

STAYING HEALTHY, LIVING LONGER!

7 POWERFUL PRINCIPLES
FOR A HEALTHIER YOU!

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CHAPTER 2

GENETICS AND THE POWER OF SELF- EXAMINATION

I am about to challenge your thinking on genetics and its role in the causation of disease.

We will dive deep into the causes of chronic pain and disease, the role of our genes, the discovery that past trauma both physical (injuries), and emotional-psychological, profoundly affect our health and longevity.

Let's first examine the role that genetics plays in the state of our health and the aging of the body.

Part 1: **Genes and Epigenetics: What is driving your Health and Life Span?**

They have proven scientifically that genetics alone can account for only about 10-20% of all diseases. Because of this understanding, it compels us to open our eyes to the remaining factors that influence 80-90% of our health outcomes. This remainder forms the groundwork of the field of "Epigenetics."

Epigenetics is the scientific field that looks at factors within our environment or within our lifestyle, that alter, activate, turn

off, or turn on the genes that determine whether we manifest disease in our lifetime. This means that with certain parts of the genome, there is an external trigger that activates a given gene. Having a particular gene does not invariably produce a particular result, as once believed. Many genes work together with our environment, experiences, attitudes, and lifestyle to produce an outcome. *The actual expression of our genes, or “phenotype” results from environmental and lifestyle factors “washing” over our genes.*

The key take-home news is that our genes are not fixed; life events trigger biochemical changes and turn them on and off. Genes work synergistically with lifestyle and environment to create the reality of what we are experiencing.

One of the best demonstrations of how our environment, lifestyle, diet, and external factors affect gene expression results from studies of identical twins. At birth, identical twins share identical genomes, meaning they carry the exact same genetic hardware. By the time twins are in their 50s, they may have as little as 3% of their genome in common. In other words, these identical twins are now only 3% identical in their expression of DNA! While physical traits, personality, and values are more hard-wired, health and risk of developing certain diseases is highly variable.

So, we know that genes respond and change according to life events, lifestyle, and environmental factors. What is even more surprising is that once these genes change, these genetic changes and tendencies are passed on to future generations. Therefore, epigenetic tendencies are transferred to our offspring.

With few exceptions, the gene is no longer considered the dictator of our destiny, but merely a “blueprint” or a suggestion that is significantly impacted by nutrition, toxins, pollutants, environment, stress, the nervous system, as well as lifestyle factors, such as smoking, alcohol consumption, and a sedentary lifestyle. The view of our genes as fatalistic, cast in stone

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determinants of our health and lifespan, has been replaced with the pliable world of epigenetics.

These discoveries must give way to a new medical model that optimizes health by looking upstream for causes, rather than only treating *downstream symptoms*. A model that personalizes the treatment to each individual's unique combination of genes, lifestyle, stress, nutrition, and environment. This is the foundation of the principles of Functional Medicine. It is unfortunate that at this current time and place, insurance companies rarely reimburse this form of medical care, but I hope that this will soon become more widely available.

In summary, science no longer supports the theory that the 'gene is king'. This is the good news, and of course, the bad news too. In most cases, it is time we no longer use our genes as an excuse. Even germs, and microbes most times, require a conducive environment to provoke pathology.

Dr. Bruce Lipton and his book, *The Biology of Belief*, (Hay House, 2016) advanced the study of epigenetics, and many other progressive doctors in the field of integrative and functional medicine are adding to the research and supporting this growing science.

Dr. Lipton has said that every one of the 50 trillion cells in our body exists in a proverbial "petri dish." In that petri dish, the environment or "medium" is the composition of the blood. This composition determines the fate of the cells. The environment of the cells is largely determined by toxins ingested or within our environment, our diet, and even what we are thinking. They sometimes call this the "terrain". The terrain, or internal milieu, is highly malleable. The brain is like the chemist churning out chemical compounds according to what we 'ingest', the way we perceive the world, and the thoughts we are thinking. If we interpret the world in a positive, loving way, we produce body chemistry that coincides with love and joy. Love and joy are the biological chemistry of health, happiness, and growth.

