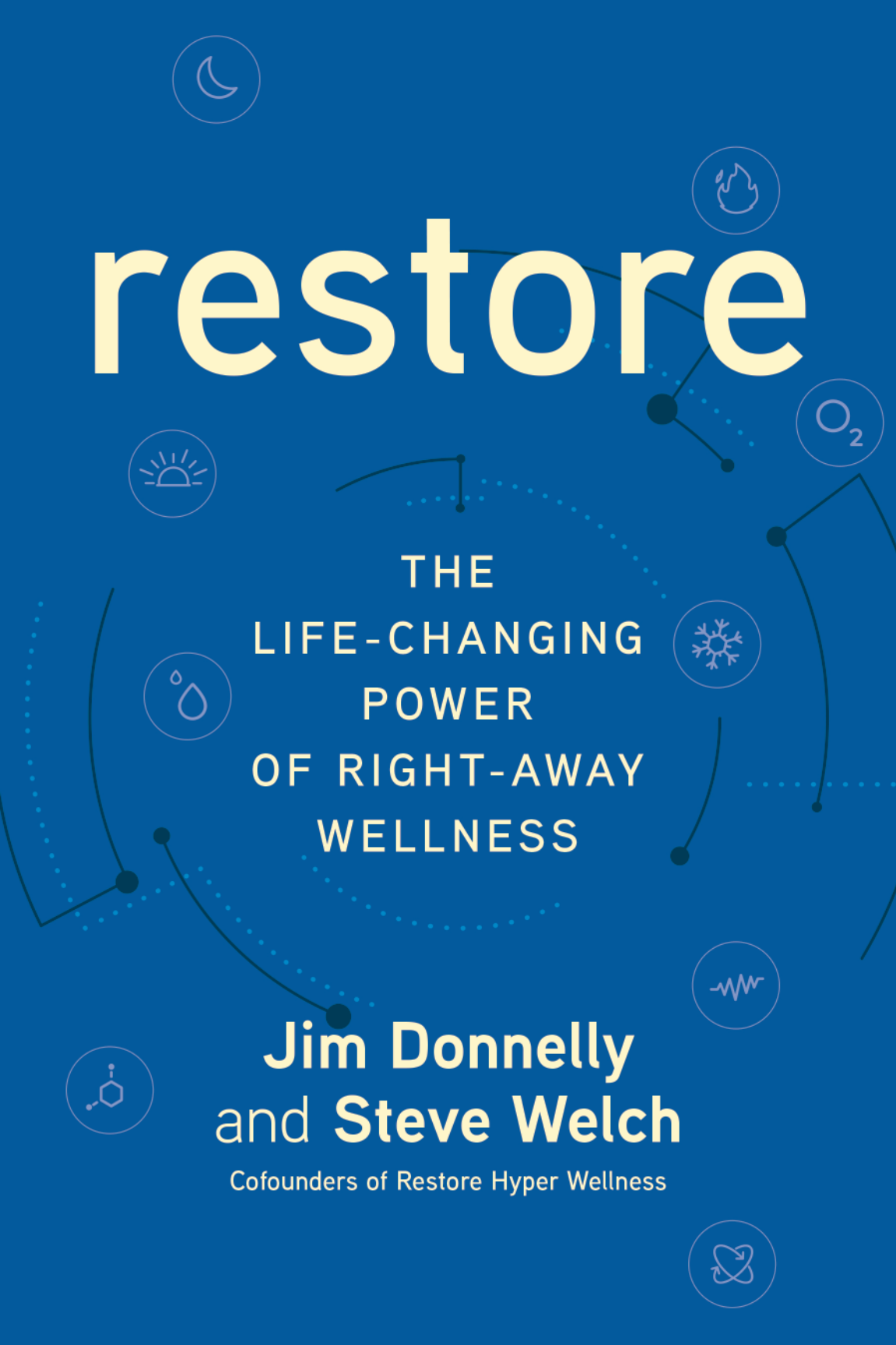
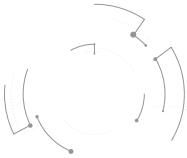

restore
THE LIFE-CHANGING POWER OF RIGHT-AWAY WELLNESS
Jim Donnelly and Steve Welch
Cofounders of Restore Hyper Wellness



chapter 1

hyper wellness

It might feel a little silly, but if you're able to get over the initial weirdness of it all, we'd like you to take a journey throughout your entire body. This might be best accomplished while standing in a relaxed position, sitting comfortably in a chair, or lying down, but even if you've got this book propped up on the stand as you're walking on a treadmill, or you're listening to it while driving, you'll still be able to do most of the things we're about to ask you to do.

