HEAL YOURSELF: The 7 Steps To Innate Healing Dr. Stephen Stokes, DC

Crazy Fish Publishing Cape Coral, FL 2023

Heal Yourself: 7 Steps To Innate Healing

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ISBN: 978-1-716-49181-8 Crazy Fish Publishing 4713 SW 25th Place Cape Coral, Fl 33914 www.drstephenstokes.com

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PROLOGUE

Heal Yourself: 7 Steps To Innate Healing by Dr. Stephen Stokes is a comprehensive guide that unveils a logistical roadmap to rediscovering your health. Dr. Stokes, a dedicated physician who treats patients daily, offers a refreshing perspective on healing. Unlike many doctors who merely write books, he has developed effective protocols to help patients overcome illness and pain by harnessing the body's innate healing ability.

In his own words, Dr. Stokes emphasizes the systemic nature of disease, challenging the compartmentalized approach of modern medicine. He asserts that everything in our bodies is interconnected, making it impossible to treat one area without affecting another. By shifting his focus from treating conditions to healing the patient as a whole, Dr. Stokes has witnessed remarkable transformations in his clinic. He attributes this success to tapping into the body's most powerful medicine—the innate ability to heal itself. In his practice, he listens to the innate healing intelligence, offers assistance, and allows the healing process to unfold naturally.

This book is a valuable resource for anyone seeking a healthier life free from pain and filled with vitality. Within its pages, readers will find essential information to unlock their optimal potential and join the ranks of those who have triumphed over illness by embracing the concept of innate healing. Furthermore, I strongly recommend seeking an appointment with Dr. Stokes, as I have personally witnessed his exceptional integrity and professionalism. He is not only my trusted physician but also a dear friend.

Dr. Michael P. Gillespie DC, B.Sc., BSE Assistant Professor, Department of Health Professions CUNY York College

INTRODUCTION

This book initially began as a clinical workbook. However, as time passed, patients started requesting copies for their loved ones. Thus, I reworked the material, including only the safest and most effective recommendations, resulting in a selftreatment manual. These seven steps, presented in order of importance, offer flexibility as you can begin at any point, ultimately leading to the same destination. It is crucial to note that this manual does not replace conventional medicine; rather, it is meant to complement it. I firmly believe that traditional and nontraditional medicine should work in harmony, within their respective boundaries, to achieve the shared objective of patient well-being.

In my pursuit of patient care, I have engaging conversations with my stepson, Michael McDowell, who is nearing the completion of medical school. By removing politics and profits from the equation, medicine can achieve limitless possibilities.

If I were to emphasize a single point, it would be that you need not resign yourself to your predetermined fate and become a statistic. Over the past decade, I have treated countless patients who had exhausted all other avenues for help. I have witnessed remarkable transformations in the lives of these individuals who were informed they had incurable conditions, requiring a lifetime of medications or invasive surgeries. They form the majority of the patients I see daily, and their experiences attest to the lifealtering impact of following the simple yet profound information contained in this book. It is common in my practice to witness patients' improvement, such as diabetics no longer reliant on prescription drugs and attaining healthy blood sugar levels after just three months of care. Men and women advised to undergo heart bypass surgery have received a clean bill of health from their cardiologists within a mere six months. These so-called incurable diseases are overcome by focusing on the person rather than the pathology.

When I accept a case, my priority lies in the results, not cost, time, or political correctness. My mission is to educate, guide, and facilitate healing. Although there is no cure, once you regain your health, it becomes crucial to maintain it. When patients inquire about the duration of their treatment, my response is always honest: "For the rest of your life." Some individuals require weekly visits, while others come once a month or several times a year. All patients receive an outline detailing how to lead a fulfilling life, and if they adhere to the recommendations, their visits become less frequent. The beauty of the journey toward health is that it progresses slowly, allowing you to get back on track if you stumble.

Frequently, I am asked, "What is the secret to living a healthy life?" It is astonishing that such a complex question has a simple answer: happiness. Happiness serves as the secret ingredient that nourishes our well-being. These two aspects are inseparable; one cannot exist without the other. What is the value of life if happiness eludes us? As you peruse this book, take notes, acquire supplements, modify your diet, and perhaps explore various therapies, always remember that the ultimate purpose is not solely health, but happiness. I have observed patients who become so fixated on healing themselves that they neglect their own happiness. Health is always a byproduct of happiness, and never the other way around. As you confront your inner struggles and strive for good health, do not allow the process to become a heavier burden than the illness itself.

The supplement recommendations I provide consist of a blend of whole food concentrates and herbal medicines. I firmly believe that optimal nutrition can be obtained through consuming whole foods, such as peas, radishes, and beets, commonly found in grocery stores. Sadly, in today's society, many individuals do not receive adequate nutrition from their diets. Conventional farming practices deplete soil and result in food contaminated with harmful chemicals. However, when given proper nutrition, the human body has remarkable healing capabilities. To achieve this, we need to consume whole, organic foods and eliminate harmful habits. Since only a few people follow this approach, supplementing with whole food concentrates and herbs becomes necessary to fill the nutritional gaps. I always advise my patients to either eat these foods or take the recommended supplements, which I source exclusively from Standard Process. This company, located in Palmyra, Wisconsin, operates as both an organic farm and manufacturing plant. I have personally visited their facilities several times throughout my career, witnessing firsthand the quality of their products and placing my trust in them for the health of my patients and family.

When I make supplement recommendations, one common mistake patients make is purchasing them from the local drug store or vitamin section of a retailer like Wal-Mart. Unfortunately, there is a significant disparity in the quality of supplements, with many being synthetic compounds lacking proper quality control. Most well-known brands are manufactured in China or India and simply repackaged in the United States. For instance, the supplement B12, cyanocobalamin, is often overlooked by low-end manufacturers who fail to disclose that this form of B-12 is bound to a toxic cyanide molecule, necessitating detoxification by the liver. Despite cyanide being a known poison, the label won't inform you of this fact. The FDA's loose definition of "natural" allows it to be used in misleading ways. Calcium supplements also suffer from misleading marketing, as calcium carbonate, commonly found in drugstores, is essentially limestone and does not benefit the body. In fact, you could lick a sidewalk, and it would provide the same effect.

As previously mentioned, I rely on whole food concentrates from Standard Process, which are in the form of tablets and capsules derived from real food. While their labels may indicate lower potency compared to synthetic counterparts, this is due to their nature as food-derived products. Consider synthetic Vitamin C (Ascorbic Acid) often sold in 500 or 1,000 mg pills. An orange slice contains approximately 10 mg of vitamin C and effectively prevents scurvy. The key lies in the orange's unique elements that cannot be replicated in a lab. These unreproducible components are what truly matter.

Consider the difference between natural sugar found in an apple and the white, crystalline substance you add to your coffee each morning. Chemical company scientists may argue that sugar is sugar, just as they claim that drinking a glass of orange juice is equivalent to consuming a can of Coke Cola. However, synthetic nutrition in America is aggressively marketed, overshadowing the principles of whole foods. The fundamental difference between artificial and whole food nutrition is that of life and death. If you consume items that never expire, you are not consuming food. It's time to discard synthetic vitamins, follow the 7 Steps to Innate Healing outlined in this book, and embrace a healthy and fulfilling life.

HOW MEDICINE GOT SICK

This section was challenging to write, as it has a negative and unpleasant tone. Personally, I prefer not to criticize or tear people down. However, I believe that sharing important information sometimes requires being assertive. If you already share the belief that big pharma is not your ally or dislike hearing bad news, feel free to skip ahead to the next section. For everyone else, let's dive in.

Allen Roses, the VP of genetics at Glaxo Smith Kline (an international drug company), once stated that in the majority of drugs, over 90% of them only work in 30 to 50% of people¹. This means that most drugs are ineffective.

Unfortunately, this information is rarely discussed. Patients often assume that prescribed drugs work, but the truth is that they only need to show minimal effectiveness to gain approval. The FDA recommends these drugs for public use, yet in many cases, they do more harm than good. If you've ever paid attention to the side effects mentioned in medication advertisements during the nightly news, it can be an eye-opening experience. The drug companies purposely distract viewers with images of happy, carefree individuals while the announcer quietly reads the fine print about potential side effects. These can include liver failure, cancer, and even suicide. Isn't it ironic that antidepressant medications can have death listed as a possible side effect? It's

¹B. B. Spear et al. Trends in Molecular Medicine in 2001, vol. 7, pp. 201-204.

disheartening to see such nonsensical situations being allowed by the FDA, an agency tasked with protecting the public's well-being.

In the past five years, under pressure from pharmaceutical company lobbyists, the government has compelled the FDA to shorten the time required for drug approval. Every day a drug remains unapproved can cost millions of dollars. Consequently, many medications receive expedited approval, and the long-term effects of these prescription drugs, even those endorsed by the FDA, remain largely unknown. How often have we heard about a new wonder drug, only to later discover it being pulled from the market or involved in a troubling class action lawsuit? Prepare yourself, as things are about to turn ugly.

Dr. Jordan B. Peterson, a professor of psychology at the University of Toronto and a clinical psychologist, is one of my mentors. He nearly lost his life due to withdrawal from a commonly prescribed class of medications called Benzodiazepines. It's crucial to note that a board-certified physician prescribed this medication, demonstrating that just because a drug is prescribed doesn't mean it's beneficial or that the recommending doctor has your best interests at heart.

When someone is taking more than three prescription drugs, predicting the side effects becomes impossible. Just ask any high school chemistry teacher. Ever wonder why drug side effects are provided on paper rather than listed on the bottle? Well, there simply isn't enough space, and it's not good for business either. If you saw all those side effects on a bottle of shampoo for your dog, would you still use it on your pet?

Welcome to "Pill Nation," where educated, caring individuals give their children flavored Tylenol every day, hoping they'll enjoy taking their medicine. Acetaminophen, the active ingredient in Tylenol, is also present in many other over-the-counter and prescription drugs for pain relief and fever reduction. Interestingly, no one fully understands how it works; it just seems to. Acetaminophen is so widely used that many falsely believe it to be harmless. Unfortunately, that's not the case. Acetaminophen poisoning results in an estimated 56,000 injuries, 25,000 hospitalizations, and 450 deaths every year. Medical professionals, the same ones who prescribe it, have concluded that long-term use or high doses can damage the liver, leading to failure or death. The U.S. Acute Liver Failure Study Group reports that Acetaminophen is widely used, leading many to believe it's harmless, but that's not true. Acetaminophen poisoning causes 56,000 injuries, 25,000 hospitalizations, and 450 deaths annually. Medical professionals, who prescribe this drug, have concluded that long-term or high-dose use can damage the liver, potentially causing failure or death. The U.S. Acute Liver Failure Study Group found that acetaminophen poisoning is the primary cause of liver failure in the country, accounting for about half of all cases. Some cases of liver failure occur even when following recommended dosages. Similar to the tobacco industry, drug companies aim to establish a customer base, even manufacturing bubble gumflavored Tylenol.

If you find my words offensive, don't worry, as business is thriving. We now have more drugs to treat various conditions than ever before. We have drugs for sleep, waking up, using the bathroom, and preventing bathroom visits. We are creating disorders and matching them with prescription drugs at an alarming rate. It's a monopolistic industry worth billions of dollars.

It's important to recognize that it's all a web of lies. Out of the 783,936 deaths caused by conventional medicine errors,

approximately 106,000 are due to prescription drugs². According to the Journal of the American Medical Association, more than 128,000 Americans die each year from taking medications as prescribed, nearly five times the number of deaths caused by overdosing on painkillers and heroin. In the past decade, prescription drug-related deaths have quadrupled according to Johns Hopkins School of Hygiene and Public Health Centers for Disease Control and Prevention. These deaths aren't solely attributed to drug abuse but ordinary people who follow their doctors' instructions and still perish. How did we stray so far from the Hippocratic Oath that all graduating medical students pledge? The answer lies in greed.

The oath states: "I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug." Interestingly, it continues, "I will prevent disease whenever I can, for prevention is preferable to cure." Maybe it's time to rework the oath to say, "I will treat symptoms while avoiding the cure because profits lie in management, not disease correction." Is this unfair criticism? Perhaps, but when was the last time you heard a doctor recommend a diet over a statin drug for high cholesterol?

Currently, over 105 million Americans suffer from chronic pain or degenerative diseases. This accounts for over 70% of doctors' time. These individuals are in agony, and their conditions are not improving. Consequently, 3/4 of all US healthcare spending goes towards disease management. American men have a 50% chance of getting cancer, and women have a 40% chance. Heart disease claims the lives of 1 in 3 Americans. One-seventh of our economy is spent on healthcare. We are the unhealthiest nation globally.

² Null,G PHD. 2011. Death by Medicine. Mount Jackson, VA: Praktikos Books

Each American spends over \$4,000 annually on healthcare. America is not healthier, just better managed.

The current trend in medicine is specialization, not generalization. Doctors are becoming experts in narrower fields. If this continues, there will be no general physicians left, only specialists. However, you can't compartmentalize the human body since everything is interconnected. Recently, a close friend of mine complained about visiting a general practitioner to have a wart removed and being referred to a hand surgeon. A decade ago, any competent doctor would have dealt with the wart. My Canadian brother-in-law, a medical doctor, enjoys performing various procedures. He mentioned that general doctors are fading away because they can't afford the malpractice insurance required for in-office treatments.

The problem is this approach isn't very effective. To heal the whole person, you must treat the entire person. It's logical because all the body's systems interact with each other. The body is more than just a collection of independent systems, organs, tissues, and fluids that break down or malfunction individually. It's an integrated unit. True health goes beyond the absence of symptoms, and that's why healthcare is failing. The emphasis on specialization is causing its decline.

I always knew that a systemic approach, rather than just treating symptoms, was the key to successfully addressing challenging cases. Disease and sickness can't thrive in a healthy body where all the systems are working in harmony. Symptoms indicate a system failure, but they are not the root cause. Something I always emphasize to patients is systems or symptoms. Imagine someone complaining about a roach problem in their kitchen. They buy traps and sprays, and the bugs temporarily disappear, only to return later. They accept it as a normal part of living in the house, never addressing the actual cause: leaving food containers open in the cupboards. Once they start practicing better storage methods, the roach problem vanishes.

The body is a self-healing organism, especially when all systems are functioning optimally. In fact, for most minor issues, you don't even need a doctor. Your body is far more capable of healing itself than any available modality. By getting your body to work properly, you can overcome any disease. This book will serve as a guide to stimulate your self-healing force, known as innate. Achieving this involves systematically evaluating your body systems and addressing any existing dysfunctions. Once all systems are functioning efficiently, innate will take over and fulfill its role.

My background is diverse, and I have an open mind. I hold a chiropractic license, but I've also trained as an EMT, paramedic, and nurse. After completing chiropractic school, my interest in Traditional Chinese Medicine (TCM) led me to obtain certification in acupuncture and herbal medicine. My passion for massage led me to advanced training in fascial release and cranial therapy. My approach combines various methods that work in different situations. I may recommend a peptide injection or prescribe a massage or breathing exercises, depending on the circumstance. There are certain conditions that require conventional medicine, and alternative care won't be effective. I've witnessed a patient trying to treat a serious infection with herbs, nearly losing their leg until they finally took antibiotics. Similarly, I've seen many lives ruined by painkiller addictions. Dr. Andrew Weil offers valuable advice: "Do not seek help from a conventional doctor for a condition that conventional medicine cannot treat, and do not rely on alternative providers for a condition that conventional medicine can manage well." We must recognize and always remember the importance of both approaches in patient care. While striving for improvement, we must never compromise patient safety. Approach the information that follows with a healthy dose of skepticism and make intelligent decisions. Remember, if something is powerful enough to provide benefits, it also has the potential to cause harm.

1

Every nerve that can thrill with pleasure, can also agonize with pain. -Horace Man

STEP ONE REDUCING PAIN

The purpose here is not to decipher the intricacies of human neurology, but rather to provide practical applications that can alleviate pain. As the underlying theme of this book, I aim to condense information in order to maximize effectiveness. In other words, how can we address 80% of the problem with 20% effort? It may sound like a lazy approach, but I employ the 80/20 rule daily when consulting with patients. Don't for a moment think that it yields no results. This generalized approach often leads to better outcomes compared to specialization. How is that possible? The answer lies in the interconnected nature of the human body. We are integrated beings, and our systems do not function in isolation. Many times, the measures I take to support the immune system also alleviate pain and boost the patient's energy. As you progress through these seven steps, you'll notice overlapping recommendations. Embrace the beauty of this and realize that even implementing a single suggested action could potentially address all your issues. This is the true essence of holistic (wholistic) health. Merely masking pain without addressing its root cause is akin to cutting a weed but leaving its root intact... it's likely to resurface. The largest section of this book is dedicated to pain reduction for obvious reasons - many people experience pain.

STOPPING THE PAIN SIGNAL

You cannot truly heal as long as you're experiencing intense pain. While prescription pain medication may be necessary in the short term, it can often be avoided through the use of various herbs in combination.

The most reliable product for pain relief is Willow bark. It serves as a safe alternative to nonsteroidal anti-inflammatory drugs (NSAIDs) like Advil, which can have dangerous side effects such as stomach bleeding and ligament tearing. Willow bark is a traditional herbal remedy with a history dating back thousands of years. As early as 200 BC, Hippocrates, the father of modern medicine, used the leaves and bark of the Willow tree to address various ailments. Native Americans also utilized Willow bark by boiling one ounce (28 grams) in a pint of water and consuming the resulting liquid over the course of a day. This dosage aligns with my recommendation of 32 grams of Willow bark.

Age-old wisdom has once again been validated by modern science. Clinical trials in Germany and Israel demonstrated that standardized Willow bark extract supports musculoskeletal health, particularly in the knees, hips, and lower back. Study participants experienced improved mobility and flexibility. The daily dosage in the trials contained 120 to 240 mg of salicin, an active chemical also artificially manufactured as Aspirin. I recommend **Saligesic**, which contains a certified extract of Willow bark in a 20:1 concentration from 8.0 g of stem bark. Each tablet contains 60 mg of salicin, along with natural extracts from the plant that I believe contribute to additional health benefits. Unlike Aspirin, Saligesic doesn't irritate the stomach lining, further highlighting the advantages of a natural product. Saligesic is particularly effective for sciatic pain and common spinal disc injuries such as bulges and herniations. Many of my patients find it helpful for arthritis pain and are able to incorporate it as a daily supplement without issues. In severe pain cases, I may suggest doses of up to 3 tablets three times a day.

In the case of more serious nerve pain the best product is Nervagesic. Each Serving Size (2 Tablets) contains: California Poppy herb flowering extract with some other synergistic herbs. It works by directly treating the central nervous system, which is often the underlying cause of chronic pain. California Poppy, a member of the poppy family, possesses mild opiate properties that are highly beneficial for relieving intense pain. You can also buy California Poppy in a liquid extract. A 200 ml bottle is formulated as a 1:2 extract, containing 2.5 grams of the product. I recommend a dosage of 5 ml, with a maximum weekly dose of approximately 40 ml. However, be cautious if you plan on driving, as it may cause drowsiness. This product is effective for overall pain syndromes like fibromyalgia or when the patient is dealing with other illnesses alongside the current injury. I particularly recommend it to individuals who experience general body pain and are prone to anxiety. I personally have taken three times the recommended dose for several weeks, without experiencing any negative side effects or dependency issues.

MOIST HEAT

The debate regarding whether to use ice or heat for injuries is ongoing. While ice can reduce swelling and numb painful nerves, it is not always the best choice. Ice should only be used for recent traumatic injuries such as fractures or tears, when reducing blood flow to the area is necessary. However, applying ice to injuries can slow down the healing process and shock the nervous system, leading to vasoconstriction.

On the other hand, moist heat is a preferable option. It penetrates the body, relaxes the nervous system, improves blood circulation, and speeds up lymphatic drainage. It is recommended to use moist heat for 20 minutes every 2 hours, as needed. Battle Creek Medical Equipment produces excellent heating pads that are known for their high heat and steam-like effect, creating an ideal healing environment³. Although they may be expensive, they are worth considering.

It's important not to underestimate the value of heat, as it remains one of the most effective ways to stimulate healing and alleviate pain in the human body. Personally, I incorporate moist heat into my daily routine, whether after exercise or before bed to relax my entire body.

INFLAMMATION

Let's recap the basic understanding of inflammation. When you sustain an injury, damaged tissues send out a distress signal. Specialized cells in the body's fascia, the tough fiber beneath the skin, receive this signal. Within the fascia, mast cells release histamine, alerting the brain that the body is under attack.

³ http://www.battlecreekequipment.com/

As a result, cytokines and prostaglandins are released around the injury, activating your pain receptors and causing discomfort. This phase typically lasts a few days to a week. These chemicals also make blood vessels porous, allowing fluids and proteins to enter through leaky capillaries. This influx creates a protective barrier around the damaged area, safeguarding nearby tissues. Additionally, platelets rush in to stop bleeding, followed by the arrival of nutrients and immune cells, leading to swelling.

Among the immune cells are neutrophils, specialized killers that arrive first. Their role is to eliminate both healthy and injured cells, using free radicals as "flame throwers" to carry out their attack. This process contributes to inflammation and remains until the neutrophils cease their activity. Fortunately, in a typical response, neutrophils self-destruct within approximately 48 hours, ending the destructive phase and resolving the inflammation.

Understanding this process is crucial as we delve deeper into the topic. To ensure that neutrophils stop causing damage within 48 hours, it is crucial. Neutrophils do not differentiate between healthy and damaged tissues, and if their destructive activity continues unchecked, they can eventually destroy the entire structure. Fortunately, the body releases two essential chemicals, Protectin and Resolvin, derived from fatty acids, which signal the neutrophils to cease their destruction.

However, if there is a deficiency of fatty acids in your diet, the body cannot produce enough Protectin and Resolvin to turn off the neutrophils, leading to a persistent cycle of pain and inflammation. Individuals suffering from chronic inflammation should increase their consumption of omega fatty acids to help generate more Protectin and Resolvin. I have witnessed the end of years of constant pain within just a few days by adding this supplement. This connection was initially observed when the Inuit people, who consumed diets rich in animal fats, had low incidences of heart disease, inflammatory bowel disease, asthma, and psoriasis.

Omega fatty acids also inhibit the conversion of arachidonic acid to the enzyme cyclo-oxygenase (Cox-2), which is the pathway targeted by drugs like Celebrex. If taking a nonsteroidal antiinflammatory drug (NSAID) such as Advil or Aleve reduces your pain, it indicates an omega fatty acid deficiency. NSAIDs are ineffective unless this deficiency is present. Therefore, when someone informs me that NSAIDs provide relief, I immediately recommend high dosages of fatty acids, and they typically experience improvement within 48 hours. Omega fatty acid imbalances can be assessed with an Omega Index test, which is inexpensive and can be conducted at home. If you're interested, I can assist in arranging for one to be sent to you. However, this issue is so prevalent that I often advise everyone to take a fatty acid supplement without testing.

In the early stages of my practice, I frequently recommended NSAIDs to patients and used them myself. However, after a discussion with a gastrointestinal specialist, I learned that even small amounts of NSAIDs can irreversibly damage the GI tract. Common products like Advil are often taken without question, but they have been proven to harm the kidneys and tendons. Consequently, I no longer take or recommend NSAIDs, but instead, I suggest several products that increase fatty acids. My top choice is **Linum B6** from Standard Process, which is a coldpressed oil extracted from organically grown flaxseeds and fortified with vitamin B6. It's crucial to use a high-quality organic flaxseed oil, as rancid flaxseed oil is similar to linseed oil used in paint, which should not be ingested. A daily intake of 6 Linum perles is recommended, ideally on an empty stomach, with a maintenance dose of 3 perles. Linum is beneficial for dry skin, temporary relief from constipation (chew 8 perles in the morning), and supports hair, skin, and nail health. It is also useful in stroke rehabilitation.

Unfortunately, a small percentage of the population has a deficiency in the desaturase enzyme, which hinders the conversion of plant oils into the necessary fatty acids. If plant oils don't seem effective or if the case is complex, it's advisable to directly opt for fish oils. However, it's important to choose highquality fish oils, as many on the market are rancid and of low quality, lacking the ability to promote the release of Protectin and Resolvin. Personally, I recommend Calamari Omega 3 Liquid from Standard Process. It is the most potent omega-3 fatty acid supplement available, and its liquid form makes it convenient for children and those who have difficulty swallowing pills. A daily intake of one teaspoon is typically sufficient to address any deficiency, while severely ill patients may require up to a tablespoon. Unlike Linum B6, Calamari liquid contains both DHA and EPA, eliminating the need for the body to produce them as it does with plant oils. If you are not needing a supplementation that is quite as strong, Cod Liver Oil from Standard Process is an excellent daily supplement. It not only contains EPA and DHA, but also vitamin D in it's natural form. This is a great consideration for long term health.

As a general recommendation for combating inflammation, I highly suggest **Boswellia Complex**. It is an exceptional product for addressing underlying inflammation and comprises Boswellia, Celery Seed, Ginger, and Turmeric. Boswellia, derived from the Boswellia serrata tree, also known as "Indian frankincense," has a long history of pain reduction and research suggests it is beneficial in reducing brain swelling associated with tumors. Celery seed acts as a diuretic, aiding the elimination of water and reducing inflammation. Ginger inhibits the formation of Substance P, a chemical involved in pain and inflammation that increases the production of pain receptors. By curbing Substance P, Ginger helps prevent hypersensitivity to pain, a contributing factor to chronic pain syndromes like fibromyalgia. Ginger also aids digestion and can be consumed as freshly made ginger tea to alleviate "sour stomach" symptoms.

Turmeric, another component of Boswellia Complex, inhibits the activation of NF-Kappa B, a pain-producing chemical. Turmeric possesses a wide range of beneficial properties. To achieve a healthy response, I recommend taking two Boswellia Complex pills, three times a day. This supplement is effective for various conditions, including arthritis, back pain, inflammatory bowel disease, ulcerative colitis, Crohn's disease, and psoriasis. It's rare for a patient not to experience significant improvement in joint pain within 1-2 weeks of starting Boswellia Complex.

Now, regarding the Turmeric in the Boswellia Complex, it's worth mentioning that Turmeric is a remarkable herb for combating inflammation. Personally, I don't tolerate a lot of turmeric well as it upsets my stomach, so I find Boswellia Complex easier to take. However, everyone is different, and if you can handle a high dose of Turmeric, **Turmeric Forte** can be a great option for you. The key to this formulation is the combination of Turmeric with Fenugreek seed extracts, which enhances absorption and improves the bioavailability of curcuminoids, the active constituents of Turmeric. In a clinical study, the curcumin-fenugreek fiber extract formulation exhibited 24.8 times the bioavailability of an equivalent amount of unformulated curcuminoids. This product is standardized to ensure optimal strength and quality, both in terms of total curcuminoids and curcumin. I recommend taking 1 tablet three times a day with food, but as with any recommendation, it's best to start with a lower dose and gradually increase it. If you experience any gastrointestinal issues, discontinue use and switch to Boswellia Complex.

HELPING IT HEAL

Now let's discuss the benefits of Gotu Kola, also known as Indian Pennywort, which happens to be one of my favorite herbs. Despite its unassuming appearance as a common weed found in many places around the world, Gotu Kola is an incredibly useful medicinal plant. If I had to summarize its benefits in one word, it would be circulation. However, it would be a disservice to oversimplify it because unlike synthetic drugs, herbs like Gotu Kola contain natural triterpenes that offer synergistic effects, impacting multiple systems in the human body. Gotu Kola has long been included in traditional treatment protocols for skin healing. It contains triterpenes, particularly asiaticoside, which have been found to promote wound healing in various experimental models, whether administered through injection, orally, or topically. The mechanism of action involves stimulating the production of type I collagen, reducing the inflammatory reaction, and enhancing glycosaminoglycan production, leading to accelerated healing. What's fascinating is that Gotu Kola can be effective regardless of how it is administered-by injection, orally, or topically. I have personally used a liquid form of Gotu Kola topically and achieved excellent results for various skin conditions. There are very few herbs that can be utilized in such versatile ways.

Gotu Kola supports the maintenance of a healthy vascular system and promotes normal blood circulation, making it a natural means of preserving overall health and supporting connective tissue and blood vessel wall integrity. It can be argued that insufficient circulation is a primary factor in most degenerative diseases. Conditions like neuropathy and sciatica, for example, are undeniably linked to nerve ischemia. By increasing blood flow to the affected areas, symptoms can be reduced, and the body's innate healing response can function optimally. Blood carries essential nutrients and eliminates waste, offering tissues the best conditions for regeneration.

Gotu Kola Complex, is a 10:1 extract derived from 2.5 grams of the plant. This complex also includes Grape Seed 120:1 extract from 3.6 grams of grape seeds and Gingko 50:1 extract from 1 gram of Gingko plant. These components work synergistically and are my preferred form of Gotu Kola. I recommend taking 1 tablet three to four times a day. This can be used for many conditions including stomach ulcers, arthritis and even post surgical trauma. It is a good foundational product to always use whenever you are trying to invoke healing in the body. Here's a short list of notable studies and reasons to use Gotu Kola,

1. Gotu kola has the potential to enhance brain power. A small 2016 study compared the effects of gotu kola extract and folic acid on cognitive function in stroke patients. The study observed three groups: one receiving 1,000 mg of gotu kola per day, another receiving 750 mg of gotu kola per day, and a third receiving 3 mg of folic acid per day. While both gotu kola and folic acid improved overall cognition, gotu kola proved more effective in enhancing memory. Additionally, a separate study on mice demonstrated that gotu kola water extract improved learning and memory, particularly in older mice.

2. Gotu kola shows promise in the treatment of Alzheimer's disease. Its ability to enhance memory and nerve function makes it a potential therapeutic option. In a 2012 study on mice with Alzheimer's disease, gotu kola extract exhibited a positive impact on behavioral abnormalities. Lab and animal studies also indicated its potential to protect brain cells from toxicity and prevent the formation of Alzheimer's-associated plaque.

3. Gotu kola may help reduce anxiety and stress. An animal study from 2016 showed that gotu kola had an anti-anxiety effect on sleep-deprived male mice. These mice experienced reduced anxiety-like behavior, improved locomotor activity, and less oxidative damage after receiving gotu kola for five consecutive days. Another study in 2013 concluded that gotu kola has an acute anti-anxiety effect among herbal medicines.

4. Gotu kola's positive impact on brain function suggests its potential as an antidepressant. A 2016 review supported this notion, citing a study involving 33 individuals with generalized anxiety disorder. During a 60-day period, these participants replaced their antidepressant medication with gotu kola and reported decreased stress, anxiety, and depression. Another study discussed in the review examined the effects of gotu kola on rats with chronic depression, showing positive effects on elements of behavioral depression.

5. Gotu kola may improve circulation and reduce swelling. A 2001 study revealed that gotu kola can alleviate fluid retention, ankle swelling, and circulation issues associated with long flights. Participants with mild-to-moderate superficial venous disease and varicose veins who took gotu kola experienced significantly less fluid retention and ankle swelling. Gotu kola's positive metabolic impact on the vascular wall's connective tissue may contribute to its effectiveness in treating varicose veins.

6. Gotu kola may help alleviate insomnia. Due to its potential in treating anxiety, stress, and depression, gotu kola is considered a safe alternative to prescription medications for insomnia and other sleep disorders.

7. Gotu kola may reduce the appearance of stretch marks. A 2013 study suggested that the terpenoids found in gotu kola can enhance collagen production, which may prevent new stretch marks from forming and aid in the healing of existing marks.

8. Gotu kola may promote wound healing and minimize scarring. In a 2015 study on rats, wound dressings containing gotu kola demonstrated healing effects on various types of wounds, including clean cuts, irregular tears, and infected tissue.

9. Gotu kola's anti-inflammatory properties may help relieve joint pain associated with arthritis. A 2014 study on rats with collagen-induced arthritis found that oral administration of gotu kola reduced joint inflammation, cartilage erosion, and bone erosion. Its antioxidant effect also had a positive impact on the immune system.

10. Recent research has examined the impact of gotu kola on liver and kidney toxicity, revealing its potential to mitigate the harmful side effects of the antibiotic isoniazid, commonly used to treat tuberculosis. In a 2017 animal study, rats were administered 100 mg of gotu kola for 30 days before receiving the antibiotic. These rats experienced reduced overall toxicity, particularly in the liver and kidneys, with their levels returning close to normal after taking gotu kola. Gotu kola is highly regarded for its ability to prevent the formation of fibrosis or scar tissue. Additionally, its capacity to enhance blood flow to the brain makes it beneficial for preventing conditions like dementia. Despite its unpleasant odor, gotu kola works rapidly. It is important to note that gotu kola should not be confused with kola nut (Cola nitida), as they are distinct substances with different properties. Gotu kola has a rich history spanning thousands of years in India, China, and Indonesia. Legend has it that an ancient Chinese herbalist lived over 200 years due to their consumption of gotu kola, earning it the moniker "the fountain of life."

Historically, gotu kola has been used to address various ailments, including syphilis, hepatitis, stomach ulcers, mental fatigue, epilepsy, diarrhea, fever, and asthma. It serves as an excellent herbal remedy for promoting healing after surgery, particularly when scar tissue formation poses a concern. I have personally witnessed its effectiveness in cases involving damaged spinal discs, as well as in patients with diabetic neuropathy experiencing ulcers and reduced circulation. The potency and necessity of this herb have led me to prescribe it to nearly all of my patients.

Chlorophyll Complex from Standard Process is an exceptional healing product made from a blend of alfalfa, buckwheat, pea vines, tillandsia, sesame seeds, and soybeans. It can be regarded as a miraculous supplement. The structure of the chlorophyll molecule closely resembles that of human hemoglobin, with magnesium being its primary component, whereas iron is central to hemoglobin. Chlorophyll exhibits a potent neutralizing effect on guanidine, a toxic byproduct associated with constipation and arthritis. If you suffer from arthritis, it is highly likely that you have guanidine and liver issues. Taking 3-9 of these supplements on an empty stomach can help address these concerns. The body efficiently processes these supplements, and I personally find myself taking them regularly when I feel the need for a healing boost.

Chlorophyll Complex is an essential supplement for individuals dealing with ulcers or colitis. In fact, we consume more of this product than any other. Even if you choose not to try other supplements, I highly recommend getting a few bottles of Chlorophyll Complex, as it also serves as an excellent whole food multivitamin. Throughout this book, you will notice my constant endorsement of this product for various health problems. It remains my favorite supplement due to its versatility and gentle nature on the body. Personally, I enjoy chewing the pills, although it has been advised against doing so to prevent potential teeth staining over time. If we ever meet, feel free to let me know if my teeth are green. I have also conducted experiments with organic wheatgrass powder, which seems to yield similar positive results.

MOVING THE LYMPHATICS

Once the neutrophils have ceased their attack, rescue cells are dispatched to clean up the area. These cells are the renowned macrophages, responsible for scrubbing the injured site to prevent infection. They engulf the neutrophils and grow in size to the extent that they can no longer travel through the bloodstream. In this state, they must exit through the lymphatic system, where they undergo filtration in the lymph nodes before returning to the blood as smaller entities called monocytes. If your lymphatic system is not functioning efficiently, waste cannot be eliminated, hindering the healing process. Unlike the vascular system, the lymphatics lack a pumping mechanism, such as the heart, to propel fluid movement. The lymphatic system is an integral component of the vascular system and plays a vital role in the immune system. It consists of a network of lymphatic vessels that carry a clear fluid called lymph (derived from the Latin word "lympha" meaning "water") towards the heart in a unidirectional manner. The lymphatics serve as the primary means through which your body removes old, damaged debris from injuries, allowing new tissues to form. If the lymphatics fail to function properly, the healing process is impeded. Fortunately, there are several simple methods to stimulate your lymphatics, which can alleviate pain and promote healing. Another straightforward way to facilitate lymphatic movement is through focused breathing exercises.