“The microbe is nothing, the terrain is everything.”
—Louis Pasteur

If the brain perceives the world with fear, anger, or negativity, the body will increase the production of stress chemicals and inflammatory proteins. You cannot be angry, emotionally closed, and bitter, perceive negativity all around you, and concurrently produce body chemistry that promotes growth, repair, healing, a robust immune system, and health.

The gene is a template, and is not, by itself, self-actualizing; it depends on the brain and the mind and the chemistry they produce, as well as the environment in which that gene finds itself to be turned “on or off.” *We are active participants, and not merely ‘at effect’ of our genes.*

A study at Duke University further illustrates this reality concerning environmental influences using genetically identical twin Agouti mice sisters. Both mice carried genes for obesity, heart disease, and diabetes, yet only one was afflicted with these diseases, while the other was thin and healthy. They found that environmental factors, such as toxins and diet, activated the expression of the diseases through a process called Methylation.

Methylation is a critical biochemical process that occurs in our body billions of times per second. It is essential for the proper functioning of all our body’s systems, from DNA repair to detoxification, to the prevention of conditions like cancer, cardiovascular disease, diabetes, depression, dementia, and stroke. Optimizing Methylation is therefore a big deal in healthy aging.

We desperately need to bring the point of control back to ourselves and what we *can* do. Any person can make a difference in their epigenetics. The epigenome is such a large player that if we do not do it for ourselves, we should consider doing it for our children and grandchildren, as we pass the epigenome down to our offspring and future generations.

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While the concepts critical to healthy aging are simple, there are no magic bullets or quick fixes to learn here. What you will learn is to become an alchemist in healing your spirit, optimizing your gene expression, owning the pain and challenges along the way, in order to live long and well into your advancing years.

Better understanding always leads to better choices. Awareness and understanding are the first two steps on the journey toward wholeness and healthy aging.

We must not lose hope, but instead strive to gain understanding and self-confidence, feed our faith more than our fears, and nurture the spirit within that guides us toward our highest good. Are we listening?

Part 2: Do Not Fear, Just Seek Understanding

*“Nothing in Life is to be feared.
It is only to be understood.”
—Marie Curie*

Every journey to health and healing is a journey back to the essence of who we are, our true divine nature. How can it not be?

I will share the critical things I needed to learn about taking care of myself, mind, body, and spirit, making better choices, healing the past, forgiving what I may have been holding on to, and coming back full circle to loving myself. If you are human, this is true for all of us, wherever we are in our journey on this planet. No exceptions.

“Everything that has ever happened to you, every choice you have made, brings you to the health you have today. Each choice puts a brick in the foundation upon which you can build the health you desire.”

***—Dr. Henri Roca, MD, Holistic,
Functional Medicine***

By sharing what is true for me, I am opening the door and inviting you to join me in self-discovery. We can gain understanding and appreciation for how our emotions, lifestyle, and choices play out in our daily lives, day by day, month by month, and year after year. Every choice we make leads to an outcome for better or worse, stacking the deck in our favor, or stacking it against us. Like compound interest in our bank account, we can think of every choice we make as compounding, cumulatively and systematically, building the scaffolding of our health.

I have learned myself, and vicariously through patients, how fear and emotions manifest as physical pain in the body. I have learned through them valuable lessons on how an invincible spirit, attitude, and spiritual connection have immense healing powers.

If you have lived long enough, you have undoubtedly experienced your share of loss, emotional upsets, and grief. Countless times, I have observed how grief and loss are expressed in the physical body, in what we call *somatization*. Somatization is a medical term defined as, “The expression of emotional stress through physical symptoms in the body.” Understanding the significance of this earlier in my career would have benefitted me personally but also clinically in my approach as a therapist.