Let's start with your legs. Everybody's legs are different, of course. Maybe yours aren't quite like the one we'll describe. That's OK. Stick with us as best as you can through this exercise. Begin with your toes. Connect with them, one by one, from the little guy on the end of your left foot to its counterpart on the end of your right foot. Assess each from the tip of the nail to the point where it meets the rest of your foot, and from the tiny phalanges running down the center to the skin wrapped around each digit. Is there an itch? A feeling of warmth? An awkwardness against a crease of your sock? And is there any pain whatsoever, wheresoever? How does all this compare to how your toes could feel, should feel, or have felt in the best moments of your life? Take stock of that perceived difference.

From there, work your way along the bottom of your left foot, the planta pedis, inch by inch, toward your heel, stopping at the flexor digitorum

brevis, the muscle right in the middle of the sole. When focused directly on that spot, almost everyone will perceive at least a little bit of soreness; this is a muscle doing a tremendous amount of work with every step you take, after all. Take stock again, then keep moving.

Feel your way around your heel, work back toward your toes, and come up toward your ankle again, this time from the top of your foot, the dorsum. Here is where you're at the best vantage to assess the five metatarsals, the upper outline of which some people can see under their skin when they engage in dorsiflexion, pulling their toes toward their shins. Pause there, head over to your right foot, and repeat what you've just done.

Now you're at your right ankle. Move it around a bit. Feel and listen for a popping sensation as you roll it left, then right, then as you flex outward and as you pull inward. What do you perceive in this large joint, where your heel bone, the talus, meets your tibia and fibula, which run the length of your lower leg?

Keep working up your leg until you get to the knee. This is one of the largest joints in the human body and a spot where many people have their first experience with a major injury—one that takes longer than a few days to heal and often has lasting effects for years or even decades to come. That's because, while our knees are designed to bend, twist, float, and glide,[1] they're inadequate for the ways in which we often use them in the so-called primes of our lives, particularly in the context of the sports we play.[2] As a result, people who have had an injury to this joint in their youth or young adult years can often still feel some residual pain, stiffness, or immobility for the rest of their lives. Are you "carrying around" a problem knee? Take note, then keep moving toward your upper thigh. Work your way, layer by layer, outside to in, from the skin to the fascia to the muscle to the femur, the largest bone in the body, then head back to the left ankle and work your way up that leg as well.

We're just now arriving at the hips and, around back, to the largest muscle of the body, the gluteus maximus, which we exert enormous

pressure upon when we sit and which is largely responsible for keeping the trunk of the body upright when we stand. Most people don't really want to contemplate their own butt, but spend some time mindfully assessing this marvelous muscle. Almost everyone carries a little pain or soreness here, or in their gluteus minimus, which is located deeper and extends to the front of the hips, or in their gluteus medius, which rests just above the upper curve of the butt. Do you?

The natural place to go from here might be your body's core, but there's a lot to unpack in there, so instead we'd like you to leave this area and focus on your arms, working your way from your fingers to your shoulders, one side at a time, just as you did with your legs. Once you've done that, you'll be close to your neck—yet another area where many people carry pain and stiffness. Focus on your skin, your muscles, and then your cervical spine—the C1 through C7 vertebrae, and the tissues in between, which are known as the intervertebral discs. Move forward, toward your throat. Swallow softly. Swallow hard. What do you feel?

Now, as we move back to the lower part of your core, we'd like you to feel for discomfort of any sort in your genitals, bowels, and stomach. Is there cramping? Gas? Bloating? Burning? Tenderness? We know how awkward this is, but this is important, so please do spend some time focusing your perceptive attention on all that plumbing down there. When in your life did that part of your being feel *right*? How does it compare to how it feels now?

Now, move up to your chest—to your lungs, esophagus, ribs, and heart. Breathe in as deeply as you can. What do you perceive at the height of that intake of air? Take a few recovery breaths, and then breathe out as much as you can. When you have expelled all the air from your lungs, do you notice a wheeze, a trembling, or a cough?

We're almost done with this exercise, but we still need to tend to our head—a part of the body often and incorrectly considered separate from the rest of our selves, as if part of our being exists below our neck and the

other part exists above it. Move your jaw around. Feel for stiffness. Listen for a sound like soft popping or grating sandpaper. Use your tongue to work around the inside of your mouth, looking for spots that are rough or sore on your hard and soft palate and inside gums, then use it to push, one by one, against the inside of each tooth. Tap your teeth together—right side molars, then left side molars, then the incisors and canines in the front. Is anything loose or painful?

Pinch your nose, let go, and then take another deep breath, this time focused on how the air feels as it moves through your nostrils, into the nasal cavity, and past your olfactory nerves. Do you notice any difficulty bringing air into your body in this way? Any congestion? Direct your perception to the sinuses under your cheekbones, the bridge of your nose, and forehead. Roll your eyes around and about. Take a few hard blinks. Are your eyes dry? Is there soreness in any of the thin rectus muscles that surround your eyeball and help it move in all these directions?

Finally, inch by inch, move from the front of your cranium toward the frontal lobe of your brain, around the sides toward your temples, which rest just outside of the temporal lobe, and up from there toward the top of your brain, the parietal lobe, and down toward the back of your skull, which covers the occipital lobe and, just below it toward the back of your neck, the cerebellum. Assess these areas for headache, migraine, tension, throbbing, or clusters of pain. But also take stock of whether you feel clear in thought, alert, awake, and content.