There are numerous breathing exercises to choose from, but one of the simplest to learn is the Breath of Fire. Yogis believe that individuals are granted a predetermined number of breaths from birth to death, and practicing the Breath of Fire may help extend one's lifespan. During challenging or stressful situations, our body unconsciously contracts the diaphragm, which is located in the area of the Solar Plexus–a region where emotions are stored, according to Yoga philosophy.

Yoga suggests that our body contains around seventy-two thousand nerves, with seventy-two considered the most significant and ten deemed vital. In India, it is believed that if the third Chakra (which serves as a convergence point for all seventytwo thousand nerves) is not balanced, a person cannot achieve good health, regardless of the amount of medicine they consume.

When practicing the Breath of Fire exercise, it involves breathing in and out through the nose while pulling the abdomen toward the diaphragm during exhalation and releasing it during inhalation. The pace of this breath is very rapid, as fast as 2 or 3 times per second, and it should also be loud enough for those around you to hear. Once perfected, the ideal rate should be between 120 and 180 breaths per minute. However, it's important to note that mastering Breath of Fire may take time, although some fortunate individuals may achieve it on their first try. To begin, you can start by forcefully and audibly exhaling while pushing the abdomen in, gradually increasing from there until you inhale the same amount of air that you exhale. This balanced breath emphasizes equal power during both inhalation and exhalation.

Another approach is to practice Breath of Fire for a few minutes in thirty-second intervals, alternating with long, deep breaths. Gradually increase the duration to forty-five-second intervals for two or three minutes. Eventually, you'll be able to perform this exercise for longer periods without pausing or feeling discomfort. Personally, my goal is to achieve 100 consecutive breaths, but I'm still working toward it.

Lastly, when you're experiencing pain and aiming to promote lymphatic fluid movement within your body, exercise becomes crucial. However, it's essential to approach exercise with caution and care, considering your nervous system's response and limitations.

When your nervous system is still guarding an injury, it's important not to force movement that could cause spasms. Instead, you should work with your body's response, gradually increasing intensity as it allows. In the initial stages, incorporating 10-15 minutes of movement in a rocking chair can be a beneficial addition to your pain management strategy. Additionally, a light walk for no more than 20 minutes, ensuring you swing your arms in a cross-crawl pattern, is an excellent exercise for promoting lymphatic flow.

If tolerated, rebounding on a mini trampoline can be enjoyable and beneficial. The Jumpsport line, used by professional gymnasts, is recommended as it utilizes elastic cords instead of springs, making it easier on the joints. The goal is not to engage in intense Olympic-style jumping, but rather to gently bounce, keeping your feet in contact with the trampoline, for 8-10 minutes every 2 hours. This gentle bounce can revitalize your body.

If trampolining is not feasible due to weight or illness, don't worry. Walking in a swimming pool can provide a similar effect. Stand in the pool with the water around 87 degrees Fahrenheit, submerging yourself up to your neckline. Begin moving up and down on your toes, gently bouncing. Allow the water to flow around you as you move your arms like a floating leaf. The water's pressure against your skin helps drain the lymphatics and soothe inflamed nerves. Additionally, the suspended movement in a reduced gravity environment retrains the brain to allow more pain-free movement in the injured area. Avoid swimming laps, water aerobics, or intense stretching. Simply float around and move. Consider using a flotation product like a pool noodle to suspend yourself in the deep end, allowing your spine to elongate. Spend at least 20 minutes in the pool 2-3 times a day when you're experiencing significant discomfort.

PAIN IN THE BRAIN

The emotional center of the brain is located near the region that processes pain signals, which means that emotions can directly impact our sensitivity to pain as it travels through the brain. Dr. John Sarno, MD, conducted research on this relationship and presented his findings in the book "Mind Over Back Pain: A Radically New Approach to the Diagnosis and Treatment of Back Pain." Dr. Sarno, a respected figure in the field, was a Professor of Clinical Rehabilitation Medicine at New York University School of Medicine and an attending physician at the Howard A Rusk Institute of Rehabilitation Medicine at New York University Medical Center. His work on Tension Myositis Syndrome (TMS) provides a compelling argument for it being a primary cause of chronic pain. I have personally utilized many of his techniques with excellent results, and I even created a DVD lecture summarizing Dr. Sarno's work on TMS that I require my pain patients to watch.

While I am not a psychologist, I recognize the benefits of reducing stress and anxiety. As information passes to the frontal region of the brain, it travels through the limbic system or emotional center. This pathway can lead to unusual phenomena as nerve impulses become intertwined with emotions. For example, if you are feeling depressed and you injure your back while lifting something, the pain may become intensified. Conversely, there are instances where individuals in combat have been shot but don't initially feel the pain until they notice blood from the entry wound. It is important to understand how emotions can influence pain perception and that the intensity of pain experienced may not always correlate with the severity of the underlying injury.

The limbic system, shaped by an individual's psychological makeup and past experiences, plays a significant role in our emotional well-being. L.R. Hubbard conducted extensive research on "clearing" past transgressions, which has been helpful for some patients in addressing various conditions. For those interested, I recommend reading his original papers. Despite mainstream media's portrayal of Scientology, I encourage you to investigate and form your own opinions, keeping an open mind and addressing your past transgressions. Alternatively, talking it out with a friend can also be beneficial.

I have personally observed a peculiar correlation involving the application of stimulation to the temporal bones on the sides of the skull while suggesting positive statements. This technique, known as "temporal tap," was introduced to me during a lecture on chronic pain treatments. It is believed to have historical roots in Traditional Chinese Medicine, where it was used to manage unruly children. Since learning about temporal tapping, I have taught it to thousands of individuals and successfully used it to overcome my own nail-biting habit. It is a remarkably effective approach for changing habits, although the precise mechanism behind its effectiveness remains unknown. Some suggest it may involve acupuncture meridians, but it could also potentially be a placebo effect, which is still valid. As a clinician, I prioritize results that can be replicated, leaving mainstream validation to researchers and experts in the field.

I don't care as much about if people understand or believe everything I do because I certainly don't understand it all, but I how pain feels and I do understand when someone gets relief. At the end of the day it's what counts most.

To perform the temporal tap, start tapping at your right temple in front of the ear canal and continue tapping on the scalp around the top edge of the ear until you reach the back center of the ear, just opposite where you started. The active spots are only along the upper half of the ear, from the front center to the back center. Tapping with all your fingertips bunched together ensures that all the points along the Temporal- Sphenoidal (T-S) line are stimulated. Say your affirmation while you tap; repeat this procedure three times. Keep in mind that the left side of the head is for positively phrased instructions and the right side is for negatively phrased instructions. Use first person "I" language, and compose your suggestions in the present tense. When tapping, start just behind the eyes and tap briskly in a backward arch over the top of the ear to the back of the ear. You can repeat the tapping motion a few times while repeating the suggestion you wish to make to yourself. The tapping area correlates to the San Jiao, Triple Warmer acupuncture meridian.

Left Side

I am... I am free to... I do... I can... It is easy for me to... I am very good at... I feel better when... I deserve... It is OK for me to...

Right Side

I am not... I don't have any problem with... There isn't any reason why I can't... There isn't any reason why I must... It is not necessary for me to... I don't need (___) to feel ok... It is not true that... I am not limited by... (___) is not a requirement for me The statements you provided can be used as positive affirmations during temporal tapping. When applying stimulation to the sides of the skull over the temporal bones, you can repeat these affirmations to help clear emotional blockages. Remember to tap on the left side while stating the affirmations for empowerment and positivity, and tap on the right side while stating the affirmations to release limitations and negative beliefs. This technique, although its precise mechanism is not fully understood, has shown effectiveness in changing habits and promoting emotional well-being.

When practicing the temporal tap technique, you can choose to say the suggestions aloud or silently, and the effects typically last for approximately 30 minutes. It's important to note that this procedure is not intended for regulating conditions such as blood pressure, circulation, or digestive problems. The temporal tap cannot override an individual's deeply held beliefs.

I have extensively used temporal tapping to help patients with smoking cessation and reducing the gag reflex during intra-oral therapy. Feel free to experiment and explore this technique, as it may lead to interesting discoveries and outcomes.

ANXIETY

Anxiety is a common challenge for many individuals in pain, and it can often be the most difficult problem to address. In some cases, untreated anxiety can worsen over time and contribute to the development of chronic pain disorders like fibromyalgia. Let's perform a quick test to determine if you have any underlying conditions that may predispose you to anxiety and other chronic issues (such as asthma, ADD, or pain).

Take two complete breath cycles through your nose, and on the second breath, exhale all the air from your lungs through your

nose. Then, hold your nose shut by squeezing it with your index finger and thumb. While holding your breath, note the duration until you feel a strong desire to breathe again. Write down the number of seconds it took. If your time is less than 20 seconds, it indicates a problem with hyperventilation syndrome, which may be limiting your overall health. If your time is under 40 seconds, you can still make significant improvements in your health through simple breathing exercises, although it is not as critical as for those below 20 seconds.

The subject of hyperventilation syndrome and its impact on health is quite extensive, and I will do my best to explain it further. Dr. Constantine Buteyko, a Russian doctor, conducted research in the 1950s and 1960s, particularly during the Soviet space race, focusing on oxygen composition for rockets. He drew inspiration from Eastern medicine, including yoga. While observing sick patients, he noticed a correlation between their heavy breathing and their illness, leading him to question whether the sickness caused heavy breathing or vice versa. He began slowing down his own breath, which resulted in lower blood pressure.

Buteyko Breathing gained attention in 1990 after the fall of Communism in Russia. It was primarily used as a method to assist people with asthma. The fundamental principles involve breathing through the nose and breathing lightly, avoiding forceful or heavy breathing. Patrick McKeown's book, "The Oxygen Advantage," provides further information on this topic.

When we breathe in excessive amounts of oxygen, our body becomes less tolerant of carbon dioxide, leading to increased breathing demands from the brain. This can contribute to anxiety disorders, asthma, various lung and breathing disorders, and even chronic pain. Interestingly, taking deep breaths does not necessarily alleviate the issue; instead, it can exacerbate it.

The good news is that correcting this condition is relatively straightforward. Begin practicing breathing exclusively through your nose and make a conscious effort to do so. At night, you can aid this process by placing tape (such as 3M Microtape) over your mouth, which helps retrain you to breathe through your nose. If you wake up in the morning with the tape still in place, it indicates progress in transitioning from mouth breathing to nasal breathing, which significantly reduces hyperventilation. Additionally, practice determining how long you can comfortably hold your breath before experiencing any distress. It's important not to turn it into a competition but rather focus on finding your personal limit without discomfort. I recommend reading Patrick's book for more comprehensive information on this topic, and feel free to reach out to me via email if you have any questions.

Anxiety can hinder the healing process by keeping the sympathetic nervous system in a heightened state. When other methods mentioned earlier fail to reduce a patient's pain, I sometimes recommend a natural supplement called **Kava Forte**, which can be considered nature's Ativan. This supplement contains Kava root extracted with 100% water at a 7:1 ratio, providing a full spectrum of compounds, including 50 mg of kavalactones. Kavalactones have been shown to calm the nerves, alleviate mild tension and stress, promote relaxation and sleep, and support muscle relaxation. The recommended dosage is 1 tablet, 2-3 times daily. As a sleep aid, I advise patients to take one tablet 20 minutes before bed and increase the dose by one tablet every 20 minutes until they are able to sleep, which may require up to 4 tablets. While there are concerns about the quality and potential liver risks associated with Kava, the Mediherb extraction process addresses many of these concerns. I encourage anyone considering adding Kava to their routine to read the studies available on the Mediherb website.

Anxiety often coexists with pain, and many patients I treat also experience panic attacks and insomnia. Traditional medicine suggests using Benzodiazepines, which increase GABA availability in the brain, for anxiety relief. However, while these drugs may provide short-term anxiety reduction, they also inhibit natural GABA production, leading to serious outcomes including suicide. Valerian, an herbal alternative, is a much safer option. As part of my work with the Veterans Association, where I treat many combat veterans with back and neck pain, most of whom also have PTSD, I recommend Valerian Complex. This supplement combines a 5:1 extract of Valerian root and passion flower with a 10:1 extract strength of Jujube seed with Ziziphus. Ziziphus is used in traditional Chinese medicine for insomnia and sleep disturbances caused by dreams. Valerian Complex is an excellent anti-anxiety supplement, particularly helpful for individuals experiencing difficulty falling asleep and nervous tension. The recommended dosage is 2-3 tablets taken one hour before bed. It has proven to be an effective herbal complex for occasional anxiety or sleep problems and is one of the top five most frequently recommended supplements in my clinic.

I have observed that many chronic diseases are rooted in lactic acidosis, a condition primarily caused by a deficiency in B vitamins. This deficiency can contribute to anxiety. **Cataplex G** is a supplement that contains vitamin B complex factors, which unlike other B vitamins, do not increase blood pressure. This product acts as a vasodilator, helping to open up blood vessels and relax nerves. The recommended dosage is 3-6 tablets per day. In the past, people obtained B vitamins from consuming organ meats such as liver, but modern lifestyles and preferences have led to an increased demand for supplementation. While the term "lactic acidosis" is not commonly used in current literature, it remains a prevalent issue in many individuals.

CLINICAL PRACTICE

As an extension of step one, I'd like to provide some insights into how I approach patient treatment in my office. I aim to present ideas that can assist you in navigating through the abundance of unreliable information when seeking quality care. It's important to note that I am not a researcher but a clinician, which means my primary focus is achieving results. Scientific validation becomes a pursuit once I am confident in a particular approach. While this may appear unconventional, it has been my approach since 2001. In my experience, science can be subjective and easily influenced by profit motives. If something proves effective, I firmly believe in its efficacy, and in many cases, scientific evidence is subsequently crafted to promote the product rather than the other way around.

Although my clinic, Advanced Pain Solutions, bears the name of a clinic, it functions more like a working laboratory (rest assured, I am not a mad scientist). Here, we embrace experimentation, and a saying adorns the lobby wall, **Inveniemus viam aut viam faciemus**. Which translates as, we will find a way or we will make a way. This serves as a constant reminder to all who enter that this is a place of unwavering commitment. It's remarkable to witness new patients glancing up and reading the saying aloud, even when the lobby is bustling with others. This fosters patient education and assures them that they have come to the right place. Every morning, upon entering the clinic, my staff and I read the saying, inspiring us to embark on our daily tasks with dedication.

The prominent red circle in my APS logo draws inspiration from the red sun symbol worn by Japanese Kamikaze soldiers. It serves as a perpetual reminder of our complete dedication to our patients. For us, this is a profoundly serious matter.



At APS, our approach revolves around treating the person rather than merely addressing the condition. While many claim to adopt a holistic approach, ultimately, they tend to focus on symptoms and conditions. We, on the other hand, approach things differently. Frequently, patients come to us seeking relief for a

specific issue, such as leg pain, and we end up addressing a different area of the body that we discover to be the root cause of the problem. I am completely certain that the starting point of treatment is irrelevant because everything within the body is interconnected. I have witnessed profound changes occur in the brain or the shoulder by applying laser therapy to the bottom of a foot. Such experiences have shaped my clinical practice. However, recognizing that patients often desire a more structured approach, we advertise our expertise in treating specific conditions: back and neck pain, knee pain, shoulder pain, neuropathy, and fibromyalgia. This list encompasses almost any ailment that comes our way, and if I've unintentionally omitted something, fibromyalgia usually fits the bill. Nevertheless, please understand that I conduct thorough medical examinations for each patient, providing a detailed medical diagnosis based on my findings. However, between you and me, these labels are

excessively restrictive. Hence, I also make additional notes in the margins regarding the underlying issues causing the patient's distress. While I inform the patient's primary doctor of a diagnosis like Sciatica, my notes delve deeper, mentioning specifics such as posterior right ilium, decreased cranial rhythm, hyperactive sympathetic nervous system, L5 right rotation with bilateral hypertonic hamstring muscles, dysfunctional sacral respiration, fixated left calcaneous, and anterior fibula, along with generally stressed thoracolumbar fascia.

There exists a fundamental disparity between my approach to medicine and that of traditional medical doctors. While others concentrate on symptoms, my focus lies in uncovering the underlying reasons for a person's failure to recover. The concept of treating the cause has been so widely discussed that it has become somewhat cliché. It's common to come across doctors advertising their ability to address the root cause of pain rather than merely masking symptoms, but in practice, they often follow the same standardized care protocols. They diagnose a condition and prescribe medications, therapy, or surgery based on what the medical guidelines dictate. While these treatments may prove beneficial if you're fortunate, they are not the solution for those unlucky individuals who continue to struggle. The true answer lies in understanding why the healing process is hindered, and this constitutes the core distinction between traditional medicine and the approach I provide to my patients.

However, it's important to note that my approach does not disregard pain management. Naturally, I employ treatments to alleviate pain, but it is not my primary focus. The majority of individuals who seek my assistance have already endured several months of pain and have consulted numerous specialists. They have undergone MRI scans, X-rays, injections, and multiple rounds of physical therapy, only to be informed that they should restart the entire cycle again.

These doctors undoubtedly have good intentions, but they seem to have overlooked the most fundamental principle of healing:

- The human body possesses an innate intelligence that can restore health when allowed to function without interference.

During my time in medical school, our focus was predominantly on studying the past, searching for insights into diet, lifestyle patterns, exposure to infectious diseases, and harmful substances. But what about the future? What about tomorrow? Let's contemplate a shift in our approach to chronic illness and pain, guided by the understanding that our bodies are constantly generating new cells to replace those that are worn out or damaged. The key realization that is often overlooked is:

- True healing occurs through the creation of new cells, rather than solely attempting to correct malfunctioning ones.

Each individual cell in our body has a finite lifespan, and as cells die off, they are naturally replaced with fresh ones. With approximately 50 to 75 trillion cells in the body, each cell type has its own specific lifespan. Even after a person's passing, it may take hours or days for all cells in the body to cease functioning. Red blood cells typically survive for about four months, while white blood cells have an average lifespan of over a year. Skin cells persist for approximately two to three weeks, while colon cells endure for only about four days. Sperm cells last around three days, whereas certain brain cells, like neurons in the cerebral cortex, can last an entire lifetime without replacement. The implication of this understanding is that, regardless of what you may have been informed about your chronic condition, there is hope for improvement as long as you prioritize the generation of healthy new cells.

SYMPTOMS AND CONDITIONS

When individuals come to my office seeking help, they often arrive after visiting multiple doctors and find themselves filled with questions rather than answers. They want to understand what is wrong with them and how they can improve their condition. While it may seem like a straightforward request, most of them are left without a clear answer. They have been overwhelmed by a multitude of symptoms and conditions. Let me shed some light on this.

The sensations we experience are known as symptoms. These can include numbness in the feet, sharp shooting pain in the hip, tingling in the fingers, burning sensations, aches, or tearing pain. While these symptoms are relevant, they are not the actual problem. They are merely the outcomes or warning signals, much like the engine warning light in a car that indicates something is amiss without specifying the exact issue.

On the other hand, we have conditions. A condition is a term assigned to a group of symptoms. For example, if someone experiences burning leg pain, weakness, and buttock pain, we might diagnose them with the condition of sciatica. However, sciatica alone does not reveal the underlying cause of the problem; it simply indicates involvement of the sciatic nerve. Common conditions include herniated discs, spinal stenosis, arthritis, and muscle spasms. Understanding these conditions is important, but they do not provide a clear understanding of the root cause. In 99% of cases, if the body is healthy, these conditions should be able to heal without any specific treatment. This is a crucial point that needs to be emphasized—the distinction between a healthy body and an unhealthy body. A healthy body possesses the innate ability to heal, while an unhealthy body struggles to do so. Therefore, the true cause of a patient's problem is often their overall state of health. The obvious solution, then, lies in pursuing and attaining health, as a healthy body has the inherent capacity to heal 99% of symptoms and conditions.

- Your symptoms, such as pain, numbness, nausea, or depression, are not the root cause of your problem.
- Your conditions, such as a herniated disc, broken arm, IBS, or cancer, are not the underlying cause of your problem.
- A person can be categorized as either healthy or unhealthy. A healthy body is resistant to illness and possesses a quick healing capacity, while an unhealthy body is susceptible to sickness and struggles to heal.

I recall a situation when my son was struggling with confidence before his first job interview. He felt inadequate due to his youth and lack of experience. He began listing various perceived flaws, including trivial things like his haircut and shoes. "Michael," I advised him, "let's start with the shoes. Let's clean them up and give them a fresh coat of polish." He began working on the shoes, and it took over an hour. When he finished, they looked brand new, and he transformed into a different person–confident and in control. Surprisingly, by addressing something seemingly unrelated, it had a significant impact on how he perceived his primary problem. Now, whenever Michael encounters a challenge, he takes the time to clean his shoes, and things often fall into place.

SYSTEMIC VS LOCAL

In my approach to care, we prioritize addressing the local area of injury last, which differs from the common practice. Many practitioners fail to initially examine the local area, and while the patient may experience temporary relief, the underlying ailment remains unresolved. It is a common assumption that problems are localized, meaning that if the knee hurts, the problem must be in the knee. While this line of thinking makes sense and is often accurate for acute injuries, it is entirely incorrect for addressing chronic issues. The body does not function in isolation.

THE NERVOUS SYSTEM

Now, let's delve into the nervous system. It consists of two parts: the central nervous system (CNS) and the peripheral nervous system (PNS). The CNS comprises the brain and spinal cord, which are well-protected by the surrounding bony structures. On the other hand, the PNS consists of the nerves and serves as a communication network between the CNS and the limbs and organs. Unlike the CNS, the PNS is not shielded by bones, making it vulnerable to mechanical injuries. The PNS can be further divided into the somatic nervous system, responsible for regulating body movement and receiving external stimuli, and the autonomic nervous system, which controls unconscious bodily functions like heart rate, digestion, and respiration.

Our primary focus lies in the autonomic nervous system because it explains how injury can lead to ischemia and hinder the healing process. To summarize:

- The nervous system comprises the central and peripheral parts.

- The central part includes the brain and spine, protected by bones.

- The peripheral system consists of the somatic and autonomic parts.

- The autonomic part controls unconscious bodily functions and is vulnerable due to its lack of protection, unlike the central system.

The autonomic nervous system, which you cannot consciously control, consists of two branches: the sympathetic and the parasympathetic. The sympathetic nervous system is often referred to as the "fight or flight" system, analogous to a gas pedal. Conversely, the parasympathetic nervous system is known as the "rest and digest" or "feed and breed" system, functioning like a brake. These systems often have opposing actions, where one activates physiological responses while the other inhibits them. In simpler terms, you can't engage both the gas pedal and the brake simultaneously. The autonomic nervous system constantly strives to balance the sympathetic and parasympathetic functions for maintaining overall health. Let's summarize the main components of each branch to better understand how it works in healing.

The sympathetic nervous system (gas pedal) performs the following functions:

- Mobilizes energy reserves
- Dilates pupils
- Increases heart rate
- Contracts blood vessels
- Raises blood pressure
- Accelerates respiration
- Directs blood flow to organs
- Reduces peristalsis (digestive muscle contractions)
- Decreases digestive secretions

- Increases sphincter contractions

On the other hand, the parasympathetic nervous system (brakes) facilitates the following activities:

- Recovery
- Energy conservation
- Digestion

The body possesses remarkable intelligence, and in the face of trauma or injury, the sympathetic nervous system floods the body with adrenaline and stress chemicals to aid in survival. Unfortunately, there are instances where the body fails to deactivate this fight or flight response, leading to prolonged presence of these chemicals in the bloodstream for days or even months. This can disrupt sleep, induce feelings of fatigue and restlessness simultaneously, weaken digestion, and result in rapid, shallow breathing. As a consequence, inflammation, anxiety, and depression can manifest as the nervous system continues to respond to a nonexistent threat, impeding the healing process.

One detrimental effect of an overly active sympathetic nervous system is ischemia. In a state of shock, the body prioritizes the blood supply and oxygenation of vital organs for survival. As a result, the nervous system reduces blood flow to the extremities such as the arms and legs. This decrease in circulation impedes the healing of commonly injured tissues in the back, neck, and shoulders.

This state of nervous system shock can persist indefinitely, leading to chronic illness and pain. Unfortunately, many physicians are unaware of this mechanism and often fail to address the underlying trauma or help calm the hyperactive sympathetic nervous system. Instead, they primarily focus on managing the patient's symptoms. Hence, the main reason people don't find relief from their symptoms is the lack of attention given to the underlying trauma and the overactive sympathetic nervous system.

Health is a precious gift, but it is not distributed equally among all individuals. We often fail to appreciate our health until we lose it. With over two decades of clinical practice since 2001, I consider myself experienced and skilled in comparison to my peers. Throughout my career, I have witnessed remarkable recoveries in cases that seemed impossible. However, I have also encountered instances where despite following all the correct procedures and guidelines, failures occurred. Frustration becomes a constant companion for doctors, leading us to question the tools we use, the patients themselves, and most of all, ourselves. The truth is, I don't possess a complete understanding of health and healing, and I don't believe anyone does. Nevertheless, I have something of great value to share with you, the reader.

My intention is not to prove or disprove the validity of my principles, as I believe it would be challenging to do so. Instead, I offer this information as a guide and remain open to possibilities. What truly matters is not just the disease a patient has, but rather the patient as a whole, with their unique experiences, circumstances, and needs.

EXAMINATION

To properly evaluate a patient, it is essential to assess their entire being, irrespective of their specific complaint. This approach allows us to uncover the underlying cause, which is often unresolved trauma to the nervous system. While many may not share this perspective, likely due to the time-consuming nature of a comprehensive evaluation and the lack of insurance coverage, I firmly believe that a systemic assessment is crucial for identifying unresolved trauma or shock. To achieve this, I have developed a 10-point examination that maximizes the amount of information gathered in the shortest possible time. This standard of care leaves no stone unturned in determining the true cause of the patient's condition. Some of these tests align with traditional medical practices, such as blood pressure measurement and urine analysis, while others, like heart rate variability testing, are not yet recognized by the medical profession.

1. History: We begin by thoroughly reviewing your health history, encompassing all past injuries and illnesses. Sometimes, seemingly insignificant past traumas may have been overlooked, including injuries sustained during the birthing process, which can contribute to current problems. Every injury you have experienced is recorded in your cellular memory. We must create a comprehensive map to understand why your body has ceased to heal, usually pinpointing a specific event or shock that initiated the issue. This part of the examination is time-intensive yet of utmost importance, often overlooked in typical patient-doctor encounters. It may take anywhere from 30 minutes to an hour, and in rare cases, I may divide the history-taking over multiple visits to ensure I gather all the necessary information. I also utilize functional evaluation forms, such as the Oswestry questionnaire, which provides an overall disability rating based on the patient's ability to perform daily activities. For most patients, it is not the pain itself but the loss of function that is most distressing. Furthermore, the site of the problem often differs from the location of the pain. Neglecting a thorough history can perpetuate the concealment of the true cause.

2. X-Rays/Diagnostic Ultrasound: Medical x-rays are typically taken with the patient lying down, which fails to reveal the effects of gravity. I always conduct x-rays with the patient standing, as this position allows me to observe the impact of factors like leg length discrepancies, joint alignment, scoliosis, and degeneration on the body. Many times, we identify issues that were overlooked in standard medical x-rays performed at imaging centers. In some cases, I may take x-rays while the patient is in motion, such as bending forward and backward, which often uncovers conditions like Spondylolisthesis, where vertebrae slip and compress the spinal cord. These unconventional x-rays unveil hidden problems. Additionally, at our clinic, we employ the Butterfly IQ diagnostic ultrasound device, which enables us to scan the body and visualize soft tissues like ligaments and organs. While not widely used in clinics, except for examining unborn babies, ultrasound is an invaluable tool that I would not practice without. The Butterfly IQ alone has garnered many referrals for our clinic. Thanks to this technology, I have diagnosed dysfunctional gallbladders as the cause of pain, saving patients years of ineffective therapy. It was through the Butterfly IQ that I discovered I had a 1 cm gallbladder stone and that my father had a significant carotid artery stenosis. Both of us are doing well, but without this technology, the outcomes could have been uncertain.

3. Neurologic Testing: Assessing all the major nerves in the body and observing the brain's response to stimulation is a standard practice in my examinations. Of particular importance are the 12 cranial nerves, which directly emanate from the brain and provide insights into the patient's overall health. I also evaluate the Cerebellum, perform blind spot mapping and check deep tendon reflexes. I want to know how the body responds to vibration, a pin prick, to heat and cold. These tests are not expensive to preform so patients can be retested frequently. I will often test before and after a single treatment to asses the effectiveness of a particular modality. When someone cannot feel vibration in their big toe and then after removing a subluxation or using laser on their nerve root there's a response, well that's powerful.

4. Muscle Dysfunction: Testing the major muscles of the body for proper function is crucial. The same nerves that control these muscles also innervate the organs. For example, dysfunction in the Tibialis Anterior muscle, located in the front of the lower leg, can be linked to urinary bladder issues, and vice versa. Muscle testing is essential, although the medical community often overlooks the significant connection between muscles and organs. By testing the major muscles, I can frequently identify potential health problems before they manifest. For instance, weak Tensor Fascia Latae muscle, related to the large intestine, prompted further testing, leading to the discovery and correction of underlying colon problems that could have developed into cancer if left untreated.

5. Palpation: Palpation, the skill of checking joints and organs for proper motion and tone through touch, is a valuable yet often neglected art. A skilled doctor can often identify issues simply by palpating. I can assess the position of organs such as the liver, spleen, and kidneys, and if restrictions are present, I can manipulate them to restore proper motion. A notable example is the treatment of a Hiatal hernia, which I have successfully addressed numerous times by manually pulling the stomach down from the throat. Patients are often amazed that such interventions can be done without surgery. Unfortunately, this hands-on approach is being overshadowed by drugs and invasive procedures. I would like to express my gratitude to Dr. Paul Arnold, a skilled osteopath, who assisted me in successfully treating my father-in-law's large inguinal hernia, providing instant pain relief. It is regrettable that more physicians do not invest the time to develop these skills. Dr. Arnold continues to run a busy osteopathic practice in Cape Coral, Florida.

6. Health Vitals: Assessing bilateral blood pressure, oxygen levels, pulse, body temperature, height, and weight can contribute to diagnosing underlying conditions. These vital signs offer valuable insights into a patient's overall health.

- Temperature: 98.6' F
- · Pulse Rate: 72 bpm men, 80 bpm women
- · Respiratory Rate: 8-16 cpm
- \cdot Blood Pressure: 110 to 140/ 60 to 90 mm Hg
- \cdot Height to Weight Ratio
- · Chest Expansion: 2-4 inches
- · Blood Oxygen Saturation Level: 100%

Vitals are done every visit. When was the last time your physician took your blood pressure 3 times to get an accurate number and did both sides of your body? You need to compare your right side to the left side for a complete picture. How about checking the difference in your blood pressure when you move from a sitting position to standing? Do you know what your blood oxygen saturation index is? My patients are taught how to self monitor these numbers with home care equipment and what is considered normal.

7. Urine Evaluation: Every patient receives a Urinalysis (UA) in the office as part of the 10 Point Examination. This gives a foundation from which I can start creating their metabolic profile. Many hidden or subacute health problems are uncovered from this test. Even a few years ago UA's were expensive and hard to preform but today anyone can buy these urine test strips from a local drug store or on the internet. I have convinced many of my patients to test their urine at home. This way they can monitor their health and the effectiveness of things like dietary or supplementation programs. Here is a breakdown of the most important elements to the urine study, as you will see there is a large amount of information available from an inexpensive test, Specific Gravity Measures the ability to concentrate and excrete your in the kidneys. Less than 1.015 indicates either high intake of water, very low electrolytes, decreased kidney function, or diabetes. More than 1.015 indicates dehydration, diabetes, decreased kidney function, congestive heart failure, liver failure, shock.

Normal pH is between 6.0 to 6.8. A pH between 5.0 and 6.0 indicates an acidic environment this could be due to high protein diet with mineral buffer deficiency, digestion or torsion problems, acidosis or fever. When the pH of the urine is between 7.0 and 9.0 this indicates an alkaline environment and can be the result of a vegetarian diet, urinary tract infections, metabolic or respiratory alkalosis. But, it is usually an indication of infection. Remember your body maintains it's pH naturally, this test indicates how much stress it is under to do that job.

There shouldn't be any leukocytes in your urine, these are white blood cells and always indicate the presence of inflammation and infection.

Nitrates are not normally present in the urine. The presence of urinary nitrate may indicate bacterial contamination or infection in the bladder. Usually this indicates a UTI.

Normally protein, because of its molecular size, is not excreted in the urine. Trace amounts can show up due to severe muscular strain, emotional stress, pregnancy, fever, trauma and ingestion of hard water. More significant amounts indicate kidney disease. Glucose should not be detected in normal urine and can indicates diabetes, kidney stress or Cushing's syndrome. This is a common finding although not normal.

When your body uses fatty acids as fuel it produces Ketones. If I'm doing a supervised fast with the patient I expect to see ketones in the urine by the third day. This would indicate the body has switched over to burning fat as fuel instead of glucose. If the patient is not fasting then the presence of ketones in the urine is an indication of diabetic ketosis, and needs to be further examined. Ketone strips are now available in any drug store and popular with the popular Atkin's style protein diet.

If Urobilinogen is present it points to liver damage, hepatitis, hemolytic disorders, biliary obstruction, and severe infection are all possibilities when this is positive.

Bilirubin is an indication of inflammation of the liver and biliary stasis or the presence of gallstones impeding the flow of bile into the small intestine. I see it in cases of hepatitis, cirrhosis, liver disease, and bile obstruction. Also this can be present if the patient is taking drugs that are toxic to the liver. Usually I will look for jaundice in these cases.

Unless the patient is a menstruating female there should be no Blood in the urine. There will be two types noted on your test strip. Non-hemolyzed can mean UTI, glomerular nephritis or strenuous exercise. Hemolyzed urine may be the result of allergies, or liver inflammation.

8. Heart Rate Variability: If you throw a stone into a lake, you will see the fish quickly scatter as their sympathetic nervous system

activates. This is a normal response we see in animals that help them survive, but if humans we hear loud noises all the time and we don't automatically start running. Humans have a history of exposure to these sort of events, like loud noises and we have a developed a familiarization to stress. Unlike the fish in the lake, our buffer system is the key to stress management and one of the primary ways to determine the strength of the buffer system is through modulation of the heart rate, also known as heart rate variability (HRV). The ability to handle stress without causing disease can be determined by the heart's ability to modulate its rate.

This has endless applications to designing effective treatment programs and evaluating their effectiveness. If the buffer system is not healthy the patient will never heal regardless of our good intention. Our software was created by the famous programmer Patrick Bottle and we are able to view and chart many different nervous system patterns in addition to HRV.

9. Functional Movement: This is based on work done by Dr. Vladimir Janda and his classification of upper crossed and lower crossed syndromes. I have the patient preform several activities like squatting, raising arms over the head and getting up from a chair and by observing how these actions are completed I can identify muscular imbalance. Most patient's have similar imbalances but every now and then I will get a surprise. I remember one patient with chronic headaches that we discovered were being caused by tight/dysfunctional hamstring muscles. You have to remember it is all connected and if you are only looking at the site of pain you are going to miss a lot of potential information.

10. Rule Out The Red Flags: I am very much in favor of self treatment however there are certain circumstances where yo

need to see your doctor. These are known as red flags. Anytime a patient has any of these it is important to seek professional help. Even in my clinic there are occasions where I will refer patients out for medical care. Any patient experiencing the following symptoms should consult with a physician immediately.