I realized the body and nervous system are energy storage facilities for our emotions, and past trauma, both conscious and unconscious. These emotions, unexpressed or unacknowledged,

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clamor for attention, sometimes in the form of physical pain or illness that becomes unresponsive to even the best of medical interventions. Emotion is energy, and if unexpressed does not simply dissipate, but rather silently festers and will reappear in strange and unpredictable forms throughout a lifetime. Therefore, until we can acknowledge and process the suppressed emotions, it will be difficult to fully heal, and we may be plagued by increasing states of illness or poor health as we age. Also, hurtful emotions that are ‘swallowed’ or otherwise resisted and avoided, get stronger, not weaker. As the old saying goes, “what we resist, persists.”

According to Gabor Mate’, MD, author of *When the Body says No*, (Wiley, 2011) “Emotional repression disorganizes and confuses our physiological defenses so that, in some these defenses go awry, becoming the destroyers of health rather than its protector.”

What will it take for us to live healthy, long, satisfying lives even though we all deal with continual emotional storms, which threaten our peace and well-being?

If we dare to look within and accept the grace we are given, our bodies will join the dance of healing and amazing transformations become possible. We must be willing to look at the mindsets, beliefs, emotional energy, and behavioral patterns that have become part of our narrative then dare to let go of the story. We need to examine how the threads creating our lifestyle may be unraveling our health.

At the time this became apparent to me, I was deeply entrenched in the traditional allopathic medical paradigm, very analytical and scientific in my approach, ignoring what did not seem to be “following the science.” As with most things in life, we tend to see only what we are looking for. They call this the ‘observer effect’ in Quantum physics. We see things not as they are, but *as we are*, from our own personal lens of reality. We continually look for evidence to confirm our beliefs

and *screen out* everything else. Thoughtful observance of evidence remains indispensable in delivering high-quality health care; however, we need to continuously test the *reliability of evidence* and the limitations of an evidence-based model of care. We need to consider that a disproportionate amount of research is conducted by the pharmaceutical industry and may reflect industry bias.

Research and evidence-based models have limitations when we attempt to apply general research findings to unique individuals with complex histories, genetics, health conditions, environments, and lifestyles. Like many medical practitioners, I also once believed that our genetics determined our destiny.

***“The truth you believe and cling to makes you
unavailable to hear anything new.”***

—Pema Chodron

Earlier in my career, I felt the more tools I had in my toolbox in the form of techniques, manual skills, and new technologies, the better I would be able to help my patients. I eagerly enrolled in new courses and after every new skill I learned, I returned to the clinic with renewed enthusiasm, fired up and ready to help my patients! Even so, very often the healing was not forthcoming or lasting and I became frustrated and perplexed.

Experience and real-life encounters have taught me that instead of concrete manual tools, I really needed to discover the missing puzzle piece as to why some patients did not get better despite these cutting-edge, “evidence-based” techniques. Instead, I needed tools that allowed the body’s innate and miraculous healing to do what it does best when all the “noise,” nonsense, and static are removed, and we cooperate with the natural laws of life and energy.

I discovered the hard truth that no new technology could heal what had to be dealt with internally, in the terrain of our own thoughts, beliefs, attitudes, behaviors, mindsets, and

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mental models. This is an inside job and there are no shortcuts to higher awareness or higher consciousness. We need to do the work, and many times we will get tired and frustrated.

I became acutely aware that *most of the diseases we face today—up to 90 percent of them—are diseases of lifestyle, or in other words, because of the influences of stress, our urban-industrial diet, environmental toxins, emotional trauma, social disconnection, and inactivity.* Even though we know this is true, we interface with a medical model that provides very few options for managing these contributing factors. We try to navigate on a turbulent and dangerous sea without the proper safety gear and equipment. The upside is that when we take hold of the rudders of our ship, using tools of lifestyle medicine, outlined in the coming chapters, we can change course.