What did you discover?

Waiting for the Unbearable

If you're like everyone else we've known who has gone through an exhaustive, contemplative exploration of your body, you perceived something that, at a bare minimum, is "not quite right." What's more, in most cases,

people who engage in this exercise will take note of not one area of concern but dozens of places in their bodies with some level of discomfort and often outright pain. If they do it again in a year, many of those problems will still be there. If they do it again in two years, it will become obvious that not only are these persistent problems, but they are problems that have grown in severity, mostly little by little but sometimes in leaps and bounds.

We've grown so used to these feelings that we usually don't even associate them with deficits in wellness. We say, "I've got a little bit of pain in my foot today," or "that's a strange sensation in my gut—I hope it goes away soon" or "my eyes are just tired right now." And unless these problems acutely prevent us from doing something we need to do, we dismiss them—even if they stick around for a long, long time. At that point it's "oh, well that's just my old trick knee" or "I always have a bit of a headache in that spot" or "my neck is always stiff in the morning."

It's only when these discomforts start to become unbearable that most people even consider seeking help. Indeed, we often dismiss these signs even when we know a symptom could be linked to a deadly disease. Researchers have found half of the people who responded to a survey about early cancer warning signs had experienced an "alarm" symptom, such as an unexplained lump or sudden and unintentional weight loss—and some were aware these symptoms could be related to cancer. Even knowing that, though, many of them declined to contact a doctor about their concerns.[3] Most had decided to sit back, wait, and see if things "got worse." Maybe *then* they'd go see a doctor. Or maybe they'd wait some more. Physicians and researchers have found similar resistance in people with symptoms related to heart disease, diabetes, and a wide range of mental health disorders. This might seem completely illogical, but it's also important to recognize that many people struggle to afford a single visit to a doctor—even with insurance, since most policies have large deductibles to meet before assistance kicks in. Others have felt the sting of having previous concerns

dismissed by physicians and don't wish to go through that experience again.

This becomes more alarming when we recognize these are the problems we can perceive. There are many we cannot. Nothing "feels" wrong when a single cell begins to malignantly mutate—and even as a cancer grows and metastasizes, the effects are almost always imperceivable. Often, symptoms come along only when the disease is rampant. Likewise, most people can't perceive the moment in which a gradual accumulation of toxic exposures finally upends the delicate and dynamic chemistry of their blood, setting off a chain reaction of harmful responses as their bodies adjust to maintain metabolism. And as anyone who has ever dealt with a mental health condition (most of us, at one point in our lives) can attest, there is rarely a single, obvious moment in which one's brain shifts from "everything's fine" to "something's wrong." These shifts are gradual and imperceptible at first—which is why so many people wait so long to seek help. It's the proverbial boiling frog.

But it doesn't have to be that way.

Of Math and Morbidity

The way we approach the task of battling injuries, ailments, and diseases has long used disease-level symptoms as the starting place for treatment, such that the term "sick care" is a far more accurate description of modern medicine than the far more common term "health care." If you have any doubts about this, just call a local physician's office and ask for an appointment. Among the first questions they'll ask, of course, is "What are your symptoms?" The expectation is a patient who is *already* perceptibly symptomatic, with the number and severity of those symptoms guiding the process of triage to determine whether someone will be seen right away, next week, next month, next year, or

not at all. This is how it works in privatized and socialized medical systems alike.

A lot happens inside our bodies between the time in which we begin to feel "less than our best" and the time in which a physician says, "You need treatment." But it's not just injuries and diseases that are getting worse during this time. It's our holistic state of wellness—our ability to engage in the world at a level commensurate with our interests, aptitudes, and desires.

A lot happens inside our bodies between the time in which we begin to feel "less than our best" and the time in which a physician says, "You need treatment."

This is raw math—not tremendously more complicated than a simple depreciation equation that estimates a reduction in capacity with the passage of time. With each fractional move away from a theoretical "perfect" state of wellness, the deficits compound, and we miss out on a little more of our potential to satiate those interests, engage those aptitudes, and fulfill those desires. But if we improve the rate of change such that capacity *increases*, the whole world changes in the other direction. This is the promise of right-away wellness, and what makes sick care such a tragedy. As a society we've long told people they must wait to feel better, and we've been failing miserably at helping people feel better *right away*, even though that's clearly the most opportune time to intervene.