- · Pain is severe or worsens when lying down
- · Fever over 100' Fahrenheit
- · Pain is present for over a month
- · Unexplained weight loss
- · History of cancer
- · History of long term steroid use
- · Recent inset of urinary tract problems
- · Pain is related to a trauma
- · Severe weakness or numbness
- · Problems with urinating or having a bowel movement

The entire examination take around an hour to complete and unfortunately that is to long for some people. I have had potential patients complain about my exam times but those are the exact people who will be the first to suggest you missed something. I always imaging myself as Sherlock Holmes when I do exams and I try to find something that no one else has seen. It is my favorite part of the whole new patient processing. Most patient's don't realize that doctors rarely do full exams anymore, most of them just go through a few motions to convince you they know what is going on but in reality you are getting basically one of 4 or 5 possible medications regardless of what is wrong with you. The exam is truly a lost art and one that I intend on promoting by talking to the patient all the way through the evaluation. Known as the "talking exam", I just call out everything I find, both good and bad as I am doing the tests. Patient's are always impressed and usually remark, "My Doctor doesn't do that" or "Why hasn't my Doctor ever done that?" Maybe you need a new doctor?

In the following few pages I will present some general examples of how I treat the main conditions I see everyday. These are only brief examples and should not be interpreted as rigid protocols but rather just some examples of what you may expect coming to see us at APS. These protocols are used in conjunction with the 7 steps to innate healing supplementation recommendations found throughout this book.

BACK NAD NECK PAIN

Back and neck pain are common experiences for almost everyone, and the reasons behind it are intriguing. As humans evolved to walk upright, our spines underwent changes, transitioning from a horizontal position to an upright posture. This shift introduced new challenges for the spine, leading to issues like scoliosis and curvature abnormalities. Unlike other animals, our mechanical system involves constant twisting and torquing due to the movement of our arms and legs while maintaining an upright back. This, coupled with a sedentary lifestyle, can contribute to problems like herniated discs. Ischemia, or insufficient blood supply, plays a significant role in back and neck pain, particularly affecting the spinal discs.

In the medical field, the journal Spine has become a renowned publication, recognized as the top-ranked orthopedic journal worldwide. In its inaugural issue in 1976, orthopedic surgeon Dr. Alf Nachemson authored a comprehensive review on lower back pain, emphasizing the intervertebral disc as a likely source of pain. His article remains highly cited today, shedding light on the challenges posed by the lumbar spine. According to Dr. Nachemson, around 80% of individuals will experience low back pain at some point in their lives, with the intervertebral disc often implicated as the cause. The slow turnover of glycosaminoglycan in the disc further adds to the complexity of managing such pain.

It is important to note that while these insights provide a broader understanding of back and neck pain, individual cases may vary, and professional medical advice should always be sought for accurate diagnosis and treatment.

Glycosaminoglycan turnover plays a crucial role in the healing process of spinal discs, which means it can take a considerable amount of time for disc injuries to resolve. It typically takes around 500 days for the discs to fully recover. Understanding this timeline is important when recovering from back pain, as it highlights the need for patience and consistent care.

The spine consists of vertebrae separated by discs, which act as shock-absorbing cushions. These discs rely on movement for their nutrition through a mechanism called the pump mechanism since they are essentially avascular. When the spine is injured, even mildly, the blood vessels that supply the discs through the vertebral end plate can be damaged or die. As more vessels become injured, the disc's blood supply diminishes, leading to degeneration. The disc becomes dry, rigid, less flexible, and may eventually bulge, herniate, or protrude into the spinal canal, causing nerve impingement. This process of ischemia is at the root of most back problems.

To address the lack of blood supply, the solution is to increase blood flow to the damaged disc and promote tissue regeneration, without relying on drugs or surgery. Special x-rays that capture the spine in an upright and active position are essential to assess how the spine is moving. While MRI scans are useful for diagnosing diseases, they are typically performed in a lying-down position and can inaccurately show bulging discs. Evaluating the spine in an upright position provides a more accurate view. If there is movement in the discs, they can be regenerated; if there is no movement, regeneration is unlikely. This approach allows for targeted treatment based on individual findings.

Angiogenesis, the process of growing new branches of blood vessels into damaged tissues, plays a significant role in reversing degenerative diseases. While most people are familiar with antiangiogenic treatments for combating cancer by inhibiting blood vessel proliferation, in the context of back and neck pain, the goal is to promote angiogenesis to aid in healing. Spinal decompression treatments, such as Vertebral Axial Decompression (Vax-D), are highly effective in creating a negative pressure between the vertebrae, stimulating angiogenesis. Unlike traction therapy, decompression ensures that the force is transferred to the vertebrae instead of the muscles, minimizing muscle spasms and promoting the desired negative pressure. Vax-D equipment has been widely used and has shown remarkable results in improving pre- and post-treatment x-rays and MRI scans.

It's important to note that individual cases may vary, and consulting with a healthcare professional experienced in treating back and neck pain is crucial for accurate diagnosis and appropriate treatment options. Indeed, the spine is the interconnected superhighway for all the nerves in the body. Treating the spine in isolation is often insufficient because it functions as a chain, and dysfunction or pain in one area can affect other regions. For example, constantly bending the head forward while looking at a phone can lead to lower back pain, mid-back pain, or discomfort in the buttocks. This is because the spine does not work independently, and it's essential to examine the neck and lower back, at a minimum, regardless of the location of the reported pain.

The design of the neck is fascinating, as it must balance and support the weight of the head while allowing considerable mobility. The neck enables approximately 80 degrees of motion in both left and right directions, primarily through the upper two joints. This places significant stress on the area, and when dysfunction occurs, the surrounding muscles tighten in an attempt to stabilize it. This compression of the Occipital nerve and artery can result in headaches and neck pain. With repeated trauma and stress, the neck responds by attempting to stabilize itself, leading to degeneration of spinal discs, commonly observed in the C5 region, just above the shoulder bump. C5 degeneration is prevalent, affecting over 50% of patients over 40 years of age and nearly 80% of patients over 80.

Chiropractors often focus on the neck and perform adjustments that produce a satisfying "pop" or "crack" sound. While many individuals experience pain relief from cervical spine manipulation, the actual reason is different from what they might assume. Adjusting the vertebrae stimulates proprioception, which refers to the brain's awareness of a body part. Proprioception is a neurological process that enables the body to pay closer attention to an area and provide necessary healing if needed.

However, the cervical spine contains sensitive structures like the Carotid arteries that can be negatively affected by the torque generated during manipulation. There have been reported cases of arterial tears resulting from this type of treatment, leading to strokes and even fatalities. Considering the risks, especially in patients over 50 with arterial calcification, I do not perform traditional cervical spine adjustments. Instead, I have achieved excellent results using a device called an Arthrostim. This electrical machine delivers gentle tapping at around 10 beats per second to the injured part of the spine. It is a comfortable and safe method that does not involve dangerous torquing. The Arthrostim slightly moves the joint, activating mechanoreceptors (nerve receptors) in the facets, which transmit signals to the brain. This process increases proprioception in the brain, offering a safer and more logical approach to healing back and neck pain. Patients may refer to the Arthrostim as a "jackhammer," but it is gentle and produces almost immediate results.

The pump mechanism is the natural way for the back and neck to receive the nutrition necessary to maintain proper spinal disc height. While Vax-D is an effective method to restore this process, it's important to consider maintenance for a healthy back. Contrary to common belief, the key to a healthy back does not lie in strong muscles, particularly the stomach muscles. Exercises like sit-ups and leg raises can actually cause disc injuries, as suggested by Dr. Stuart M. McGill, a professor of spine biomechanics at the University of Waterloo.

Dr. McGill's research indicates that certain joints in the body require stability, while others require mobility. The low back, for instance, requires stability rather than excessive mobility. Attempts to increase flexibility in the low back through forward bending, whether in yoga or sit-ups, can lead to disc damage and tears. Animal models consistently demonstrate this outcome. It's comparable to continuously bending a copper wire until it heats up and breaks. Therefore, stability, not mobility, is what we should aim for in the lumbar spine.

To achieve mobility in daily life, we should focus on increasing mobility in the hips, as they demand mobility rather than stability. Following Dr. McGill's guidance, a safe program can be developed to optimize the body's efficiency. For now, it's recommended to avoid leg raises and sit-ups.

The spine naturally exhibits curves in the neck (lordosis), midback (kyphosis), and low back (lordosis). These curves, observed from the side, prevent spinal distortion and disc degeneration. If the natural curves are present, scoliosis (lateral curves) is unlikely to occur. Therefore, these curves are significant for injury prevention during activity. If one or all of these curves are missing, it's advisable to replace them gradually.

Current research suggests that the spine requires approximately 18 minutes to adjust to controlled stress. To reintroduce a curve in the neck, at least 18 minutes of therapy is recommended. Various devices are available to help restore these curves, but a simple towel roll can be used effectively. By folding a beach towel in half and rolling it into a loose cylinder, it can be placed behind the head on the neck, allowing the neck to stretch and extend comfortably. Advanced movements can be performed using a foam roll or a device like the Posture Pump. Additionally, wrapping a towel or Theraband around the base of the neck and gently raising and lowering the chin can help create a pumping mechanism to bring blood into the discs. A towel can also be used to stretch the upper back and reverse any humping, as well as to restore the natural lordosis in the lower back, following a similar approach as treating the neck.

Swimming can be highly effective for home care of an injured neck. The pressure of the water against the skin and the ability to float reduce pain and pressure on the spinal discs. To swim comfortably, wearing a mask and snorkel is recommended to avoid constantly looking up, which could exacerbate neck pain. Simply wading around the pool with a relaxed neck can help. For additional relief, suspending yourself in the deep end with a pool noodle wrapped around the back of your head allows the discs to decompress. In the case of lower back problems, swimming without focusing on kicking can be beneficial. Relax and bob around, using a pool noodle under your arms and simulating a biking motion in the water. Gradually, your body will move to a horizontal position, allowing you to move around the pool without pain. Spending time in the deep end without the noodle can further decompress the lower back, and some patients may apply a light weight to the ankles during this exercise. However, caution is essential to avoid accidents in the water.

If swimming is not feasible, using a rocking chair can provide similar benefits. Rocking back and forth gently activates the pump mechanism of disc regeneration and improves balance and spinal muscle control by activating the cerebellum. Consider purchasing an old-fashioned wooden rocking chair, preferably a large and sturdy one, along with comfortable cushions to prevent discomfort.

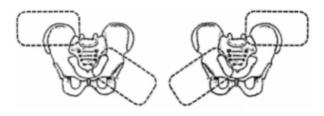
Regarding inversion tables, they can be beneficial if used correctly to reinforce the pump mechanism. It's important to invest in a good quality table and test a few options before making a decision. Instead of going fully upside down, a gentle pump is recommended. An alternative to inversion tables is a spinal traction belt like the DDS 300 by Disc Disease Solutions⁴. This brace is inflated with air and expands to separate the spinal bones around the disc, reducing pain and activating the spinal stabilizing muscles. For cervical spine treatment at home, Disc Disease

⁴ <u>www.ddsmed.com</u> Disc Disease Solutions offers many useful products that I have recommended over the years. You can even use my name DRSTOKES and get discounts, and free shipping.

Solutions also offers the Cervi-Trac, a neck decompression device that is highly effective.

Hyper mobility of the sacroiliac joints is a common issue that can cause back problems. The sacroiliac joints connect the sacrum to the pelvic bones and are constantly under pressure to compensate for lost motion from the lumbar spine. In many cases, rather than adjusting the joint for fixation, stability is needed. You can easily test if you have this problem by using a big leather belt wrapped tightly around the middle of your pelvis and observing how it feels when you move. If you experience less pain, wearing a Trochanter belt for a few weeks can provide stability and promote healing. Trochanter belts are affordable and can make a significant difference for many individuals.

Another helpful hack for back pain involves using a pair of shoes or sneakers. If you suspect a twisted pelvis (sacroiliac joint) causing pain, lay on your back and have someone check if one leg appears shorter than the other. If there is a noticeable difference, place a shoe, sneaker, or even a soft rolled towel under the shorter leg and lie there for 15 minutes. This technique has provided relief for individuals with back spasms, as demonstrated by an example at a wedding where laying on dress shoes helped alleviate severe back pain.



Right Short Leg Set Up

Left Short Leg Set Up

This is a view from above looking down at the patient, who is lying on their back looking up at you. If you are correctly placing the blocks (sneakers etc...) the legs should balance in length when you check them.

PAIN IN THE HEAD

Headaches are a part of life, I think I can safely say everyone has had one. You can get a headache from drinking too much alcohol or not enough water. Eating a lot of sugar, breathing in fumes or simply getting hit in the head. Sometimes headaches are a sign of underlying problems that are not directly related to the head. Nutritional deficiencies in iron, B12 and folic acid are known causes of headaches. Hormonal problems such as Hypothyroidism also produce headaches in most people. These are considerations for every patient. As I write this today I saw a lady in the clinic who reported she would have a headache every month with her period, then when she went through menopause the headaches increased to daily. This poor person has suffered with daily headaches for 15 years and no one had been able to help her. It took only 10 minutes of proper history taking for me to realize that her headaches were hormonal in nature. No one, not the neurologist, primary doctor or any of the many chiropractors she had seen over the years diagnosed this. All you need to do is listen to the patient.

Throughout my years of practice, I have successfully aided numerous individuals suffering from headaches by categorizing them into two distinct types, each requiring a unique approach. This differentiation is crucial because what may alleviate one type of headache often exacerbates the other.

The first category I refer to as musculoskeletal headaches, which happens to be the most prevalent and straightforward to address. These headaches typically manifest as a tension-type pain, characterized by aching muscles in the shoulder region, accompanied by tender spots beneath the back of the head and around the base of the neck. Applying pressure to these areas provides relief and diminishes the pain. Additional measures such as a soothing hot shower and nonsteroidal anti-inflammatory drugs (NSAIDs) like Advil or Aleve prove beneficial. The pain is generally bilateral, akin to a sensation of squeezing or pressure, and is not accompanied by nausea, sensitivity to light or sound, or aura. Our primary objective in treating these headaches is to reduce myofascial tension and sensitivity.

To commence treatment, I prioritize addressing the Galea Aponeurotica, the superficial fascia of the scalp. Positioned at the crown of the head, it serves as a connecting bridge between the front and back of the body, as well as the left and right sides. This unique positioning allows it to transmit stress experienced elsewhere in the body. When you learn to touch the top of someone's head with a gentle touch, you will gradually sense areas of tension throughout their entire body. Using the tips of my fingers, I delicately navigate the scalp, applying counter-tension wherever necessary. Remarkably, the tissues often respond swiftly to this technique.

Another area of concern is the suboccipital region, located at the base of the skull where it meets the neck. If you place your hand in that area, you will detect two prominent bumps beneath the skull, within which our treatment targets reside. Alongside various muscles that connect the head to the neck and shoulders, sensitive structures like the Occipital nerve and artery also inhabit this space. Directing a few minutes of focused treatment is typically sufficient to alleviate the headache and create space in this region. Massage therapists have achieved remarkable success in remedying these types of headaches, and many of our techniques reflect their approaches.

When it comes to treating headaches, I classify them into two categories: musculoskeletal headaches and migraines. Musculoskeletal headaches, which are more common, are characterized by tension-type pain, muscle aches in the shoulders, and tender spots under the back of the head and around the base of the neck. Pressure on these spots and hot showers can provide relief. Treatment for musculoskeletal headaches focuses on reducing myofascial tension and sensitivity. Targeting areas such as the Galea Aponeurotica (the superficial fascia of the scalp) and the suboccipital area (located behind the head where it meets the neck) can be effective.

However, migraines, which are less common, require a different approach. They are typically described as throbbing or stabbing pain on one side of the head, accompanied by nausea, sensitivity to light, sound, and smells, and sometimes visual disturbances or auras. Migraines are believed to be neurological in nature and represent a complete nervous system overload. Treating migraines often involves addressing neurological factors and may require a different treatment approach compared to musculoskeletal headaches.

Regrettably, what holds true for musculoskeletal headaches often proves ineffective when it comes to the second type of headaches I address: migraines. These migraines, which encompass the more severe cluster headache variant, are comparatively less common. Typically confined to one side of the head, they are characterized as throbbing and stabbing pain. Migraine sufferers often experience nausea and exhibit sensitivity to light, sound, and even certain odors. As they enter my office, they don their sunglasses and describe seeing an aura surrounding ordinary objects. While some attribute migraines to vascular origins, I reject this theory, and recent studies support my stance. Migraines, in fact, stem from neurological factors and signify a complete overload of the nervous system. One can envision a migraine as an electrical storm raging within the confines of the head.

Resolving the enigma of migraines lies in restoring equilibrium to the nervous system, particularly the brain. Direct access to the brain is, of course, unattainable. However, the benevolent Architect has endowed us with 12 cranial nerves that maintain direct connections to the brain, bestowing upon us the opportunity for therapeutic intervention. In my approach to treating migraines, my primary objective is to pacify the neurological tempest by alleviating cranial pressure and rebalancing the cranial nerves. It is worth noting that massage therapy exacerbates the condition by overstimulating the nervous system. Assisting patients in overcoming this challenging condition is no easy feat. However, when executed correctly, the results can be nothing short of dramatic.

Imagine the profound impact of being plagued by migraine headaches from a young age, enduring 30 to 50 years of excruciating pain, and then suddenly experiencing freedom from that torment. Treating migraines is undeniably one of the most gratifying aspects of my work. A significant portion of my approach draws inspiration from the renowned Osteopathic physician, Dr. William G Sutherland (1873-1954), whose lifelong dedication led to the development of cranial manipulation techniques. During his time, he faced harsh criticism from the medical establishment, which adamantly argued against the notion of cranial bone movement. However, with the advent of advanced diagnostic tools like MRI scans, many of Sutherland's ideas have since been vindicated. Even though neurosurgical videos have depicted the pulsation of the brain, as Sutherland had suggested, cranial therapy continues to be misunderstood and unaccepted by the majority of medical doctors.

The human skull is not an immovable structure; it consists of 108 joints that glide and interlock, functioning like gears, accommodating the brain's expansion and contraction. Through extensive experience, I have discovered that a handful of specific areas account for 90% of migraine-related issues. My initial focus lies in decompressing the hard palate, which is the roof of the mouth. I firmly believe that addressing the hard palate alleviates migraine headaches by stimulating the greater palatine nerve, a branch of the Trigeminal nerve. The second area of attention is the Temporal bones located on the sides of the head. By gently pulling the ears outward, I provide traction to the temporal bones, indirectly calming the brain. Typically, these techniques offer some relief to patients. However, if necessary, I employ a more invasive yet highly effective treatment to swiftly reduce cranial pressure. By inserting a small balloon into the patient's nasal cavity and carefully inflating it, I am able to promptly adjust and expand the skull, thus alleviating pressure. It is important to note that I cannot delve into the details of this procedure here, as attempting it without proper training can lead to serious harm. Nevertheless, for many of my patients, this nasal treatment has proven to be the missing piece of their migraine solution. If you have not yet explored this type of correction, it is certainly worth considering. Now, shifting gears momentarily let's address knee pain...

KNEE PAIN

When patients come to me with a diagnosis of "bone on bone" in their knee, I often ask them a simple question: Can you bend your knee? If the answer is yes, then it's not truly a case of bone on bone. The ability to bend the knee indicates that there is still some remaining cartilage. In the absence of any cartilage, the knee would be locked and immobile. It's crucial to grasp this understanding. Take a moment to reflect on what I just stated. The degeneration shown on an X-ray does not necessarily equate to bone-on-bone contact; this is a common occurrence in individuals over 50 years of age. Degeneration seldom indicates bone-on-bone status.

Moreover, if you have the ability to move your knee joint, there is a potential for cartilage regeneration. Most patients experience significant symptom relief within the first few days of our knee treatment, although it can take up to 500 days for complete tissue regeneration. While I can assist patients in alleviating their pain, it is important for them to continue the process and remain aware of the ongoing changes within the joint to achieve full correction. The main point to grasp here is that you can regenerate the cartilage in your knee joint and effectively resolve most issues without resorting to drugs or surgery. In many cases, patients can find relief from conditions such as meniscus tears, bursitis, Osgood-Schlatter disease, runner's knee, jumper's knee, patellar tracking problems, and osteoarthritis. Surgery is only necessary in severe cases where there is significant damage to the stabilizing ligaments. I refer less than 10% of my patients to surgeons. If a ligament is completely detached, surgery may be required, but for partial tears, there is a chance for correction. I typically recommend a 14-day trial period to observe how the knee responds, expecting a 30-60% improvement within that timeframe.

The knee joint is indeed a complex structure, and despite being commonly referred to as a hinge joint, it possesses additional complexities beyond simple hinge-like movement.

It is crucial to understand that the knee joint operates more akin to a screw than a simple hinge. This understanding is paramount when attempting to heal the knee through therapy. It is important to recognize that the knee is influenced by the lower back, specifically the Femoral nerve and its branches. This means that knee pain and dysfunction can occur without direct injury to the joint itself. For instance, a herniated disc in the spine can cause pain and weakness in the knee. Therefore, in all cases of knee pain, it is essential to examine the lower back. I find that approximately 70% of the time, treating the lower back alongside the knee yields lasting results. Many patients come to me after failed knee surgeries, only for me to discover that the root of their problem lies in the L3 spinal disc. In such cases, the surgery was unnecessary as the issue did not originate in the knee after all.

Additionally, you must assess the patient's feet, paying particular attention to ankle mobility. If the ankle joint lacks flexibility, the stress is transferred to the knee. Even something as simple as a tight calf muscle (located at the back of the legs) can lead to knee injury if left untreated. I often provide patients with a simple wooden block and instruct them to use it for stretching the tight muscles. The results can be remarkable. Of course, proper arch support in the foot is also essential, and there are other details to consider. However, most patients experience immediate improvements from this straightforward, generalized approach.

When considering the regeneration of the knee joint, several therapies are crucial to contemplate: PEMF, Hako Med, Class 4 Laser, and Kax-D (knee joint decompression performed on a VAX- D machine). When used in combination, these therapies provide almost immediate pain relief and promote angiogenesis (blood vessel growth) in the damaged tissues. Particularly, laser therapy has been extensively studied in Russia, demonstrating its ability to regenerate joint cartilage. Many patients have visited physical therapists (no offense intended) and have been advised to exercise the leg muscles for knee pain. I comprehend the reasoning behind this approach, but it is incorrect. Exercising the knee muscles can worsen the condition and potentially cause further cartilage damage.

Consider this: if the cartilage is already worn out, why would you strain it further? Would you drive a car with flat tires? Therefore, a more effective approach involves healing the damage. Patients often demand exercises, which is peculiar, so I devised something they can do that aids in regenerating the knee joint without stressing the structures. I refer to it as the "knee pump." Simply position your knees at the edge of a high chair or table, and attach ankle weights to each leg. For most individuals, weights between 8-10 lbs work well. Now, gently rock your legs back and forth in an alternating sequence, avoiding activation of your quadriceps muscles. The objective is to create a pumping motion within the joint space, facilitating fluid circulation in and out of the knee. This gentle stress stimulates the immune system and induces controlled inflammation, thereby aiding in cartilage regeneration. Aim for approximately 10 minutes of this exercise, repeating 2-3 times daily, and observe how your body responds. If you are genuinely committed to joint regeneration, continue this routine for at least a year (500 days for full cartilage regeneration). In some cases, complete joint restoration may require several years.

While nutrition isn't the sole determining factor, it still plays an important role in cartilage and tissue development. One particular element you should ensure an ample supply of is bone broth. Bone broth has been a staple in human diets since the time we began cooking food over fire. It involves simmering bones from various animals, like fish, beef, chicken, and turkey, which are typically discarded. This practice has been celebrated by cultures worldwide for centuries. Beyond enhancing the flavor of recipes, bone broth offers extensive and diverse health benefits that have now gained widespread attention. In fact, it might be considered the "hottest trend in health" today, despite its ancient origins.

Throughout history, virtually every culture has utilized some form of bone broth to promote health and support a robust immune system. This nourishing liquid is packed with protein, collagen, gelatin, glucosamine, chondroitin, and essential minerals often lacking in modern diets. These vital nutrients contribute to a wide array of health advantages and support various bodily systems, including the gut, immune system, joints, lean muscle mass, skin, hair, nails, metabolism, and maintaining a healthy weight.

Bone broth contains an abundance of Type II collagen and essential minerals such as potassium, magnesium, calcium, selenium, glycosaminoglycans (GAGs), hyaluronic acid, glucosamine, and chondroitin. It is also high in proline and glutamine, amino acids that promote digestive system health. As a result, bone broth surpasses supplements as it directly aids in cartilage regeneration. At the very least, consider incorporating bone broth into your morning routine before breakfast. In more severe cases, consuming several servings per day is even better. Personally, I enjoy mixing it with grass-fed cow butter, which increases my intake of healthy fats. Achieving successful knee joint regeneration is not sufficient on its own to ensure proper functionality. It is crucial to address two significant structures: the Popliteus Muscle and the Infrapatellar Ligament. To determine if these areas require treatment, I conduct a simple test. I have the patient stand on one leg (using support for balance) and bend the supporting leg by approximately 30%. If they experience pain during this movement, it indicates the need for treatment in those specific areas.

The Popliteus muscle in the leg plays a crucial role in unlocking the knee during walking. In my experience, I have observed that it is often weak and requires strengthening. Here are two techniques I use to address the Popliteus muscle and the Infrapatellar Ligament:

1. Strengthening the Popliteus Muscle: The patient lies on their stomach while I apply firm pressure to the lateral attachment of the Popliteus, located below the lateral condyle. The patient initiates internal rotation of their foot while I provide resistance of about 10-15%. They extend their leg while maintaining this contact. By repeating this process for about three consecutive movements, I can activate a neurological reflex that immediately strengthens the muscle. I have taught this technique to doctors within a short time frame, and it has proven to be an effective treatment. When combined with strengthening the Infrapatellar Ligament, it corrects around 60% of knee issues in my clinic, often in just one treatment.

2. Strengthening the Infrapatellar Tendon: This tendon, located beneath the kneecap, can be quite tender. With the patient lying on their back and their affected leg supported on my bent knee, I apply strong pressure to the ligament while the patient lightly presses their heel downward, allowing the knee to passively flex. Again, a few movements are performed, and then we reassess using the squat test mentioned earlier. Typically, there is improvement observed.

If you ever find yourself in my area and are experiencing knee problems, I encourage you to visit my clinic and undergo these two treatments. It only takes approximately 15 minutes, and it may provide significant pain relief and healing for your knees. It's worth giving it a try.

BAD SHOULDERS

Inability to raise your arm out to the side and above your head often indicates a supraspinatus muscle tear. If the tear is complete, surgery is typically required, while therapy can be beneficial for partial tears. It's important to note that the shoulder is a highly intricate joint and relies on the shoulder blade (scapula) for additional stability.

When raising the shoulder to the side, many individuals tend to incorrectly engage the trapezius or levator scapula muscles to complete the movement. This is evident when the shoulder raises upward as the arm moves, resembling a shrugging motion. The correct approach involves keeping the shoulder down, utilizing the supraspinatus muscle, and ensuring the shoulder blade remains pressed against the rib cage. Failure to do so over time can lead to stress on various shoulder structures, resulting in tearing, degeneration, and bursitis.

Our treatment process occurs in stages. Initially, our focus is on reducing pain and inflammation without concerning ourselves with the movement dysfunction. This phase typically lasts around 14 days and involves modalities such as Class 4 Laser, Hako Med, and Gua Sha. Once the arm begins to feel better, we can proceed to reeducating the movement and facilitating the regeneration of any damaged cartilage. Regardless of the joint's location (be it the back, knee, or wrist), they all require the same element for cartilage regeneration: blood flow. The primary treatment for tissue regeneration is the PEMF machine, supported by numerous studies demonstrating its ability to regenerate partial tears in approximately six weeks. During this time, I see patients daily and gradually provide them with home exercises to aid the process.

Joint cartilage receives nutrition through a pumping mechanism facilitated by movement. Our goal is to activate this "pump mechanism" while avoiding excessive muscle development. If energy is primarily directed towards the muscles, the cartilage becomes secondary. Many patients receive strenuous shoulder exercises that prove ineffective because they primarily target the muscles rather than the joint itself.

Patients are often prescribed a simple movement involving the use of ankle weights around their wrists. With a few pounds of weight, they can either sit or stand and swing their arms back and forth in a small range of motion using an alternating or cross-crawl pattern. This exercise is performed for 5-8 minutes several times a day. With consistent practice and proper clinical support over a period of 6 to 9 months, joint cartilage regeneration can begin (bearing in mind the natural turnover time of approximately 500 days for cartilage). It's important to start with a suitable weight and avoid excessive muscle engagement, as the focus should be on treating the cartilage.

Supplementation is also recommended, which includes a high intake of bone broth to ensure adequate minerals for cartilage building (such as glucosamine sulfate), as well as **Calamari Omega 3 Liquid** (Standard Process) to reduce inflammation. Additionally, incorporating a handful of **Chlorophyll Complex** (Standard Process) into the regimen can contribute to achieving exceptional results for those seeking optimal outcomes.

Frozen shoulder, a condition that restricts arm movement above the head and can make daily tasks like shaving or combing hair impossible, has gained significant attention for valid reasons. However, in many cases, a complete restoration of movement is possible with just one treatment. The key lies in addressing the latissimus dorsi muscle, a large wing-like muscle located under the armpits. The latissimus dorsi muscle is responsible for keeping the arm and shoulder down. By releasing the tension in the latissimus dorsi muscle using the neurological reflex treatment mentioned earlier, the arm can often regain full mobility in a single treatment. This is achieved by lengthening the latissimus dorsi muscle and strengthening the supraspinatus muscle.

Additionally, the rotator cuff, which attaches to various points on the head of the humerus (arm bone), interacts with the acromion—a small bony segment connected to the shoulder blade (scapula). Between the acromion and the humerus, the rotator cuff tendons can become pinched or irritated during certain movements, leading to wear-and-tear over time. In some cases, due to genetics or lifestyle factors, the acromion bone can develop a downward hook shape towards the humerus, further reducing the space between the acromion and the humeral head and increasing the likelihood of impingement.

A study comparing shoulders with rotator cuff tears to those without issues found that 62% of the injured shoulders had hooked acromions, compared to only 13% in healthy shoulders. In certain cases, hanging from a bar can help correct this problem. The concept behind hanging from a bar is that when the arm is fully extended overhead, the humerus (arm bone) presses against the acromion, potentially reshaping it over time. Since modern humans no longer engage in activities like swinging from branches or climbing ropes, there is no natural stimulus to counteract this deformity. Therefore, incorporating a daily hanging routine, gradually increasing the duration, can provide the shoulder with a reason to remodel itself. Trying this approach is worthwhile, as significant improvements have been observed in my own shoulders through hanging exercises.

It is important to note that if the supraspinatus muscle is completely torn from its bone attachment, surgery is necessary to reattach it. In such cases, therapy alone will not restore movement but can help alleviate pain. Therefore, I always request an MRI before treating a shoulder to avoid wasting time. If surgery is required, many of the treatments we utilize, such as Class 4 Laser, can aid in the recovery process.

Furthermore, it's worth considering that the C5 nerve root innervates several shoulder muscles. Thus, problems in the shoulder can be influenced by conditions like a herniated disc or arthritic stenosis at that level. In cases where all other approaches have failed, cervical decompression therapy (Vax-D) can often produce the desired positive outcome you have been seeking.

NEUROPATHY

Neuropathy refers to a nerve problem or dysfunction, but it is often associated with spinal nerve damage. However, in some rare cases, neuropathy can also occur as a result of exposure to harmful chemicals, such as those used in chemotherapy treatments, bug sprays, weed killers, and various environmental pollutants present in the air, water, and soil. While conditions like carpal tunnel syndrome and sciatica are forms of neuropathy, the general public commonly associates neuropathy with diabetes due to its prevalence in diabetic individuals.

The underlying mechanism of neuropathy is ischemia, which refers to a restriction in blood supply to tissues, resulting in a shortage of oxygen necessary for cellular metabolism and tissue vitality. Ischemia is typically caused by issues with blood vessels, leading to tissue damage or dysfunction. It involves not only a lack of oxygen but also reduced nutrient availability and inadequate removal of metabolic wastes. Ischemia can be partial or total. The solution to neuropathy lies in increasing vascularization, or the growth of new blood vessels, to the injured nerves and tissues. This process is known as angiogenesis.

Regardless of the specific cause of neuropathy, the treatment approach in my clinic focuses on reversing ischemia through angiogenesis. I prefer utilizing machines over hands-on therapy to ensure consistent results. Technological advancements have enabled the replication of techniques and immediate feedback on treatment outcomes. All neuropathy patients at my clinic undergo various therapies, including pulsed electromagnetic therapy (PEMF), spinal decompression for the neck or lower back, hako med electrical stimulation, laser radiation, and in some cases, oxygen therapy. While I still perform limited hands-on interventions to fine-tune the healing process, it typically takes a short amount of time due to the effectiveness of the machines.

Additionally, all neuropathy patients are initiated on a 10-day nutritional supplementation program designed to support cellular regeneration. We offer two plans, one tailored specifically for diabetics and another for individuals without diabetes. These programs involve complete lifestyle modification using whole food concentrates, herbal medicine and dietary changes to support the healing process.

Patients can expect to observe a significant improvement in symptoms within the initial 30 days of treatment, followed by functional recovery by day 60 and long-term stabilization by day 90. However, it's important to note that each individual's health and disease progression may vary, so this is not a one-size-fits-all approach. Rather, it serves as a guide to help set realistic goals. In other words, reversing neuropathy in just a few weeks is not typical. Although rare cases may see rapid improvement, it's likely that those individuals didn't actually have neuropathy, as it takes several months for the nerves and blood vessels to fully recover.

Treatment should be administered daily until the healing response stabilizes. In our office, we have found this typically takes around four weeks. Afterward, the frequency can be reduced to 2-3 times per week. It's important to ensure treatment does not exceed the patient's metabolic capacity, as this can lead to exhaustion and hinder the healing process. From our experience, the maximum treatment time a patient can handle is approximately an hour. To easily assess metabolic capacity, one can test heart rate variability (HRV). If the treatments are effective, HRV should improve. If not, it's likely that the intensity of the treatment is too high and should be adjusted.

For individuals with neuropathy, maintaining a healthy cardiovascular system is crucial since the growth of new blood vessels plays a significant role. Monitoring blood pressure, resting pulse rate, chest expansion, and oxygen saturation levels are useful indicators of treatment success. Again, it's important to emphasize that being overall healthy greatly contributes to recovery, whereas an unhealthy person may require additional support. Exercise routines for neuropathy patients primarily focus on improving cardiovascular health rather than building skeletal muscle, and these are detailed in the exercise section. Patients are often surprised when I inform them that the number one exercise for neuropathy is simply breathing.

Despite the availability of easier options, some patients still refuse to engage in exercise or participate in harmful activities such as smoking. These same patients often express confusion during re-evaluations when their progress doesn't meet their expectations.

Many patients inform me that they were told there is no cure for neuropathy, and I agree with them. It's important to understand that there is no cure for anything; instead, the body focuses on healing. When damaged tissues are replaced, the replacements are always of lower quality. Nevertheless, most individuals find these results satisfactory. Given sufficient time, which can be up to 12 weeks, I consistently observe a 90% success rate that endures. To clarify, I mean that within 12 weeks, most patients experience a 90% reduction in their complaints, which do not return. Results naturally vary due to various factors, and in rare cases, there may be a complete failure of recovery. It's important to recognize that treatment is not a magical solution, and healing can only occur if the potential for it already exists. We cannot create what is not already present, and patients often overlook this critical fact. Will treatment work for you? Well, how is your current health? When you sustain a cut on your leg, does it heal quickly or slowly? How is your digestion? Sex drive? Energy level? All these factors contribute to determining your potential, and perhaps you may not experience a 90% improvement, but rather a 50% improvement. Regardless of your current state, false hope does not exist if you are willing to put in the effort.

