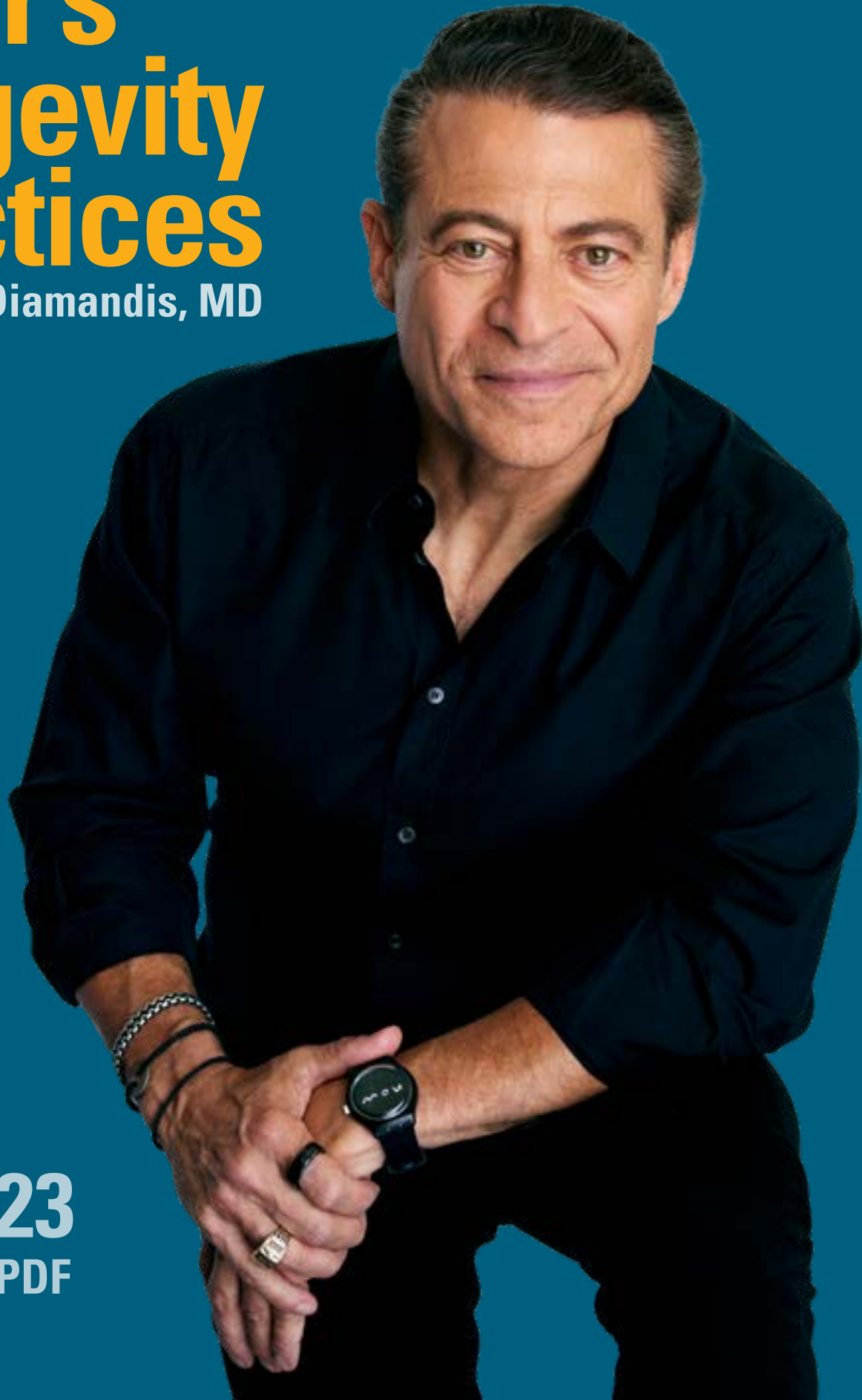


Peter's Longevity Practices

by Peter H. Diamandis, MD



Fall 2023
SUMMARY PDF

Preface: An Intro to Longevity Practices

At 62, I am grateful to be in peak condition—physically, mentally, and energetically. My journey to this state wasn't a matter of luck but a result of dedicated effort and prioritizing healthspan. My mission is clear: to maintain my optimal health for the next decade, aligning with the advent of new therapeutics aimed at decelerating, halting, and potentially reversing aging.

Over the last ten years, my focus has been on understanding and exploring vitality and healthspan. I've delved deep into biotechnology, longevity diets, exercise strategies, sleep, and more. My engagement in various platforms like the Moonshots podcast and events such as Abundance360, coupled with my involvement in longevity-focused companies like Fountain Life and Lifeforce, has enriched my insights.

In a world overflowing with information, the challenge is to keep it all straight and accessible. That was my motivation for writing the book "LONGEVITY: Your Practical Playbook". It serves as a practical reference, curating a wealth of material into an easily consumable format, backed by rigorous scientific research.

I've produced 'Peter's Longevity Practices' to provide a concise insight into the more comprehensive full-length book for people that want to participate in the Healthspan Revolution. My intention is to widen access to this valuable information and encourage followers who are taking their first steps on this path or looking to go deeper.

I hope this short book proves beneficial to you. More importantly, I hope it inspires you to prioritize your health. In today's world, health truly is the new wealth. Remember, "The individual who has health has a thousand dreams. The one without it has but one."

Here's to an extraordinary decade ahead.