So, why don't we have health care that intervenes sooner, accenting immediate wellness and alleviating immediate suffering before things get out of hand? In no small part, we can thank a man named Henry Pritchett, who, as president of the Carnegie Foundation for the Advancement of Teaching in the early 1900s, had his fingers on the purse strings of the largest single philanthropic charitable trust ever established at that point in history. Among Pritchett's greatest priorities was the reformation of

American medical schools, and he directed much of the foundation's enormous wealth toward propping up the country's best research-based institutions—those with the capacity to investigate and test treatments for the most pernicious diseases of the day, including pneumonia, flu, tuberculosis, gastrointestinal infections, and smallpox. These investments were hugely successful, and many of the deadliest diseases from a hundred years ago are now treatable conditions, while others have been almost entirely eradicated. The unintended consequence of this focus, however, was that the schools training doctors for most of the 20th century were less focused on holistic wellness. So, even though people could increasingly go to their doctors for life-saving treatment when they became sick, their physicians didn't often have the knowledge, skills, or time to help patients stay well in the first place.

Hospitals in the early 1900s were also struggling to balance their responsibilities to provide life-saving care with the need to stay solvent, particularly as the Great Depression left many patients unable to pay for the care they were receiving. To address this concern at the 400-bed hospital he helped administer in Texas, Baylor University vice president Justin Kimball devised a plan that would allow local teachers to pay 50 cents per month for "prepaid" care. In December 1929, a teacher named Alma Dickson slipped on an icy sidewalk and fractured her ankle. She was hospitalized over Christmas and released without a bill, having become the first person to be served by modern medical insurance.[4] In the coming decades, as both private and socialized systems gained traction around the globe, the insurance model—which paid for care administered after serious problems developed—dictated the ways care was distributed. Insurers became bigger and more powerful. Care became more specialized and more expensive.

But the breaks-before-fixes structure remained. All the while the fundamental depreciation equation that leads small ailments and injuries to whittle away at a person's capacity for hyper wellness continued unabated,

and generations of people would never know anything other than sick care.

It's time for us to change this dynamic, first by noting that identifying and mitigating even the smallest deficits in wellness is not an irrational obsession. Rather, this exercise can be best thought of as the starting point for a reimagined kind of insurance in which investments are applied to bolster immediate health, thereby preventing today's discomforts from becoming tomorrow's disabilities, all while providing greater capacity to take other meaningful steps toward hyper wellness.

Identifying and mitigating even the smallest deficits in wellness is not an irrational obsession.

Yes, what we're asking you to do, right now, is to completely upend the way you think about health care. And as long as we're doing that, there's another concept that we'd like you to start thinking differently about: aging.

Age versus Aging

For the first part of the 2021 Myrtle Beach Marathon, Ken Rideout stationed himself behind another runner, just trying to stay out of that morning's ocean breeze. When the winds eased, right around the time they reached mile 16, Rideout made his move—and there wasn't another runner in sight for the rest of the race.

The former prison guard and recovered drug addict finished the 26.2-mile course in just under 2 hours 31 minutes. It was his first marathon victory. It was also the day before his 50th birthday![5]

Fifty is such a fascinating age. Most of us know someone who, at 50, is physically fit in ways we can hardly fathom. They are emotionally poised.

They are as mentally sharp as ever, even more than ever. Whether they are religious or not, they live life with a distinct spiritual serenity, a balance of doing and being. And if someone who didn't know that person's actual age had to guess, based only on appearances, they might guess on the very low side of things.

Most of us also know someone who, at the age of 50, is out of shape, beaten up, tired, and losing steam. They are either psychologically fragile or emotionally unavailable or both. They are mentally degrading. They are spiritually lackluster, unable to mindfully exist in the moment or contemplate anything greater than themselves. And if someone who didn't know them were asked to estimate their age, that guess would be on the high side.

Of course, most folks at any adult age are somewhere between these two extremes. They are physically but not emotionally healthy. Or they are mentally but not spiritually fit. There's a spectrum to all these descriptors.

Where each person falls along that spectrum has long been thought to have been mostly a matter of genetic programming. Some people are destined to age a bit slower, and they're like the first person we envisioned. Other people are designed to experience aging a bit faster, and they're more like the second person.

Each of us can play a big role in the rate at which we experience aging.

There is some truth to this way of thinking about aging, although not as much as many people assume. By following genetically identical twins over time and tracking their outward appearance, rates of disease, and molecular markers of aging, early research on this question suggested that genes account for less than a third of how we age. That meant that about two-thirds of aging was attributable to something else. More recently, though, researchers employing large data sets and models that account for even more factors have concluded that heritability accounts for as little

as 7 percent of how a person ages.[6] The other 93 percent is based on a person's environment and, especially, their lifestyle choices, such as what they choose to eat, how they choose to exercise, and whether they choose to smoke. In other words, each of us can play a big role in the rate at which we experience aging. Importantly, this doesn't mean we simply change the fact that we *feel* the effects of aging. It literally means that we can change aging itself.