In my experience, a significant dosage of **Cataplex B-Core**, which is a natural source of B vitamins forms the basis of the supplement program. Cataplex B Core is very different from synthetic B vitamin products on the market, which can cause negative side effects in many people. Cataplex B Core contains bovine liver, organic beet (root), nutritional yeast, defatted wheat germ, rice bran, organic carrot, organic sweet potato, and bovine adrenal as primary nutritional sources. **Neurotrophin PMG** is a speciality product that is essential in treating any nerve condition, and I will explain how these PMG's work in a later chapter. Strangely, **John's Wort 1.8g** which is usually associated as an anti depressant herb also helps dramatically with neuropathy patients.

The treatment for neuropathy involves daily sessions for 4 weeks, and if there is improvement, we continue with 3 sessions per week for an additional 4-6 weeks. The modalities that assist in promoting nerve regeneration include Class 4 Laser and Hako Med. Depending on the severity of the condition, vibration therapy and some myofascial work may also be incorporated into the treatment sessions. Unlike many other diseases I treat, neuropathy truly affects the entire body and should be addressed accordingly. As mentioned earlier, approximately 60% of neuropathy sufferers may have spinal degeneration and stenosis contributing to their condition. Therefore, it is crucial to decompress the spine in addition to treating the peripheral nerves.

The calf muscles play a vital role in directing blood flow to the lower legs. Encouraging patients to perform gentle ankle raises can significantly enhance the healing process. In the case of hand neuropathy, simple wrist curls or squeezing a soft ball can yield positive results. Some patients may find portable TENS units useful for stimulating their feet between clinical sessions. Lower frequencies (1-10 Hz) are employed to strengthen the nerves, while higher frequencies (100-200 Hz) help reduce pain. To promote nerve healing, frequencies above 1000 Hz are required, which are available through Hako Med Therapy. Our neuropathy treatment protocol was featured in a study that showcased an 87% success rate among 284 patients⁵, which is quite promising.

Neuropathy is not a mysterious condition; it is a disease caused by reduced blood flow that necessitates treatment focused on stimulating angiogenesis. Achieving lasting results requires dedication from the patient and regular treatments administered over several months. It's important to understand that neuropathy can indeed be healed, and most individuals do not have to endure unnecessary suffering.

TREATMENT MODALITIES

If your pain stems from a traumatic injury like a herniated disc, torn muscle, or injured ligament, therapy can significantly contribute to your healing process. Throughout my years of treating patients since 2001, I have developed a highly effective therapeutic approach called Angiogenics[™]. This approach focuses on stimulating angiogenesis, which is the body's process of growing new blood vessels to supply soft tissues with oxygen and nutrients. In my view, angiogenesis serves as the fundamental basis for all forms of healing, regardless of the specific condition.

^{3. 247} patients (87%) reported total recovery treatment success or a definite positive influence with their condition (i.e., pain resolution, vascular change, new tissue growth, etc.) using the Hako Med Therapy. F. Savery, M.D., R. Sorgnard, Ph.D., J. Woessner, M.D., Ph.D. Clinical Electromedical Research Academy Excerpta Medica Journal Report Advances in Therapy, Vol.7, No.5 American Academy of Pain Management - Annual Conference 1992 Expo-Medica: Latin America - 1993 "Oral Presentation

It represents a remarkable advancement in medicine, and you can expect to hear more about it in the future. The treatment I offer promotes cellular regeneration without relying on drugs, injections, or invasive surgeries, and its efficacy is strongly supported by research and case studies.

In our clinic, we utilize four key pieces of technology to promote angiogenesis: Vax-D, Hako Med, Class 4 Laser, and PEMF Therapy. Additionally, I personally administer a series of protocols that combine Chiropractic, Osteopathic, Acupuncture, Massage, and Cranial Therapies. These protocols have proven to be highly effective in stimulating the body's innate healing response. It's worth noting that unlike traditional manual therapies, the methods I employ are gentle and safe for individuals of all ages, including small children and older patients.

VAX-D (VERTEBRAL AXIAL DECOMPRESSION)

Allow me to share a testimonial from a remarkable patient, Dr. Robert Channey, MD, the former assistant Surgeon General of the United States. Given his cautious nature as a government official, his endorsement holds great significance. Here is his story, in his own words:

"I had been dealing with a back problem since 1977. We discovered that the discs in the L4-L5 and L5-S1 region had deteriorated. In July, I experienced excruciating pain in my back, which extended all the way down my left leg to my toes. It wasn't until late September that I came across a TV program about VAX-D. It seemed promising, but I remained skeptical. I called their office and scheduled an appointment for the next day. During the appointment, they conducted a thorough examination and recommended an MRI. The results showed deterioration in the L4-L and L5-S1 areas. They suggested I start VAX-D and undergo treatment for 15 consecutive days, which meant missing out on weekends at the beach and on my boat. I thought, well, it's worth a try, so I began the treatment.

One Saturday morning, while at the clinic, I had a conversation with another physician who was also undergoing treatment. I mentioned that I believed VAX-D was benefiting my back, but I still had doubts about the sciatic pain in my left leg. He shared the same sentiment, but we decided to continue with the treatment regardless. On September 27th, which also happened to be my birthday, my large family took me out for a seafood dinner by the bay. Throughout the entire outing, I couldn't find any relief from the aches in my back, particularly the pain in my left leg. I continued on with treatment and after the fifteenth session I only had a slight twinge. Since that day on, I am completely free of the pain in my back and my left leg. I jog the same as I used to, as I did last evening, not a very long one, down to the park and back. I cut the lawn, I'm back without any pain at all, and I've got to say that VAX-D was the thing that did it for me."

Dr. Channey's testimonial holds a place of honor on the wall of my clinic, and his video is featured on my website. His experience is just one among thousands of individuals who have found relief from chronic back pain with Vax-D. I must emphasize that this success is not a reflection on me, but rather a testament to the ingenuity of Dr. Allen Dyer, MD, the creator of this remarkable technology and former Minister of Health for Ontario, Canada.

The design of our backs presents a significant problem. Discs, small cushions located between the spinal bones, act as shock absorbers. The center of these discs contains a jelly-like substance (nucleus), surrounded by a cartilage wall (annular fibrosis). These discs are the leading cause of back pain in humans. They can sustain injuries from torsion, and once damaged, they may bulge or herniate, exerting pressure on the nerves and causing pain. As we age, these discs dehydrate, becoming thinner and more sensitive to pressure. When someone mentions back pain due to arthritis, in most cases, they are referring to degenerative disc disease–a condition where the disc wears out. Complicating matters further, discs lack proper blood supply. They do not have direct vessels to deliver blood, oxygen, and nutrients. Consequently, healing these discs becomes challenging, and most never fully recover after sustaining an injury.

The nutrition of a healthy disc relies on motion. This is why maintaining movement, such as through regular exercise like walking, is crucial for the well-being of your back and spinal discs. However, there is a significant catch-22 situation here. When a disc is injured, motion can exacerbate the pain and further damage the disc, halting the normal process of blood supply and impeding healing. The spinal disc represents a vulnerable point, the Achilles' heel of back pain. You can try ust about anything but most treatments just do not work very good. Traditional approaches such as anti-inflammatories, injections, and physical therapy may provide temporary relief from back pain, but they cannot repair damaged discs. Surgery is often considered as a last resort for disc injuries, typically involving nerve decompression. However, until recently, the options were limited to either living with pain or undergoing surgery. Fortunately, a manual therapy called Vax-D (vertebral axial decompression) has emerged as a successful method for decompressing damaged discs. This therapy was developed by the brilliant Dr. Allen Dyer, MD, who holds several patents, including one for technology used in common heart defibrillators. I have personally met and trained with Dr. Dyer, and he is an expert in treating back pain.

Dr. Dyer embarked on a journey to alleviate his own back pain and soon realized that traditional treatments had poor success rates. Recognizing that disc damage is often pressure-induced, he hypothesized that reducing the pressure on the affected structures could help. While previous attempts had been made with traction therapy, Dr. Dyer recognized its limitations. Traction could stretch the spine, but it could not overcome the muscle guarding reflex. As the muscles tightened, the tension increased spinal disc pressure, leading to further damage. I personally experienced this issue with early attempts at stretching my back on a traction table, which resulted in further injury due to the inability to overcome the muscle guarding reflex and tearing my disc.

Dr. Dyer, while experimenting in his boathouse, devised a solution using a block and tackle setup to determine how to apply sufficient force to the spine without triggering muscle spasms. Spasms are a protective response by the muscles to prevent damage to the spinal cord. Dr. Dyer discovered that a logarithmic curve, a mathematical formula, could be employed to apply pressure in a manner that tricks the brain and prevents spasms. Essentially, it involves a slow and controlled pull using logarithmic ratios. Pistons in engines use logarithmic ratios, and Dr. Dyer incorporated a piston-firing mechanism into his device based on this principle.

Vax-D has demonstrated remarkable effectiveness in reducing pressure within the spinal disc. In a normal spinal disc, the pressure is approximately 75 mm/Hg. With traditional methods such as traction or hanging on a bar, the pressure can be reduced to around 35 mm/Hg before triggering muscle spasms. However, Vax-D, utilizing its patented logarithmic curve treatment system, can reduce the pressure to a negative level of 135 mm/Hg. This negative pressure creates a vacuum inside the damaged disc, allowing it to naturally absorb bulges, herniations, and fluid, facilitating the healing process over the course of 20, 45-minute treatments. This level of negative pressure was not achievable prior to the invention of Vax-D.

Moreover, the vacuum created by Vax-D flushes the damaged disc with blood and oxygen, promoting angiogenesis. This means that new blood vessels grow around the disc, providing it with a fresh supply of nutrition, thereby keeping it healthy. It is important to note that Vax-D is often criticized as merely being traction, but in reality, only Vax-D treatment can generate a negative intradiscal pressure in the spine. Other decompression tables on the market, as well as traditional traction, cannot achieve this. There is a study that substantiates this claim:

The study titled, **Effects of Vertebral Axial Decompression on Intradiscal Pressure" by Gustavo Ramos, MD, and William Martin, MD, published in the Journal of Neurosurgery (Vol. 81: No. 3, 1994),** confirms that Vax-D creates a negative pressure force as low as -160 mm/Hg.

There are three other studies with mentioning here but on my website you can read the other 20-30 if you are interested. A 42 patient study showed 76% achieved remission of pain with 18 treatment sessions, versus 43% remission with 9 treatments. Except in emergent conditions, VAX-D should be utilized before surgery is undertaken. Success correlates with number of sessions administered⁶. Four years after VAX-D, Patients show a 4 sustained 86% reduction in pain; 91% of patients resumed their normal

⁶ Journal of Neurological Research (Vol. 26, April 2004) Efficacy of Vertebral Axial Decompression on Chronic Low Back Pain: Study of Dosage Regimen. Dr. Gustava Ramos, MD

activities⁷. And in 1998 a big study was completed on 778 cases that showed a 71% success rate in lumbar herniations, degenerative discs and arthritis of the facet joints⁸ .The Vax-D treatment is changing the way we treat back pain in this country. If you are suffering please accept my offer right now to come into my clinic and learn all about how this treatment that can fix your condition. You will be under some of the most experienced care in the United States. Our Vax-D associates have all been personally certified by Dr. Allen Dyer, MD and have preformed thousands of treatments. They all have passed a formal written examination and practical evaluation that includes more than 100 hours training before ever touching a patient. In addition they are all Registered Chiropractic Assistants, licensed through the State of Florida. Let's just say they really are good at what they do.

Recently, we have developed the technology to also include the treatment of the neck and the knee, producing results that are objectively seen on post MRI's and x-rays

HAKO MED

The Hako Med is an electrical device with an unusual name. If you saw how this machine looks, you would think it was a robot from NASA. Standing over 3 feet tall, the Hako Med has around 8 hoses coming out of it, attached to suction cups. I suppose it truly resembles an Octopus, except for the large digital display that constantly flashes numbers and program readouts. The Hako Med has received FDA clearance for various indications. Unlike other

⁷ Anesthesiology News, (Vol. 29, No. 3 March 2003) VAX-D reduces 5 Chronic Discogenic Low Back Pain. Robert H. Odell, M.D., PhD., Daniel Boudreau, D.O

⁸ Journal of Neurological research (Vol. 20, No. 3 April 1998) Vertebral Axial Decompression Therapy of pain associated with Herniated or Degenerative Discs or Facet Syndrome: An outcome Study. Earl Gose, PhD; William Naguszewski, MD

electrical therapy devices used by physical therapists and chiropractors in the United States, this equipment is specifically designed for physicians involved in clinical pain management and Neuropathy. It shares a closer relationship with surgically implanted electronic stimulators but is delivered effectively through the skin without needles.

The Hako Med delivers electronic frequencies that can block pain signals and heal nerves without requiring painful injections or potentially harmful medications. Patients often compare its "feel" to a TENS unit, but the Hako Med is more complex and sophisticated. While a TENS unit produces frequencies between 1 and 100 Hz to distract patients from pain, the Hako Med can generate frequencies up to 20,000 Hz. Nerves fire at around 1000 Hz, so exposing them to higher frequencies can produce different biochemical effects, such as reducing pain by expending cyclic adenosine monophosphate (cAMP).

Dr. Hansjürgens, the inventor of the Hako Med Horizontal Therapy device, coined the term "multifacilitory stimulation" to describe the intracellular results and other benefits of electromedical treatments at frequencies greater than those that stimulate nerve firing. Although I haven't personally met him, I've had several conversations with his son, who resides in Hawaii and continues his father's research.

When my back was injured, I incorporated the Hako Med into my rehabilitation routine several times a day, and the results were outstanding. This device serves as the missing link in treating chronic pain syndromes such as Fibromyalgia, Neuropathy, Reflex Sympathetic Dystonia (RSD), and numerous other nerve-based disorders. I cannot express enough positive things about the Hako Med. A recent study revealed that specific electrical frequencies can stimulate bone growth in osteoporotic patients, but the most impressive finding was an 87% reversal of neuropathy in sufferers after only 6 weeks of treatment⁹.

The Hako Med has undergone many similar studies that demonstrate its effectiveness in treating shoulders, knees, and virtually any painful disorder that patients bring into my clinic.

When a patient arrives at the clinic bent over and in severe pain, the Hako Med is my first line of defense. Typically, after a 45minute session, they can walk upright and report 60% or greater improvement. This treatment is as effective as a nerve block injection but doesn't require skin penetration or subject patients to the side effects of prescription medications. Repeated steroid nerve injections can cause osteoporosis and other diseases, not to mention that most patients dislike needles.

DIOWAVE 30 WATT LASER

The class 4 laser is currently the closest thing to a magic wand in medicine. Pioneers like Anatoly Shekhter at the Russian Academy of Sciences in Moscow have utilized high-powered lasers to stimulate the regeneration of spine discs and joint cartilage through angiogenesis. While the concept of laser radiation may be challenging for some patients to grasp, it becomes easier to understand when comparing it to how sunlight can trigger a chemical reaction in the body to produce Vitamin D. Laser

⁹ 247 patients (87%) reported total recovery treatment success or a definite positive influence with their condition (i.e., pain resolution, vascular change, new tissue growth, etc.). Treatment of Diabetic Neuropathy, Arterial ischemia, stenosis and progressive gangrene. F. Savery, M.D., R. Sorgnard, Ph.D., J. Woessner, M.D., Ph.D. Clinical Electromedical Research AcademyExcerpta Medica Journal Report Advances in Therapy, Vol.7, No.5 American Academy of Pain Management - Annual Conference 1992 Expo-Medica: Latin America - 1993 "Oral Presentation"

therapy can have a profound effect on regeneration and chemical modulation within the human system.

In the United States, high-powered class 4 lasers deliver these regenerative outcomes. Our Diowave 30 Watt Laser System stands as the most potent laser available in the medical marketplace today, and it serves as our prime tool for treating patients at Advanced Pain Solutions.

In most cases, lasers are not powerful enough to deliver sufficient photons to the damaged area. Over the years, we have clinically tested numerous lasers and found that only highpowered devices like the Diowave 30 Watt have the potential to measurably affect the tissue. Our average treatment dose is around 30,000 joules, which we administer in approximately 17 minutes using the 30-watt laser (30 joules per second x 1000 seconds = 30K joules). In comparison, a typical 3 Watt laser found in many clinics would require over 2 1/2 hours to complete the same treatment.

The primary biological action of laser therapy results from stimulating cellular transport mechanisms in the mitochondria. This specific frequency of light triggers various beneficial effects, such as releasing vasodilating chemicals to increase blood flow, stimulating DNA and RNA synthesis, increasing enzymes to reduce inflammation, boosting superoxide dismutase to minimize free radicals, normalizing tissue pH, reducing pain, enhancing ATP production, and increasing energy for cellular healing and repair.

For a long time, there were assumptions that laser therapy might not penetrate deep enough into the body to provide benefits. While I initially believed the benefits were due to Hilton's Law, a recent study has shown that class 4 lasers can indeed reach brain tissue through the dense skull. This discovery is a gamechanger for all physicians using laser therapy. For reference, here is the study, **Near infrared photonic energy penetration: can infrared phototherapy effectively reach the human brain? by Theodore A. Henderson and Larry D. Morries from The Synaptic Space and Neuro-Laser Foundation in Centennial, CO, and Lakewood, CO, USA, respectively.**

The study provides evidence that using higher wattage lasers enables the delivery of therapeutic levels of laser photons deep into the brain without causing tissue heating or damage. Laser therapy has been the subject of numerous incredible studies, and while it's challenging to include them all here, many are available on my website or through a simple Google search. One remarkable finding is that laser has been objectively proven to regenerate cartilage¹⁰ - truly amazing!

PEMF (PULSED ELECTROMAGNETIC FIELD)

PEMF technology takes alternating current (AC) and converts it into direct current (DC), offering controllable intensity variations from low to high. When the voltage passes through a coil embedded in the body applicator, it emits a pulsed magnetic field. Each pulse stimulates electrons within the body, gently pulling the electrically charged cell membranes. Between pulses, cells relax. PEMF, inspired by the earth's natural electromagnetic pulse, is considered energy medicine used to enhance circulation and cell

¹⁰ Regeneration of spine disc and joint cartilages under temporal and space modulated laser radiation E.Sobol, A.Shekhter,

A.Baskovc, V.Baskovc, O.Baum I.Borchshenkoc, V.Golubevc,

A.Gullerb, I. Kolyshevb, A.Omeltchenkoa, A.Sviridova,

O.Zakharkinaa, Institute on Laser and Information Technologies,

Russian Academy of Sciences, Medical Academy of Moscow,

Center for Vertebrology and Orthopedics, Russia, Arcuo Medical Inc., US

metabolism. Electromagnetic exchanges between cells are vital for human life, and we measure brain waves with EEG tests and cardiac waves with EKG tests. During cardiac arrest, a defibrillator delivers a therapeutic dose of energy to the heart to restart it.

PEMF therapy introduces a low-frequency pulsed electromagnetic field that recharges the body's cells, allowing them to float freely and potentially promoting various health benefits. By increasing their functioning surface area, PEMF therapy enhances circulation, oxygenation, and hydration within cells. It also improves the cellular ability to absorb nutrients and remove toxins from the body, leading to overall health benefits.

NASA's research on the effects of prolonged exposure to reduced Earth's magnetic field on astronauts' health prompted them to explore the positive impact of PEMF. Their study, titled "Pulsed Electromagnetic Fields - A Countermeasure for Bone Loss and Muscle Atrophy," aims to develop a noninvasive PEMF device to counteract bone loss and muscle atrophy during space exploration missions to the Moon, Mars, and beyond. The potential of this technology is not limited to space missions; it could also be beneficial in treating various muscle diseases, agerelated muscle atrophy, cancer-related muscle atrophy, osteoporosis, and other bone diseases here on Earth.

The human body consists of approximately one hundred trillion cells, acting like mini-engines powered by a combination of fuel from the nutrients we consume, oxygen from the air we breathe, and electrons stored in cell batteries (mitochondria) to drive the metabolism process. PEMF therapy can play a crucial role in supporting this cellular energy production and metabolic processes. Each cell in the body has its unique function, working in symbiosis to support life. Marrow cells in certain bones create red blood cells that deliver nutrients and oxygen while removing toxins. Cells in the liver and kidneys, among others, collaborate to clean the blood. Despite their distinct roles, all cells are powered by the same process.

The majority of cell processes rely on adenosine triphosphate (ATP) as the rechargeable energy carrier. ATP's phosphate groups are held together by high-energy chemical bonds. Under specific conditions, one of the phosphates can break away, releasing energy. This energy is utilized for energy-demanding reactions that sustain cell life and directly impact our overall health. After phosphate is released, adenosine diphosphate (ADP) remains as spent fuel cells, and these are later recharged back to ATP through the infusion of energy from the food we eat.

Mitochondria, found in all nucleated cells, act as the energy factories of the cell. These organelles process molecules derived from food, containing abundant chemical bond energy from breakdown products of sugars and fats. Inside the mitochondria, these fuel molecules are disassembled to release their chemical bond energy in the form of electrons. Hydrogen ions obtained from the fuel molecules are pushed into the inner membrane sack within the mitochondria by pumps embedded in the cell membrane, providing raw materials for energy production.

Oxygen plays a crucial role in the process, as it has a strong attraction to electrons. It recharges the ADPs (flat batteries) to ATPs (charged batteries) by pulling electrons generated by the mitochondria and using most of the energy from the fuel molecules to push hydrogen ions through the cell ATP synthase enzymes. This recharge process adds a phosphate ion to the ADP, transforming it back into a charged battery, ATP. The presence of oxygen significantly impacts the cell's energy production. Without oxygen, each sugar molecule metabolized can only produce 2 ATPs, whereas with oxygen, the same cell can generate 38 ATPs from each sugar molecule. According to Nobel Prize Laureate Dr. Otto Warburg, cells maintain a voltage across their membrane, with a positive charge on the outside and a negative charge on the inside. This electrical potential is known as the trans-membrane potential (TMP) and is created by ion pumps that transport potassium and sodium ions in and out of the cell.

The aging process, stress, unhealthy diet, and exposure to toxins can lead to a decrease in cell voltage, or TMP. Dr. Warburg discovered that healthy individuals had cell voltages of 70-100 mV, while those with chronic illnesses displayed cell voltages between 30-50 mV, and cancer patients showed even lower cell voltages, below 15-20 mV. Diminished cellular voltage is directly linked to disease and sickness, as cancer cannot thrive in highly charged cells. For instance, we rarely hear of cancer in the heart, which has the highest voltage of any organ in the body.

The ATP bio-electrical process provides the energy needed for the body's various functions, including respiration, circulation, movement, digestion, and reproduction, as well as the proper functioning of all organs. PEMF energy medicine enhances the charging of the cell batteries (transforming ADP to ATP in the mitochondria) and stimulates all components involved in delivering oxygen and nutrients to the mitochondria for ATP production. PEMF therapy further enhances the body's delivery systems, including circulation and hydration, to support optimal cellular function and overall health. PEMF therapy increases oxygen absorption by energizing cellular pumps, leading to enhanced absorption of vital nutrients and the efficient expulsion of waste toxins during the metabolic process. The energized cells experience an increased charge (TMP), thereby maximizing aerobic respiration (with oxygen) for optimal ATP energy production within the body.

While the concept of cellular voltage may be challenging for some to grasp, it can also be understood as cellular potential hydrogen or pH. For instance, a normal pH level in adults of 7.44 corresponds to a cellular voltage of -25 mV. This correlation helps us comprehend the significance of cellular voltage in maintaining the body's health and energy production.



PEMF therapy can effectively treat pain by blocking the transmission of messages to the brain through the nervous system. It can stimulate the production of natural endorphins, which act as pain blockers. Additionally, oxygenation can be beneficial in alleviating neuropathic pain, while reducing inflammation in both tissues and nerves, thereby decreasing pain levels. This article discusses the mechanisms of pain in the body and how PEMF therapy can be utilized for pain management.

Health and wellness should be among our top priorities in life. Every day, we should focus on achieving optimal health and wellbeing through a well-planned combination of diet, nutrition, exercise, and rejuvenation. Aging is inevitable for all of us, but maintaining cell health and organ function can support healthy aging. The natural process involves the death and replacement of old cells, contributing to the overall wellbeing of the body.

As our cells go through the natural aging process, we must ensure they regenerate in a healthy environment. PEMF proves to be an excellent ally in promoting healthy aging, ensuring the optimal natural regeneration of cells. Aging can be accelerated by illness and stress, and sometimes the pharmaceuticals prescribed to help us can inadvertently intensify the process. Our diet, exercise habits, environment, and toxin exposure can all contribute to premature aging, which is fraught with health issues.

Lindsey Vonn triumphed over the 22 most challenging months of her career, achieving her 60th World Cup victory in a downhill race at Lake Louise on Saturday. She expressed her unwavering belief in her ability to make a comeback. This victory marked her first in nearly two years and PEMF was a large part of her recovery process, 'I've never had that sort of setback like I've had the last two years, I always believed in myself to come back but I never really knew until today. And today I'm finally back at the top. ... It's an amazing day." A broken shin and two knee operations were not enough to spoil Vonn's class and she could not have chosen a better place to return than Lake Louise, where she clinched her 15th victory at the resort. Her secret? Lindsay is an advocate of PEMF energy medicine and is the owner of multiple PEMF devices. There are literally hundreds of positive studies on PEMF but here I will review two of my favorites, treating multiple sclerosis and regrowing joint cartilage.

Scientific studies have shown that PEMF plays a significant role in treating Multiple Sclerosis (MS) on multiple levels. Firstly, it aids in repairing damage to the Myelin sheath. Secondly, it contributes to neuroplasticity by reprogramming damaged areas of the brain.

PEMF treatment has led to various improvements in MS patients, including enhancements in gait, balance, bowel and bladder functions, vision, mood, and sleep. Patients also reported a reduction in tremors.

One of the notable advantages of PEMF is its ability to penetrate the skull and nervous system without causing involuntary muscle spasms, providing a relaxing treatment for MS without any side effects. Scientific studies indicate that PEMF is capable of initiating various healing processes, including addressing multiple sclerosis.

In general, reports have indicated that PEMF demonstrates improvements in various areas, such as fatigue, sleep, vision, bladder function, movement, speech problems, and mood in MS patients. One of the visible manifestations of MS is spasticity, characterized by increasing stiffness and a slowdown in limb movement. Over time, patients with Multiple Sclerosis (MS) may experience changes in posture due to muscle weakness. Involuntary muscle spasms can occur, causing discomfort and embarrassment as they lose control of their motor functions. PEMF therapy has shown significant benefits in addressing these issues:

In a double-blind, placebo-controlled study, PEMF administered daily for 15 days demonstrated effective results in reducing MS symptoms. The most positive improvements were observed in alleviating spasticity and pain¹¹.

Another double-blind, placebo-controlled study concluded that PEMF administered daily for 15 days proved to be an effective treatment in reducing spasticity and incontinence associated with multiple sclerosis. These findings highlight the potential of PEMF therapy in managing and improving various symptoms related to MS, such as spasticity, pain, and incontinence.

Fatigue is one of the debilitating symptoms of MS. It can immobilize a patient, as they lack the energy to perform basic daily functions, let alone enjoy outings with their families and friends. PEMF, by enhancing oxygenation, nutrient uptake, and ATP production, has the potential to optimize the energy levels for individuals with MS. Curatron offers settings for Oxygenation, Energy Regulation, and Vitalization. The studies reveal the following:

This article documents the cases of three multiple sclerosis patients who have been experiencing persistent and incapacitating daily fatigue for several years. Treatment with

¹¹ A. Guseo, Pulsing Electromagnetic Field Therapy of Multiple 9 Sclerosis the Gyuling- Bordacs Device: Double-Blind, Cross-Over and Open Studies, Journal of Bioelectr., 6(1), 1987, p. 23-35

extracranially applied flux electromagnetic fields significantly improved symptoms of fatigue in all three patients¹²

Another study encompassed fatigue along with a wide range of symptoms that experienced relief:

This article documents the case of a 55-year-old female with chronic progressive multiple sclerosis who underwent a single external application of magnetic fields lasting 20 minutes. The treatment rapidly resulted in improvements in various areas, including fatigue, sleep, vision, bladder function, movement and speech problems, and mood ¹³.

MS can also lead to impairments in balance, muscle weakness, tremors, and lack of muscle coordination (ataxia). These impairments significantly affect a person's mobility and often lead to dependence on a walking aid. These issues are caused by the destruction of the insulators surrounding the nerves, known as the Myelin sheath. Bladder function is impaired due to damage to the sensory nerves responsible for indicating bladder fullness.

This article presents the case of a 58-year-old male with multiple sclerosis and a 37-year history of the disease. Treatment with external application of magnetic fields resulted in a rapid improvement of neurological symptoms in areas such as walking, balance, sensory symptoms and bladder function. Within 24

¹² R. Sandyk, Treatment with Weak Electromagnetic Fields Improves 11 Fatigue Associated with Multiple Sclerosis, International Journal of Neurosci, 84(1-4), February 1996, p. 177-186

¹³ R. Sandyk, "Rapid Normalization of Visual Evoked Potentials 12 picoTesla Range Magnetic Fields in Chronic Progressive Multiple Sclerosis," International Journal of Neurosci, 77(3-4), August 1994, p. 243-259

hours of treatment, improvements in numerous cognitive functions were also observed ¹⁴.

The improvements in balance and walking have been remarkable: This article presents the case of a 36-year-old man who was severely disabled with partial paralysis and lack of coordination. Undergoing three treatment sessions per week with pulsed electromagnetic fields for one year resulted in a range of improvements, including enhancements in gait, balance, bowel and bladder functions, vision, mood, and sleep. Notably, no progression (worsening) of symptoms associated with multiple sclerosis was observed throughout the course of EMF treatment¹⁵.

MS can affect eyesight in two different ways. Firstly, the eyes may no longer move together (Internuclear ophthalmoplegia), causing double vision (diplopia). This occurs when one eye moves, but the other fails to follow. The cause is damage to the myelinated sheaths of the nerves connecting the eyes, leading to scarring. Secondly, the optic nerves can become inflamed (optic neuritis) when the myelin sheath (the insulator) is damaged. This results in pain, blurry vision in part or all of the vision field, and may cause flashes of light. The color vision is often less vivid, especially the ability to see red in the affected eye.

¹⁴ R. Sandyk & R.P. Iacono, "Improvement PicoTesla Range 13 Magnetic Fields of Perceptual-motor Performance and Visual Memory in a Patient with Chronic Progressive Multiple Sclerosis," International Journal of Neurosci, 78(1-2), September 1994, p. 53-66

¹⁵ R. Sandyk, "Treatment with Electromagnetic Field Alters the 14 Clinical Course of Chronic Progressive Multiple Sclerosis-A Case Report," International Journal of Neurosci, 88(1-2), November 1996, p. 75-82

PEMF has shown remarkable success in various areas by aiding in re-myelination (regrowth of myelin) and reducing scarification and inflammation. This article highlights the case of a 36-year-old multiple sclerosis patient who experienced immediate improvements in visuoperceptive functions following treatment with an external application of magnetic fields¹⁶.

A subsequent study corroborated these findings, reporting on four cases of multiple sclerosis patients who experienced enhancements in visuospatial and visuomotor functions after undergoing treatment with external application of low magnetic fields¹⁷.

Cognitive impairment, often referred to as brain fog, is one of the areas where MS patients suffer. In this regard, PEMF has shown significant results:

This article presents the cases of three patients with long-term symptoms of multiple sclerosis who received treatment with extracerebral pulsed electromagnetic fields over a period of 6 to

 ¹⁶ R. Sandyk & R.P. Iacono, "Multiple Sclerosis: Improvement of 15
Visuoperceptive Functions PicoTesla Range Magnetic Fields,"
International Journal of Neurosci, 74(1-4), January-February 1994, p.
177-189

¹⁷ R. Sandyk, "Further Observations on the Effects of External16

picoTesla Range MagneticFields on Visual Memory and Visuospatial Functions in Multiple Sclerosis," International Journal of Neurosc, 77(3-4), August 1994, 203-2

18 months. The results indicated that all three patients experienced significant improvements in cognitive functions¹⁸.

Another cognitive area recognized is the ability to understand written words, known as alexia. This article presents the cases of three multiple sclerosis patients suffering from alexia (lack of understanding of written words) who experienced a reversal of alexia following the initiation of electromagnetic field treatment¹⁹.

Studies have shown that patients experienced significant improvements in cognitive functions, including problems with understanding words (Alexia), with patients experiencing a "reversal of the alexia following the start of electromagnetic field treatment."

MS sufferers may also face issues such as slurred speech, a slowdown in talking speed, and problems with pronunciation or articulation, known as dysarthria. These problems are caused by scarification of the myelin sheath (the insulators) on the nerves that affect speaking.

For instance, in the case of a 55-year-old female with chronic progressive multiple sclerosis who received a single external

¹⁸ R. Sandyk, "Progressive Cognitive Improvement in Multiple 17 Sclerosis from Treatment with Electromagnetic Fields," International Journal of Neurosci, 89(1-2), January 1997, p. 39-51

¹⁹ R. Sandyk, "Reversal of Alexia in Multiple Sclerosis Weak 18 Electromagnetic Fields," International Journal of Neurosci, 83(1-2), November 1995, p. 69-79

application of magnetic fields lasting 20 minutes, the treatment quickly led to improvements in speech problems²⁰.

The effectiveness of PEMF has been consistently demonstrated through various cases: This report highlights two chronic multiple sclerosis patients who exhibited severe speech problems. However, after undergoing 3-4 weeks of treatment with pulsed electromagnetic fields, their symptoms were completely resolved²¹.

In another instance, three female multiple sclerosis patients with poor word fluency experienced a remarkable 100-percent increase in word output after just 4-5 sessions of treatment with electromagnetic fields²².

The emotional toll on MS sufferers can be significant, as they struggle to cope with an expanding array of symptoms, leading to clinical depression. Additionally, side effects from medications used to treat MS can exacerbate these feelings, leading to anger, anxiety, frustration, and hopelessness. In some cases, suicidal thoughts may also arise.

²⁰ R. Sandyk, "Rapid Normalization of Visual Evoked Potentials 19 picoTesla Range Magnetic Fields in Chronic Progressive Multiple Sclerosis," International Journal of Neurosci, 77(3-4), August 1994, p. 243-259

²¹ Treatment with Weak Electromagnetic Fields," International Journal of Neurosci, 83(1-2), November 1995, p. 81-92

²² R. Sandyk, Improvement in Word-fluency Performance in Patients 21 with Multiple Sclerosis Electromagnetic Fields," International Journal Neurosci, 79(1-2), November 1994, p.75-90

PEMF devices that can penetrate the brain have shown promise in treating clinical depression. This article discusses three cases of female multiple sclerosis patients exhibiting suicidal behavior. Treatment with pulsed electromagnetic fields successfully resolved the suicidal behavior in all three patients, and this improvement was maintained over a follow-up period of 3.5 years²³.

Indeed, impairment in sleep can significantly contribute to both fatigue and depression in multiple sclerosis patients. Factors such as chronic pain, medications, involuntary movements, and increased muscle tension (hypertonicity) can disrupt sleep patterns.

The article cites several instances where PEMF treatment resulted in improvements in sleep, highlighting it as a positive benefit for MS patients. By addressing sleep issues, PEMF can potentially alleviate fatigue and aid in managing depression, leading to an overall improvement in the quality of life for those with multiple sclerosis.



The use of PEMF has shown promising results in regrowing cartilage and repairing bone. Patients have experienced cartilage regrowth in knee joints, which effectively changed the bone-onbone situation. By recreating the cartilage between the bones, PEMF increases glide and removes pain. For instance, the X-ray of a 70-year-old female shows significant cartilage growth between the bones (on the right side), eliminating the need for a knee replacement and relieving extreme pain experienced during walking due to cartilage degeneration.

Scientists and researchers worldwide have been investigating the use of PEMF for cartilage regrowth and bone repair, and they have found significant and encouraging outcomes in this field.

The Department of Orthopedics from the Christin Medical College and the Sree Chitra Tirunal Institute for Medical Sciences and Technology in India reported that PEMF stimulation of osteochondral defects with a calcium phosphate scaffold is effective in forming hyaline cartilage. PEMF serves as a noninvasive and cost-effective adjuvant treatment alongside salvage procedures like abrasion chondroplasty and subchondral drilling²⁴.