Peter H. Diamandis, MD

Founder and Executive Chairman, XPRIZE Foundation

Executive Founder, Singularity

Executive Chairman, Fountain Life

Curator, Abundance360 & Abundance Platinum

Author of "Abundance," "BOLD," "Future is Faster," "Life Force," "Exponential Organizations 2.0"

Peter's Legal Disclosure

I am an educator, entrepreneur, and scientist. ***I am not a clinician and cannot make clinical recommendations for the prevention or treatment of any disease. In making these suggestions, I am expressing only my own views and sharing what I am personally doing for my health.***

No one should start taking any supplement or medications without first checking with his or her personal physician. Some supplements can be dangerous for people with certain pre-existing medical conditions, and supplements can interfere with some prescription drugs. Supplements can and will affect people differently.

In general, the FDA is limited to post-market enforcement because, unlike drugs that must be proven safe and effective for their intended use before marketing, there are no provisions in the law for the FDA to approve dietary supplements for safety before they reach the consumer. **Note:** The evidence of benefit for most of these supplements comes from laboratory experiments and/or from epidemiology data, not from human clinical trials.

Supplements should only be purchased from trusted retailers and brands. Testing has shown that many supplements are tainted with unlisted ingredients and/or do not contain the amount of the supplement listed on their label.

For additional, more detailed recommendations in the categories of sleep, exercise, diet and supplements, please read *Life Force*, a book jointly written by me in partnership with Tony Robbins and Robert Hariri, MD, PhD.

“Life is short... until you extend it!”
—Peter H. Diamandis, MD (October 2023)

Preface: An Intro to Longevity	1
Peter’s Legal Disclosure	2
Chapter One: Longevity Diet	4
Chapter Two: Exercise Practice	6
Chapter Three: Sleep Practice	9
Chapter Four: Annual Fountain Upload	11
Chapter Five: Meds & Supplements	14
Chapter Six: Longevity Mindset	17
Chapter Seven: Women’s Health	20
Appendix A: Blue Zone Wisdom	23
Appendix B: Recommended Reading	26
Appendix C: Product Recommendations	27

Chapter 1: Longevity Diet

“100 to 120 years is a nice range, but what I want is to live with passion and aliveness. I want energy, vitality and strength during that time. I want to be able to keep rejuvenating. That, to me, matters the most.”

—Tony Robbins

In my sixth decade, I've come to a profound realization: what I eat directly sculpts my health and cognition. Mastering nutrition is not just a personal endeavor but part of the quest for longevity. Here are three areas to focus on for enhanced healthspan:

- 1) **Avoiding Sugar:** To me, sugar is more than just empty calories; it's a detriment to health, contributing to higher blood pressure, inflammation (cardiac and neuro), weight gain, diabetes, fatty liver disease, and fuels cancer. Studies with rats have shown that sugar can be as addictive as cocaine.

Every year as part of **Abundance360**, I join nutritionist Dr. Guillermo Rodriguez Navarrete (Fellow of the American College of Nutrition, FACN, and a member of the American Society for Nutrition) to take members through a “**22-day No-Sugar Challenge**” on WhatsApp.

Whenever I have a craving for something sweet, I will satisfy it with a bit of dark chocolate (>75% dark cacao). I don't eat dessert and have conditioned myself to say “no” immediately when it's offered at the dinner table or restaurant, so I'm not even tempted.

- 2) **Prioritizing Protein:** Protein is a critical component of my diet and I prioritize getting enough of it. Typical advice suggests 0.80 grams of protein per pound of body weight (1.6 grams per kg), but that may be too low to maintain muscle mass as we get older. So, my personal goal is now 1.0 gram of protein per pound of body weight. That means I take in a whopping 150 grams per day (I weigh about 145 pounds).

I make sure to consume protein from diverse sources including fish, eggs, chicken, nuts, beans, and legumes. I don't eat dairy products or beef because of an allergy to the casein in dairy, and the association of red meat with cancer.

Three times per week I drink whey protein shakes (especially on days I'm lifting weights), and have plant protein shakes on all other days.

In particular, I love **Ka'Chava** (chocolate), which I enjoy as a breakfast and sometimes as a snack. I supplement this with a great "hot" protein drink called **Nutri11** that I use to replace my morning coffee. It has zero sugar and 11 grams of protein. I LOVE the way it tastes. Another way I replace coffee is with a hot mug of **MUDWTR**, which is a black tea powder containing a number of beneficial mushrooms.

NOTE: It is important not to consume a day's worth of protein all in one sitting but instead to spread it out over three to four servings during the course of the day. Doing this will maximize muscle protein synthesis, enhance recovery, sustain an anabolic state, optimize nutrient utilization, and also manage appetite.

- 3) **Fasting:** Minimizing overall calories is proven to promote longevity in almost all animal models tested, including non-human primates. However, I no longer do 19-hour fasts as a clinical trial proved there were no real cardiometabolic benefits, and due to my desire to consume 150 grams of protein over the course of the day on a distributed basis.

There does appear to be good evidence that multi-day fasting periods encourage pro-longevity-supporting autophagy. One of the best ways to get the benefit of longer fasts without the pain is something called the **ProLon Fasting Mimicking Diet**, which is a guided, shake-based fast that supports healthy weight loss and cellular rejuvenation. It's a 5-day program that is relatively painless and something I've been doing twice per year. My Longevity physician tells me that, ideally, I should do this once a month for 3 months in a row. More information is available here www.prolonfast.com.

Lastly, I manage my blood glucose using a "continuous glucose monitor (CGM)" such as those supplied by **LEVELs** as well as the **FreeStyle Libre-3**. My goal is to measure which foods spike my blood glucose with a view to reducing inflammation. It also keeps me aware of my eating habits.

"Let your food be your medicine and your medicine be your food."

—Hippocrates

Chapter 2: Exercise Practice

“Extending the healthy human lifespan will increase global abundance and uplift humanity. The equation is simple; longer healthier lives means more time spent at our productive best which means more innovation.”