In mice and other model organisms, scientists have already demonstrated the ability to slow down and even reverse the symptoms of aging—from graying hair and wrinkled skin to weakening muscles and thinning blood vessels—using drugs and supplements aimed at restoring the energy-transporting molecules that are lost in nearly all animals as they experience aging. Although it will still be some time before any of these interventions could potentially be approved by regulating bodies like the US Food and Drug Administration and the European Medicines Agency, which are the standard-bearers for safety and efficacy of medical treatments and therapies, many people are already seeking to implement these treatments in their lives. Others have been more cautious—which is an understandable approach, given the many questions that have not yet been resolved about how and whether these interventions work in human beings. But the vast majority of people are not in either of the "go for it" or "wait and see" camps, because they are still living under the assumption that aging inexorably comes with age.

Before anyone can make progress toward understanding their own wellness, let alone hyper wellness, they must be able to decouple these concepts. So, let's do that: Age is *not* aging.

Age is a unit of time. One voyage around the sun. Two voyages. And so on. This rate is fixed. There's nothing we can do about it.

Aging, on the other hand, comprises the progressive physiological changes that lead to a decline of physical and mental function. This does not happen universally to our entire bodies but rather emerges unevenly

across each of our biological systems and subsystems, and even across each of the 37 trillion cells of our bodies.

When we are young and healthy, almost all our cells function very effectively. Over time, though, our cells begin to break down, and the organs and systems they are part of eventually stop working. The result is less energy and more pain, the earliest signs of holistic aging, which can be thought of as being inversely proportional to holistic wellness. As aging increases, wellness decreases; as wellness improves, aging is mitigated.

This is vital to understand, not only because extreme aging is so brutal, but because aging invites disease. There is no factor that is a greater predictor of heart disease, cancer, stroke, diabetes, and dementia than aging. So, when we slow aging, we also slow all these diseases—a double benefit that results in longer healthspans, the period of life lived without aging-related diseases or disabilities.

To be clear, neither of us is an immortalist; we both believe that everyone will die eventually. We are also not enamored with the view that healthy lifespan extension, in the extreme, is a categorically good idea, even if it was possible. Some very credible scientists have suggested that it's reasonable to assume that healthspans of 120 years and longer may become common in the future,[7] but as a society we would need to make some revolutionary changes to keep that sort of future from being a dystopian one. But while this idea shouldn't be dismissed as fanciful, most people are still many, many decades from anything close to that sort of longevity.

In the meantime, however, what the current research suggests is that even if all medical progress ended at this very moment—if we could rely only on the treatments and therapies we have today—we would still have everything we need to secure 16 to 25 additional years of healthy life for just about anyone. That's possible simply by making lifestyle choices that result in a slowing of aging—or, in the inverse way of thinking, an increase in wellness.

Let's just consider that more conservative number—16 years—and remember, as we do, that we are not simply talking about more years but more *healthy* years: Who would not want to spend an extra decade and a half living, loving, learning, and giving? Who would not want to get to see their grandchildren and great-grandchildren grow and thrive?

Now, let's be even more optimistic (as we both are). Who would not want all that for another quarter-century—or perhaps even longer?

We do. Do you? If so, hyper wellness is the path.

Setting a Hyper Wellness Trajectory

There is one important caveat to the view of wellness and aging as inversely proportional concepts: The years we've lived, the stresses we've faced, and the decisions we've made cannot be undone, and thus, as Shakespeare wrote in one of his most famous works, "Things without all remedy should be without regard." There is no sense feeling guilty for that which has resulted in our current state of wellness. Lady Macbeth was right: "What's done is done." Some of the consequences of those years, stresses, and decisions may not be undone, and so we must come to the goal of hyper wellness with a realistic expectation of potential—albeit an expectation that, as you will see, is often far greater than most people initially allow themselves to believe.

That was the surprise awaiting John, a client at the first studio we opened in Austin. John had suffered a back injury when he fell off a roof at the age of 25 and carried significant pain in his spine ever since. We met him in his early 60s, a time in which he was additionally experiencing a slow decline in energy during and after his biweekly workouts. That's not unusual with aging, and it's what first brought John into our studio for cryotherapy, which has long been associated with decreases in fatigue during exercise.[8]

John's experiences with cryo came with an increase in energy—which is what he was hoping for—but it also led to a substantial decrease in the pain in his back, an experience also aligned to research findings[9] but one that John hadn't so much as dreamed of experiencing himself.

"I've got to say that was a shock," he told us. "I felt like I'd tried everything over the years, but it just kept getting worse. That pain was part of me. It was always there. And I can't say that now, with cryo, it's like I was never injured at all, but there are lots of times now when I don't notice the pain."

But John also figures he hasn't reached his full potential. And, in fact, he can't, for there is no "perfect" state of hyper wellness. There's always room for growth toward potential. And that's an important part of the process. By continuously working toward the goal of bringing his lived experience closer to potential, staying on the virtuous cycle, John is working against the sorts of "small slides" away from wellness that—little by little, and especially for people who are of a greater age—lead to aging and disease.

Thus, one of the most vital steps toward hyper wellness is an assessment of potential. How do we ascertain what is immutable versus what can actually be improved? Here's a good rule-of-thumb question: Have others in similar circumstances experienced improvement?