Additionally, the Department of Biochemistry and Biophysics at the University of Rhode Island produced a report stating that certain configurations of pulsed electromagnetic fields (PEMFs) have clinically shown effectiveness in promoting the healing of

²⁴ P. R. J. V. C. Boopalan, Sabareeswaran Arumugam, Abe Livingston, Mira Mohanty and Samuel Chittaranjan, ChristianMedical College & Institute for Medical Sciences and Technology inIndia. Pulsed electromagnetic field therapy results in healing of full thickness articular cartilage defect. published online 26 March 2010

fracture nonunions. These PEMFs are believed to enhance calcification of the extracellular matrix. In vitro studies also suggest that PEMFs may modify the extracellular matrix by promoting the synthesis of matrix molecules. Histomorphometric studies indicate that PEMF stimulation also promotes the maturation of bone trabeculae. The report raises the possibility that a specific PEMF can change the composition of cartilage extracellular matrix in vivo, and similar mechanisms may influence other processes like endochondral ossification, such as fracture healing and growth plates²⁵.

These findings highlight the potential of PEMF in enhancing cartilage formation, bone healing, and tissue repair, making it a promising option for orthopedic treatments.

Current evidence suggests that electrical stimulation therapy, including PEMF, may offer significant improvements for knee osteoarthritis²⁶.

The Royal Veterinary College in London conducted research on the influence of pulsed electromagnetic fields (PEMF) on proteoglycan composition in cartilage extracellular matrix. Their findings indicated that PEMF treatment significantly stimulated the retention of glycosaminoglycans in cartilage explants and reduced the release of glycosaminoglycans into the media. The

²⁵ Aaron RK, Ciombor DM, Jolly G., Stimulation of experimental endochondral ossification by low energy pulsing electromagnetic fields. J Bone Miner Res. 1989 Apr;4(2):227-33

²⁶Hulme J, Robinson V, DeBie R, Wells G, Judd M, Tugwell P., (Cochrane Collaborating Center, Center for Global Health, Institute of Population Health - University of Ottawa) Electromagnetic fields for the treatment of osteoarthritis. Cochrane Database Syst Rev. 2002; (1):CD00352

study concluded that PEMF treatment preserved extracellular matrix integrity in cultured cartilage explants by down-regulating proteoglycan synthesis and degradation in a coordinated manner without affecting their gross structural nature²⁷.

PEMF stimulates osteoblasts and the extracellular matrix in rebuilding bone structure and cartilage. It invigorates different cells involved in this rebuilding process. Similar to a construction site where motivated workers need building materials to start construction, good nutrition, minerals, and supplementation are essential to provide the building blocks for cells to work in reconstruction. However, due to soil depletion, healthy diets may not always contain adequate amounts of necessary nutrients to make a significant difference in the reconstruction process.

²⁷Liu H, Lees P, Abbott J, Bee JA., Department of Veterinary Basic Sciences, The Royal Veterinary College, London, UK. Pulsed electromagnetic fields preserve proteoglycan composition of extracellular matrix in embryonic chick sternal cartilage. Biochim Biophys Acta. 1997 Aug 29;1336(2):303-1

2

Healing is a matter of time, but it is sometimes also a matter of opportunity. - Hippocrate

STEP TWO: DETOXIFICATION

The purpose here is not to decipher the intricacies of human neurology, but rather to provide practical applications Every single day, you are exposed to toxins. Your body generates its own toxins, known as endogenous toxins, and also encounters external (exogenous) toxins from outside sources. These harmful substances are present in the air you breathe, the food you eat, the water you drink, and the products you handle. Exposure to these toxins can overwhelm your body's natural detoxification ability. In my view, an overload of toxins can lead to various issues, such as fatigue or difficulty sleeping, indigestion, temporary gastrointestinal upset, food cravings, weight gain, reduced mental clarity, low libido, skin problems, and joint discomfort. The typical American diet is a primary source of these toxins. Processed foods that are high in fat, refined sugar, and seasonings often contain pesticides and artificial ingredients, contributing to the buildup of toxins in your system. Metabolic detoxification is your body's natural process of neutralizing and eliminating toxins. This process consists of three phases that convert fat-soluble toxins into a water-soluble state, making it easier for your body to eliminate them. To facilitate metabolic detoxification, your body requires specific nutrients to support each of these phases.

In phase one, stored fat-soluble toxins transform into an "unlocked" state, which is more water-soluble but, in many cases, more toxic than their original form. These highly toxic substances produced in phase one are then converted into non-toxic molecules and become even more water-soluble during phase two. Finally, during phase three, these water-soluble toxins leave your cells and become available for your body to eliminate. If these toxins are not removed from the body, they may get reabsorbed and potentially cause different illnesses in other tissues.

The most effective way to support the body's detoxification process is through the use of an infrared sauna. However, it's crucial to fully understand the process and proceed with caution to avoid potential complications. I learned this from my personal experience when I decided to remove mercury fillings from my teeth. Despite not experiencing any symptoms of mercury poisoning at that time, I wanted to replace the silver fillings for aesthetic reasons and also due to concerns about the mercury's toxic properties.

Through extensive research, I found a holistic dentist specializing in safe mercury removal. The dentist was

knowledgeable, certified under the International Association of Mercury Free Dentists (IAMFD), and the procedure went smoothly, leaving me with porcelain fillings and a beautiful smile. I enthusiastically recommended the dentist to friends and even the local TV news anchor.

Unfortunately, a few months after the procedure, I started experiencing gastrointestinal discomfort, bloating, gas, heartburn, stomach pain, anxiety, random muscle twitching, vertigo, and severe depression lasting for days. After medical tests, I discovered abnormally high levels of mercury in my blood. Unlike the relatively straightforward process of removing the mercury fillings, eliminating the mercury from my blood proved to be a challenging and time-consuming task. Even now, I'm still coping with the effects of mercury toxicity, and although I am improving each year, the battle has been grueling.

The key steps in removing heavy metals from the body are chelation, which involves physically pulling the metal from tissues, and ensuring proper elimination from the body. For me, the successful approach involved using an infrared sauna for chelation and GI Adsorb (Standard Process) as a binder. I would take four GI Adsorb capsules about ten minutes before a 20-30 minute infrared sauna session at 130 degrees Fahrenheit, repeating this process twice a day. Although it was an aggressive approach, it took six months to reduce my mercury blood levels by 30%. I tried prescription drug chelators like DMSO, but they made me very sick.

In conclusion, understanding the detoxification process is crucial to avoid potential harm, and for me, the combination of an infrared sauna and GI Adsorb proved to be the most effective way to safely remove mercury from my body. GI Adsorb contains clinoptilolite, an adsorbent zeolite mineral known for trapping naturally occurring toxins and eliminating them through normal elimination processes.

When considering the use of an infrared sauna, it's crucial to be aware of potential risks, especially if the sauna is made in China. Many saunas from popular box stores like Costco and Sam's Club are manufactured using pressboard instead of solid wood, which is glued together with chemicals. When heated, this glue can release toxic chemicals like arsenic and formaldehyde, which is ironic when trying to detoxify the body. Additionally, the wiring in these inexpensive Chinese saunas can produce dangerously high levels of electromagnetic energy, which has been linked to health issues like cancer in some studies.

To avoid such risks, it is essential to invest in a high-quality sauna made in North America. I found that SaunaRay Sauna, located in Collingwood, Ontario, Canada, meets all my requirements. Unlike cheaper alternatives, SaunaRay does not use materials containing formaldehyde, toxic glue, chemical fire retardants, plastic, or fiberglass heaters. They solely use natural and solid Ontario Basswood, handcraft each piece to perfection, and assemble them traditionally, one piece at a time. The saunas are finished with pure Canadian Beeswax.

Moreover, SaunaRay has the lowest electromagnetic fields (EMF) among all saunas globally, with electrical leakage barely detectable at 0.2 milliGauss, which is 10 times lower than the safe limit. It is up to 80 times lower than other brands on the market, especially those using "carbon fiber" style heating systems. SaunaRay is safe even for individuals with electrical sensitivities. When trying to detoxify the body, it's crucial to prioritize health and safety by investing in a high-quality sauna like SaunaRay, which prioritizes using natural materials and has the lowest EMF levels to ensure a safe and effective detoxification process. It's important to be cautious when considering saunas advertised on the internet, as many of them are imported from China and may use toxic materials and high EMF carbon fiber heaters, posing potential health risks. However, SaunaRay saunas are a recommended alternative, as they are made with natural materials, have the lowest EMF levels, and have shown significant benefits for patients, including aiding in the recovery from mercury toxicity. These saunas come with a lifetime guarantee.

When using a sauna, remember to constantly wipe off sweat with clean towels to avoid reabsorbing released toxins. Taking a binder like GI Adsorb before the sauna can help eliminate cellular toxins and prevent redistribution.

To further support detoxification, consider using the **SP Detox Balance s**hake from Standard Process. This shake contains specific ingredients to safely guide you through the three phases of detox.

By making informed decisions and taking necessary precautions, you can safely enjoy the benefits of sauna detoxification and support your overall health. These shakes are designed to support whole body detoxification and offer various benefits such as aiding the body's metabolic detoxification processes²⁸. They are a rich source of protein, containing 17g per serving from pea isolates, pumpkin concentrate, oat flour, and buckwheat flour. The shakes provide essential amino acids required for phase II enzymes, which are crucial for conjugation. Additionally, they offer dietary fiber, support the body's natural toxin elimination function, and serve as a good source of plantbased magnesium. As they are gluten-free and vegan, they can be suitable for a wide range of individuals.

During a 10-day detox, the shakes can be incorporated into your routine, starting once a day and gradually building up to three times a day before cycling back down. They offer vitamin and mineral support for the detoxification pathways, ensuring comprehensive coverage. Especially if you are using a sauna twice a day, which can lead to mineral depletion due to excessive sweating, these shakes can be beneficial in replenishing essential minerals like magnesium.

By incorporating these shakes into your detoxification process, you can enhance your overall detox experience and support your body's natural cleansing mechanisms effectively.

LIVER SUPPORT

Your liver plays a vital role as a major filter that cleanses your entire body. In Traditional Chinese Medicine (TCM), the liver is

²⁸ The supplement's ingredients are a combination of various beneficial components to support detoxification and overall health. It includes protein, organic buckwheat, organic dried beet leaf juice, apple pectin, juniper berry powder, organic Spanish black radish root, burdock root powder, organic beet root, calcium citrate, organic barley grass, dandelion leaf, broccoli, inositol, organic dried alfalfa juice, Oregon grape root powder, globe artichoke leaf, choline bitartrate, sunflower lecithin powder, milk thistle extract (containing 80% silymarins), mushroom powder (cordyceps sinensis), carrot root, organic sweet potato, and red wine extract.

regarded as the "General" of all organs because it facilitates blood circulation and supports "Qi," considered the life force itself. Many TCM formulas involve liver support due to its significant role in maintaining overall health.

One of the early signs of liver disease is fatigue, as the liver stores glycogen, which is used to produce energy. In a clinical setting, liver problems can often be identified before cellular damage occurs, as patients may exhibit skin issues. The analogy of a water filter that needs frequent changes to prevent cloudy water applies here - liver problems can result in issues manifesting in the skin.

Surprisingly, many diseases not conventionally associated with the liver can have connections to it. For example, in cases of autism, abnormal liver profiles with high toxin levels are often found in children's blood. Similarly, patients with arthritis may have elevated toxin levels that the liver is unable to eliminate. One particular toxin called Guanidine is a result of constipation and cellular damage. When Guanidine enters the bloodstream, it forces calcium out of the system to restore pH balance, leading to the formation of arthritic calcifications like bone spurs.

It is indeed common to observe issues with toxicity in arthritic patients, leading to the decision of not running the test on them anymore as it consistently shows positive results. In Step one, **Chlorophyll Complex** from Standard Process was mentioned to aid in the body's healing process and also neutralize guanidine.

Liver detoxification is crucial for everyone with arthritis. The liver's ability to convert essential acids, linoleic and linolenic, to arachidonic acid is essential for building protective tissues around nerves, akin to insulation on electrical wires. However, individuals with degenerative diseases like muscular dystrophy, multiple sclerosis, or spinal stenosis often have severe liver problems and cannot make this conversion, impacting their overall health.

In my clinic, the liver is a key focus, and it's considered to be a critical point of intervention to address various health conditions. Supporting the liver's biochemical pathways can lead to improvements in multiple symptoms for your patients.

The liver's functions are extensive, including the production of bile, storage and conversion of glucose for energy, metabolism of proteins, storage of essential vitamins, and synthesis of blood clotting factors. Digestion problems in many individuals might persist until the liver is effectively treated.

For digestion issues related to the liver, **Livton Complex** from Mediherb is a preferred choice. This supplement is particularly useful for gallbladder disorders, loss of appetite, flatulence, nausea, intestinal bloating, and constipation. Taking the recommended dosage of 3-4 tablets per day can be effective in increasing bile production and reducing inflammation, aiding in overcoming gallbladder problems.

By addressing liver health and utilizing the appropriate supplements like Chlorophyll Complex and Livton Complex, you are providing your patients with valuable support to enhance their overall well-being and manage various health conditions effectively. In cases of constipation, ensuring liver health is crucial because bile acts as a natural laxative, and improving liver function often resolves this condition. Typically, I prescribe natural laxatives like Colax (Mediherb), which contains the herb Cascara (Rhamnus purshiana), as a secondary option only when enhancing liver health isn't sufficient. The recommended dosage is 1-4 tablets before bedtime, and it takes about 8 hours to work. For some individuals with chronic constipation, taking Colax throughout the day, such as 1-2 pills three times a day with food, can lead to better results. This approach can help reset the nervous system and promote positive, long-term bowel habit changes.

The liver plays a vital role as a detoxifier, breaking down or transforming substances like ammonia, metabolic waste, drugs, alcohol, and chemicals, enabling their excretion from the body. Under a microscope, we can observe rows of cells known as Kupffer cells in the liver, which ingest and break down toxic matter. The liver is effective in removing a wide range of microorganisms, including bacteria, fungi, viruses, and parasites, from the bloodstream. This is crucial to prevent dangerous substances from accumulating in the blood and invading deeper parts of the body. Infections with parasites often result from contaminated water supplies found in large cities, and other harmful organisms can find their way into the gut and bloodstream from various sources, leading to chronic infections and poor health. Protecting the liver from overload with these microorganisms is essential.

To ensure safer water consumption, it is best to boil water for at least 5 minutes or drink bottled water that has been filtered and sterilized. High levels of unhealthy microorganisms can also come from eating foods prepared in conditions of poor hygiene by individuals carrying bacteria, viruses, or parasites on their skin. Foods, especially meats that are not fresh or preserved, may contain a higher bacterial load, placing a strain on the liver's filtering capacity if consumed regularly.

By promoting liver health and taking precautions to avoid harmful microorganisms in water and food, individuals can support their overall well-being and minimize the risk of health issues related to toxin accumulation and infections.

The liver has 2 phases of detoxification. Phase one detoxification consists of oxidation-reduction and hydrolysis. What does that mean you may ask? Well, it involves things like cytochrome P450 but let me simplify for you. It converts poisonous chemicals into less harmful chemicals. Phase two happens through a process called conjugation, where the liver turns drugs, hormones, and various toxins into water-soluble excretable substances. For efficient phase two detoxification, the liver cells require sulfur-containing amino acids such as taurine and cysteine. The nutrients glycine, glutamine, choline, and inositol are also needed for efficient phase two detoxification. Eggs and cruciferous vegetables (e.g., broccoli, cabbage, Brussels sprouts, cauliflower), raw garlic, onions, leeks, and shallots are all excellent sources of natural sulfur compounds to enhance phase two detoxification.

I often think of the liver as Superman, and the drug Acetaminophen is the Kryptonite. Acetaminophen is a toxin that causes severe, even fatal liver disease that increases in toxicity when combined with even low amounts of alcohol. How many times have people taken Acetaminophen for a hangover? This could be a potentially fatal mixture. It is commonly known by its street name, Tylenol but it can be found in many over the counter products, almost everything. Here is a list of Acetaminophen containing products: Actifed, Alka-Seltzer Plus Liquid Gels, Anacin, Cepacol, Contac, Coricidin, Dayquil, Dimetapp, Dristan, Excedrin, Feverall, Formula 44, Goody's Powders, Liquiprin, Midol, Nyquil, Panadol, Robitussin Saint Joseph, Aspirin-Free, Singlet, Sinutab, Sudafed, Theraflu, Triaminic, All Tylenol Brand Products, Vanquish, Vicks, Zicam. These are the main prescription drugs that include Acetaminophen: Butalbital, Endocet, Fioricet, Hydrocet, Hydrocodone Bitartrate, Lortab, Oxycodone, Percocet, Phenaphen, Sedapap, Tapanol, Tramadol, Tylenol with Codeine, Tylox, Ultracet, Vicodin, Zydone. Why would anyone ever take Tylenol or better yet how could any honest physician ever prescribe Tylenol to a patient? So many children's medicines contain Acetaminophen, it's criminal.

FASTING

The most effective method for cleansing your liver is through fasting. Personally, I follow a routine of fasting one day every week, starting from Saturday night after dinner until Sunday night. During my fast, I stick to water with occasional consumption of green tea or black coffee. While these mini fasts offer benefits, if you're unwell, longer fasts become necessary to detoxify your system. There's a wealth of valuable literature on fasting, but my favorite is 'Fasting and Eating for Health: A Medical Doctor's Program for Conquering Disease' by Joel Fuhrman. Although I don't agree with everything he recommends, he's an authority on fasting and provides compelling evidence to support its health benefits while dispelling myths like the risk of hypoglycemia.

Thankfully, the science supporting fasting is robust. Our body's primary fuel source is glucose (sugar). When you stop eating, your body seeks glucose to sustain itself. Initially, it utilizes the glucose stored in the liver, approximately 100 grams of glycogen. However, these reserves only last about a day, and the body then turns to break down fat tissue for fuel. The challenge is that fat tissue alone doesn't provide sufficient energy, leading to the breakdown of muscle tissue to meet the body's glucose requirements-definitely not an appealing prospect, witnessing your body essentially consuming itself.

But there's a positive outcome. On the third day of fasting (second day in women), the liver begins producing an abundant supply of ketones. As ketone levels rise in the blood, they compete with glucose to become the primary fuel source. Eventually, ketones win the competition, and the brain, heart, and muscle tissues start using them as fuel instead of glucose. This state, known as ketosis, results in a significant reduction in muscle wasting and an optimal breakdown of fatty tissue, toxins, and unnecessary growths. You can easily determine when this happens by using a ketone strip, available at local pharmacies.

Once you enter ketosis, your body will cease to starve and lose muscle. Instead, it will utilize excess materials, such as fat, tumors, and dead cells, as fuel. Fasting serves as the ultimate detoxification and weight loss tool. However, I strongly advise fasting only under the guidance of a trained and experienced physician. If your doctor is overweight, they might not be wellversed in fasting practices. Keep in mind that fasting can lead to complications, so it's crucial to be in good health and able to handle the stress associated with fasting. Before initiating a fast for any patient, I always conduct a thorough physical examination, including an EKG and stress test.

It's worth noting that in some individuals, they may not be able to switch to using ketones as fuel even after fasting for several days. Instead, they continue burning glucose for energy, leading to muscle breakdown at a rate of one pound per day. This is not fasting but rather starvation, which can cause permanent damage to internal organs and, ultimately, result in death. To identify this issue, ketone test strips are a valuable tool. If you don't enter ketosis by the end of the third day, it's crucial to end your fast immediately. I've witnessed people becoming emotional when they had to discontinue their fast after the third day due to a failure to enter ketosis. Remember, if ketosis doesn't occur, there are no exceptions - the fast must be stopped.

Alternatively, a simpler way to enjoy the benefits of fasting is through the popular intermittent fasting schedule. By restricting eating between 11 am and 7 pm and fasting for 16 hours between meals, many of the advantages, such as improved insulin production and reduced stress hormone release, can be achieved. This approach has been proven to promote longevity and overall health and is relatively easy for most people to follow.

Here is a simple guide to fasting to help motivate you based on your goals.

13-15 hour fast: Ketones, testosterone both increase, inflammation is reduced and most people will lose weight.

17-24 hour fast: During a 17-24 hour fast, autophagy initiates a process in which cells break down and eliminate old, damaged, or abnormal proteins and other substances within their cytoplasm, the fluid inside the cell. The resulting breakdown products are then recycled to support essential cell functions, particularly during periods of stress or starvation. Additionally, autophagy plays a crucial role in combating infections by destroying bacteria and viruses. Moreover, it may act as a preventive measure, inhibiting normal cells from transforming into cancer cells. However, once cancer has formed, autophagy could potentially protect the cancer cells by providing them with extra nutrients or by shielding them from anticancer drugs and other harmful substances. Furthermore, autophagy can influence the body's immune response against viruses, bacteria, and cancer cells.

24 hour fast: Intestinal stem cell reboot. The gut stem cells come in and help repair and revitalize. Because many neurotransmitters are produced in the gut this can also be very helpful for many emotional conditions such as depression and anxiety.

36 hour fast: I call this the belly fat fast because it really targets the fat around the waistline. Do a 36 hour fast followed by a 12 hour eating window and then repeat this cycle 3 times and you will finally get rid of belly fat.

48 hour fast: This is a dopamine reset, so very useful for anyone who is struggling with addiction or or other dopamine issues. We will cover this in more detail later when we discuss neurotransmitters, but fasting for 48 hours can completely reset your dopamine system which is related to happiness and motivation.

72 hour fast: This is an immune system reset and based on the works of Walter Lango. Here white blood cells reboot themselves and we get a full body stem cell activation. On a personal note, after a bad hurricane here in Cape Coral, Florida, I rolled my ankle working around my pool trying to clean up my damaged pool cage. At first I was sure that I had broken my foot but luckily the x-rays showed it was just a bad sprain. I did my usual rehab for such an injury and got the pain down in a short while but occasionally the foot would start hurting whenever I stood for long periods or walked too much. This went on for almost a year until I did a 72 hour immune reset fast. This activated systemic stem cells and I am convinced healed my injured foot. I have been free of foot problems ever since.

BEETS

Beets are among the most common and effective natural liver detoxifiers known to humanity, with a history of use spanning hundreds of years. These vibrant vegetables are packed with essential nutrients that promote overall health and are particularly beneficial for liver health. Some of the crucial substances found in beets include betaine, betalains, fiber, iron, betacyanin, folate, and betanin, making them a high-antioxidant vegetable.

Their high antioxidant content contributes to their liverdetoxifying properties, as antioxidants play a crucial role in neutralizing harmful free radicals and reducing oxidative stress on the liver. Betaine, a compound found in beets, aids in liver function and supports liver detoxification processes.

Moreover, beets contain betalains, which are natural pigments with anti-inflammatory and detoxifying properties. These compounds assist in purging toxins from the liver and improving its overall health. The fiber content in beets is also valuable for the liver, as it helps in the elimination of waste and toxins from the body, promoting healthy bowel movements and reducing the burden on the liver. Additionally, beets are a good source of iron, which supports red blood cell production and oxygen transport throughout the body, contributing to optimal liver function.

With its array of beneficial substances, incorporating beets into your diet can be an excellent way to naturally boost your liver health and overall well-being. Whether consumed raw, cooked, juiced, or grated in salads, beets offer a versatile and nutritious addition to your meals.

To ensure the ingestion of these essential fibers, I encourage consuming beets raw rather than juicing them. Fortunately, there are various ways to enjoy beets, such as baking, grating, roasting, or incorporating them into different dishes. Apart from supporting liver detoxification, beets offer numerous health benefits. They have been associated with liver healing, lowering homocysteine levels, improving stomach acid production, preventing the formation of free radicals in LDL, and even reducing the risk of lung, liver, skin, spleen, and colon cancer. While these benefits aren't directly linked to liver detoxification, they contribute to the overall efficiency of the body's systems. As various bodily functions are interconnected, these benefits indirectly aid the liver's ability to rid itself of toxins and function optimally.

The recommended serving of beets can vary depending on the source, so a good approach is to start the day with beet juice instead of coffee and incorporate grated beets into salads and dishes whenever suitable. Additionally, having a baked or roasted beet as a side dish with dinner regularly is beneficial. For convenience, some people opt for whole food concentrates like **Betafood**. Taking three pills a day is a common dose, but during periods of increased stress on the liver, doubling the dose to six pills can be beneficial.

Betaine (also known as Trimethylglycine), the key ingredient in beets, is a naturally occurring substance in the body. It is a byproduct of sugar beet processing and serves as an amazing natural supplement that can rejuvenate the liver within just six months. Betaine's effectiveness has been well-documented in real people, including those in good health. If you have any liver condition, consider taking Betaine for an entire year. This supplement is safe, inexpensive, and naturally found in our food sources.

Indeed, Betaine offers more than just liver detoxification benefits. It has been shown to significantly lower homocysteine levels, a marker of inflammation associated with heart and artery disease, a leading cause of global mortality.

Numerous studies have highlighted the positive impact of Betaine supplementation on homocysteine levels and overall health. For instance, research conducted in the Netherlands, Finland, England, and Germany demonstrated the remarkable reduction of homocysteine levels with Betaine supplementation, accompanied by improved liver function and lower diastolic blood pressure. Additionally, at the Mayo Clinic and Stanford University, Betaine has shown impressive results in treating non-alcoholic fatty liver disease, which is closely linked to the increasing prevalence of diabetes and blood sugar issues.

Fatty liver disease is often undetected, but it can have severe consequences if left untreated. Betaine's efficacy in addressing this condition has been observed at various prestigious institutions, such as the Mayo Clinic, University of Virginia, and Loyola University.

The combination of Betaine's liver-detoxifying properties and its ability to lower homocysteine levels makes it a powerful and natural approach to enhance overall health and prevent serious conditions. It's clear that beets, being a rich source of Betaine, truly deserve their superfood status. So, incorporating them into your diet is a simple and effective way to reap their numerous health benefits.

SULPHORAPHANE

Sulforaphane, present in broccoli sprouts and other cruciferous vegetables in small amounts, has shown remarkable health benefits. A study published in Food Chemistry (v173, 2015) found that the consumption of broccoli sprouts significantly reduced inflammation in humans. Advanced diagnostic tests were utilized to assess the patients' inflammatory response, and the results suggest that reducing inflammation can lead to a longer and healthier life.

In Western countries, conditions like gastritis, ulcers, and Helicobacter pylori infections have become increasingly prevalent. Research in Cancer Prevention Research (v2, 2009) demonstrated that consuming broccoli sprouts daily for two months resulted in dramatic improvements in digestion, even without any changes in diet or lifestyle. The study observed positive effects on individuals with toxic H. pylori bacteria in their stomachs.

Another significant finding was made at the Linus Pauling Institute, where a study in Experimental Biology and Medicine (v232, 2007) showed that sulforaphane inhibits cancer growth in humans. By inhibiting histone deacetylase (HDAC) activity, which promotes malignant growth, sulforaphane displayed anticancer properties. For example, in patients with PC-3 prostate cancer cells, the administration of broccoli extract led to a 40% inhibition of cancer growth, a truly remarkable outcome. Despite these promising results, sulforaphane is not yet considered standard medical treatment for all cancers, leaving room for further exploration in the medical field.

Moreover, the beneficial effects of sulforaphane extend to liver cancer, which is prevalent in parts of China due to airborne pollutants. In a study published in Carcinogenesis (v33, 2012), patients were provided with a daily broccoli sprout beverage, showcasing the potential of this compound in tackling liver cancer. With its numerous health benefits, sulforaphane has demonstrated its potential as a powerful chemopreventive agent. Liver cancer is prevalent in certain regions of China due to airborne pollutants, and you may recall seeing people in the country wearing dust masks as a protective measure. A study published in Carcinogenesis (v33, 2012) investigated the effects of a daily broccoli sprout beverage on patients. Within seven days, their urine analysis showed significant excretion of carcinogenic toxins, such as ethylene oxide and benzene.

Liver disease, in all its forms, has become an epidemic worldwide. In a separate study published in the World Journal of Gastroenterology (v21, 2015), men with fatty liver disease were administered sulforaphane for 60 days. Surprisingly, without any changes to their diet, researchers found that sulforaphane was highly effective in improving liver function by reducing oxidative stress.

Prostate disease, particularly BPH and prostate cancer, is on the rise in developed countries, ranking as the second leading cause of cancer-related deaths in men. Notably, a study in Cancer Prevention Research (v8, 2015) investigated the effects of sulforaphane on males who had undergone a radical prostatectomy. Over six months, the treated group experienced almost twice the time to double PSA levels compared to the control group. Another study in the Investigation of New Drugs (v33, 2015) explored sulforaphane supplements in men with recurrent prostate cancer, demonstrating reduced PSA levels and significantly shortened doubling time for PSA.

The world is grappling with increasing lung problems, particularly asthma, which has become a leading cause of death. A study in Respiratory Research (v16, 2015) focused on asthmatics who were given sulforaphane for 14 days. The results were impressive, showing significant improvement in bronchodilation and other parameters, measured through advanced tests like "FEV1 response" and high-resolution CT scans. This suggests the potential for prolonged use of sulforaphane to yield even greater benefits.

Moreover, as diesel exhaust particles are toxic and accumulate over time, a human study published in Food Function (v5, 2014) explored the effects of sulforaphane in fruit juice on individuals exposed to diesel exhaust. Remarkably, in just four days, their nasal white blood count increased by 85%, indicating a protective effect of sulforaphane against such toxic exposure.

In a study published in Clinical Immunology (v130, 2009), subjects were given sulforaphane to improve upper airway inflammation. The results were incredible, with doctors stating that oral sulforaphane effectively and safely induces mucosal Phase II enzyme expression in the upper airway of human subjects.

The prevalence of autism has risen drastically in recent years, and conventional treatments often involve administering toxic anti-psychotic drugs, which may exacerbate the condition. However, in a remarkable study published in Proceedings of the NAC (v111, 2014), children with autism were given sulforaphane for four weeks without any changes to their diet or lifestyle. The double-blind study with sophisticated psychological testing showed surprising results, with improvements in social interaction, abnormal behavior, and verbal communication. Despite these impressive findings, sulforaphane remains underutilized in medical practice, leaving parents and doctors with limited options for treating autism. Moreover, adult schizophrenics were included in a study published in Clinical Psychopharmacology Neuroscience (v13, 2015), where they were given sulforaphane for eight weeks. Cognitive function improved significantly without any other therapies, highlighting the potential of sulforaphane as a valuable addition to treatment protocols for mental health patients.

The growing list of published human studies showcasing diverse benefits from an inexpensive and safe supplement is truly remarkable. Given these positive outcomes, all adults should consider incorporating sulforaphane supplementation into their health regimen. For maintaining healthy levels of sulforaphane, the recommended go-to supplement is Spanish Black Radish, with a dosage of 3-9 pills a day. Additionally, Cruciferous Complete can be alternated with Spanish Black Radish for further detoxification benefits, taken at a similar dosage of 3-9 pills a day. Cruciferous Complete uses brussels sprouts and kale to supply a good source of sulforaphane, but with a less intense detoxification reaction that you will get with the Spanish Black Radish. As a bonus, when you take Cruciferous Complete this product will also help your joints by helping your body production of glucosamine sulfate.

These studies present compelling evidence of the health benefits of sulforaphane, yet its full potential remains largely untapped in mainstream medical practice. It prompts us to question why doctors aren't widely using this powerful natural compound to prevent and treat various diseases and conditions.

GLUTATHIONE

Glutathione plays a crucial role in preserving brain tissue and has the power to prevent the onset of Parkinson's disease and other degenerative conditions. Starting with glutathione is an excellent step towards better health, as it acts as a natural product that cannot be patented by big pharmaceutical companies, making it less widely known.

The glutathione oxidation-reduction cycle allows the body to neutralize dangerous chemicals, rendering them harmless. I was astonished when I saw neurologist Dr. David Perlmutter, MD, treating a Parkinson's patient with glutathione in a before-andafter video. Witnessing the significant improvement in the patient's condition, from hardly moving to walking and waving to the camera with minimal shaking, was remarkable.

If you watch these videos, you'll be compelled to explore glutathione further and consider integrating it into your healthcare program. Personally, I have consulted with Dr. Perlmutter on various cases, including my wife's finger tremor. He is a pleasant and professional expert, renowned for his work on diet and the value of whole foods, as evidenced by his authorship of several great books.

To boost your natural glutathione levels, I recommend taking **Silymarin** at a dosage of 1 tablet, three times a day. Silymarin, derived from Milk Thistle extract, contains flavonolignans collectively known as silymarin. This product is standardized to ensure optimal strength and quality, providing 168 mg of flavonolignans per tablet. Silymarin works synergistically to elevate glutathione levels and offers additional benefits, such as antioxidant activity and support for normal liver detoxification and mild indigestion relief through increased bile flow.

Another beneficial product is **LivCo**, which combines Milk Thistle with Schisandra and Rosemary leaf. I recommend this to individuals exposed to environmental chemicals or excessive drug or alcohol use. Taking two tablets before drinking alcohol, two upon returning home, and two in the morning can help reduce hangover symptoms. For disease support, the standard dose is 1-2 tablets three times a day.

Incorporating these natural supplements can play a significant role in supporting your overall health and well-being, particularly by enhancing glutathione levels, which is vital for protecting brain tissue and combating degenerative diseases.

COFFEE ENEMA

Increasing your body's production of Glutathione can be achieved through a coffee enema. The liver filters the body's blood every three minutes, making a 15-minute retention time for a coffee enema ideal. By exposing the body to caffeine during the enema, the hemorrhoidal blood vessels dilate, widening the liver's portal veins. This increased blood flow stimulates Glutathione production, which acts as an enzymatic catalyst, attaching itself to toxins in the body and facilitating their removal as waste. Studies with mice liver have shown a 600% increase in detoxification, and the small bowel detoxified by 700%.

The Gerson Therapy, pioneered by Dr. Max Gerson, MD, provides valuable insights into the benefits of coffee enemas. Charlotte Gerson, carrying on her father's work, operates a treatment center in Mexico that follows nutrition and detoxification protocols, successfully reversing terminal cancer in patients.

I was initially skeptical about the Gerson Therapy, but my skepticism diminished when a patient shared their remarkable recovery from terminal cancer after undergoing the Gerson Therapy for a year. The patient followed the coffee enema protocol among other treatments and achieved a 100% cancerfree status, defying his doctor's initial prognosis.

To perform a coffee enema, you'll need an enema bag, which resembles a hot water bottle with a tube attached. Prepare the coffee by boiling 1 quart of distilled water with six heaping teaspoons of organic ground coffee for three minutes, then let it simmer for an additional 15 minutes. After cooling the mixture to body temperature, strain it through a coarse cloth or fine strainer. It's essential to avoid preparing the enema coffee like regular brewed coffee, as standard brewing does not release the potassium found in coffee beans, which acts as an "anti-cramping" agent.

There are two types of enemas: the retention enema and the cleansing enema. Start with the cleansing enema using distilled water without coffee to empty the colon of all waste before administering the coffee enema.

Once you have emptied your colon, add distilled water to the coffee solution and place it in the enema bag. Lubricate the enema tip and gently insert it into the rectum while lying on your left side. Allow the fluid to flow in, and then clip the enema tube and remove it. Retain the coffee enema for approximately 15 minutes. To ensure the coffee reaches the transverse colon, roll to the center, lift your pelvis, and then roll to the right. The primary purpose of the retention enema is to assist the liver in eliminating impurities. Caffeine from the coffee travels through the hemorrhoidal veins directly to the portal veins and liver.

During the 15-minute retention period, lie down on your right side with both legs close to your abdomen, and practice deep breathing. Massaging your colon gently may help enhance the effects of the enema. After the designated time, sit on the toilet, stand up, move around, and try to expel the contents. Initially, you may only be able to retain the coffee enema for 3-4 minutes, but gradually build up the retention times with daily enemas.