—Peter H. Diamandis, MD

I use exercise to accomplish two objectives: My first goal is to increase muscle mass, and my second goal is to optimize my metabolic and mitochondrial health.

A Matter of Life & Death

A 2018 study of over *1 million people* published in *The Lancet* found that individuals who engaged in 150 minutes of moderate-intensity exercise per week had a *28% lower risk of death from any cause*. Subjects who engaged in 750 minutes per week—or 12.5 hours—had a mind-blowing **42% lower risk of death** compared to those who never exercised.

There is no known therapy or drug with this type of well-studied effect on human lifespan.

Another recent study found that participants who walked over 4,000 steps a day had healthier brain tissue, better memory, as well as superior cognitive function compared to those who didn't meet the threshold.

These are just some of the reasons building and maintaining muscle mass is absolutely critical, and it is not a “once and done” activity. Building muscle needs to become part of your regular routine. Muscle mass decreases approximately 3 - 8% per decade after age 30, and the rate of decline is even higher after age 60.

Building Muscle

I work out three times per week using heavy weights for both my upper and lower body (Sundays at Gold's Gym with my trainer TR and twice per week with Speck at Equinox). Each session is an hour long, guided by a trainer who pushes me harder than I can typically push myself.

This year, in pursuit of adding 10 lbs of muscle mass, I invested in an at-home all-in-one AI-enabled workout system called **Tonal**, which I use on days I'm not lifting free weights. The Tonal system combines the best of strength training with the innovation of smart technology. Tonal is a wall-mounted unit that harnesses electromagnetic resistance to simulate weights. The interactive display coaches users through personalized strength training exercises as the system intelligently adapts to each individual's needs and calibrates workouts in real time.

Last year, I purchased a **Katalyst Suit** to get the benefits of electro muscle stimulation (EMS) at home. I wear the suit for 20-minute sessions where electricity stimulates my muscles to contract. This helps me maintain muscle mass when I'm short on time and it also helps create variety in my workout. One recommendation is that you *remain very well hydrated* when using the Katalyst Suit and don't overdo it.

VO2 MAX & Mitochondrial Health

Having plenty of muscle is great, but it is the metabolic health of your muscle and its mitochondria that counts. VO2 max, or maximal oxygen uptake, is the ability of your mitochondria (the powerplants of your cells) to convert oxygen and glucose or fat into energy for your body in an efficient fashion. It's a measure of the maximum amount of oxygen that an individual can use during intense exercise, and a key indicator of cardiovascular fitness and aerobic endurance.

Several studies have found a direct correlation between VO2 max and longevity. Higher VO2 max levels in middle age have been associated with increased survival rates in older age.

I work on improving my VO2 Max using steady-state cardio and interval training. At least 3 (ideally 4) days each week I do moderate "Zone 2" cardio exercise for 45 – 60 minutes. I start light jogging / brisk walking, cycling, or playing tennis and use a Polar Verity Sense to measure my heart rate. Once I'm in Zone 2 (which, for me, is about 110-115 bpm) and maintain it there for an hour.

Here's how you calculate your **Zone 2 heart rate**:

- **First, calculate your maximum heart rate ("max HR")**, which is equal to 220 minus your age. For me: $220 - 62 = 158$
- **Second, calculate the lower limit of Zone 2**, which is equal to your max HR x 60%. For me: ~ 100 bpm
- **Third, calculate the upper limit of Zone 2**, which is equal to max HR x 70%. For me: ~ 110 bpm

In addition to this, 1 or 2 days a week I replace a steady-state cardio with a High Intensity Interval Training (HIIT) workout. I warm up for 5 – 10 minutes then alternate between 1 minute of high-intensity exercise (such as sprinting or fast cycling) and 1 – 2 minutes of low-intensity recovery. I repeat this cycle for 20 – 30 minutes.

Setting & Tracking Goals

Living to 100 isn't the problem most of us will face, the problem is the condition in which we will arrive. If you are over 60 years old, exercising just twice per week with weights (resistance) doing push-pull type exercises (push-ups, pull-ups, deep knee bends, etc.) has the effect of reducing all-cause mortality by 50% and reducing your risk of cancer three-fold. My friend, Regan Archibald and my coach Dan Sullivan (Founder of Strategic Coach®) collaborated to create "Your Fitness 50 Benchmark" as a simple means of self- assessment, goal setting, and tracking progress.

The 3 levels are Fit, Fitter, and Fittest. I see them as motivation to make improvements no matter what age or fitness level you are at. I like to work on each of the 11 benchmarks simultaneously once a week. The purpose is to have a baseline fitness threshold that you can enjoy when you are 100 years old. An explanation of each category and my numbers can be found in the full-length LONGEVITY: Your Practical Playbook book.

Your Fitness 50 Benchmarks

Successfully go to Fit to Fitter to Fittest in each category

FIT		FITTER		FITTEST	
Push Ups: 50 Seconds	15	Push Ups: 50 Seconds	25	Push Ups: 50 Seconds	40
Plank Hold	1 Minute	Plank Hold	2 Minute	Plank Hold	3 Minute
Grip Test: Dead hang	30 Seconds	Grip Test: Dead hang	60 Seconds	Grip Test: Dead hang	90 Seconds
Squats: 50 Seconds	20	Squats: 50 Seconds	35	Squats: 50 Seconds	50
Wall Squat Hold	30 Seconds	Wall Squat Hold	60 Seconds	Wall Squat Hold	90 Seconds
Lunges: 50 Seconds	20	Lunges: 50 Seconds	35	Lunges: 50 Seconds	50
Sit-To-Stand: 50 Seconds	6	Sit-To-Stand: 50 Seconds	8	Sit-To-Stand: 50 Seconds	10
Sit-To-Rise: No Hands	2	Sit-To-Rise: No Hands	1	Sit-To-Rise: No Hands	0
Single Leg Balance: 50 Seconds	20	Single Leg Balance: 50 Seconds	35	Single Leg Balance: 50 Seconds	50
1-Mile Walk/Run/Elliptical	12 Minutes	1-Mile Walk/Run/Elliptical	10 Minutes	1-Mile Walk/Run/Elliptical	8 Minutes
25 Burpees	4 Minutes	25 Burpees	3 Minutes	25 Burpees	2 Minutes
ACHIEVED		ACHIEVED		ACHIEVED	

Dan Sullivan and Regan Archibald Lifetime Extender Collaboration © eastwesthealth2022

Chapter 3: Sleep Practice

“Sleep is Mother Nature’s best effort yet to counteract death.”