Hippocrates, the father of medicine, believed “the forces within us are the greatest healers” and that it was far more important to know the person who had the disease than to know the disease the person had. Our current practice of medicine has moved in opposition to this philosophy. We now practice a fragmented, reductionist approach that is “disease-focused,” “organ focused” and does not honor the unique bio-individuality and interconnectedness of the whole person.

We can no longer afford to ignore what is making us sick in our hearts, relationships, and physical bodies, or continue to cut ourselves off from what the spirit within us needs to thrive. We have a new opportunity every day to allow full expression of our emotional selves, especially those parts we have disowned or kept concealed, as an adaptation to early hurtful experiences. When we reconnect and cooperate with our true nature, we activate natural healing forces, producing positive change for healing the body and changing behavior.

Hidden from our conscious awareness are the many thoughts and beliefs that serve as our fundamental behavioral operating system. We are woefully unaware of the factors that direct every cell in our body and nervous system, every chemical

in our biochemistry, and literally every choice we make. The voices and mental chatter in your head are a part of you, but they are not you—yet they continue to drive your behavior.

Dr. Joe Dispenza, the author of *Breaking the Habit of Being Yourself*, (Hay House 2012) suggests thoughts are energy, and 90% of who we are is a series of memorized behaviors running like a rote, unconscious computer program. Many of the voices in our head, along with ways of responding, are learned in childhood and are not our own, yet we never question them. *They do not reflect our true nature, yet they control nearly everything we do.*

The bottom line: it is vitally important **to free the true self and heal the spirit** if we are going to experience a positive life and health-enhancing change.

The divine light in each one of us is seeking to be known; if it is not, the consequence will often be a deep longing, an unfulfilled yearning, and a restless heart. It may come in the form of malaise, fatigue, discontentment, or even physical pain and illness. When we are in the prime of our lives, it is not convenient to look deeper; after all, we are busy. Instead, we attempt to deny our deeper needs, attempting to satisfy them with material things, status symbols, overeating, overspending, over-consuming, over scheduling, busyness, television, video games, social media, and other distractions. We intentionally distract ourselves from our ‘feeling’ self.

The healing journey is a call to stop the insanity and move toward self-awareness, self-compassion, and self-love while deepening our connection to the divine self and others. This is an act of trust, that life will ultimately give back to us the gift of transformation in exchange for our inner work. We can transcend and overcome what has been limiting us.

I am a member of the enormous group of people that resists change or finds it extremely difficult. Avoiding or resisting change is a common theme I witness over and over in my

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patients and clients. The brain is efficient and likes ‘same’ and ‘familiar’. As we increase in years, we become even less likely to embrace change, are less flexible, and may become more rigid in our thinking. I still believe we are capable of change and so much more than we give ourselves credit for.

Change must begin with an internal yearning for something better for ourselves. No one can want this for us. We will not take any positive action unless we *believe* we can improve and that the choices we are making truly matter. *True awareness*, accompanied by our belief, inevitably changes something for the better. Only from this frame of reference can we develop the skill set needed to reshape our future.

Our power is always in the present moment, it is never in the past. We don’t look at the past so that we can develop a ready arsenal of excuses. After all, we may have plentiful reasons to be sick, tired, and to give up hope of anything better! No matter what has happened in the past, we must use our voices and our choices for positive change now. The human mind is brilliant at rationalizing our less-than-optimal choices and responses. Most of us have had plenty of practice at this, I know I have, but is that the life we really want?

While valid reasons exist, they do not have to become excuses or obstacles to a better way of doing things. If we do not see ourselves as part of the problem, we may never see that we are part of the solution. Let’s begin by believing that we have value and deserve better, and second, permit ourselves to do whatever it takes to set us on higher ground energetically, emotionally, and physically.