For individuals dealing with serious health issues, I often recommend daily coffee enemas until noticeable improvements are observed. Eventually, the frequency can be reduced to every few weeks or at least once a month, depending on the individual's dietary habits and lifestyle, such as intake of unhealthy foods or alcohol. A coffee enema is a powerful tool that can be used whenever you want to thoroughly cleanse your entire system, making it beneficial for everyone.

ALCOHOL

When alcohol is consumed, it gets absorbed into the bloodstream from the stomach and intestines. Enzymes in the body, such as alcohol dehydrogenase (ADH) in the liver, metabolize alcohol into acetaldehyde. However, alcohol is damaging to the liver and all bodily systems, offering no useful or positive benefits. Similar to smoking, alcohol can temporarily open up blood vessels but later cause severe vasoconstriction, posing risks to blood flow and overall health. Drinking alcohol can significantly impact the liver's detoxification process, leaving little energy for maintaining good health. In my professional opinion, there is no safe or beneficial amount of alcohol for consumption.

I witnessed the devastating effects of alcoholism in my aunt Joan, who was once a slim and beautiful woman but gradually deteriorated over 15 years and passed away in her 50s due to alcohol-related issues. Her story serves as a painful reminder of the destructive nature of alcohol. If you or someone you love is struggling with alcoholism, it is crucial to seek help before it's too late. There is nothing healthy or beneficial about alcohol, regardless of any attempts by manufacturers to convince otherwise.

Recently, I made the decision to completely give up drinking alcohol, and I have experienced significant improvements in my health. I encourage you to try going without alcohol for a month and observe how much better you feel. Your well-being and quality of life can be greatly enhanced by choosing to avoid alcohol altogether.

SMOKING

If you smoke you must quit today. Smoking is an extremely harmful habit with severe consequences for your health. The impact of smoking is evident in a person's complexion, often resulting in a gray skin tone due to the accumulation of toxins. Smoking constricts blood vessels, hindering waste removal from cells and leading to a buildup of harmful substances, ultimately affecting skin color and health. By depriving cells of oxygen and nutrition, smoking severely impairs healthy bodily function, leading to premature death. Even if someone managed to live to a very old age while smoking, their lifespan would have been significantly longer without this detrimental habit.

Not only does smoking harm the individual's health, but it also has the potential to affect the well-being of those around them, making it a socially irresponsible choice. In my clinic, I firmly encourage patients to quit smoking before I accept them as clients because the chemicals in cigarettes have a damaging effect on cellular health, leading to various health issues, including lung cancer. Emphysema, a painful and dreadful condition, is just one example of the devastating impact of smoking on the lungs. Smoking also affects brain chemistry and reinforces neurological pathways related to chronic pain. Although quitting smoking may not be easy, it is absolutely possible and extremely beneficial for your health. Patches, gums, and prescribed medications are not always necessary; the decision to quit lies within you. I, too, quit smoking cold turkey during my 20s while pursuing a medical career. It was challenging but entirely worth it. You don't need any excuse to smoke, and once you make the decision to quit, you'll find various therapies and treatments available to help heal the damage caused by smoking.

In about a year after quitting, your body will begin to function better, and you'll experience improvements in lung health, appearance, and overall well-being. Glutathione administered through a nebulizer can be beneficial for cleaning the lungs during the recovery process. I urge you to take action right now and throw away the cigarettes for good. You have the power to make this positive change for your health and well-being.

WATER

Water keeps cells hydrated, helps maintain a healthy balance of body fluids, and most importantly supports the elimination phase of your detoxification. Drink about eight to 10 glasses of water per day (eight ounces per glass). The best water is from a natural spring. Your reverse osmosis tap water is just recycled toilet water and contains many micro chemicals that are not removed by the RO filtration process. At best tap water is dead water. Water has been proven to hold memory and therefore can be very harmful depending on where it has been.

The unpredictable behavior of water concerned scientists in the 1950s and 1960s. Unable to explain a series of unpleasant incidents such as deaths of scientists and intelligence agents after drinking water, they resulted in a conclusion that initially seemed incredible: What if water has memory? What if by some unexplained mechanism, it manages to "save" information, much like a computer?

In the next years, a series of experiments in various countries of the world have shown that water "recorded" and "saved" outside influences. According to the study author Jacques Benveniste and his team of researchers, it "remembered" anything that happened in its surrounding environment, and anything that came in contact with water left a "mark" in it.

Later scientist, Masaru Emoto's experiments suggest that water doesn't just have memory, but its structure could be affected by the emotions of people. According to Emoto, water molecules change their position when they interact with positive or negative emotions. With the help of a technologically advanced tool Magnetic Resonance Analyzer, the researcher studied the crystalline form of water and made photos of the changes brought to it from the various environmental and human influences. According to Emoto, the results of his experiments suggest that different kinds of music and people's thoughts, feelings, and words directly affect the crystal structure of water, which seems to react like a living entity. Emoto put labels on bottles of water with expressions of human emotions and ideas. Some of them were positive, for example, "thank you" and "love". Others were negative, as the label "You make me sick, I will kill you." He claims that the water reacted to these expressions. According to him, the water with positive messages made beautiful crystals and the water with negative messages made ugly and deformed crystals. The memory of water can be deleted by exposure to a strong magnetic field or with rapid movement, as you would see pouring it into a wine irrigator.

The purpose here is not to overwhelm you with unorthodox ideas (some may suggest pseudoscience) but rather to emphasize the importance of water. For me I try to only drink natural spring water and if exposed to tap water I will always try to stir it rapidly or expose it to a magnet for a few minutes before drinking if possible. A man has often more trouble to digest food than to get it. -Proverb

STEP THREE: DIGESTION

The human digestive system is a complex series of organs and glands that process food. In order to utilize the food we consume, our body breaks it down into smaller molecules that can be handled and then excreted as waste. The digestive system mainly consists of a long, twisting tube that runs from the mouth to the anus, along with a few other organs like the liver and pancreas, which produce or store digestive chemicals. Personally, I envision the food slowly moving throughout my inner body, massaging and healing as it travels through my core. If you don't have a similar image of food, perhaps it's worth reconsidering what you are eating.

The digestive process commences in the mouth, where food is partially broken down through chewing and the action of salivary enzymes. These enzymes, produced by the salivary glands, break down starches into smaller molecules. After being chewed and swallowed, the food enters the esophagus, a long tube that runs from the mouth to the stomach. The esophagus employs rhythmic, wave-like muscle movements, known as peristalsis, to propel food from the throat into the stomach. This muscle movement grants us the ability to eat or drink even when we're upside-down, which is how astronauts can swallow in space.

The stomach, a large, sack-like organ, churns the food and bathes it in strong acid. Food that is partly digested and mixed with stomach acid is referred to as chyme. Once in the stomach, the food proceeds to the duodenum, the first part of the small intestine, and then joins the jejunum and the ileum, which is the final part of the small intestine. In the small intestine, bile (produced in the liver and stored in the gallbladder), pancreatic enzymes, and other digestive enzymes from the inner wall of the small intestine aid in the breakdown of food. After passing through the small intestine, food enters the large intestine, where some water and electrolytes are removed. The large intestine is home to various types of bacteria, some of which are beneficial, while others are harmful. Maintaining this balance is crucial for your health, as we'll discuss later. The food first enters the cecum. the initial part of the large intestine, where it's connected to the appendix. From there, it travels upward in the ascending colon across the abdomen to the transverse colon, and then descends on the other side of the body through the descending colon. The final part of the colon is called the sigmoid, and it's here that waste is transferred to the rectum, where it's stored until it can be excreted via the anus. The process of digestion is intricate, and it's essential to remember that when we eat something, it goes through all these different steps, exposing our bodies to either healing or harm. The key to digestion lies in enzymes.

ENZYMES

I never truly grasped the significance of enzymes until I met Randy Grant. Randy's impressive resume includes being a nutritional consultant for companies like Motorola, AT&T, and working with high-profile individuals such as NBA, NFL, Wesley Snipes, and Arnold Schwarzenegger. His wealth of experience in nutrition and diet trends from around the world intrigued me so much that I invited him from Arizona to my Fort Myers clinic to learn his methods.

During his presentation, about 10 minutes in, Randy surprises me by placing a Big Mac hamburger on the table. It appeared like a typical Big Mac, with only the white bread buns and two meat patties, no lettuce or tomatoes. At first, I assumed it might be his lunch, but to my astonishment, Randy reveals that the Big Mac is over five years old. I couldn't believe it and asked how that was possible. His answer was simple yet astonishing: "Enzymes!" Now, let me explain the significance of enzymes and what I learned from Randy's expertise.

Enzymes are vital catalysts produced inside the cells of living organisms, responsible for all essential actions that sustain life. According to Randy's theory, humans possess a predetermined amount of enzymes, and once this reserve is depleted, degeneration occurs due to the inability to digest food properly. For instance, lactase, the enzyme required to digest lactose in milk, can be exhausted, leading to lactose intolerance.

The Big Mac never broke down because it lacked enzymes, being chemically preserved and considered "dead" food. On the other hand, Randy demonstrated how enzymes can break down substances, as seen when he added enzyme supplements to Jello Pudding, causing it to transform into a runny liquid. Enzymes are protein catalysts that facilitate the chemical reactions responsible for digesting food and converting it into absorbable nutrients. They can be categorized as metabolic enzymes produced within our bodies and enzymes obtained from external sources, such as the foods we consume. However, cooking and processing foods at temperatures above 118°F destroy these enzymes, making enzyme-deficient foods a major detriment to our health.

When we consume enzyme-depleted foods, our bodies rely on metabolic and digestive enzymes, which are limited in supply. Depleting this backup enzyme reservoir places stress on the body and may lead to various health consequences. Thus, being mindful of food preparation methods that preserve enzymes can positively impact our overall well-being. When our bodies spend energy digesting food, less energy is available for other essential processes, such as maintaining heart health, burning stored body fat, and slowing down the aging process. As our digestive enzyme stores diminish, we may become unable to properly digest certain foods, leading to issues like lactose intolerance if we deplete our lactase enzyme supply.

Initially, enzyme deficiency can manifest as indigestion, with symptoms like burping, heartburn, abdominal cramping, and bad breath. However, more severe conditions like constipation, skin disorders, headaches, and degenerative diseases have also been linked to enzyme deficiency. Interestingly, many people reach for antacids when experiencing indigestion, which actually hinders the enzymes from performing their function. In most cases, individuals require more enzymes and stomach acid, not less.

Randy strongly advocates including 50% raw fruits and vegetables in every meal and taking digestive enzyme

supplements daily, especially when the meal lacks the recommended portion of raw foods. This practice helps in breaking down the foods we eat and can prevent degenerative conditions like arthritis.

While fruits and vegetables are essential for a healthy diet, it's essential to consider the growing conditions. Commercial growers often deplete the soil, necessitating the use of chemicals to achieve high yields. As a result, non-organic vegetables today contain less than 50% of the nutritional content they had a century ago. Even if someone follows a healthy diet, they may still require enzyme support due to the nutrient-depleted state of modern produce. And for those consuming a high amount of cooked and processed foods, supplementing with digestive enzymes becomes critical for maintaining good health.

Instead of solely relying on multivitamins, it's crucial to focus on improving our diet and taking enzymes to ensure our bodies can efficiently extract nutrition from the foods we consume. Digestive enzymes can be particularly beneficial, especially when dealing with processed foods or meals lacking living foods. Carrying enzyme capsules when dining out can be a practical solution to maintain optimal digestion.

One recommended all-purpose enzyme is **Enzycore**, a vegetarian formula without HCl, making it suitable for sensitive patients. Enzycore is a comprehensive blend of enzymes, glutamine, and whole food ingredients designed to support healthy digestion and enhance nutrient absorption. It offers a broad range of pH microbial enzymes, enzymes breaking down fats, protein, and carbohydrates, as well as kale and beet powder to support a healthy digestive process. Additionally, L-glutamine in Enzycore provides energy to cells with high energy needs, like

those in the intestines, offering support during both gastric and intestinal digestion.

Another enzyme frequently recommended is **Zypan**, a supplement containing Pepsin and Hydrochloric Acid (HCL). Zypan aids in the digestion of proteins, fats, and carbohydrates while normalizing stomach pH and supporting the pancreas. If you experience intestinal gas, Zypan might be particularly helpful, as a healthy bowel should be acidic and not alkaline. The choice between Zypan and Enzycore depends on whether HCL is needed or not. Zypan is recommended for those requiring HCL, and it should be taken between 1-3 after each meal. However, if you have an ulcer, Zypan might not be suitable initially, and specific considerations for an ulcer protocol should be taken into account. Some individuals may also find that they do better on one enzyme product over the other.

Dr. Hiromi Shinya, MD, serves as the Chief Surgical Endoscopy at Beth Israel Medical Center. He asserts that utilizing specific enzyme therapies has led to a 0% cancer recurrence rate among his patients. After treatment, none of his patients have experienced cancer again. He has written books and published studies on this topic. If this remarkable success doesn't motivate you to start taking enzymes, what will?

For long-term support, the best option is **Digest Forte.** It is a blend of bitters designed to support your body's natural enzyme and HCl production. DiGest Forte has been traditionally used for the following purposes:

- Stimulating gastric juice output and appetite
- Supporting healthy digestion and intestinal function
- Promoting healthy gastrointestinal tone

- Cleansing the liver
- Increasing bile flow as a cholagogue
- Promoting a normal response to environmental stresses

Usually, I start patients off on Zypan, but eventually, I switch them over to the bitters for long-term management.

GUT FLORA

The human body comprises approximately 10 trillion cells and carries around ten times as many microorganisms in the intestines. Bacteria account for most of the flora in the colon and make up to 60% of the dry mass of feces. The gut hosts between 300 and 1000 different species, with most estimates around 500. However, around 99% of the bacteria stem from approximately 30 or 40 species. Although fungi and protozoa also play a part in the gut flora, little is known about their activities. Research suggests that the relationship between gut flora and humans goes beyond simple coexistence and is, in fact, mutualistic. While people can survive without gut flora, these microorganisms perform essential functions, such as producing vitamins, building hormones, and training the immune system. Nevertheless, under certain conditions, some species may cause disease by producing infection or increasing the risk of cancer for the host.

Maintaining the proper balance of good and bad flora is crucial to promoting health. Antibiotics used to treat bacterial illnesses or inadvertently consumed through meat consumption from animals treated with antibiotics can lead to antibiotic-associated diarrhea (AAD). Antibiotics can cause AAD by directly irritating the bowel, altering the levels of gut flora, or allowing pathogenic bacteria to grow. Furthermore, antibiotics can lead to an increase in antibiotic-resistant bacteria, causing illnesses that become difficult to treat with antibiotics when they invade the host. Altering the numbers and species of gut flora can impede the body's ability to ferment carbohydrates and metabolize bile acids, potentially leading to diarrhea. Unbroken carbohydrates may absorb excessive water, resulting in runny stools, while a lack of SCFAs (short-chain fatty acids) produced by gut flora could also contribute to diarrhea.

A decrease in levels of native bacterial species disrupts their ability to inhibit the growth of harmful species like C. difficile and Salmonella kedougou, potentially leading to severe conditions such as cancer. Establishing healthy gut flora is vital for promoting overall systemic health.

I have developed a 30-day gut reconditioning program known as weed, feed, and seed. During the gut reconditioning program, you will follow a specific regimen to promote a healthy gut flora balance. Here's how it works:

1. Weeding Phase (Weekends):

- Take 1 to 2 capsules of **Gut Flora Complex**, the herbal mixture containing essential oils like Oregano and Aniseed, which help eliminate harmful bacteria.

- Also, consume Garlic Forte, 2 tablets two times a day. Garlic acts as a GI antiseptic, inhibiting bacterial growth in the colon and restoring healthy gut flora during the "seed" phase.

2. Feeding Phase (Weekdays):

- Take 2 to 6 wafers of **GI Stability** each weekday. This supplement contains 2'-FL, a unique prebiotic Human Milk Oligosaccharide (HMO) that feeds selective bacteria in the lower GI tract, promoting their growth. - Additionally, consume 2 to 3 **Vitanox** daily. Vitanox contains grape seed extract and green tea, which support healthy gut flora by preventing the regrowth of pathogenic bowel bacteria.

- Remember to reduce your intake of sugar, starch, alcohol, and yeast, and stay well-hydrated by drinking plenty of water.

3. Seeding Phase (Weekdays):

- To introduce beneficial bacteria into your colon, take three **ProSynbiotic** supplements daily. ProSynbiotic is a blend of four research-supported probiotic strains and two prebiotic fibers, supporting gut flora and overall intestinal health.

The probiotic I use is so unique I wanted to take a few minutes here and list it's ingredients. I understand that this is boring stuff but it is exactly the reason these supplements by Standard Process make such a difference. The ProSynbiotic contains, Lactobacillus acidophilus (including LA-5[®]) is one of the lactobacilli strains that have shown to improve outcomes in individuals with occasional constipation and lactose tolerance challenges. Lactobacillus paracasei sp (L. casei 431®) adheres to the intestinal tract, tolerates bile, and supports the gut during challenges while aiding the body's natural immune system response. Bifidobacterium lactis (BB-12®) is a strain of bifidobacteria that thrives in acidic and bile-containing environments. Bifidobacteria play a crucial role in native microflora, temporarily colonizing the gut to help maintain a natural bacterial balance. Saccharomyces cerevisiae var. boulardii historically supported normal stool consistency, promoted the growth of beneficial bacteria, and inhibited others in the gut.

Inulin, a complex carbohydrate, serves as an energy source for specific microorganisms and supports the absorption of calcium and magnesium. Galactooligosaccharide (GOS) is a preferred substrate for BB-12, supporting active proteins and gut mucosal cells while increasing short-chain fatty acid and lactate levels in the gut.

Lactobacteria, like acidophilus and bifidus, are considered friendly bacteria that reside in the intestinal tract, particularly the colon. They play essential roles in digestion, excretion, and maintaining a balanced pH in the colon. Moreover, they counteract the growth of harmful bacteria and help regulate infectious yeasts like Candida. Unfortunately, chlorinated water, antibiotics, and diets high in animal protein can destroy lactobacteria and favor the growth of harmful bacteria. Consequently, a constant battle for dominance occurs between good and bad bacteria in the gut.Many people have an imbalance, with only 20% lactobacteria and 80% bad bacteria. To achieve optimum health, the ideal ratio should be 80% lactobacteria to 20% bad bacteria.

Following this 30-day program involving "weeding," "feeding," and "seeding" can help you achieve a healthier gut flora balance and improve your overall digestive and intestinal health.

While many people believe that eating yogurt provides them with sufficient lactobacteria, it's often not the case. After 24 hours, even the best yogurts experience a rapid decline in bacteria, leaving behind lactic acid, a waste product of the bacteria's metabolism. Additionally, if yogurt is mixed with sugar or fruit, the live bacteria can be compromised.

A more abundant and straightforward source of supplemental lactobacteria is cabbage. Consuming cabbage promotes the growth of existing friendly bacteria in the digestive tract, and it acts as a nourishing food for them. Furthermore, cabbage helps suppress the growth of harmful bacteria, controls gas, and reduces bowel odor. Making cabbage a regular part of your diet can provide significant benefits for gut health.

ACID REFLUX

Dealing with acid reflux can be challenging, and even in mild cases, it may take several months to heal the stomach, while more severe instances may require a year or longer for recovery. The stomach requires acid to perform its function, but sometimes this acid can lead to issues. A valve called the lower esophageal sphincter usually keeps the acid in the stomach. However, if this valve malfunctions, the acid can flow into places where it doesn't belong, such as the throat. Several factors can contribute to this, including poor diet, hernia, injury, some medications, but the primary cause is often stress.

To address gastritis and promote GI tract healing, especially for the stomach and small intestine, take 2 **HiPep** tablets with water after your meals. This contains Deglycyrrhizinized Licorice, Chamomile and Meadowsweet to quickly relieve symptoms of an over-acid stomach. For additional healing I recommend also taking, **Chlorophyll Complex**, 3 per meal. After one week, Zypan (Standard Process) can be added, taking 2 capsules with each meal, as long as there are no ulcers present. Remember, these are food supplements, not drugs, so don't worry about taking multiple pills - it's like consuming food for healing.

Research indicates that a weak lower esophageal sphincter (LES) is often responsible for acid reflux, and there are suggestions that taking **Calcium Lactate** for several weeks might help strengthen this muscle. However, this concept remains experimental, and no concrete research has confirmed its effectiveness. Nevertheless, there are many patient testimonials supporting its potential benefits.

From personal experience²⁹, I have dealt with acid reflux and found relief by making dietary changes and using the HiPep formula. In many cases, acid reflux is linked to an overactive sympathetic nervous system, triggered by excessive stress. To address this issue, it is essential to balance the nervous system for these patients to find relief. Managing stress and achieving a balanced nervous system may significantly improve their acid reflux symptoms.

ULCERS

If you have ulcers, it's crucial to focus on healing them before attempting to balance your stomach chemistry. Avoid loading up on digestive enzymes, especially HCl, as it may worsen the condition. Instead, try taking a few Zypan tablets on an empty stomach to check for any severe burning, which could indicate an ulcer. If this occurs, consider getting an H. pylori breath test, as this bacteria might be the underlying cause. If you have H. pylori, it's essential to treat it first before anything else can be effective. I have eliminated H.Pylori using Garlic Forte and Echinacea Premium with great success. In some cases I recommend seeking a medical prescription anti-bacterial drug to ensure effective eradication. Once the bacteria is gone, you can use herbs to rebuild and heal. Ulcers can be challenging to heal, but there are some powerful tools that can help, such as **HiPep** which contains deglycyrrhizinized Licorice root to avoid increasing blood pressure. Take 2 tablets after each meal. Additionally, consider using Chlorophyll Complex to soothe the GI tract. Gotu Kola, mentioned in the previous step, is also useful for tissue healing.

²⁹ I write extensively about my personal health struggles and how I overcame those challenges in my book, The Philosophical Physician.

CABBAGE DRINK

For those dealing with stomach ulcers or seeking to improve good bacteria growth, here's a cabbage drink solution: Blend 3 cups of coarsely chopped fresh cabbage with 1-1/2 cups of distilled water, then let it sit at room temperature for precisely three days. Strain off the liquid and measure out a quarter cup, using it as a starter for the next batch. Blend 3 cups of cabbage with 1-1/2 cups of distilled water and combine it with the quarter cup from the previous batch. Let it sit at room temperature for 24 hours, and subsequent batches will take only one day. Store the drink in the refrigerator and consume half a cup three times per day, preferably with meals, discarding any leftovers after 24 hours. Continue this daily for one to three months. The cabbage juice should have a sour, slightly carbonated, and mineral taste.

Regarding bad breath, after my sister-in-law underwent several months of antibiotic therapy for a chronic ear infection, she experienced it. I recommended starting enzymes with her meals and my weed, feed, and seed gut program. In just 30 days, her bad breath disappeared.

GALLBLADDER TROUBLE

Gallbladder troubles can arise when bile, produced by the liver and used to digest fats, becomes stagnant, leading to stone formation. This condition is often observed in individuals who have lost significant weight or switched to low-fat diets. While gallbladder flushes may not remove stones, you can potentially improve the gallbladder's health and delay surgery through proper care.

For a diseased gallbladder, **AF Betafood**, a beet supplement, is highly recommended, taking 3-9 capsules a day to decongest the liver. Beet leaf juice, a source of Betaine and a methyl donor, has historically helped dysfunctional gallbladders by facilitating methylation reactions.

To reduce and prevent gallstones, you can use **Betafood**, 1-3 capsules a day after meals, along with **Livaplex**, 6 capsules a day, **Choline**, 3 capsules a day for improved fat metabolism in the liver, and **Phosfood Liquid**, 30 drops a day, to balance calcium levels and prevent kidney stones and other issues associated with calcium imbalance.

In severe cases, pure bile salts such as **Cholacol**, 3-6 capsules a day before meals, can significantly increase bile flow. Collinsonia Root has been added to reduce the risk of hemorrhoids, which may be aggravated when bile salts are taken alone. Patients without a gallbladder should consider regular supplementation with this product. Never take bile salts with your meals, instead take it 1.5-2 hours after you eat to make sure the food gets to the small insetting before you increase the bile, otherwise the bile supplement will try to neutralize the stomach acid and cause digestive problems.

An inexpensive diagnostic ultrasound is the best way to detect gallbladder stones. It's common to have a few stones without experiencing any issues, but they can become problematic over time.

HIATAL HERNIA

Hiatal hernia syndrome is a common functional GI disorder characterized by gastroesophageal reflux symptoms and can trigger asthmatic bronchoconstrictive episodes. It differs from a true hiatal hernia, as the proximal stomach only exerts upward pressure against the diaphragmatic hiatus without protruding into the chest. To provide relief, a simple technique can be used for both the syndrome and a true hiatal hernia. Possible symptoms include heartburn, regurgitation, acid reflux, difficulty swallowing, chest or abdominal pain, feeling full soon after eating, shortness of breath, and potential signs of gastrointestinal bleeding.

The syndrome may be inherited or acquired due to trauma or increased intra-abdominal pressure, such as in pregnancy or abdominal obesity. The gentle technique involves contacting the epigastric area below the costosternal angle, using a "claw" hand contact, and applying traction toward the left ASIS while allowing soft tissue rotation. After the rotation, additional clockwise thrusts are added.

Dr. Failor emphasized adjusting the T10 and T11 vertebrae, checking the occiput, and examining C3, C4, and C5, which innervate the diaphragm. Immediate change is expected after treatment. Post-treatment, patients should perform heel drops, drink warm water and perform specific movements to support the benefits of the treatment. Training in functional lifting and exertion is also essential to prevent re-injury.

4

But however secure and well-regulated civilized life may become, bacteria, Protozoa, viruses, infected fleas, lice, ticks, mosquitoes, and bedbugs will always lurk in the shadows ready to pounce when neglect, poverty, famine, or war lets down the defenses.

-Hans Zinsser Rats, Lice, and History 1934

STEP FOUR: IMMUNITY

he human body does not just have an immune system; it is an immune system. Unlike the skeletal, respiratory, reproductive, endocrine, and central nervous systems, which have clear sets of organs and immune responses, the immune system operates as a cohesive unit. Various organs play specific roles in the immune response. For instance, the stomach releases HCL to combat parasites, the spleen releases antibodies, intestinal flora neutralize pathogenic microbes, and the thymus releases lymphocytes. Improving the immune system's efficiency requires enhancing the overall health of the entire body, a central theme in this book that emphasizes seamless integration. The immune system employs three potent actions when combating invaders. The first response, often referred to as the "army," involves inflammation. White blood cells are dispatched to eliminate invaders, and if unsuccessful, an abscess is formed to protect the body until drainage is possible. The second response, called "adaptation," can be likened to special forces. It involves developing specific antibodies that are trained to target particular invaders, taking a little longer but proving highly effective. Lastly, we have the "lymphatics filtering system," comprising lymph fluid and nodes, which clears away deceased invaders and aids other immune players. For example, when fighting an invader, your tonsils may swell as the lymph nodes filter the aftermath of the immune system in action. This explains how some individuals manage to stay healthy even when around sick individuals because their robust immune system protects them.

Infectious disease represents the most significant threat to one's health, and numerous data suggests that almost every known disease originates from germs. Conditions such as diabetes, fibromyalgia, back pain, and migraine headaches can all be associated with the presence of infectious agents, potentially leading to catching something like back pain.

At my clinic, Elk Root, commonly known as **Echinacea Premium**, is the most frequently used supplement to boost the immune system. Echinacea, also known as the purple coneflower, is a native North American wildflower revered by various American Indian tribes. For instance, the Ute tribe associates coneflowers with elk and calls them "elk root" due to the belief that wounded elk seek them out for healing. Many tribes, particularly those in the Great Plains and Midwest, traditionally used coneflower roots as healing herbs to treat swelling, burns, and pain. Coneflower holds special significance for the Navajo tribe, being considered one of their sacred Life Medicines. This interest in Native American culture arises from my wife's Navajo heritage.

Echinacea serves as a potent immune system modulator, meaning it can increase or decrease immune activity as needed, distinguishing it from immune stimulators that could exhaust the immune system if overused. This versatile herb could almost build an entire practice on its own, as it is effective for various issues, including skin problems, anti-aging, and even cancer prevention. The essential medicinal components in Echinacea are the alkylamines, which are responsible for the tingling sensation on the tongue. Studies supporting Echinacea's effectiveness are based on the presence of these alkylamines, but unfortunately, off-theshelf Echinacea supplements lack them. However, at our clinic, we provide Echinacea from Mediherb, where the presence of alkylamines has been tested and proven effective in multiple studies. We recommend taking 2 tablets three times a day for aggressive dosing or 1 tablet 2-3 times a day for preventive use.

Additionally, I frequently prescribe **Echinacea Premium Blend Liquid Extract 1:2**, with a dosage of up to 40 ml per week in 5 ml servings. To ensure the quality of our recommended products, I encourage you to contact my clinic and request the quality reports. If someone cannot provide such reports, it indicates they don't test their products, leaving you unaware of what's actually in the product.

HYGIENE

Hygiene plays a crucial role in preventing diseases. Let's start with the basics: Do you maintain a daily shower routine, using soap and shampoo? Regularly using deodorant and keeping your toenails and fingernails short and clean are also essential. Brushing your teeth at least twice a day and keeping your tongue clean are crucial for oral hygiene. Additionally, washing your hands before meals, after being in public places, and touching shared surfaces like doors, tables, and computers, as well as after using the restroom, are simple tasks that make a significant difference in preventing the spread of germs.

It's important not to be misled by the notion of purposely exposing oneself to unsanitary conditions to strengthen the immune system, as this is not a valid approach. History has shown that something as basic as using soap and water significantly increased the odds of survival after surgeries, saving numerous lives.

Maintaining proper hygiene also involves having certain essential items on hand, such as bleach, which can be used to disinfect surfaces, toothbrushes, and other items. Using diluted bleach regularly helps keep things clean and germ-free. When dealing with infectious diseases, it is crucial to take immediate disinfection measures.

Keeping oneself clean is essential, and personal hygiene extends to maintaining cleanliness after bowel movements. Consider using a bidet to wash the genital area with soap and water, especially if you are overweight. Trimming hair in the genital area can also aid in hygiene, as excessive hair can trap germs.

When it comes to deodorants, opt for alternatives that mask odor without containing toxic aluminum, such as certain natural deodorant brands or Old Spice products. Recently I am enjoying a product from Weleda that contains essential oils called Citrus Deodorant. You may want to check it out. Next ensure that your clothes, especially underwear and intimates, are washed in hot water with a reputable detergent. Avoid using towels for an extended period, as they can become breeding grounds for germs. Regularly disinfect the shower, bathroom, and toilet area to prevent the excessive multiplication of germs.

In addition to personal hygiene, consider the cleanliness of your living space. Change air filters regularly, and consider investing in a portable air cleaning system if you live in shared spaces or have pets. Buy one of those robot vacuums and just have them going around daily picking up pet hair, it will make a big difference in your health.

By prioritizing hygiene, you can significantly reduce the risk of diseases and maintain better overall health.

The correlation between cardiovascular disease and poor dental health is significant. The presence of germs in your mouth can eventually reach your arteries and heart, causing inflammation. It's crucial to prioritize dental care by brushing your teeth regularly. Personally, I carry a folding toothbrush in my pocket, bought from a drugstore, and I make sure to brush after consuming acidic or sugary foods, or at least twice a day.

I opt for good quality toothpaste that effectively kills germs, not the natural feel-good stuff made from flowers. Remember, it's essential to eliminate harmful bacteria while maintaining a healthy environment for beneficial bacteria to thrive.

Regarding fluoride, after studying the data, I choose toothpaste containing it. Fluoride effectively prevents cavities, leaving no doubt about its benefits. Although some may consider making toothpaste using sodium peroxide and baking soda, I find fluoride toothpaste more convenient.

Now, you may wonder about fluoride being toxic. Indeed, fluoride is poisonous, and that's how it eliminates germs in your mouth. It's essential to use the paste while avoiding swallowing it and rinsing your mouth after brushing to minimize any additional risks.

Additionally, don't forget to floss regularly, despite the inconvenience or discomfort it may cause initially. Taking care of your oral health is crucial for overall well-being, and you can even rinse your mouth between patients at the office or chew sugarfree gum or breath mints.

I acknowledge that sugar-free gum may not be ideal, but it's a better option compared to allowing germs to thrive in your mouth. Making these choices is a necessary step towards better dental hygiene and overall health.

When a patient comes for their initial consultation and displays signs of inadequate hygiene or emits unpleasant odors related to body odor, waste, animals, or alcohol, my nurse records a note on their chart. I always take about 10 minutes (sometimes even longer) to discuss the concept of personal hygiene with them. In such cases, I often offer them a chapter from my book to read. While some patients might feel offended or embarrassed, my intention is not to shame them but rather to sincerely encourage better hygiene practices. In most cases, they appreciate the concern, and many begin adopting some of these recommendations. As a doctor, I find myself naturally assuming the role of an educator, and often patients are grateful that someone cares enough about their well-being to discuss personal matters within a confidential setting. Body odor serves as an instinctive indicator that something may be amiss, so if you notice an unpleasant odor, it's vital to take the time to clean yourself inside and out. In my studies of Traditional Chinese Medicine, I once encountered a doctor who could diagnose patients based on smell, which was somewhat invasive yet intriguing. Dogs trained to detect cancer patients through their scent further suggest that there may be more to this olfactory approach than meets the eye.

When humans started living among domesticated animals, various diseases emerged. Animals can be quite dirty, and if you suffer from chronic illnesses, it might be prudent to reconsider having them as pets. Those with robust immune systems may not face immediate issues, but living with animals can lead to unpleasant odors due to dander and excrement, which isn't ideal for overall health or social perceptions. For individuals experiencing chronic illnesses, the additional stress on the immune system from living with animals can be detrimental. I understand that life is nuanced, and there may be exceptions, but at the very least, keeping pets clean and off your bed can help.

Maintaining external cleanliness is vital, but internal hygiene is equally important. I'd like to reiterate the benefits of fasting, which costs nothing and is accessible to everyone. Fasting can profoundly impact your health and longevity, reducing illness occurrences and extending your life. The practice is straightforward - fast for 24 hours once every seven days, and ideally, continue this routine for the rest of your life. By doing so, you give your gastrointestinal system valuable time to rest and eliminate waste, adding 52 days of GI health per year. Fasting not only conserves your body's cellular divisions but also frees up energy to focus on healing and repair processes. Initially, you might not feel your best while fasting, possibly due to caffeine, sugar, or dairy withdrawal, which will be discussed in the diet section. Start by fasting on a day that works best for you, such as weekends. My wife and I practice this by having our last meal on Saturday night and refraining from eating until Sunday night. Remember to stay hydrated and drink water if needed, but don't feel compelled to force the issue. Despite potential initial discomfort, consider fasting once a week as a crucial step towards taking control of your health. It may seem daunting at first, but it's primarily a psychological challenge, and I encourage you to give it an honest try.

By incorporating weekly fasting, you will also notice a gradual reduction in your total caloric intake, leading to a loss of about a pound or half a pound per week. In the chapter on diet, I'll delve into longer fasts for weight loss and potentially curing seemingly incurable diseases. For now, use weekly fasting as a means to maintain your body's health. You will come to realize that fasting is the most potent tool you possess to overcome illness and enhance your well-being. If there's one thing you choose to implement from this book to improve your health, let it be fasting once a week.

ALLERGIES

Over the years, I've managed over 2000 individual cases, with approximately 10 new cases per month, resulting in around 40,000 office visits and counting. Through my experience, I've come to believe that all chronic diseases have an autoimmune component. Conditions like diabetes, fibromyalgia, digestive disorders, headaches, arthritis, and back pain have shown significant improvement or even complete reversal when I balance the patient's immune system. Often, an underlying allergy, whether common offenders like ragweed and molds or hidden food allergies, is preventing patients from experiencing relief and improvement.