—Matthew Walker, PhD

My Personal Sleep Transformation

In the past, I would pride myself on making do with as little sleep as possible, typically 5.5 hours. My usual excuse was, “I’ll have plenty of time to sleep when I’m dead.” **Boy was I wrong.** Regularly getting 8 hours of sleep boosts memory retention, enhances concentration, augments creativity, stabilizes emotions, strengthens the immune system, enhances athletic performance, and staves off deadly ailments like cancers and heart disease. **I now prioritize getting 8 hours of high-quality restful sleep, and here’s how I do it.** (Much of this information is available in more detail in the books *Life Force* and *Why We Sleep*.)

Establishing Routine: Today, my absolute target is 8 hours of sleep, with 7 hours as a minimum. I’m usually in bed by 9:30 pm and asleep by 10 pm, and typically wake on my own around 5:30 am to 6 am. Setting and sticking to a routine is critical for high-quality sleep. Eight hours of sleep between 10 pm and 6 am is **not** the same as 8 hours between 12 am and 8 am.

Winding Down: For me, this is 30 – 60 minutes, typically between 8:30 pm and 9:30 pm. I turn down the lights, wear my blue-light-blocking glasses to help optimize melatonin levels, and slow down my routine. No TV. No Computer. I’ll get into bed and either meditate on the day (focusing on what I’m most grateful for) or listen to a book on Audible (typically science fiction).

Blocking Light: I love using the **Manta Sleep Mask** (MantaSleep.com). It’s super comfortable, blocks out all light, and avoids putting pressure directly on your eyes. I’ve become addicted to my Manta mask and own 3 of them, and I always travel with one wherever I go. On the other side of sleep, I love to get outside to see the sunrise, to give my visual system and brain the signals to wake up and enter my day fully powered up.

Staying Cool: I set my room temperature air conditioning at a chilly ~64 degrees F (18.2 degrees C). This helps me get your core body temperature down to enter deep sleep. I purchased a cooling mattress pad called **Eight Sleep**, which is a system that cools you down to a chosen temperature. The nice thing about the Eight Sleep mattress is that you can dial a temperature curve through the night. I typically set this at -5

degrees, have the system get cooler in the middle of the night, and automatically warm up to +4 degrees in the morning.

Mandibular Adjustment Device: Sleep apnea is a sleep disorder characterized by repeated interruptions in breathing during the night. It causes fragmented sleep and decreased oxygen intake which leads to daytime fatigue, impaired cognitive function, mood disturbances, and an increased risk of accidents if left untreated over time. To protect against it, I use a specially fitted upper and lower mouth guard called a “mandibular advancement device” designed to help keep the airway open during sleep by repositioning the lower jaw (mandible) and tongue slightly forward. I love it so much that I can’t go to sleep without it. To get one, visit your dentist.

Sleep Supplement: When I have jetlag, or am having trouble getting to sleep the one product I use is **Peak Rest by Liferforce**, which includes a slow-release melatonin formulation, magnesium glycinate, L-Glycine, L-Theanine, and vitamin A. A second hack for me is to have a pad of paper and pen next to my bed to write down my ideas when my brain is over-active in the middle of the night. Getting it out of my head and onto paper allows me to relax and get back to sleep.

Measuring My Sleep: The Oura device gamifies my sleep by giving me a detailed numeric evaluation of how well I slept through the night. Each morning, one of the first things I do is look at my daily “Readiness Score” and “Sleep Score”. My goal is to always see a score of at least 90 on each metric. Many times, just the thought that I will be measured in the morning is motivation enough to get to sleep early and minimize any alcohol or late-night food intake.

Avoiding Late Night Eating: I avoid having any food within 2 hours of going to sleep (so, typically 7:30 pm for my desired 9:30 pm bedtime). This gives my body enough time to begin digestion and prevent heartburn. Not eating before bed promotes autophagy, which is the way your body cleans out all the misfolded proteins and cellular debris. Your microbiome is also healthier when you don’t eat right before bed since it allows the beneficial organisms that do best in a calorie-poor environment to thrive.

No Caffeine After Noon: Caffeine has a half-life of 4 to 6 hours in individuals who are fast caffeine metabolizers and 8 to 10 hours in slow caffeine metabolizers. This means it takes that amount of time for the quantity of caffeine in your body to be reduced by half. Since I am a slow caffeine metabolizer (which I know from my **Fountain Life** genetic analysis), I have chosen to drastically reduce and almost eliminate my caffeinated coffee consumption. On occasion, I may have half a cup when I wake up, but then I will switch to decaffeinated drinks.

Chapter 4: Annual Fountain Upload

“Our aim should be to help our patients die young as late as possible.”

—Tenley Albright, MD

"Reality: Your Body is Masterful at Hiding Disease"

In the quest for longevity and optimal health, it's crucial to acknowledge a sobering reality: our bodies, as intricate and resilient as they are, often mask the early and middle stages of diseases. This hidden progression is a silent threat, one that can suddenly manifest in life-threatening conditions. Consider these startling statistics: 70% of fatal heart attacks occur without any prior symptoms, and similarly, 70% of deadly cancers are those not routinely screened for in standard medical practice. This stark reality underscores the urgency of proactive health monitoring.