It might seem hard to believe that every malady that someone else has mitigated is a problem that you can fix as well, and you might not be the kind of person who can embrace that level of optimism, or who isn't ready to do so just yet. That's fine and reasonable. You don't need to believe that you can reach the *apex* of your wellness potential in order to begin moving in that direction. But it's important to understand what is possible, even if those possibilities seem like they could only exist in the extreme, for this is what allows us to take a first step knowing that if and when that step proves successful, it won't be the last. Thus we keep moving, we keep improving, we keep growing, and we keep healing. We get closer and closer to becoming hyper well.

You don't need to believe that you can reach the apex *of your wellness potential in order to begin moving in that direction.*

Taking a Wellness Census

No perceptible improvement in wellness is too small to matter, for capacity is cumulative. If we have many problems to address—as most people do—it also doesn't matter what specific problem is solved first, because a boost in any one part of our wellness will make the next improvement more likely. So, while it makes sense to target a precise problem, it's not necessarily a failure if the first intervention we try doesn't mitigate that specific issue, particularly if we perceive a benefit in some *other* area of our life.

This will become clearer as we dive into many of the therapies we will discuss in this book. None of these interventions are targeted at just one problem; the research tells us that all of them can be multidimensionally effective. By way of example, we'd like to introduce you to Marie, who at the age of 53 decided to become intentional about addressing a problem she had been dealing with for many years, chronic joint pain, which was preventing her from exercising.

Marie hadn't heard about whole-body cryotherapy at that time, but she had heard that ice baths could be effective for reducing joint pain. So, every evening before she worked out, Marie would fill a bathtub with cold water and drop in as many ice cubes as she was able to make in her freezer that day. She would slide into the tub, staying immersed in the frigid water as long as she could, and then get out. She did this for a week, then two, hoping she would be among the group of people for whom this therapy works to alleviate joint pain.

As it turned out, her joints *didn't* feel any better. They didn't feel worse, but there was no perceptible improvement in this aspect of her wellness. It was still painful to exercise.

What Marie did notice, however, was a perceptible change in mood. "It wasn't a huge difference, at first, but it was noticeable," she said. "I was waking up less unhappy and more content."

This makes plenty of sense, because research has shown that even a single session of cold-water immersion can lead to significant emotional boost.[10]

There is a wealth of clinical evidence showing that exercise can improve one's mood, but the opposite is also true: When our emotional states improve, we have more resilience. We can exercise more. So, Marie did. She was still feeling pain and stiffness in her joints. But she had the emotional capacity to go just a little bit farther in the face of those challenges. Instead of looking sadly at the exercise bike in her living room and deciding she just couldn't do it, she would hop on and pedal for a few minutes. And no, this wasn't the Ironman Triathlon, but it was a little bit more than she could do before, and after a few weeks she found she could do even more. The *targeted* problem hadn't subsided, but Marie was nonetheless deriving a wellness benefit. That's a meaningful success. Yet if Marie looked at this experience only through the lens of whether it improved her joint pain, she would have seen it as a failure.

We do tend to miss things we are not looking for, and there are few better examples of this than the famous "invisible gorilla" experiment, which employs a video of six people—three of them wearing white shirts and three wearing black—who are moving about and passing basketballs with one another. People watching the video are asked to count the passes made by the individuals wearing white. Most people who watch the video get the right answer of passes, or come close, but what many viewers also miss is that, in the middle of the video, a person wearing a gorilla costume strolls into the middle of the passing circle, thumps its chest, and then walks away. If you watch the video and know to look for the gorilla, you

can't miss it. But if you don't, it's astounding how easy it is to not even notice the person in the ape suit.

We do tend to miss things we are not looking for.

This is why a "wellness census" is so important, preferably (but not mandatorily) before you engage in any of the therapies we will be detailing later in this book. There are many different ways to conduct such an assessment, but perhaps the easiest starting point is to take a journey through your body, much like the exercise we suggested at the start of this chapter. When you move methodically throughout your body, you'll come to recognize the places that are not doing what they are designed to do, in either obvious ways or more subtle ways. When we earlier described this whole-body assessment, we suggested you make a mental note of those issues, but when you go through this process again it would be beneficial to first turn on an audio recorder. You might not have a medically proper name for what you discover, and that's OK. The truth is that there might not *be* a clinical definition for what you're feeling. So just do your best to describe it. You might simply say something like "There's a warm, slightly painful feeling under my left shoulder" or "There's a faint pinching sensation below my ribs when I take a deep breath."

Do this with your body at rest. Do it again as you stretch in every direction you can manage, and then again with your body in motion at a slow and comfortable pace of walking, and again at a jog, and then again at whatever speed of running, swimming, biking, or other cardiovascular exercise you can maintain at length, making verbal notes along the way. It might be a good idea to do this several times over a week or two, then transcribe your audio notes into a document or, better yet, a spreadsheet.