Some toxic reactions to foods are apparent and cause immediate symptoms, such as hives, rash, breathing difficulties, and even life-threatening anaphylactic shock. However, many adverse reactions to food toxicity are slow forming and often go unnoticed or misdiagnosed, leading to prolonged suffering for patients. Medication may mask symptoms, creating dependency rather than promoting true healing.

In my clinic, we offer what I believe is the most advanced test available worldwide for food allergies. By testing the patient's blood for 156 different foods and substances, we can identify what they should avoid. This information alone has led to complete reversals of hyperactivity in children, relief from migraines, and successful weight loss for numerous patients.

When using the standard skin prick allergy test, only about 5% of the population shows allergic reactions, which are immediate and use the IgE model for initial response classification. However, when using a delayed reaction test, a staggering 90-95% of the population reacts. This suggests a significant increase in allergies compared to 100 years ago, which I believe is linked to the high consumption of sugar.

Today, sugar consumption is at an all-time high, with children frequently consuming sodas, fruit juices, energy drinks, and vitamin waters. Sugar wreaks havoc on the immune system, making it essential for individuals aiming to repair their immune system and eliminate allergies to completely avoid all sugar intake. Based on my personal experience, it typically takes about eight weeks of complete avoidance from the triggering food (and sugar) to clear a normal IgG allergy. More severe reactions may require up to six months, depending on genetics and the extent of damage to the immune system.

If the allergy clears, the patient can resume eating the triggering food as long as their immune system remains balanced. During this period, using the digestion chapter's protocol will aid in healing the system.

Let's explore a therapy called Pulsed Electromagnetic Field Therapy (PEMF), which I offer at my clinic. PEMF helps heal and regenerate the body by charging injured cells. To understand PEMF, it's essential to recognize that the human body is mainly composed of electrical charges. All matter, at its smallest level, is an electrical charge. I have observed that when patients undergo PEMF therapy and are exposed to an allergen within the same field, it appears to reduce the allergic response. While this is not something I typically advertise, in most cases, I've seen positive results. People with egg allergies, cosmetic allergies, and drug allergies have experienced a decreased immune response when exposed to the offending allergen during PEMF treatment. I encourage patients to try it for themselves to witness the selfexplanatory results.

To alleviate allergy symptoms like itchy eyes, runny nose, and skin reactions related to eczema, dermatitis, and psoriasis, I often recommend beef liver. However, since many individuals are hesitant to eat beef liver, I provide them with a supplement called **Antronex** instead, to take 3-9 pills a day. In the 1920s, Japanese researchers discovered the antihistamine effects of a beef liver extract known as Yakriton. Additionally, Antronex can help with a condition called portal hypertension caused by a congested liver. Whenever I encounter a patient with high blood pressure, I may administer a few Antronex pills to check if their blood pressure lowers quickly, indicating a congested liver as the underlying cause of hypertension. While I prefer beef liver as a first choice, Antronex serves as a suitable alternative.

For individuals dealing with asthma, especially when allergy plays a significant role, I find **Albizia Complex** to be highly useful. Taking two tablets three times a day can help stabilize mast cells, reducing the release of histamine. This product contains two beneficial herbs, Albizia, and Chinese Skullcap, which prove effective in managing seasonal respiratory problems when started 4-6 weeks before the expected onset.

STOMACH ACID

Low stomach acid can also contribute to allergic reactions to food. Are you aware that using antacids and acid blockers like Rolaids, Tums, Pepcid AC, Tagamet, and Zantac could lead to harmful consequences? These products decrease your body's production of hydrochloric acid (HCL), which can result in digestive issues. Surprisingly, many digestive problems, including heartburn, are not caused by excess acid but rather too little. Inadequate HCL can prevent proper food breakdown, leading to undigested food molecules entering the bloodstream.

The repercussions of incomplete food digestion can trigger autoimmune responses, contributing to diseases like Rheumatoid Arthritis, Lupus, and Crohn's. Harmful bacteria thrive when food doesn't break down correctly, causing ulcers in the stomach. Using anti-acids further slows down HCL production, promoting the growth of harmful bacteria and potentially exacerbating autoimmune reactions. The solution is straightforward - stop taking anti-acids or acid blockers and restore your body's normal HCL production. If you have severe bleeding ulcers, it may be necessary to heal the stomach first before increasing HCL production. **Chlorophyll Complex**, taken at a dosage of 9 a day on an empty stomach, can help heal the stomach by providing essential fat-soluble elements to rebuild gastrointestinal mucous membranes and permanently repair the ulcer.

Once the stomach is healed, you can introduce **Zypan** or, in severe cases, **Betaine Hydrochloride** at a dosage of 3-6 pills per day with meals. Betaine Hydrochloride helps separate the betaine and HCL in the stomach, making HCL available for digestion. This is beneficial for individuals who struggle with protein digestion or mineral absorption.

DiGest is an excellent product that I often recommend for longterm correction of low stomach acid and to aid digestion. It's a digestive aid that addresses various issues such as poor digestion, lack of appetite, dyspepsia, flatulence, constipation, and inflammatory conditions of the stomach and bowel, including colitis and gallstones. Additionally, it promotes the secretion of endogenous hydrochloric acid (HCl), gastric enzymes, and bile.

For the best results, I advise my patients to take 1 to 2 tablets of DiGest 15 minutes before meals for maintenance. For those who only need general digestion support, one tablet taken 15 minutes before meals works well. What makes these tablets unique is the addition of gentian to the coating. I often suggest to patients that they suck the tablet for a short time until they taste the bitterness and then swallow it. This enhances the tablet's activity, and some patients find it more manageable than a bitter liquid formula. I find DiGest tablets especially beneficial for elderly individuals, picky eaters, children, and patients with chronic diseases who experience digestive issues. They are particularly helpful in alleviating symptoms of irritable bowel syndrome, such as gut spasms and other digestive discomforts. Overall, DIGest is an excellent aid for maintaining proper digestion and supporting digestive health.

BETA GLUCAN

Very simply, Beta-glucan (not gluten) is one of the most potent immune enhancers we have, either prescription or nonprescription. That includes the medical "hoax" interferon alpha. Nothing does more to boost your immune system. You already consume Beta-glucan every day, only not enough to help you. It is only in the last few years that technology has allowed us to produce powerful and inexpensive Beta-glucan supplements. The scientific literature is full of valuable studies on the power of betaglucan. One excellent study was published in the European Journal of Clinical Nutrition (vol. 55, 2001) from the University of Lausanne in Switzerland. Patients were given oral Beta-glucan supplements along with their regular meals. Very sophisticated tests were conducted to monitor their blood sugar, insulin, fatty acids, and other parameters. In only three days, insulin levels fell an astounding 26% because the cells responded more efficiently to the regular production of insulin! Glucose levels dropped dramatically by 12%. This means if you had a high glucose level of 100, that three days later, it would drop down to a reasonable level of 88. Taking this is very important to avoid blood sugar and insulin disorders.

Blood sugar metabolism and insulin are just one area of benefit here. Beta-glucan has been studied for its anti-cancer and antitumor effects in lab animals, demonstrating tremendous potential. Beta-glucan is part of my cornerstone program for high cholesterol. Why poison yourself with toxic statin drugs when you can lower your cholesterol naturally, safely, and effectively? Chronic diseases like cancer and diabetes have viral components. The only way to help yourself is by maintaining a strong immune system and reducing exposure to all the dangerous dangers found in our food and environment. People are eating out in places that do not adequately prepare food and exposing themselves to large doses of dangerous pathogens. Our food is grown with toxic chemicals, and our livestock is exposed to a multitude of diseases and filth, so prevention and lifestyle change are the messages here. Every time you eat out, there is a risk of Hepatitis.

This is heavy; just take a minute to think about it. That person in the kitchen preparing your food, do they have a cut on their finger? Did they wash their hands after using the toilet? Many of these diseases show up right away, but some are silent for years before they surface. Here in Florida, there was a significant Federal investigation a few years ago in a small town located in the middle of the state. Many people outside of the usual demographics contracted AIDS. Scientists started thinking that perhaps the virus had somehow mutated and become airborne. Suddenly, the whole town looked like a scene from the X-Files, with government scientists setting up labs and taking samples. Then, just as fast as it all started, everything stopped. No one ever heard the results from the studies. All media attention just halted. To this day, I don't know what happened, but I think you need to be careful and not assume everything is clean and safe; protect yourself. Ganoderma & Shiitake Mushroom Complex provide the best source of Beta-glucan available; take one tablet three times per day. Incidentally, this is a great adjuvant immune therapy for carcinoma, temporary weakness of the bodies,

defenses, immune depletion, caused by chemotherapy, radiation, weaken, or suppressed immunity and things, such as post viral syndrome, HIV infection or autoimmune diseases. I also will personally use this product if I'm doing a lot of flying, and therefore getting exposed to unnecessary radiation.

Of course, if you like eating oats, a single cup of cooked organic oats three times a week will provide you with all the Beta-glucan you need... you're welcome Quaker!

HERPES

So many people suffer from this nasty virus. It is estimated that 70% of all Americans have oral herpes, and 25% have genital herpes. So, this is a huge problem that can be helped by taking a straightforward product, St. John's Wort Liquid Extract 1:2 (Mediherb). Most people already know that St. John's Wort is an effective antidepressant, but very few people know that it is also a very strong antiviral. I prescribe it frequently in combination with immune-enhancing herbs for viral infections, such as herpes, Epstein-Barr virus, and other envelope viral infections. It is not useful on non-enveloped viruses like the human papillomavirus, which causes warts. Most of the hepatitis viruses are enveloped, so it is helpful in these cases; the exception is hepatitis A, which is non-enveloped. Take a 5 ml dose, up to 40 ml a week. Also, you can blend it with vitamin E cream and make a topical that can be applied directly to the cold sore or genital lesion. This works like magic.

There is more calcium in the body than any other mineral combined, and calcium supplements are the number one product sold in health food stores, but most of them are useless because they do not absorb from the GI tract. Another product that helps is Calcium Lactate (Standard Process). This is useful for fevers, infections, cramps, hyperthyroidism, osteoporosis, herpes, canker sores, insomnia, a physiological relaxer, and soft tissue repair. It is an absorbable form of calcium and magnesium in a 5:1 ratio. This gives it a pH of 5.2, which is acidic, with seven being neutral. The acidity is needed to allow it to be absorbed. The only kind of calcium you can ionize in your bloodstream is calcium bicarbonate. Calcium lactate changes to calcium bicarbonate in just one step. If you take spring water and heat it in a tea kettle, the soft calcium bicarbonate will change to hard, insoluble calcium carbonate, which forms at the bottom of the kettle. This is limestone. So the closest thing we have to calcium bicarbonate is calcium lactate. Take 4-12 a day or 1/3 to 1 teaspoon of powder.

In addition, if you suffer from canker sores in your mouth, pack Calcium Lactate pills around the sore, and it will stop hurting and heal quickly. The mechanism for how this works is complex, but in simple terms, the Calcium Lactate goes through your body and tags all the invaders (bacteria, viruses, mold, fungi) that are causing problems so that your immune system can locate them more easily and then do its job to eliminate them. It has nothing to do with building your bone strength, so whenever you are feeling sick, reach for calcium lactate right away and help boost your immune system.

5

While on my enzyme protocols have produced a 0% cancer recurrence rate. None of my patients have ever got sick with cancer again. -Dr. Hiromi

STEP FIVE: DIET

H umans are genetically programmed to eat a diet that is mostly anti-inflammatory, consisting mainly of vegetables, fruits, nuts, and animals that eat vegetation. This is commonly known as a hunter or Paleolithic diet. In contrast, today's modern diet is based mainly on grains and animals that eat grains. There are also many refined foods like sodas and genetically engineered foods, or as I call them, Frankenstein foods. Our modern diet promotes inflammation and the metabolic imbalance that causes disease.

Carbohydrates are a big part of this problem. We break down carbohydrates into glucose so our cells can use them as energy. Insulin is a particular chemical that we use to allow this to occur. If our carbohydrate load becomes excessive, more insulin is needed, and eventually, our cells become less responsive to allowing the glucose into the cells. The glucose cannot remain in the blood, so it is then forced to be stored in our fat cells. Eventually, these inflated fat cells begin excreting hormones that cause many health problems. Just think of all the sugary soda pop people are drinking today; this is responsible for the vast increase in insulin resistance and subsequently diabetes in today's younger population. Contrary to popular belief, fats found in nuts, olive oil, and animal products can promote insulin sensitivity and lower inflammation. A high carbohydrate, low-fat diet would be the worst choice for anyone trying to fight disease. This type of eating will make you sick.

Here are the foods you should try to avoid:

- Grains and grain products, including white bread, whole wheat bread, pasta, cereal, pretzels, crackers, and any other product made with grains or flours from grains, which includes most desserts and packaged snacks.

- Partially hydrogenated oils (trans fats) found in margarine, deepfried foods (French fries, etc.), and packaged foods. Corn oil, safflower oil, sunflower oil, cottonseed oil, peanut oil, soybean oil, and foods made with these oils such as mayonnaise, tartar sauce, margarine, salad dressings, and many packaged foods.

- Soda and sugar are inflammatory. If you eat dairy or soy, they should be consumed as condiments, not staples.

- Meat and eggs from grain-fed animals (domesticated animal products). Modern meat is problematic because the animals are obese and unhealthy; they are loaded with saturated fats and contain too many pro-inflammatory omega-6 fatty acids. Grass-fed meat or wild game are our best choices. Otherwise, we should eat lean meat, skinless chicken, omega-3 eggs, and wild fish. Lean cuts of meat and lean hamburger meat are available at most grocery stores, and even extra-lean is sometimes available.

I know that it can seem overwhelming, and you may feel that there is nothing left to eat; however, you need to decide how much pain and suffering you are willing to live with, and then eat accordingly. The fewer inflammatory foods you eat, the less inflammation you will have and feel. No one will be perfect, just do your best. If you have a few weak moments or more extended periods of time where you dine excessively on inflammatory foods, do not beat yourself up or become depressed. This happens to everyone, so simply recommit yourself to the program. Stay focused and tell yourself that everything you consume will take you one step closer to health or disease. This is a fact we all must accept, so we should all do our best to make good choices.

If you are fortunate and have "good" genes, you may be able to handle more inflammatory foods than some of your family members or friends. The problem is that most inflammatory diseases develop slowly and without symptoms until it is far too late. Therefore, we all need to be careful about consuming proinflammatory foods and not take for granted what appears to be good health. All you need to do is eat mostly fruits, vegetables, nuts, fish, chicken, and lean meat. Eat until you begin to feel full and then stop. Occasionally, I will place patients on complete vegetable diets, but I have found over the years that this is not necessary for most people. As I gather practical research from my patients, I feel that the complete absence of animal products is not necessary. Recently, I am seeing more problems with a strict vegetarian diet that promotes many grains and grain products.

Here are the foods that will help promote your health: - All fruits and vegetables. Eat fruits raw and vegetables raw or lightly cooked. - Red and sweet potatoes are acceptable as long as they are consumed with a protein, such as eggs, fish, meat, or fowl.

- Fresh or frozen fish. This must be wild. Farm-raised fish has high levels of omega-6 fatty acids.

- Meat, chicken, eggs from grass-fed animals. Go to www.eatwild.com to find producers of grass-fed animal products. If you cannot acquire grass-fed products, do the best you can to get lean cuts of regular meats, which are available at all supermarkets.

- Omega-3 eggs. There are usually local farm-raised eggs available from cage-free animals. You will notice the difference in taste and the color of the yolk; it is brilliant yellow.

- Wild game (deer, elk, etc.). Here in Florida, it is easy to get wild boar.

- Nuts: raw almonds, cashews, walnuts, hazelnuts, macadamia nuts, etc. As nuts are high in calories, be sure to temper your nut consumption if your goal is to lose weight. For example, 1/4 cup of nuts provides about 170-225 calories. Try to buy raw nuts, once they are roasted and salted, they are just junk food. The roasting process destroys the oils (hydrogenates).

- Spices like ginger, turmeric, garlic, dill, oregano, fennel, red chili pepper (my favorite), basil, rosemary, and even a little sea salt is okay.

- Oils and fats: It is best to use organic oils, as it is thought that non-organic oils may contain pesticides. Use organic extra virgin olive oil and coconut oil.

- Butter is also a healthy choice, and the best butter comes from grass-fed cows. You will get the best available butter if you buy organic butter (Organic Valley indicates that their butter and heavy cream are from grass-fed cows).

- Salad dressing: extra virgin olive oil, balsamic vinegar (or lemon juice), mustard if you like, and spices (Greek, Italian, ginger, dill, oregano, etc.; whatever suits your taste). When eating in a restaurant, use dressings sparingly, as most are made with soybean oil or worse, and most are rich in sugar.

- Whenever you are thirsty, drink water or try some Japanese organic twig tea. During the fall season in the Uji district, a traditional center of the Japanese tea industry, tea farmers turn to the harvest of tea twigs for Kukicha, "the peasant's drink," socalled because farmers drank it after selling the leaves to sophisticated urbanites as a cash crop. Because caffeine is concentrated in the leaves, twig tea is low in caffeine and can be enjoyed even at night. I have recently dropped all coffee and even green tea from my diet because the caffeine is just too harsh on my system. I find the Twig tea is a great substitute with lots of traditional tea flavor. Try it and let me know what you think, just make sure

MEAL PLANS

Here are some meal ideas that follow the guidelines of an antiinflammatory diet:

1. Soft-boiled, poached, or gently fried omega-3 eggs with your favorite vegetables and spices. You can use organic virgin coconut oil or olive oil for cooking. If you're not carbohydrate-sensitive, a small serving of sautéed potatoes is okay.

2. Omega-3 egg or egg white omelet with favorite vegetables and spices. You can pour marinara or pasta sauce over the omelet to give it a pizza-like taste.

3. Occasionally have a bowl of oatmeal, but avoid excess calories by using water or unsweetened coconut milk instead of cow's milk. Let the fruit be the sweetener. 4. Chicken, fish, or steak Caesar salad without croutons is an example of a balanced meal with appropriate portions of vegetables and protein. This model meal can be applied to other meals as well.

5. Chicken, fish, steak, or your favorite lean meat with steamed or sautéed vegetables and your preferred spices. You can include a small portion of sautéed or baked potato if desired. Have as much salad as you like.

6. Pour marinara or pasta sauce over vegetables and meatballs made from lean chop meat or animal protein sources of your choice.

Here is my recipe for bone broth. Use 4 pounds of grass-fed beef bones with marrow. Add four chopped carrots, four chopped celery stalks, and two medium onions (peel on, sliced half and quartered). Include four smashed garlic cloves, one teaspoon of kosher salt, and one teaspoon of whole peppercorns. Add two bay leaves, three sprigs of fresh thyme, and 5-6 sprigs of parsley. Mix in ¼ cup of apple cider vinegar (Braggs). Cover the ingredients with 18-20 cups of cold water.

Let the broth simmer on low heat for several hours until it becomes rich and flavorful. Bone broth is known for its healing properties, containing nutrients like gelatin and glycine, beneficial for your gut, skin, and digestive tract.Now place all ingredients in a 10-quart capacity crock-pot and add in water. Bring to a boil over high heat; reduce and simmer gently, skimming the fat that rises to the surface occasionally. Simmer for 24-48 hours. Remove from heat and allow to cool slightly. Discard solids and strain remainder in a bowl through a colander. Let stock cool to room temperature, cover, and chill. Use within a week or freeze up to 3 months.

Most broths on the commercial market are filled with dangerous chemicals so I do not recommend them with the exception of Butchers Bone Broth (chicken and beef), I find these to be excellent.

LOSING WEIGHT

When it comes to maintaining body weight, it all boils down to the number of calories you consume. While I wish eating healthy alone could lead to weight loss, it might not be enough. If you are more than 20 pounds overweight, you'll need to make drastic lifestyle changes to see progress. My suggestion for severely overweight patients is to fast. Based on my experience with thousands of overweight patients, it's challenging to achieve the necessary changes through a regular healthy food plan alone. We need to shed the extra weight and eliminate the excess fat, which acts as a gland and secretes chemicals that can cause pain and degenerative diseases.

Fasting involves abstaining from food but continuing to drink water. The goal is to achieve ketosis within the first three days of fasting. You can buy ketone test strips at the drug store to check your ketone levels each day. If you don't enter ketosis after the third day, you must stop the fast. This is a critical and essential step. In a small number of people, ketosis conversion might not occur, and in such cases, continuing the fast would lead to starvation and potential harm. However, if you do enter ketosis, your body will break down the extra fat and materials without starving you. It's crucial to be cautious and attentive during the fasting process. When it comes to maintaining body weight, it all revolves around caloric intake. While it would be great if we could lose weight solely by eating healthy, it may not be enough. For those over 20 pounds overweight, drastic changes in lifestyle are necessary. Fasting is my recommendation for severely overweight patients as it helps shed extra weight and fat without losing muscle. During the fast, you'll stop eating but continue to drink water. The initial three days might be tough as your body still uses glucose as fuel, making you feel tired and sickly. Once you enter ketosis, which usually happens after the third day, you'll drop around 2 pounds a day. Staying well-hydrated during the fast is essential.

Breaking the fast requires a gradual reintroduction of solid foods, starting with broths, then steamed veggies, and eventually broiled white fish. After reaching your weight goal, following the guidelines mentioned earlier will help you maintain it. Loading up on digestive enzymes during fasting can be beneficial for some patients to aid in weight loss and detoxification.

Fasting has been practiced for centuries, and it's a great way to stay in tune with your body. Dr. Joel Furhman's book can provide valuable insights if you're serious about fasting. Understanding calories and their impact on body weight is crucial. Each pound of body weight requires 10 to 15 calories to maintain, so it's essential to consume an appropriate number of calories to stay at your goal weight.

Being honest with ourselves is vital for real change. Many people who claim to eat only salads may not be accurately assessing their caloric intake. It's essential to consider the weekly intake of food rather than isolated days. Remember that each pound of body fat contains about 3500 calories. Cutting daily intake by 500 calories (500 calories/day x 7 days = 3500 calories) will lead to a 1-pound weight loss per week. Fasting is a more effective way to reduce body weight. Once you reach your ideal weight, maintaining it requires the right amount of calories and proper food choices.

When patients come to my clinic, they are often eager to try something different. They might have heard about unique procedures that have helped others find relief from their pain, leading them to have high expectations. They listen intently to every word I say, hoping for a magical solution. But then comes the first reality check when I tell them that the most potent medicine they'll receive is their diet. Some react with silence, others roll their eyes, and some keep nodding, waiting for more information despite having heard the truth. Diet seems to be an unpleasant word for many, often associated with disappointment and failure. However, there's no escaping the fact that what you eat, combined with your genetics, directly impacts your health.

Interestingly, I face more resistance when it comes to diet recommendations than any other procedures I offer in my clinic, even those that cost thousands of dollars. People tend to question and challenge dietary advice, which is entirely free. However, after more than 20 years of researching the relationship between food and human health, I am convinced that the ideal diet consists mainly of vegetables and lean proteins, with limited intake of fruit and grains.

When evaluating any diet plan, consider these five important points:

1. The whole is greater than the sum of its parts.

2. Genes alone do not determine disease. Nutrition plays a critical role in activating or expressing genes, influencing their effects, whether good or bad.

3. Nutrition can effectively mitigate the adverse effects of toxic chemical exposure, making it crucial for overall health.

4. The same nutrition that prevents disease in its early stages can also be effective in halting or reversing disease in its later stages.

5. Nutrition that benefits one chronic disease is likely to promote overall health and well-being.

CARBONATED DRINKS

Carbonated drinks are bad news. You might enjoy a Doctor Pepper now, but later you might need to see me, Doctor Stokes (sorry, that was a bit corny). You've probably heard that sodas are not good for you due to caffeine, sugar, or artificial sweeteners. However, there's another hidden problem inside carbonated drinks that you may not know about, and many people consider it the best part: the carbonation.

Our bodies are primarily made up of water, which has a neutral pH balance of 7. The pH scale ranges from 0 to 14, with 0 being completely acidic and 14 being completely alkaline. We want our bodies to be at a neutral level of 7. The pH scale is exponential, so each point drop on the scale is ten times more acidic. For example, a drop from 7.0 to 6.0 is ten times more acidic, and from 7 to 5 is 100 times more acidic, and so on. The same principle applies to a rise in pH.

Carbonated beverages can significantly affect our pH level. When we mention carbonation, it's not just about sodas; it includes sparkling water, sparkling ciders, beer, and others. Regular and diet pops typically have a pH range of about 2.5 to 3.5, with diet versions being lower than regular ones. Sparkling waters have a pH of about 3-4, most beers are between 3.9 and 4.2, and ciders are around 4. Ideally, our pH should be between 7.1 to 7.5 for optimum health, while our blood pH should be in the range of 7.35 to 7.45.

Our modern lifestyles tend to move us toward a more acidic pH. Most of the foods we eat are digested into acids, and even exercise produces acids in our bodies. Diseases thrive in acidic, oxygenpoor environments, and carbonated beverages contribute to this acidic environment.

When we drink carbonated liquids with food, like carbonic acid, it neutralizes the hydrochloric acid (HCl) produced in our stomach for digestion. This sends a message to our pancreas not to send enzymes to aid digestion, leading to undigested food sitting in the stomach. Drinking soda with a meal can sabotage even the healthiest menu because nutrients in the food aren't properly digested and absorbed.

When you consume carbonated beverages, your body tries to protect itself by using reserves of alkaline buffers, mainly calcium from bones and DNA, to raise the body's alkalinity level and maintain proper pH, especially in the blood. This can lead to kidney and gallstones, joint pain, calcification and narrowing of the vascular system, osteoporosis, dental erosion, muscle spasms, irregular sleep, and damaged cells.

Although drinking carbonated beverages won't lead to immediate death due to the body's ability to neutralize acids to some extent, it does speed up the aging process and contributes to acidity. If you must have a carbonated beverage, consider having it as a between-meal snack. Better options would be water, fruit or vegetable juice, or green tea. To help your body's natural acid reduction process, try juicing ten whole lemons and adding them to 3 quarts of water. Drink this slowly over 24 hours, as lemon can balance the body's pH by raising or lowering it as needed.

MILK

I was raised on milk. During high school, when I was trying to gain weight for Rugby, I drank 2 liters of whole milk every day. I believed milk was a health food loaded with calories and protein, and it certainly helped me put on pounds. I recall reading in my college nutrition book that milk is nature's perfect food. However, what I didn't realize then was that, like all processed foods, milk wasn't good for my body. Before processing, milk contains many beneficial elements, but during manufacturing, it loses these qualities. Let me explain the process.

First, a suction machine is attached to the cow's nipple to extract the milk, which is temporarily stored in a tank. The raw milk collected at each farmhouse is then transferred to an even larger tank and homogenized, preventing the fat from separating and rising to the top. Unfortunately, this process changes the fat in milk to hydrogenated fat, which is harmful. Before going to the market, homogenized milk must be heat-pasteurized to eliminate various germs and bacteria. This high-temperature treatment destroys enzymes, which are vital for every body function and disease prevention. Additionally, more hydrogenated fat is created during the ultrahigh temperatures used in pasteurization. So, milk processing eliminates all the good enzymes and transforms the fat into a harmful substance.

There is a common misconception that milk helps prevent osteoporosis, but the opposite is true. Drinking too much milk can actually cause osteoporosis. Here's how it works: The normal calcium concentration in human blood is around 9 to 10 mg. When you drink milk, the calcium concentration in your blood suddenly rises, and the body tries to bring it back to normal by excreting calcium through the kidneys. Drinking milk to get calcium leads to the ironic result of decreasing the overall level of calcium in the body. Countries like America, Sweden, Denmark, and Finland, where a lot of milk is consumed daily, have high rates of hip fractures and osteoporosis. In contrast, countries like Japan, where people consume much smaller amounts of fish containing calcium that is not quickly absorbed, have very low rates of bone loss diseases like osteoporosis.

If you can find unpasteurized organic milk from grass-fed cows, these problems do not apply. However, it's essential to consider the potential of germs and diseases being transferred from the cow into your body with unpasteurized milk. Most unpasteurized milk cannot be sold for human consumption due to this issue. If you don't have access to a farm that you trust, it's better to pass on unpasteurized milk and try unsweetened coconut or almond milk instead.

GRAINS

Grain consumption is a sensitive subject for many individuals, so I want to spend some time explaining why I feel it is not a good food choice. Most people have eaten bread, pasta, and cereals their entire lives, and giving up this food can be psychologically traumatic for some, illustrating the strong and often inappropriate emotional connection that we have with food. Many find it surprising that grains are a relatively new food from a historical perspective. The following foods were never consumed before 5,000-10,000 years ago: grains, pasta, cereal, soy, beans, dairy, refined sugar, partially hydrogenated fats, and seed oils, such as corn, safflower, cottonseed, sunflower, peanut, canola, and soybean oil. Mammals with similar genetic coding to ours inhabited the earth for 1,990,000 years before man appeared on earth. We must appreciate that our genes are not dissimilar from those that came before us; modern science has demonstrated this fact. This means that humans are genetically adapted to eat fruits, vegetables, fish, fowl, meat, roots, tubers, and nuts. Consider also that there are no chronic diseases caused by eating these foods. No matter what disease you may suffer from, none of these foods must be eliminated from the diet. The same cannot be said for grains.

In a nutshell, grains contain several problematic substances, including gluten, lectin, and phytates. Grains also promote inflammation by increasing body acidity and disrupting proper blood sugar regulation. I have experimented with many different diets and tested the blood chemistry of patients both on and off grains. In every case, the elimination of grains promoted health. This research even changed my own dietary choices and moved me from the vegetarian diet I had followed for many years to my current diet that does not include many grains.

Celiac disease is a disabling digestive condition caused by the gluten found in certain grains. The most notorious gluten grains include wheat, couscous, spelled, Kamut, rye, and barley. Among the non-gluten grains are rice, wild rice, millet, and corn. You may be familiar with Celiac disease, a condition that damages the lining of the small intestine and prevents it from absorbing essential nutrients. This damage is due to a reaction to eating gluten, which is found in wheat, barley, and rye. The exact cause of celiac disease is unknown. The lining of the intestines contains areas called villi, which help absorb nutrients. When people with celiac disease eat foods or use products that contain gluten, their immune system reacts by damaging these villi. This damage affects the ability to absorb nutrients properly, leading to malnourishment, regardless of how much food they eat. The disease can develop at any point in life, from infancy to late adulthood, and those with a family history of celiac disease are at a higher risk. The disorder is most common in Caucasians and people of European ancestry, and it tends to affect women more than men.

However, it's not only those suffering from celiac disease who need to avoid grains. Gluten can promote many other symptoms and conditions, ranging from schizophrenia to more common conditions like headaches. For certain individuals, gluten sensitivity can present exclusively as a neurologic disease, without classic digestive problems. Common symptoms of gluten sensitivity include headaches, numbness, tingling, and weakness.

In one study, researchers randomly selected 200 disease-free individuals to assess anti-gluten antibody levels as a measure of gluten sensitivity. Health complaints of the 15% of subjects with the highest antibody levels were compared with the 15% of subjects with the lowest levels. Interestingly, those with the highest antibody levels suffered from headaches, chronic fatigue, regular digestive complaints, subtle anemic changes, and no signs of celiac disease, while those with the lowest levels were symptom-free. In another report, 3 cases of gluten sensitivity were discussed, where patients experienced digestive bloating, gas, abdominal pain, and fatigue. Their symptoms resolved after adopting a gluten-free diet.

A detailed list of gluten foods can be found at the Celiac Sprue Association's website (www.csaceliacs.org). Here's a personal story about my wife's struggle with gluten.

Several years ago, my wife Kathy developed a strange problem where every time she tried to write with her left hand, her index finger would curl up. Despite running various tests and consulting specialists, we couldn't find a conclusive diagnosis until a neurologist in Naples, specializing in neurological disorders, concluded it was early-onset dystonia and not Parkinson's disease as previously suspected. After trying various treatments with no success, one day, Kathy decided to adopt a high-protein diet, eliminating grains, and her condition miraculously improved-her finger stopped curling. However, when she returned to a normal diet, including pasta, her dystonia returned. Although Kathy tested negative for gluten sensitivity, reducing her intake of grains and sugar significantly improved her condition. This experience taught us valuable lessons, showing that even if a doctor says you don't have gluten sensitivity, reducing grains can still have significant benefits.

Grains contain a substance called phytic acid, which is known to reduce the absorption of calcium, magnesium, and zinc. Grains also promote an acidic body pH, which is known to be inflammatory. Research has now demonstrated that a dietinduced acidic state helps promote the loss of bone and muscle. While grains are a low-fat food, they contain an elevated ratio of omega-6 to omega-3 fatty acids. Omega-6 fatty acids are converted into chemicals that cause inflammation, chronic disease, and pain. Therefore, the benefits are outweighed by the problems.

With the above in mind, you may be wondering why we have been told that grains are so good for us. First, whole grains do contain nutrients and fiber, both of which are healthy and antiinflammatory. However, we get more nutrients and fiber from fruits and vegetables. Second, grains are inexpensive and can be stored easily, making them profitable for food manufacturers. We are never told that we can get all the nutrients and fiber we require by eating fruits, vegetables, and nuts, and that there is no need to consume grains. It is important to understand that the health conditions discussed above have only been associated with the consumption of grains and legumes (beans), and have never been associated with the consumption of fruits, vegetables, nuts, and healthy animal meats. Therefore, try to avoid grains, flours, bread, pasta, etc., and try to replace these foods with fruits and vegetables.

A great misconception is the notion that we cannot get adequate fiber unless we eat whole grains. In fact, whole grains are a poor source of fiber when compared to fruits and vegetables on a calorie basis. When we compare foods based on calories, fresh fruit typically contains twice the amount of fiber found in whole grains, and non-starchy vegetables, such as broccoli and lettuce, contain almost eight times the amount of fiber found in whole grains.

Along with being low in fiber, grains are also low in potassium when compared to fruits and vegetables. Research has demonstrated that diets low in potassium predispose one to numerous diseases, such as chronic pain, osteoporosis, agerelated muscle wasting, calcium kidney stones, high blood pressure, stroke, asthma, exercise-induced asthma, insomnia, air sickness, high-altitude sickness, Meniere's Syndrome (ear ringing), and age and disease-related chronic kidney insufficiency.

Unlike other minerals, it is vital that we get potassium from food, not supplements. Supplementing with potassium can lead to inappropriately high levels of potassium in the blood, called hyperkalemia, which can lead to muscle weakness, numbness and tingling, abnormal heart rhythm, muscle paralysis, troubled breathing, and even heart failure and death.

LEGUMES

All grains and legumes (beans, lentils, soy) also contain sugar proteins called lectins, which resist digestion and cooking. Before absorption, lectins are known to cause digestive system inflammation, which may or may not cause obviously linked symptoms. After lectins are absorbed into circulation from the digestive tract, they bind to the surface of cells throughout the body. While all the details are not known, researchers state that there is now abundant evidence that lectins can cause disease in humans and animals. I believe lectins play a role in promoting the following conditions:

- Diabetes mellitus
- Inflammatory bowel disease
- Rheumatoid arthritis
- Psoriasis
- Multiple sclerosis
- Retinitis and cataracts
- Congenital malformations
- Infertility
- Allergies and other autoimmune problems

Just the fact that beans need to be prepared so much before we can eat them should be an obvious sign that they are not an ideal food source for humans. During a one-year experiment, I ate a strict vegetarian diet to see how it would impact my health. As expected, my cholesterol dropped, but unfortunately, I developed some severe gastrointestinal problems and a gallstone. My overconsumption of beans was a causative factor. Fortunately there is some good news for all you bean heads out there. If you pressure cook the food it will reduce the lectins to an acceptable level. Some companies like Eden Beans already pressure cook there products so do a little research and make the right choices.