In my journey to understand and combat these hidden threats, I discovered the transformative power of advanced diagnostics. This led to the co-founding of Fountain Life, a platform I am deeply involved in, offering cutting-edge diagnostics and therapies aimed at early disease detection and prevention. In this chapter, I delve into how Fountain Life's innovative approach has revolutionized my health strategy and how it can do the same for you.

My Annual Fountain Life Upload

Each year, I undergo a comprehensive diagnostic process through Fountain Life's APEX Membership program. This is not just a routine check-up; it's a 150GB data deep-dive into my health, covering everything from cardiovascular risks to neurocognitive function. The goal? To detect and address any hidden health threats before they become unmanageable.

APEX Member Diagnostic Testing

The APEX program is incredibly thorough. It includes over 100 clinical biomarkers, full-body and brain MRIs, advanced coronary CT angiograms, and a host of other tests, each designed to uncover the slightest hint of a health issue. This level of detail is unprecedented in standard medical care and is what sets Fountain Life apart.

The Importance of Looking

Why subject oneself to such extensive testing? The numbers speak for themselves. Out of every 100 individuals screened, 2% discover unknown cancers, 2.5% find aneurysms, and 14.4% identify critical health issues needing immediate attention. These are life-saving revelations.

Fountain Digital & Fountain Health Benefits

Recognizing the need for more accessible options, Fountain Life has expanded its offerings. The Digital Membership, launching in 2024, brings regular testing and telemedicine consultations within reach for many. Additionally, Fountain Health, launched in 2022, offers health benefits for companies, democratizing access to these vital services.

What's Included in the Fountain Life APEX Upload?

The APEX upload is a journey through the most advanced medical imaging and testing available. From AI-enhanced MRIs and CCTAs to genomic sequencing and epigenetic testing, the range is staggering. Each test provides invaluable insights into one's health, forming a comprehensive picture of where you stand and what you might face.

MyLifeforce

For those at different stages of life or with different financial means, Lifeforce offers an alternative. With comprehensive blood work, hormone optimization, and functional medicine support, it's a more accessible path to personalized health. The success stories, reflected in improved vitality and health markers, are testament to its effectiveness.

Why This Matters

In a world where advanced medical interventions are becoming increasingly available, the first step is staying healthy enough to benefit from them. Fountain Life and Lifeforce are not just about extending life; they're about enhancing its quality. They represent the first bridge in a journey towards a future where medical advancements could significantly extend our lifespan.

To learn more about these groundbreaking health platforms and how they can transform your approach to health and longevity, visit FountainLife.com and MyLifeForce.com.

This chapter is just the beginning; the full details and more in-depth discussions are available in the book.

Fountain Life's Massive Transformative Purpose (MTP):

“Our MTP is to extend Member healthspan using the most advanced diagnostics and vetted personalized therapeutics.”

Chapter 5: Meds & Supplements

“It’s likely that we’re just another ten to twelve years away from the point that the general public will hit longevity escape velocity.”

—Ray Kurzweil

Peter’s Legal Disclosure: *As I mentioned earlier in this book, I am an educator, entrepreneur, and scientist. I’m not a clinician and cannot make clinical recommendations for the prevention or treatment of any disease. In providing the details below, I am sharing the list of supplements and medications I’m taking based on my physician’s recommendation. **No one should start taking any supplement without first checking with his or her personal physician.** Some supplements can be dangerous for people with certain pre-existing medical conditions and supplements can interfere with some prescription drugs. Supplements can also affect different people differently. The FDA has reviewed these supplements to determine whether their listed ingredients are safe to consume but no US regulatory authority has reviewed their ability to address cognition, dementia, Alzheimer’s disease, or human brain health generally. The evidence of benefit for most of these supplements comes from laboratory experiments and/or from epidemiology data, not from human clinical trials. Supplements should only be purchased from trusted retailers and brands; testing has shown that many supplements are tainted with unlisted ingredients and/ or do not contain the amount of the supplement listed on their label.*

"My Prescription Medications"

Navigating the complexities of health and longevity is a journey that requires careful consideration and personalization. In this chapter, I open up about my own prescription regimen, shaped by my specific medical needs and objectives. This disclosure isn't a one-size-fits-all prescription but rather a transparent look at my approach, tailored through continuous blood biomarker testing and expert guidance from my Fountain Life physician.

Managing Cholesterol: A Personalized Cocktail

My genetic predisposition to heart disease led me to a specific cocktail of medications targeting hypercholesterolemia. This includes Zetia, for its unique mechanism of inhibiting cholesterol absorption; Crestor, a low-dose statin with added benefits of anti-inflammatory, antiviral, and antioxidant properties; and Repatha, a biologic that effectively lowers LDL cholesterol levels. It's a regimen that maintains my ApoB levels within an optimal range, illustrating the power of tailored medicine.

Longevity and Off-Label Use: Rapamycin and Peptides

In the realm of longevity biohacking, Rapamycin emerges as a standout for its potential to modulate autophagy and metabolism. Its use, however, comes with significant considerations and potential downsides, necessitating expert consultation. Similarly, peptides like CJC/Ipamorelin and testosterone optimization are part of my routine, reflecting the nuanced balance required in hormone therapy for longevity.

Cognitive Enhancement: Nootropics and Modafinil

To meet the demands of my global travels and the need for sharp cognitive function, I sometimes turn to nootropics like Modafinil. While effective, it's important to recognize the potential risks and ensure it's used under professional supervision.