***“Argue for your limitations and
sure enough they’re yours.”***

—Richard Bach

Every day we have a choice to act with self-compassion, recognizing and honoring our imperfect, wounded selves,

loving ourselves back into wholeness. The other alternative is to go unconscious, numbing the discomfort of our emotional selves with food, alcohol, consumerism, busyness, and other addictions. Many of us live our lives tottering between listlessness, numbness, and paralysis on one hand, and the need to be busy, driven and scheduled to exhaustion at the other. While few behaviors standing alone are always negative, the real question becomes, *why are we doing what we are doing?* Behavior produced in a state of mindfulness, when we feel good, differs greatly from one arising reactively or unconsciously, attempting to quickly eliminate, an uncomfortable, or undesirable feeling.

Unknowingly, we stifle that “still small voice” rustling to be heard, yet if continually unacknowledged, will get buried deeper in the recesses of our spirit. Sometimes we are not even aware that there is a part of our life story that is running the show. Mental programs are playing silently in our minds and ultimately controlling our behavior. Very stealthily, the mental tape or story we run keeps us fearful, holds us hostage to a life of playing small, accepting less than what we deserve, and making unhealthy choices. The inner voice or self-talk we mindlessly engage in is *negative over 75% of the time, yet we never question these inner conversations, and we allow them to set the upper limits of our life.*

Experiencing apathy, depression, nervous tension, pain, fatigue, and sickness, are clues that we are not living as our body, heart, and spirit commands. Sadly, many people have accepted these states as normal. They may not realize they are unwell because they have disconnected the body, from mind and spirit. These states are not conducive to a healthy, fulfilling life.

Self-reflection is the catalyst for growth and self-awareness. Self-awareness is empowering and *must precede* any life transformation. When we continue in a trance of beliefs and behaviors without questioning them, we remain hypnotized

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and unaware. We can never change what we are not aware of. An important discovery I made is that miracles will magically unfold when you rediscover and allow expression of the true self.

Whatever we are willing to bring into the light for scrutiny, regardless of how scary or uncomfortable it may seem, automatically weakens its effect on us. Real transformation demands that we get comfortable being uncomfortable. The caterpillar is comfortable in the cocoon but knows that his transformation depends on breaking free.

I invite you to take a journey back to the soul with me, where all healing must occur. What sort of miracles can we expect when we take the **journey back to self?**

Part 3: When the Student is Ready, the Teacher Appears

WHY LISTEN TO WHAT I HAVE TO SAY?

It has become a life mission for me to create a movement toward true health that honors the whole person, body (biology), mind and spirit. How and why did I begin this quest? I will give you an inside glimpse at the experiences that have led me to this place.

Through the course of many years of practice, I have treated hundreds of people with chronic pain, arthritis, and other chronic diseases that typically disrupt the pursuit of enjoyable activities and overall quality of our life. It has always been my mission to help others overcome physical limitations and pain and give them a chance to rediscover what brings them fulfillment and joy.

Over the years, I realized that my traditional practice was missing many pieces of the wellness puzzle, so I continued to

pursue ongoing education. I have witnessed an alarming trend of increasing comorbidities, that is, more and more people living with multiple diseases and consuming a plethora of pharmaceutical drugs to “stay alive.” I sincerely believe most people desired to thrive, not just stay alive. It was deeply troubling to witness the chronic pain and the complexities of conditions that people were experiencing, with few options available to them for effective resolution.

In this book, I will draw upon scientific information, examples, and stories from my own experience, as well as those of many patients, to create a formula for true health and wellness. I will reveal the current, emerging science on chronic disease, and the growing body of knowledge on the significance of the mind-body connection.

As an orthopedic therapist, I see many patients in the clinic that have injuries or pain from accidents, falls, and surgeries, and many continue to have pain and limitation long after the original incident has healed.

Previously, the way we viewed pain and disease was with a *biomedical model* which suggested the *symptoms follow the pathology, tissue damage or injury*, with greater damage correlating with greater pain or disease. The biomedical model implies that the problem can be ‘fixed’ only by outside interventions, and the patient is a passive recipient of treatment and a victim of circumstance. In acute care medicine, this applies well. When someone presents to the emergency room with a broken hip, they will require medical treatment to treat and stabilize the injury.