A medical exam is a wise second step, as your physician may recognize problems that you do not. A slight heart murmur. Blood pressure a little on the high side of a healthy range. A bit of damage in your ear canal.

Many well-intentioned doctors won't even make note of issues that they feel are "typical" for someone of your age, so it's important to let your physician know that you'd like them to alert you to *anything* that could be improved, even if they don't view it as an area of great concern. Add your doctor's observations to your list.

Physical exams are often accompanied by a few routine tests, including a blood panel. Most patients never look at the results of these tests—they rely on their doctors to tell them if anything is wrong. But many physicians are reluctant to flag anything that isn't far away from the putatively healthy "reference range" of upper and lower limits, so it's good to see these numbers with your own eyes. If you can't access a blood panel from your physician, consider getting a test done in a private clinic, at a studio like Restore, or from a reputable online testing provider. Don't panic over what you see when your data arrives. Don't seek to diagnose yourself. Just become aware of these data, and add the numbers to your list.

We shouldn't neglect mental health. Just about everyone can benefit from a formal psychological assessment, but if you're feeling mentally fit, there's not necessarily a pressing reason to take on that burden of time and expense. What can be helpful over the long term, however, is one of the many self-assessments that are available online and are backed by a reputable clinical source, preferably one that allows you to provide your answers on a scale and to see and save those answers over time. If taking a test like this alerts you to a potential struggle that you might need some help addressing, that's a positive outcome. But even if no substantial problems are revealed through a self-assessment, it's good to remember that more than 50 percent of people will be diagnosed with a mental health disorder at some point in their life, so keeping this data as a baseline may be valuable down the road.

There are ways to go much deeper—and depending on your time, interest, and resources, this can be advantageous. Your personal genetic code won't ever change, but many people find it beneficial to undergo personal

DNA sequencing, especially as research has made it increasingly possible to connect specific genes, and combinations of genes, to one's risks for many health conditions. This can be done via mail through reputable companies, but some people who are worried that they might mess up the process if they do it themselves prefer to have it done at a testing lab in their community.

In contrast to your unchanging genetic code, your epigenome—a collection of molecular markers that rest on everyone's DNA and have the power to modulate genetic expression—is malleable over time, and is increasingly being connected to propensities for physical and mental wellness. The epigenome may also be the best place to assess biological aging. Tests that measure various epigenetic markers, including those that are associated with aging, are increasingly accessible and affordable.

Finally, there are a growing number of biomarkers that aren't often part of the routine clinical testing most people get from their physicians, but that have been demonstrated to be useful, particularly in association with the ways in which our bodies utilize nourishment. Knowing this data can help you see changes when and if they come, which is why biomarker testing has been among the most sought-after services we offer at Restore.

People will go about all this in different ways. Some will want to have as many data points as possible to assess and track their wellness over time. Others get overwhelmed by stuff like this; for them, a simple self-assessment of how their body feels will be enough. Most folks will be somewhere in the middle as a condition of interest, time, and resources. There is no right answer. Do what you can and what feels right for you.

If you don't do anything, though, it's almost certain you're going to miss the gorilla in the middle of the room. And while that doesn't render the process toward hyper wellness impossible, it will slow down the journey.

Not sure how you feel about this one way or another? Start small. Make a ranked list of 10 things you're already aware of that you'd like to

improve upon, and target the top item on that list, while keeping watch for changes to the others. Over time you may decide to be more regimented, and that's fine, too. The important takeaway is that you put yourself in a position to perceive improvements in your wellness—the "feel better" part of the virtuous cycle—because that's when the "do more" part comes into play.

There is no right answer. Do what you can and what feels right for you.

Getting to the First Rotation

Once you've done *something* and felt better because of it, it's time to do *something else*. If the first therapy you tried addressed the problem you were targeting in sufficient measure that it's no longer a problem, then it's obvious that you'll need to select another target. Consult the document you created as a result of your wellness census, identify an issue that has potential for mitigation, find the research-backed interventions that have been demonstrated to be effective (this book will hopefully be a great resource for you in this regard, but we encourage you to become comfortable searching the vast library of peer-reviewed literature available from the National Center for Biotechnology Information), and get to it.

What might not be so obvious, however, is what to do if the therapy you tried didn't sufficiently address the problem you were targeting. At first blush, it might seem that the right answer would be to choose another intervention that research suggests may positively impact that same area of concern, but that may or may not be the right approach at this point in your journey toward hyper wellness.

Here's why: People often try to alleviate the biggest problem they are

facing. And this makes some sense, because eliminating big problems can pay big dividends in terms of capacity: If you're successful, you'll feel *a lot* better. Ergo, you'll be able to do *a lot* more. The virtuous cycle will start with a turbo-charged success!

But big problems generally become big problems because they are akin to an extensive quantity—a principle from classical mechanics that describes a system whose magnitude is the sum of its subsystems, and that can be applied to biological systems as well. So, if a therapy documented to often have a beneficial effect doesn't result in that intended effect, the reason might be because the complexity of the problem outweighs the directness of the solution.