Skin Care and Beyond: OneSkin and Daily Supplements

Skincare is another critical aspect of my regimen. OneSkin, with its focus on senescent cells, is a daily staple, along with SPF 30 facial sun protection. Additionally, my supplement routine includes Creatine, Alpha Lipoic Acid, Selenomethionine, Lion's Mane, Vitamin D with K2, and more - each chosen based on my specific health needs and test results.

Boosting NAD+: NMN, NR, and Nuchido TIME+

NAD+ boosters have a special place in my regimen. My approach includes NMN, NR, and Nuchido TIME+, all aimed at elevating NAD+ levels, crucial for sirtuins function and overall cellular health. This strategy is grounded in cutting-edge research and personal experience, highlighting the importance of keeping abreast of the latest scientific advancements.

Exploring the Edge: Senolytics, Exosomes, and Therapeutic Plasma Exchange

Under the EDGE membership at Fountain Life, I'm exploring advanced therapeutics like senolytics, exosomes, and therapeutic plasma exchange (TPE). Each of these represents the forefront of medical research in longevity, offering promising yet still-evolving pathways to enhanced healthspan.

Stem Cell Frontiers: Banking and Biobanking

The preservation of stem cells and biobanking is an investment in future medical advancements. By storing autologous adult stem cells and exploring treatments like Celularity's placental stem cells, I'm preparing for the next wave of regenerative medicine.

Peptide Protocols: A Frontier in Medicine

Finally, my use of peptides, from BPC-157 to CJC-1295 / Ipamorelin, demonstrates the potential of these small but powerful molecules in various health and longevity applications. However, their use requires staying informed about the latest FDA regulations and guidance.

This chapter is not a recommendation but a window into my personalized health journey, underscored by the principle that each individual's path to health and longevity is unique. For a deeper understanding and more detailed discussions, the full book provides an extensive exploration into these themes.

“It is health that is the real wealth, and not pieces of gold and silver.”

—Mahatma Gandhi

Chapter 6: Longevity Mindset

“The best way to enjoy your aging process is to take care of your body and mind, to keep learning and growing, and to find joy and purpose in the present moment.”

—Deepak Chopra, MD

Cultivating a Longevity Mindset: My Personal Journey

For me, embracing a Longevity Mindset has been a transformative journey. It's about believing in the power of science and technology to not just add years to life but life to those years. This mindset is a fusion of optimism, education, and proactive health management.

In 2018, after the analysis of a 54-million-person ancestry database, scientists announced that lifespan has little to do with genetics. In fact, heritability is accountable for only ~7% of your longevity. In fact, heritability is accountable for only ~7% of your longevity.

Other studies peg this somewhat higher, estimating that heritability accounts for some 20% or 30% of your lifespan—which means that, at a minimum, that lifestyle choices account for 70% of your longevity.

Understanding the Foundation of Longevity

Longevity is less about genetics and more about choices. Through my experiences and research, I've learned that while genetics play a role, they are not the sole determinants of how long and well we live. This realization empowers us to take control of our health destiny.

The Seven Pillars of My Longevity Mindset

- 1. Belief in Extended Healthspan:** I've shifted from viewing life as a predetermined timeline to seeing aging as a modifiable process. This belief propels me towards a future where living beyond 100 years in good health is a tangible goal.
- 2. Selective Media Consumption:** My reading and viewing habits are carefully curated. I immerse myself in content that fuels my optimism and knowledge about longevity, from groundbreaking books to insightful digital platforms like LongevityInsider.org.
- 3. Building a Community of Longevity Enthusiasts:** The people I surround myself with share my passion for longevity. Together, we exchange ideas, motivate each other, and stay abreast of the latest advancements in health and wellness.
- 4. Sleep as a Non-Negotiable Asset:** I prioritize sleep as a fundamental pillar of health. Inspired by experts like Dr. Matt Walker, I ensure I get the requisite hours of restful sleep, understanding its profound impact on my overall well-being.
- 5. A Diet That Fuels Longevity:** My diet is a conscious choice, rich in whole foods and balanced nutrients, aimed at optimizing my physical function and healthspan.
- 6. Commitment to Regular Exercise:** I maintain a rigorous exercise regimen, focusing on building muscle mass and enhancing cardiovascular health, integral to longevity.
- 7. Embracing Advanced Diagnostics:** Regular health check-ups and advanced diagnostics are part of my routine. These tools provide invaluable insights into my health, allowing me to make informed decisions and catch potential issues early.

Evaluating My Longevity Mindset

I often assess my mindset, asking myself tough questions about my beliefs, habits, and the company I keep. This self-reflection is crucial in realigning my actions with my longevity goals.

The Psychological Edge: Will to Live

The “will to live” plays a pivotal role in longevity. It's about having goals and purposes that make life worth living. For me, these include witnessing and contributing to humanity's advancements in space, technology, and health. My determination to see these dreams come to fruition fuels my longevity.

XPRIZE Healthspan: Catalyzing Global Change

My work with the XPRIZE Foundation is a testament to my belief in human potential and innovation. The Healthspan XPRIZE is not just a competition; it's a beacon of hope and a catalyst for global change, driving breakthroughs in extending our healthspan.

The Societal Ripple Effects of Extended Healthspan

Increasing our healthspan has profound societal implications. From economic to social dimensions, a longer, healthier life means more time to contribute, learn, and experience. It's about turning what was once science fiction into science fact.

My Message to You: Cultivate Your Longevity Mindset

I encourage you to reflect on your own Longevity Mindset. Assess where you stand in terms of beliefs, habits, and the influence of your environment. Remember, the journey to extended healthspan begins with a single, conscious step. Embrace a future where reaching 100 years old in vibrant health is not just a possibility but a probability.