This model doesn’t apply as well when a patient with an injury continues to experience enormous pain and disability, for months or years, despite state-of-the-art medical interventions, while other patients with similar or worse injuries, heal without complication and little impact on their daily living. This disparity was, and continues to be, an enigma to me and places the traditional biomedical model into question.

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There has been a movement away from using the biomedical model clinically, toward using a *biopsychosocial* model of pain and disease. The biopsychosocial model is the forward-thinking model, suggesting that pain, especially chronic pain, is a dynamic, complex interplay between the biological (physical), psychological, and sociocultural variables. Long after the tissue has healed the pain still lurks in the nervous system. We know that chronic pain does not follow the rules. I will cover this in greater detail when I discuss chronic pain.

I have seen many examples of patients with MRI scans and X-rays that suggest they should have tremendous pain and suffering, yet they have minimal complaints and lead normal, happy, and productive lives. While others with few, if any findings on these scans have daily, intractable, chronic pain with disabling effects on the quality of their lives.

As many as 85% of people with chronic neck and back pain *do not* have a clearly identifiable structural cause for their pain. In fact, research has shown that over 50% of 30-year-olds, and nearly 90% of 60-year-olds, have degenerative changes in the spine on imaging such as XRAY and MRI, and **do not** have symptoms. Again, an enigma, unexplainable even with the best diagnostic tools.

When treatments and other interventions cannot bring symptom resolution, patients may be told by their doctors, “There is nothing more to do”, followed by, “You will need to learn to live with the pain,” the limitations, or the new “normal.” Many times they are handed a prescription and told “See you next year.” We can easily understand how many people can lose hope becoming desperate for answers, as I was one such person.

Unknowingly, doctors and therapists may even create a negative expectancy, where the patient no longer expects a positive outcome and begins to lose hope. In medicine, we called this the “Nocebo” effect. It is the opposite of the positive expectancy and positive outcome of the “Placebo Effect.” The

Placebo Effect is a powerful paradigm in scientific, double-blind placebo experiments that reflect a positive outcome from an inert or sham intervention, simply because the patient *believes* it will help. Similarly, the nocebo effect confers a belief that ‘nothing will help’ and they then realize the negative response. The patient no longer expects or has hope for healing.

This highlights the incredible power of the mind and how ones’ beliefs affect the physiology of the body, creating a physical change in the body, either as a negative (nocebo) or positive outcome (placebo) effect. When you are told that medically speaking there is not much that can be done, or that the treatment options may not help the problem, you no longer have an expectancy to be well. This is precisely why it is so critical to guard your mind, thoughts, and beliefs rigorously, and especially after receiving a “diagnosis,” as the effect of the mind on the body is profound. *I cannot stress this enough!* It is not a single, brief, or passing thought that affects our physiology but rather a continuous thought loop or belief pattern that *we buy into*, that has a profound impact on our physiology and outcomes.

Before I had my own epiphany, as a treating therapist, I always felt in my spirit that there was more going on than what meets the eye. These real-life patients were not following “textbook” or “evidence-based” guidelines, nor were they responding to therapy or traditional medical interventions, with any resounding success.

The startling and most upsetting discovery was how many of these younger, middle-aged patients had multiple health conditions, were taking two or more prescriptions, and were still plagued with excess weight, fatigue, high blood pressure, diabetes, and chronic pain. Many had already undergone surgeries with limited relief of their symptoms. In fact, some were worse because of the inactivity and weakening muscular system post-surgery.

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In summary, current research supports that X-rays and scans, such as CT scans or MRIs, are poor predictors of pain and poor indicators of the *actual causes* of pain, especially pain that is chronic. I couldn't agree more! The current studies on pain neuroscience have finally shed some light on why this is the case.