Or, at least, that might be the case *at this moment*—but it doesn't mean that all hope for mitigation is lost. Rather, it means that the best approach may be to move on to another target, seeking to build capacity a little at a time for an eventual run at that bigger, more extensive problem.

For instance, the first issue Marie identified for intervention was stiffness in her joints. The nightly ice baths didn't at first seem to be having any success in addressing that issue, but she did seem to be in a better mood, and that provided her with a bit of energy for more exercise. The truth is that there are a lot of other interventions for sore joints that have a good deal of research to back their effectiveness. Heat can help,[11] as can acupuncture.[12] So can meditation,[13] massage,[14] and some supplements.[15]

But joint pain wasn't the *only* problem Marie was facing. She also retained soreness in her muscles for days after she exercised. That was never a big problem—it's something that many people deal with as they experience aging—but now that she was exercising a little bit more, the soreness seemed to be sticking around a little bit longer. Although this was never the most pressing problem on her list, it was an issue with a lot of demonstrated potential for mitigation—particularly through compression therapy.[16] When Marie learned this, she purchased a set of compression tights, and she made a habit of putting them on right after her post-workout

shower. Soon, she noticed a subtle change: The muscle pain she was experiencing wasn't lasting as long as it did before! And so she could exercise a bit more often.

This is what we call a "rotation" on the virtuous cycle—the moment in which an intervention leads to an improvement that, in turn, permits you to engage in another intervention. Marie tried an intervention, it helped her feel better, so she could do more. She tried another, and it also helped her feel better, and now she could do more again. And the awesome thing that happened, in her case, is that these two interventions were working in tandem to permit more exercise—which is itself an intervention that accentuates wellness and slows aging.[17]

Is this the point at which a person's joint pain begins to be alleviated? For some people, perhaps. Exercise has repeatedly been shown to be effective for this problem.[18] For Marie, it would take a few more rotations of the cycle, but we are happy to report that she did eventually arrive at a life of substantially reduced pain and increased mobility!

No one is like anyone else. We all have different challenges and different goals. We're also all going to choose different therapies, based on what is available and affordable—or perhaps based on what seems most intriguing to us as individuals. Some people see a cryotherapy chamber and think, "Hell yeah!" Others see one of these machines and say, "Oh my, I'm not sure about that." That therapy might work on both types of people, but if someone is initially nervous or skeptical about an intervention, that's probably not the right starting place for them, and it might not ever be something they're willing and able to try. There's nothing wrong with that. We're all going to take a different path toward hyper wellness.

What is important for everyone, equally, is *staying on* the virtuous cycle—using a little bit of the capacity you earn with each rotation to do more, so that you can continue to make progress toward your potential.

We're all going to take a different path toward hyper wellness.

Live More

As we mentioned, research suggests that in the long term, the virtuous cycle we've described may accentuate wellness and slow aging enough to offer 16 to 25 additional years of healthy life. But while good health can help promote happiness, these words are not synonymous. Indeed, over the years most of us have met some people who appear to be fit and vigorous well into their 80s and 90s, and yet they don't appear to be happy. They're cantankerous. They're miserly. They don't seem to have many close friends or devoted family members. It's sad.

If we're not using the healthy years we earn by virtue of a hyper wellness lifestyle to do the things that bring joy to our lives, then what's the point?

The same can be said for the short term. The capacity you generate as a result of therapies that prove successful for alleviating immediate suffering and accentuating immediate health can be wholly turned toward "doing more" in terms of more such interventions. This is just what smart novice entrepreneurs do when they first turn a profit. They don't buy a fancy new car; instead, they reinvest in their business. In the same way, it can be good to reinvest all your earned capacity into your immediate health when you are only a few rotations into your journey toward hyper wellness. This itself can be a source of joy for many people. But if you don't *ultimately* use some of this capacity to bring joy to your life in other ways, then, again, what's the point?

If you've been suffering from joint pain, and your path toward hyper

wellness has alleviated that pain enough so that you can exercise more, then by all means use that capacity to exercise more. But also use it to go on walks with your friends. Use it to play a sport with your children or grandchildren. Use it to take up a new hobby. Use it to volunteer to help people in need in your community. Use it to bring joy to your life—right now. Use it to feel alive, fulfilled, loved, needed, and purposeful. Wonderfully, investing in yourself in these ways is capacity-generating, too, for when we live a life of joy, we want it to keep going, thus we generate fuel for the next turn of the virtuous cycle, and the next after that, and the next after that.

Along the way, you'll hit some obstacles—many that will reveal themselves early into this journey, and some that will appear only once the voyage is well underway. But you'll also soon recognize that there are elements of your life that will keep you moving in the right direction, and some of these things are also going to reveal themselves early in this process, while others will come along when you least expect it. These are the "headwinds" and "tailwinds" of the hyper wellness lifestyle, and before we begin a deep exploration of how to mitigate and accentuate these winds, we need to know where to find them.