Your longevity is a canvas, and your mindset, the brush with which you paint your future. Choose your colors wisely, and may your journey be as enriching and fulfilling as you envision.

“We show that a slowdown in aging that increases life expectancy by 1 year is worth US\$38 trillion, and by 10 years, US\$367 trillion. Ultimately, the more progress that is made in improving how we age, the greater the value of further improvements.”

—*Nature Aging* (Jul 5, 2021)

Chapter 7: Women's Health

"People are always asking me, 'What do you want people to say about you in a hundred years from now?' I always say I want them to say, 'Dang, don't she still look good for her age?'"

—Dolly Parton, Singer

By Helen Messier, PhD, MD

Chief Medical & Scientific Officer, Fountain Life

Peter asked me to add a chapter on women's health in addition to his excellent advice and longevity practices outlined in the previous chapters.

Before sharing details on what I personally do to extend my healthspan, I think it's important to explain why women, in general, need their own set of longevity practices.

Simply put, women are different from men.

Understanding Our Bodies: Physiology and Unique Health Concerns

As women, we're biologically distinct in numerous ways: higher body fat for pregnancy and breastfeeding, hormonal variations, smaller cardiovascular and pulmonary systems, and less dense bones. These physiological nuances give rise to specific health concerns unique to us – gynecological cancers, menopause, pregnancy, and increased risks of Alzheimer's, depression, autoimmune diseases, and stroke.

Understanding our different immune responses is crucial; women generally have more robust immunity, resulting in lower cancer rates but higher incidences of inflammation and autoimmune diseases.

Closing the Research Gap: A Call for Gender-Specific Studies

Historically, women have been underrepresented in clinical trials, leading to a gap in understanding gender-specific responses to treatments.

This lack of research is evident in drug adverse effects, where 80% of withdrawn drugs exhibited greater harm in women. Moreover, hormonal influences on the brain and immune function are often overlooked in studies. Recognizing these disparities is vital in advocating for and advancing women-centric health research.

Hormones: The Linchpin of Women's Health

Hormones play a pivotal role in our well-being. They govern more than reproductive functions; they impact our brain, bone, heart, and overall health. Understanding the cyclical nature of hormones like estrogen and progesterone is key, especially during hormone replacement therapies. Mimicking natural hormonal cycles can lead to more effective treatments and balanced health.

Ovarian Aging and Reproductive Health

Ovarian aging happens at a pace five times faster than other organ systems, posing challenges in fertility and menopause. Lifestyle factors like smoking, diet, and stress can influence ovarian reserve. Egg freezing, though effective in preserving fertility, faces challenges like OHSS due to intensive hormone treatments. Innovations like Gameto's Fertilo aim to improve egg freezing techniques by mimicking natural ovarian environments, offering safer and more effective fertility solutions.

Intermittent Fasting: A Different Approach for Women

Intermittent fasting's impact on women can differ due to our unique hormonal profiles. Extended fasting might disrupt menstrual cycles, indicating a potential evolutionary mechanism to prevent pregnancy during food scarcity. Post-menopausal women may find fasting more beneficial, but overall, women should approach fasting with caution, considering individual health factors.

Toxin Exposure: A Heightened Risk for Women

Environmental toxins, often found in everyday products, pose a higher risk to women due to higher body fat percentages and societal beauty standards. Awareness and informed choices about personal care products and diet can mitigate these risks.

Stress Management: Essential for Women's Health

Women's multifaceted roles in society contribute to higher stress levels, impacting mental and physical health. Stress management techniques like binaural beats, nature walks, and social support are vital. Understanding the "progesterone steal" phenomenon, where stress diverts hormone production, highlights the need for balanced self-care.

Exercise: Tailoring Approaches to Women's Needs

Exercise benefits both genders, but societal norms often dictate different types for men and women. Women can develop strength ratios comparable to men with proper training and should consider their unique physiological responses to exercise when designing workout routines.

Sleep: Understanding Gender Differences

Women generally require more sleep than men and experience different sleep patterns and quality due to hormonal fluctuations. Tailoring sleep environments and habits to these differences can enhance sleep quality and overall health.

Supplements and Medications: A Personalized Approach

The choice and dosage of supplements vary based on individual needs and physiology. Women typically require lower doses due to smaller body sizes and different metabolisms. A diverse range of supplements catering to gut health, cardiovascular support, brain health, and cellular support, among others, can optimize women's health and longevity.

In summary, embracing our uniqueness as women in health and longevity practices allows us to navigate our wellness journey with greater understanding and efficacy. From hormone management to stress relief, each aspect requires a tailored approach reflective of our distinct physiological and lifestyle needs.

Appendix A: Blue Zone Wisdom

The Blue Zones are regions of the world where people are known to live longer, healthier lives compared to the rest of the population. These areas have been identified through research conducted by the Blue Zones Project. Based on research by Dan Buettner, a National Geographic Fellow and *New York Times* bestselling author, 5 cultures of the world—or blue zones—were identified with the highest concentration of people living to be 100 years or older.



Figure 1. Blue Zone Map shows where today's centenarians are concentrated.

18 "Blue Zone" Secrets for a Longer Life

Following are 18 identified hallmarks of centenarians living in Blue Zones.

How many are you following?

1. **Protect Your DNA:** Safeguard your genetic material by avoiding exposure to harmful toxins and adopting a healthy lifestyle. Use sunscreen and avoid too much sun exposure. Preventing DNA damage promotes overall longevity.
2. **Play to Win:** Approach life with a positive and competitive mindset, setting goals and challenges for yourself. This is important because it keeps your mind engaged, fosters resilience, and adds purpose to your existence.