The more we learn about chronic pain and illness, the less can be explained by traditional medical tests or X-rays. Therefore, I believe *we need an integrated approach to treat chronic pain and disease, as it is often an intermingling of many complex factors at work*. As we age, it is this chronic pain that can cause us to feel older than our age, and to give up hobbies and enjoyable activities for a date with our recliner, icy hot, and the remote control!

The best place to start an investigation into any health challenge is always with a history.

As a treating clinician, I began to connect the dots and saw that those who had complex pain and other diseases had other behaviors and lifestyle factors in common as well. There was a common denominator, yet it may be nothing a doctor can discover in a 15-minute appointment. Let's dive into the importance of taking a health and life-experience history.

Part 4: The Importance of a Timeline: Why Everything Matters

“Tug on anything at all and you'll find it connected to everything else in the universe.”

—John Muir

When patients share their histories in therapy, I gather valuable information and gain useful clues they may not share with their doctors. It is therapeutic for the patient to have someone who will listen, who they can trust and share their

story with. A complete and thorough patient history provides vitally important information that a physical exam alone will not accomplish. By allowing the patient to tell their story and listening with empathy and non-judgment, true healing is initiated.

Learning to ask the right questions can reveal the underpinnings of chronic pain or chronic symptoms. A thorough history of chronological life events weaves a rich and colorful tapestry, which is unique for each person, encompassing the mind, body, and Spirit.

Through my own health challenges, I learned to appreciate firsthand the art and science of including a thorough medical history and timeline with the patient's presentation of current clinical symptoms.

The Functional Medicine timeline is one of the valuable tools used by Functional medicine practitioners. It helps explain symptoms that don't seem to fit with the diagnosis, test results, or X-ray, and the reasons why some patients return to health quickly while others continue to struggle with symptoms and declining health. The timeline can uncover valuable information about why certain bodily systems may not be functioning optimally. The Functional Medicine practitioner acts as a detective during the initial interview with the patient, revealing conditions relating to pre-birth, birth, childhood, and adulthood. This creates a pattern unraveling the underlying processes of pain or disease. The more complex the presenting symptoms, the more useful the timeline becomes as an investigative tool.

I discovered many patients had a familiar story about their pain or condition they have been trying to relate for months and years to anyone who would listen. Yet, it seems no one genuinely listened or took the time to reflect their story back to them.

What is the significance of mirroring the patients' story, and why does it matter? I believe it is a critical missing puzzle

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piece that nudges the patient forward on the road to healing. Their personal history and story have become their truth, and this story continues to evoke an emotional and physical reaction. *Inevitably, there is a part of the story that has been 'unknown or unexpressed' and is preventing the movement toward wellness.*

The other commonality was that “chronic stress overload” was a widespread and common denominator. Sometimes the ongoing stress was driving the pain and tension, and the pain and tension was driving the stress in a continual forward feedback loop. *Stress as we will find out, is a potent driver of many states of disease and imbalance.* Many medically unexplained symptoms are stress induced medical conditions. We call these *Psycho-physiologic Disorders*. These real bodily symptoms are not in your imagination but are generated by the brain in response to real or perceived stress ‘danger’ signals.

When we think of major life stressors, we may think of job loss, divorce, death, illness, and relationship difficulties. While any of these acute stressors can throw us into a state of disequilibrium, what is most damaging is what we know as chronic “sympathetic” hyperarousal, sympathetic dominance, or a hyper-vigilant nervous system. Our body is designed to handle ‘short term’ threats and then recover, returning to a state of equilibrium. In a hyper-vigilant or sympathetic state of chronic stress, the brain and nervous system register a continual “threat” even in seemingly benign or non-threatening circumstances. *A nervous system always under threat creates unhealthy biochemistry.*

To understand the mechanisms involved and how they are affecting health and aging, we will explore how the stress response works and how it impacts the body on so many levels.