3. **Make Friends/Community:** Cultivate meaningful relationships and engage with your community regularly. This fosters a support system that provides emotional well-being and a sense of belonging, which are essential for a long, fulfilling life.
4. **Choose Friends Wisely:** Surround yourself with people who uplift and support you in your journey. Your social circle profoundly influences your habits, attitudes, and outlook, impacting your overall health and longevity.
5. **Quit Smoking:** Break free from the grip of tobacco to protect your respiratory health and reduce the risk of life-threatening diseases. If you smoke, quit now.
6. **Embrace the Art of the Nap:** Incorporate short, restorative naps into your routine to recharge your body and mind. Napping enhances productivity and mental clarity.
7. **Follow a Mediterranean Diet:** Prioritize a diet rich in vegetables, whole grains, healthy fats, and fish. The Mediterranean diet is associated with lower rates of chronic diseases and promotes heart health, increasing your chances of longevity.
8. **Eat Like an Okinawan:** Model your eating habits after the Okinawan diet, emphasizing plant-based foods and lean protein sources. This dietary choice is linked to exceptional longevity and vitality.
9. **Get Hitched:** Cultivate a loving, committed relationship or marriage. Married individuals, on average, live longer, with a mortality rate about 15% lower than unmarried individuals.
10. **Lose Weight:** Achieve and maintain a healthy weight through balanced eating and regular exercise. Weight management is essential for preventing chronic diseases and improving overall well-being.
11. **Keep Moving:** Stay physically active through daily exercise and movement. Regular activity boosts circulation and maintains muscle and bone health, enhancing longevity.
12. **Drink in Moderation:** Consume alcohol in moderation to protect your liver and overall health. Reduced alcohol promotes longevity.
13. **Get Spiritual:** Cultivate a sense of spirituality or purpose that gives your life meaning and direction. Spiritual practices can reduce stress and enhance mental and emotional well-being.

14. **Forgive:** Let go of grudges and practice forgiveness to reduce emotional stress and foster healthier relationships. Forgiveness enables mental and emotional longevity.
15. **Use Safety Gear:** Prioritize safety in your activities by wearing appropriate gear (seat belts, ski helmet) and taking precautions. This helps prevent accidents and injuries that can disrupt a long and healthy life.
16. **Make Sleep a Priority:** Prioritize quality sleep by maintaining a consistent sleep schedule and creating a restful environment. Good sleep habits are fundamental for physical and mental rejuvenation.
17. **Manage Stress:** Implement stress-reduction techniques such as meditation, deep breathing, or mindfulness. Effective stress management is crucial for both mental and physical health and longevity.
18. **Keep a Sense of Purpose:** Cultivate a clear sense of purpose in life, whether through work, hobbies, or community involvement. A sense of purpose enhances motivation and resilience, contributing to a fulfilling and longer life.

Appendix B: Recommended Reading

Here are my top 10 reading recommendations if you care to dive in deeper.
Note: these are not provided in any particular order; all are brilliant.

Life Force: How New Breakthroughs in Precision Medicine Can Transform the Quality of Your Life & Those You Love,

by Tony Robbins, Peter H. Diamandis, MD, and Robert Hariri, MD, PhD (2022)

Lifespan: Why We Age—and Why We Don’t Have To,

by David Sinclair, PhD (2019)

Outlive: The Science and Art of Longevity,

by Peter Attia, MD (2022)

Why We Sleep: Unlocking the Power of Sleep and Dreams,

by Matthew Walker, PhD (2017)

The Science and Technology of Growing Young: An Insider’s Guide to the Breakthroughs that Will Dramatically Extend Our Lifespan . . . and What You Can Do Right Now,

by Sergey Young (2021)

Young Forever: Live Longer, Healthier, and Happier Using the Latest Science,

by Mark Hyman, MD (2022)

The Kaufmann Protocol: Why We Age and How to Stop It,

by Sandra Kaufmann, MD (2018)

Fantastic Voyage: Live Long Enough to Live Forever,

by Ray Kurzweil (2004)

Ageless: The New Science of Getting Older Without Getting Old,

by Andrew Steele, PhD (2021)

Ending Aging: The Rejuvenation Breakthroughs That Could Reverse Human Aging in Our Lifetime,

by Aubrey de Grey, PhD (2008)

Appendix C: Product Recommendations

Here's a list of products that I personally use and that have been mentioned throughout this book.

Athletic Greens AG1 – <https://diamandis.net/ag1>

Nutri11 by Dr. Guillermo R. Navarrete – <https://diamandis.net/Nutri11>

MUDWTR: A Coffee Alternative – <https://diamandis.net/mud>

ProLon Fasting Mimicking Diet (FMD) – <https://diamandis.net/prolonfast>

Levels Health Continuous Glucose Monitor – <https://diamandis.net/levels>

FreeStyle LibreLink – <https://diamandis.net/FreeStyle>

Oura Ring – <https://diamandis.net/oura>

Katalyst Electrical Muscle Stimulation Suit – <http://diamandis.net/katalyst>

Tonal – <https://diamandis.net/tonal>

InBody H20N Smart Full Body Composition Analyzer – <https://diamandis.net/inbody>

Manta Sleep Mask – <https://diamandis.net/manta>

Audible – <https://diamandis.net/audible>

Eight Sleep Cooling Mattress Pad – <https://diamandis.net/eightsleep>

Lifeforce Products: – <https://diamandis.net/lifeforce>

- Peak Rest
- Peak Rise
- Peak Healthspan
- Peak NMN

Fountain Life Apex Membership – <https://diamandis.net/fountainlife>

OneSkin's OS-1 – <https://diamandis.net/oneskin>

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“Life is short... until you extend it!”

—Peter H. Diamandis, MD

For more information

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Fountain Life: fountainlife.com

Lifeforce: mylifeforce.com

XPRIZE Foundation: xprize.org