SUGAR

If you stop consuming sugar for one month, you will never crave it again. Make sure you don't fall into the artificial sweetener trap; these chemicals are even worse than sugar. Just so you understand, sugar is sucrose, fructose, and maltose - that's it. Check the labels because every few years, a new artificial sweetener is introduced that is guaranteed to be safe, but every one of these artificial non-caloric sweeteners has been found to be toxic and unsafe. One of the most popular products is Splenda. It is advertised to taste like sugar and is made from sugar, but this is not correct. Splenda is a chemically modified substance with added chlorine, making it more similar to a chlorinated pesticide than something we should be eating or drinking. As it breaks down in your body, it creates more unnatural products that can harm your digestive system. Most people think that choosing "diet" drinks or "lite" vogurts compared to the sugar-laden versions is doing something good for themselves, but the problem is that you're exposing yourself to a whole new set of problems with artificially sweetened drinks and foods. Always choose sugar over artificial sweeteners.

Another product I hear a lot about in the media is Stevia. This seems good at first because it is a plant and not made in a lab. Unfortunately, natural does not always mean safe. As an example, tobacco is also a natural plant. Even the FDA has refused to approve the entire Stevia plant as a sugar substitute because of safety concerns. All the studies show that Stevia, Sucralose, Aspartame, and all sugar substitutes do the same, if not more damage than regular sugar. So why bother? If you must use sugar, read labels and look for products without sugar.

Of course, as always I have a hack for all you sugar babies and it is called Monkfruit sweetener, in particular a brand called Lakanto. No aftertaste and no negative side effects. Try it out and test your blood sugar before and after and see how you do. What? You don't have a glucose tester? They cost less than \$50 at Wal-Mart, go buy one today and start experimenting.

MACROS

Here is the final solution if you are trying to be as healthy as possible or trying to overcome chronic disease or injury:

PROTEIN: Aim for at least 1 gram per pound of ideal body weight.

FATS: Consume at least 40% of your ideal body weight in healthy fats.

CARBOHYDRATES: Limit your intake to no more than 130 grams a day.

Remember, healthy fats are your friends. If you are hungry, increase your fat intake, and if you are tired or lacking energy, increase your protein intake. Trust me, two weeks of eating this way, and you will feel like a new person. One crucial tip about food is to eat more protein, especially animal protein like red meat, eggs, wild fish, ribeye steaks, bacon, and organ meats. Make sure to choose pasture-raised, organic, grass-fed animals only.

A second tip would be to supplement your diet with Collagen Peptides. This product is made from the hide of grass-fed bovine and contains 8 of 9 essential amino acids. I recommend one made by Vital Proteins, but there are several good companies out there. Taking 2 scoops of this twice a day will give you an extra 36 grams of protein and help protect your joints as you age. It has no flavor and mixes well with water, coffee, or coconut milk.

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E=MC2 ³⁰. -Albert Einstein

STEP SIX: ENERGY

I fyou need short-term energy, you can drink a cup of coffee, but if you want to produce consistent, safe energy, you will need Adenosine triphosphate (ATP) and cardiovascular health. Let's begin with something most people have never heard of before: ATP. To understand ATP, you will need to meet the little alien that is living inside your body, called the Mitochondria. I asked my stepson to write a brief explanation of what they are and why they are essential. Michael McDowell is a medical student attending AT Still University, but in his undergraduate studies at the University of St. Louis, he specialized in cellular biology. Here is a section of a lecture he gave on energy production:

³⁰ What this equation means is that a small amount of matter has a huge amount of energy potential. If a penny could be converted entirely to energy, it would provide enough energy to power the New York City metropolitan area for at least two years

You have little batteries inside your cells, and they are called the Mitochondria. These entities once lived outside our system and a long time ago decided to join our cells for a mutually beneficial relationship. This is called the Endosymbiotic Theory. The Mitochondria possess a double membrane in which the processes of cellular respiration use oxygen and components that are broken down from the food we ingest to produce ATP, the basis for all cellular energy. This double membrane is thought to have formed from an event in which the Mitochondria, acting as a lone prokaryotic cell, was engulfed by another cell that would eventually lead to the creation of the cells present in our body. This engulfment created the secondary membrane that surrounds the mitochondria.

Another indication that Mitochondria once existed as a lone entity is that they possess their DNA. The Mitochondria's DNA is present in a circular form, while ours is the familiar double helix. Over time, however, much of the DNA needed for the function of Mitochondria seems to have been transferred to the nucleus of our cells, making the Mitochondria dependent on the coding found in our DNA for their survival and function.

Basically, all of this indicates that a long time ago, cells that would eventually make up the multicellular organization found in the human body existed independently. These cells, only able to produce small amounts of energy through anaerobic (without oxygen) processing of organic material, came upon mitochondria, like a bacterium, which could be harnessed to more efficiently produce energy through an aerobic process (using oxygen). These cells then engulfed or ate these bacteria and eventually made them dependent. In a sense, the mitochondria were made slaves to produce large amounts of energy for the cell, allowing them to form multicellular organisms like human beings. The interesting point is that the DNA of the Mitochondria and common bacteria are very similar. I believe it is possible that extensive use of prescription antibiotics can collaterally damage the Mitochondria when attacking harmful bacteria. This could lead to premature aging, less energy, and degenerative disease. Antibiotic therapy should be closely monitored. This is only a theory of mine, but based on my research, it certainly makes sense."

A healthy Mitochondria produces about 1% waste from this process of making ATP, and the exhaust comes in the form of free radicals. These are molecules that have an unpaired electron in the outer orbit, making them very unstable and highly reactive. The unpaired electron is always trying to stabilize itself by reacting with other molecules that can donate an electron. This exchange produces inflammation and damages our cellular structures. When the production of ATP becomes less effective, the waste produced increases. Think of this like someone reaching their anaerobic threshold while they are working out: lactic acid builds up, they get tired, and the muscles start to ache. These free radicals lead to aging and disease, and eventually, when we produce more waste than can be processed, we die.

Keeping this system working at optimal capacity is very important. The biggest threats are toxins, including poisons from environmental exposure (pesticides, radiation, second-hand smoke) and from the foods we eat (sugar, additives, hydrogenated oils).

Our bodies produce a safety mechanism for handling free radical activity called antioxidants. These substances, like vitamin C, can be found in many fruits and vegetables we eat. Glutathione is one of the most powerful antioxidants available and should be included in any health-building program. An excellent teacher of mine, Dr. Walter H. Schmittt, once commented, "Antioxidants are like bulletproof vests for our cells." The good doctor helped me understand the benefits of these powerful chemicals. Recent studies show that restrictive caloric intake reduces free radical activity, which is another good reason for periodic fasting. I want to tell you a true story about a past patient of mine that shows how important antioxidants can be.

Donald Lasko was diagnosed with cancer when he came into my office. I told Don, "I don't treat cancer," but he insisted I do whatever I can to help him fight it. At that time, I focused mainly on chiropractic adjustments to free him of Subluxations, as there have been valid studies showing that chiropractic manipulation can increase the immune system activity. I believed he would benefit from being free from joint fixation. Meanwhile, Don started taking large doses of vitamin C after reading articles by Linus Pauling, a brilliant chemist and Nobel Prize winner, who had strong ideas about using antioxidants.

Don was taking around 15,000 mg of vitamin C per day, about 15 grams. After about four weeks, his blood chemistry started to change, and his cancer doctor noticed a significant decrease in his blood cell count. This trend continued, and eventually, Don received the great news that he was cancer-free. Initially, the cancer doctor thought it was the vitamin C intake recommended by the chiropractor (me), but I had nothing to do with it. Don's recovery is an amazing example of what could be possible if this knowledge found its way into mainstream medicine. Linus Pauling's teachings are the foundation of what is now known as orthomolecular medicine or functional medicine.

Regarding antioxidants, I recommend using **Vitanox**, an excellent antioxidant containing grape seed extract and green tea.

It helps restore healthy flora by preventing the regrowth of pathogenic bowel flora and offers various health benefits.

When faced with situations where someone says nothing can be done, it often means we need to explore further. My stepson, Michael McDowell, pointed out how antibiotics may harm the Mitochondria, so it's essential not to abuse these drugs and increase probiotic intake after antibiotic use to restore gut flora.

Mitochondrial disorders like Fibromyalgia, Chronic Fatigue Syndrome, or premature aging may be linked to antibiotic use. Top researchers suspect that conditions like Parkinson's might have a foundation in Mitochondria malfunction. Ensuring your Mitochondria are functioning properly is vital for overall health.

To produce energy, it's crucial to consume enough quality protein. There are 22 amino acids, and 8 of them are considered essential. If you get the essential amino acids, your body can synthesize the others. Protefood (Standard Process) supplies a high concentration of essential amino acids and is particularly beneficial for older patients.

Plant-based protein shakes, like **Veg-E Complete Pro**, are excellent options. Collagen Peptides from Vital Proteins are also a valuable supplement. It's recommended to consume at least 1 gram of quality protein per pound of ideal body weight, or at least 30-50 grams of protein per meal.

For patients dealing with fatigue and adrenal depletion, **Rhodiola & Ginseng**, is the perfect herbal formula. It benefits cases of fibromyalgia, poor memory, ADHD, sexual dysfunction, and athletic performance enhancement. It's also useful in male infertility treatment. Rhodiola & Ginseng, along with **Tribulus**, can boost testosterone levels and enhance recovery time from athletic activities. Many athletes find it helpful.

CARDIOVASCULAR SYSTEM

Your cardiovascular system must be healthy to generate energy and provide all the essential components to the mitochondria. The heart serves as the motor driving this process. **Hawthorn** is a herb known as "The nurse of the elderly heart" and offers numerous benefits. It reduces the heart muscle's oxygen requirements and promotes heart re-vascularization. Hawthorn also helps with peripheral circulation, arrhythmias, tachycardia, and arteriosclerosis. The recommended dosage is 1-3 tablets daily.

Another product beneficial for the cardiovascular system is **Gingko Forte**, my favorite herb for various purposes. It enhances blood circulation throughout the body and aids in healing and angiogenesis. Despite the numerous positive studies on Ginkgo, I'm puzzled as to why it's not a first-line treatment for cognitive dysfunction. Ginkgo inhibits the effects of platelet-activating factor (PAF), which is beneficial for people with allergies, asthma, inflammatory conditions, and cardiovascular diseases like a history of strokes, where PAF levels tend to be elevated.

Ginkgo's effects take 4-8 weeks to become significant. I use 21-28 ml per week to correct dizziness and peripheral circulation issues, such as those seen in neuropathy. Taking 30-50 drops before events helps me feel more alert and able to retain information for extended periods.

Garlic Forte can effectively reduce high levels of bad blood fat (LDL) by up to 18% in two months when taking 2 tablets daily. Each tablet is equivalent to one whole, fresh clove of Garlic. It has been a recognized medicinal plant for 3,500 years, adding flavor to our food and aroma to our kitchens. Quality Garlic products containing alliin and allicin are vital for optimal efficiency. The enteric coating protects the delicate Garlic enzyme alliinase, allowing allicin production in the non-acidic environment of the small intestine, providing similar benefits to crushed fresh Garlic. I rarely suggest patients with total cholesterol under 300 to take action to lower it unless their triglycerides are also very high. Garlic can be toxic, so its use should be under direct supervision and based on individual blood lipid profiles.

Inositol Power is a lesser-known product but highly effective for fat metabolism and energy production. It acts as a pain reducer, especially for diabetic patients or those with disorders like ADD, ADHD, and SOD. Inositol works wonders in complex cases that don't respond to other treatments. Personally, I found it helpful in reducing pain during athletic injury recovery. The recommended dosage is 1/4 to 1 teaspoon per day. It efficiently turns the foods you eat into energy, making it an excellent alternative to coffee and stimulants. It has personally worked for me in burning off stubborn fat.

EXERCISE

Alright, here's the exercise part everyone has been waiting for, a list of useful exercises. Ah yes, so many times in the clinic patient will ask, or I should say beg me for exercises. I would spend hours photocopying instructions and putting together personal exercise routines for them only o find the stapled sheets soaking in a mud puddle outside the office or left on a waiting room chair. Exercise recommendations should be given after careful evaluation, tailored to each patient's specific needs. However, I can suggest some general movements that can improve energy and healing. Walking is the best movement a human body can do. Head outside, look around, and swing your arms in a cross-crawl fashion. Aim for three, twenty-minute walks a day, covering approximately one mile each. Before adding anything else to your routine, make sure you can achieve this. If walking is challenging, consider recumbent cycling (seated stationary biking). And if that's not feasible due to your physical condition, opt for pool exercises, mimicking walking, for three, twenty-minute sessions daily. Building this foundational activity is crucial, and it forms the basis for your exercise routine.

Walking may not seem as athletic as intense workouts, but it's one of the best exercises you can do. If back pain is an issue, you can shorten your walking times or wear a lumbar support brace with an ice pack during your walks for pain relief. Ice packs are recommended for this purpose, not heat, as the ice will numb the area and allow you to complete your required time.

Creativity and a positive mindset are essential when it comes to staying active and stimulating yourself. No matter the circumstances, keep moving and find ways to adapt exercises to your abilities. I once had a patient with no legs who used a peddler (UBE-upper body ergometer) to bike with his arms. The key is to remain active and enthusiastic about improving your life through exercise. Your health should be a top priority, and nothing should be more important than taking care of yourself. Don't get side tracked because you thing you need expensive equipment or Hollywood trainers. Just move your body, you do not need weights or strength band (although they can be helpful once you start getting in shape, but the most important thing is moving the body to stimulate blood flow.

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All you need in this life is a tremendous sex drive and a great ego. Brains don't mean a shit. -Captain Tony, Key West, Fl.

STEP SEVEN: HORMONES

M r. Cap Monroe lived in Southwest Florida and was 135 years old when he died. He swore that his longevity was because he drank a special tea made from Spanish Moss (Tillandsia Usneoides). This common moss grows in the swamps and hangs off the trees. Since I live in Southwest Florida, I have started studying Spanish Moss, and it turns out to contain mostly chlorophyll, minerals, and B vitamins. So maybe Old Cap Monroe had discovered the fountain of youth after all. I tried to manufacture a safe tea from the moss, but honestly, it is a nasty plant that houses insects and spiders. There are just better products available, not to mention the stuff tastes awful. You can mimic Cap's results by taking **Chlorophyll Complex** (which contains a big dosage of Tillandsia). Take 3-9 of these on an empty stomach. You will notice several products like Chlorophyll Complex keep popping up. It's hard to isolate the body into compartments, which means just about anything you do in one step of the seven steps will affect the others. I always think of old Cap Monroe whenever I hike in the Everglades or take a few Chlorophyll Complex perles.

If there is one area of your health that you never want to selftreat without proper knowledge, it is hormones. I am going to make safe, generalized recommendations for educational purposes only. I strongly recommend you consider a professional consultation before starting hormone therapy.

There are three main groups of hormones: steroids, which are made from cholesterol; lipids, which are fats; and amino acids, which make proteins and form brain chemicals called neurotransmitters. Hormones are chemicals that carry messages throughout your body. They have the power to produce miracles, but unregulated, they can destroy your body. So it is important to always test hormone levels before starting supplementation. This was difficult years ago, but now it is simple and inexpensive. I do not care for urinary hormone testing because it is very inaccurate. The best way to test hormone levels is with saliva testing, and we can do that for you in our clinic.

Everything necessary that I have learned about hormones was from my mentor, Dr. Paul Ling Tai. He is the author of several excellent books and an expert on anti-aging. Dr. Paul is known as "The doctor of last resort," and for a good reason. Results. So over the years, Dr. Paul and I have formulated a hormone balancing program that works. One thing Dr. Paul always stressed is the importance of examining the skin and how it relates to hormonal health. "The health of the skin reflects the entire body," Dr. Paul often reminded me. "It is impossible to achieve optimal health if the patient is taking Statin (cholesterol) medication. Cholesterol is an essential part of healthy hormonal production.

There is a lot of mistrust regarding hormonal supplementation, but Dr. Tai suggests that rarely do we see people in their 20's and 30's with cancer, and this is a time when hormones are at their highest. He believes hormones like estrogen and testosterone do not cause cancer. In fact, Dr. Tai thinks they prevent it! He says, "If estrogen caused cancer, every big-breasted woman would have cancer, and that is not true." I could talk for hours about Dr. Tai; he is a remarkable person.

Most medical doctors, including endocrinologists, generally know almost nothing about your hormones. You will never be healthy unless you maintain youthful hormone levels throughout your life. Men have 12 hormones, but only need to test four. Women have 15 hormones, but only need to test seven. You can easily and inexpensively test and balance all of them. We offer inexpensive hormone testing at the clinic and through mail order.

SUGAR

Reduce sugar intake: Sugar is the anti-hormone. Avoid consuming high sugar foods close to bedtime as they stimulate insulin release, which suppresses growth hormone production. Most growth hormone is produced 1-2 hours after sleeping, so a high sugar meal before bed can disrupt this process. Since GH supplementation is costly and natural GH supplementation may not be effective, it's better to work with the hormones you already have. Sugar is harmful to all hormones, especially growth hormone. Keep in mind that white flour also becomes sugar, so eliminate all white trash products from your diet. Remember, sugar is sugar, whether it's from natural sources like sugar cane, brown sugar, honey, or maple syrup, or from artificial sweeteners like sucralose or xylitol. All sugar substitutes are dangerous and unhealthy. Commercial fruit juice often contains high fructose corn syrup, so it's best to limit its consumption. Even natural juice, though containing living enzymes, is still high in sugar and should be consumed in moderation.

Look at the kids today, most of them are overweight, and 30% will develop diabetes due to excessive sugar consumption. We are a soda pop nation, and even kids are put on diet programs. Eliminating soda from your child's diet can significantly improve their health and save their lives. Avoid toxic sugar substitutes like sucralose and stevia, as they can harm your body more than regular sugar.

Reducing and eliminating sugar intake is essential for balancing hormones without relying on prescription drugs. If you have a problem with sugar, consider taking **Gymnema**. This is the herb for diabetes. Gymnema has been used in Ayurvedic medicine for 3000 years and is known as the "sugar destroyer" in Hindi, called Gurmar. These tablets are specifically for diabetes, insulin, dependent, and non-insulin dependent. I would usually recommend one tablet three times a day and then when things get under control, cut it back to just one tablet a day. This product is good for hyperglycemia, diabetes, reactive, hypoglycemia, insulin resistance and metabolic syndrome.

SEX

Got your attention? I cannot write a chapter on hormones without talking about sex. Surprisingly, I get asked about sex a lot. For most people, it is an embarrassing topic, not because sex is shameful but because sex is related to a primal purpose of reproduction, and failure in this area makes us feel disconnected from the Universe. The good news is that for 99% of the population suffering from sexual dysfunction, it can be completely corrected.

To avoid uncomfortable discussions with patients, I started giving them handouts when they asked me for advice. From a physiological perspective, these self-treatment techniques work. It's a fact that if you are not enjoying sex, you will age faster and be more prone to disease. By following the 7 steps outlined in this book, you can resolve many sexual issues as your entire body starts to heal.

There are a few bad habits like smoking and alcohol that need to be regulated because they reduce blood flow to the sex organs. Without proper blood flow, orgasm will be difficult, and eventually, sexual desire will diminish, and important nerve receptors will start to desensitize, leading to chronic sexual dysfunction. Many prescription medications, like those taken for depression, blood pressure, and heart disease, also have a negative effect on your sex life.

The basic ingredients of good sex are strong blood flow and healthy neurological response. Walking is great to help with blood flow, but if you are overweight, it's hard on your joints. That is why I recommend you buy a recumbent bike. This allows you to sit down and pedal in the comfort of your own home. I like the inexpensive set of pedals you can buy at Walmart; that way, you can use your chair and you can even place the bike on a tabletop and pedal with your arms.

Adding oxygen to this procedure increases the effectiveness. Breathing 5-10 liters per minute of oxygen while you are pedaling is amazing. This exercise with oxygen therapy (EWOT) will get super-oxygenated blood moving through your system, increasing your sex drive and performance after only a few days of this type of training.

Now that we have you moving and increasing blood flow throughout your body, the next step is "neurological genital stimulation." The cheapest way to stimulate the growth of new neurological pathways to your genitals is with vibration. Go to Walmart and buy a small back massager or hand vibrator. You do not need to go to a sex shop and buy an expensive penis-shaped device (unless you want to), but you will need to vibrate the area gently and consistently for a few minutes once or twice a day.

This will start the process of angiogenesis, and new blood vessels and nerve pathways will start to form, leading to increased sensitivity in your pubic region over about 14-28 days. Many times during this exercise, you may find yourself reaching orgasm, or not, either way is okay. There are no rules. Just continue to stimulate, and over time things will start to happen for you. Men should stimulate between the scrotum and the rectum as well as gently along the sides of the penis. Women should stimulate the pubic bone and around the clitoris, making sure not to injure the delicate tissues of the region.

In most cases, I will also recommend that men with erectile dysfunction use a vacuum constriction device (VCD). This is an external pump with a band on it that a man can use to get and maintain an erection. The VCD consists of an acrylic cylinder with a pump that may be attached directly to the end of the penis. A constriction ring or band is placed on the cylinder at the other end, which is applied to the body. The cylinder and pump are used to create a vacuum to help the penis become erect, and the constriction ring is used to maintain the erection. This is a medical treatment device, and Medicare will pay for this equipment if you get a prescription.

Sex is important, and the more you have, the better balanced your hormone levels will become. For good libido, both men and women can benefit from **Tribulus**. It is a proven supplement to increase testosterone levels. Take one tablet three times a day, using the right part of the Tribulus plant (the leaves and stems) that was used in clinical trials for best results.

The key to Tribulus is that it will work with your own body to help you produce more hormones, like testosterone, naturally. For that reason, I always prescribe it to patients even if they are already taking a testosterone cream because the cream is just external and does nothing to improve the natural body levels.

Now in some cases, we need a real bump of testosterone, and this can be either for men or women but usually it is in my male patients. There is one product that always delivers and that is **Tongkat Ali**. Here are some of the amazing benefits of taking this herb.

- Glycoprotein and Eurypeptide contents inside of Tongkat Ali allow for a boost in Total and Free Testosterone.
- Direct action of Tongkat Ali on corpus cavernosa (blood vessels inside the member) and seminal vesicle muscle tone.
- Enabling a boost in free testosterone by facilitating testosterone to unbind from SHBG (sex-hormone binding globulin) or reducing the metabolism (i.e. breakdown) of testosterone.
- Boosts intimacy health though indirect antioxidant properties due to potential superoxide dismutase (SOD)

activity. The enzyme SOD has been found to be directly correlated with antioxidant activity.

 Increased conversion of pregnenolone to progesterone, cortisol, 5-DHEA and Testosterone in corpus cavernosum tissue.

The scientific evidence on Tongkat Ali reveals that Tongkat Ali significantly improves male performance and vitality. It leads to a boost in total, bound, and free testosterone levels, masculine drive, member hardness, strength, as well as sperm parameters associated with fertility and virility. Also, all seven human clinical trials conducted and reported did not find any negative side effects. As long as the sourcing, harvesting, manufacturing, and distribution of Tongkat Ali maintain the highest quality standards, this natural herb can be a beneficial addition to support men's natural edge.

I like to take 2, 100mg pills a day and cycle this for 4-6 weeks on and then take a few weeks off. I notice many benefits including you would expect from increasing testosterone including increase in muscle mass and higher sex drive.

ADRENAL HEALTH

Your body has a system designed to deal with stress; it is called the adrenal system. The hormones secreted by your adrenals influence every major physiological process in the body. How you heal, how fast you age, and whether you get sick are all directly related to healthy adrenal glands.

Many times I'm forced to give patients a prognosis on whether a specific treatment program is going to work. Of course, this is impossible, and I hate to place some percentage on a patient's chance of getting better. I always tell them they have every reason to expect a positive outcome because under ideal circumstances, the body will heal itself. Our job is to provide a healthy environment and then allow the innate healing process to take its course. However, if the adrenal system is not functioning correctly, the body will have difficulty dealing with the healing process, and this makes perfect sense. Someone who is spending all of their energy on dealing with stress will have very little left over for healing.

About five years ago, I started testing the adrenals on every patient before I accepted them into care. The test is very simple: a small amount of urine is taken and mixed with silver nitrate, then drop by drop, potassium chromate is mixed into the solution. The mixture will eventually turn orange, at which point you can determine the status of the adrenal glands. A system that is hyperactive is just as detrimental as one that is hypoactive. I recorded these results and found a direct correlation between adrenal health and recovery. Today, most of my patients take an adrenal supplement while they are receiving therapy in my office. Strengthening the adrenals means the patients are less sore after therapy, and they recover faster.

You can check your adrenal system by taking your blood pressure while lying down and then standing up and taking it again. We are interested in the systolic blood pressure, which is the first number or the high number in your blood pressure reading. In a normal blood pressure reading of 120/80, the systolic number is the 120. Your systolic pressure should go up about 10 points or more when you stand up and walk around for a few seconds after you have been laying down. If your systolic pressure stays the same, goes down, or only goes up a few points, you most likely have a problem with your adrenal glands. This is a simple test, and although not as accurate as the urine test, it is a good way to do a quick home assessment. Why don't you have a blood pressure cuff? Buy one today; blood pressure is just one of those indicators you need to keep a close eye on if you are interested in staying healthy.

If you are experiencing adrenal fatigue, the first solution is to get more sleep. That's simple enough: rest more often and for longer periods of time. If your blood pressure tends to run low, you can add some Pink Himalayan Salt and water to your diet. Himalayan Salt is a natural antihistamine and helps reduce pain and inflammation, so it is not always a bad thing.

For adrenal depletion, I start with **Adrenal Complex**, 2-4 a day as a support formula. This formual includes Licorice and Rehmannia to promote adrenal health. These herbs have a long history of traditional use in herbal preparations to:

- Restore adrenal function
- Support adrenal gland health
- Aid the body in adapting to life challenges

These tablets work well where there is cortisol excess and the adrenal glands are being overtaxed, or were there is a cortisol deficiency, and they are depleted. It works either way. When I was extremely busy in my office and stressed out of my mind, I would often get fatigued, and I knew my adrenals were working very hard. I would take one tablet twice a day and found that it completely rejuvenated where it felt and gave me energy without adding anxiety. For an extra bump, I would combine the Adrenal Complex with **Drenamin**.

Patients who need continued support should consider the **Adrenal Health Pack**, a 30-day supply of individual packs, taken

both in the morning and evening. Each pack contains the following:

- Cataplex[®] A-C-P (two tablets) – Supports immune system response function and cell maintenance

- Drenamin[®] (one tablet) – Contains vitamins that are involved in healthy adrenal gland functions and the production of neurotransmitters associated with emotional balance

- Paraplex[®] (one tablet) – Contains PMGs that have a unique profile of nucleotides and peptides from bovine pancreas, adrenal, pituitary, and thyroid.

PROGESTERONE

Progesterone is safe, non-toxic, and offers numerous proven benefits for both men and women. It acts as a counterbalance to the harmful effects of estrogen and helps maintain the balance of estradiol and estrone. It's important to note that prescribed oral progesterone is not the same as real progesterone, which cannot be absorbed orally. For females over 13 years old, having their progesterone levels checked and using bioidentical transdermal cream according to their cycle is recommended. Post-menopausal women can start applying the cream directly.

Physicians have coined the term "estrogen dominance" to describe the imbalanced ratio of estrogen to progesterone caused by excess estrogen or inadequate progesterone. Progesterone plays a crucial role in decreasing estrone, making it an important part of the puzzle. Symptoms of estrogen dominance, such as weight gain, bloating, mood swings, irritability, tender breasts, headaches, fatigue, hypoglycemia, uterine fibroids, endometriosis, fibrocystic breasts, and certain cancers (breast, ovary, uterus, and prostate), are recognized by women who have experienced PMS and menopausal symptoms. In aging men, estrogen levels can surpass those of postmenopausal women, leading to various problems like adiposity, breast development, cancers, prostate issues, baldness, and other age-related conditions. Testosterone deficiency is also associated with this, causing the testosterone to estrogen ratio to decline. To counteract excess estrogen in men over 50, a small amount of natural transdermal progesterone can be applied daily, such as 5 mg topically. Progesterone is safe to use in these amounts, and even laboratory studies with huge doses in animals showed no side effects.

Progesterone acts as a potent 5-alpha-reductase inhibitor, protecting against unwanted dihydrotestosterone (DHT) binding. It also helps maintain a healthy prostate gland by continuously filling progesterone receptors. Studies in laboratory animals demonstrated that natural progesterone reduced prostate weights. Therefore, progesterone is anti-feminizing in men. Both men and women can benefit from using progesterone as a transdermal cream to counter the damaging effects of estrogen and protect against cancer.

For optimal absorption, apply the cream on areas with thin skin, such as the insides of your wrists or upper chest. **A good cream should contain 500 mg of progesterone per ounce or at least 1000 mg in a 2-ounce container.** You can purchase this at any health food store, like Whole Foods. It is inexpensive and very useful for both men and women.

My suggested use for postmenopausal women is to apply 1/4 teaspoon to the chest, stomach, or abdomen any two weeks of the month. Premenopausal women can apply 1/2 teaspoon daily from day 12 to 26 (with day 1 being the first day of their period). Men

can use 1/8 teaspoon five days a week. To obtain this product or schedule a hormone evaluation, please contact the clinic.

When applying progesterone cream externally, you are introducing an external source. If you prefer working within the body, consider **Chaste Tree**, one tablet daily for PMS and mastalgia. Two tablets, 2 to 3 times daily for hyperprolactinemia, endometriosis and fibroids. Chaste Tree is known for its historical wisdom and modern research support in maintaining healthy hormonal balance. The active components in Chaste Tree help reestablish a normal hormonal balance, benefiting women with PMS and other menstrual symptoms by regulating the balance of prolactin and progesterone during their menstrual cycle.

MENOPAUSE

My mainstay for the treatment of menopausal symptoms is Wild Yam Complex. Patients rave about the results. It is very effective in reducing many of the common symptoms of menopause, including hot flashes, night sweats, insomnia, mood changes, fatigue, diminished mental function, and reduced physical endurance. Mid-life should be a time women can look forward to, with family responsibilities easing, providing the freedom, time, and energy to pursue the things they have always planned. So, if menopausal symptoms are holding you back, natural relief is at hand. Menopause is a normal change in every woman's life. During menopause, hormones are sometimes out of sync, leading to undesirable physical and emotional effects. Safe and gently effective, Wild Yam Complex combines a range of herbs, including Wild Yam, Shatavari (known as "woman with 1,000 husbands"), Black Cohosh, and Korean Ginseng, to support women through this life transition. Take 1-2 tablets three times a day.

PROSTATE

The prostate gland plays a role in male reproductive function. It produces an alkaline secretion that is added to semen, which may help the healthy functioning of sperm. The prostate gland wraps around the urethra as it leaves the bladder and before it enters the penis. The urethra is the tube from the bladder, which in men, travels inside the penis, enabling the body to remove waste and excess water in the form of urine. A healthy prostate gland is necessary for normal bladder function. ProstaCo is a unique combination of Saw Palmetto, Nettle Root, and Crataeva bark in a base of pumpkin seed oil. Since the early 1980s, many clinical studies have been performed in Europe with the standardized liposterolic extract of Saw Palmetto. In 2004, controlled clinical trials found that it supported healthy hormone levels in prostate tissues. Nettle leaf is well known for its traditional use; it has been mentioned in medieval herbal texts, but less familiar is the use of the root. Nettle root extract was found to partially block 5-alphareductase, which, when combined with testosterone, produces DHT (dihydrotestosterone). DHT is the hormone responsible for androgenic alopecia hair loss. The second enzyme is aromatase, which makes estrogen. Studies by researchers Lichius and others have shown a reduction in prostate growth in mice when large doses of nettle extract were taken orally. Combining nettle root extracts with saw palmetto berries in BPH patients reduced the amount of testosterone and estrogen. Other uses of nettles include treatment for arthritis, asthma, kidney, urinary tract infections, and last but not least, baldness. Crataeva is a medium-sized tree found in almost all parts of India. One of the Sanskrit names of this plant is Varuna, which means 'that which is earnestly desired by people.' Crataeva has been extensively used to alleviate problems in urination associated with swelling of the prostate. This action of the herb is usually attributed to the chemical lupeol. In effect, lupeol is said to neutralize the enzymes responsible for manufacturing leukotrienes that bring on

inflammation. Take two capsules twice a day. Also, I want to mention how important it is to manage the prostate if you are not having regular sex. I see this in elderly men, and it contributes to prostate enlargement and disease, including cancer. If you are interested in a healthy prostate, learn how to massage the prostate. You can purchase simple, inexpensive, and "small" devices for this purpose, so don't sweat it. I had one patient in his eighties who started having decent erections once he began a program of prostate massage and herbal medicine.

MELATONIN

You can start taking Melatonin immediately without any risk. It is the most potent antioxidant in the body. Unlike most antioxidants that become free radicals when they lose an electron, Melatonin does not, allowing it to serve as an antioxidant repeatedly. Oral intake of melatonin is not effective as the liver neutralizes it before it enters the bloodstream.

Melatonin levels have a direct impact on longevity, immunity, and cancer risk. As we age, our melatonin levels decrease. This hormone regulates our internal clock, and studies have shown that mice given melatonin lived one-third longer than control mice. Monitoring your melatonin levels at 3 am with a saliva kit is recommended to assess its impact on your health. Melatonin is now recognized as one of the most potent anti-aging hormones, with various benefits for conditions such as AIDS, Alzheimer's Disease, asthma, diabetes, Down Syndrome, Parkinson's Disease, poor vision, and sexual dysfunction.

Melatonin peaks during adolescence and declines with age, making it essential to maintain healthy levels. The pineal gland releases melatonin, regulated by exposure to sunlight, increasing at night and reducing during the day. One of its most crucial benefits is protecting cellular DNA, slowing down and even reversing aging. Electromagnetic fields from modern appliances, like cell phones and microwaves, can harm cellular DNA and deplete melatonin. Supplementing with melatonin can help counter the effects of electromagnetic pollution.

Although melatonin's benefits are well-established, it is not commonly suggested by doctors, including endocrinologists who specialize in hormones, possibly due to it not being a prescription drug they can profit from. Using a liposomal cream is one of the best ways to introduce melatonin into your system, and it can also help reverse signs of aging on the skin, such as liver spots. Melatonin's unique antioxidant properties make it safe to use repeatedly with no negative effects.

There is a company Zetpil³¹, that I use and recommend. They make a 25mg Melatonin cream which is sold as a skin care product bt is an excellent and inexpensive Melatonin supplement. My wife uses it on her face an has eliminated several brown aging spots. Recommended use: Apply in the early evening, 1-2 hours before bedtime. Some individuals become drowsy immediately making this product a safe sleep aid. If you do become immediately drowsy you should adjust and take the product accordingly. Melatonin is powerful and can have various side effects on some people. As with all hormone related supplementation and really any supplementation, you should consult with someone who has experience so they can help you make safe, effective decisions. Remember, you can reach out to me, through my website for free consultation.

³¹ https://www.zetpilnutrition.com/product/melatonin-25mg-cream/

THYROID

Thyroid problems have become a major concern in South West Florida, with newspaper ads focusing on related symptoms. After seeing these ads, my wife Katherine wanted to get tested, and it's a sensible idea given the rising prevalence of thyroid disease. Many people only check TSH levels, but that's not sufficient since TSH can vary day to day and be unreliable. It's crucial to also test free T3 and free T4 levels. Additionally, autoimmune attacks can spike thyroid levels, requiring careful consideration.

The issue with thyroid testing lies in the "normal ranges." If your test results fall within the range, your doctor may assume everything is fine, but it's not always the case. For example, if your T3 level is 1.7 on a 1.5 to 2.5 scale (average of 2.0), you may be considered in range, but you are low. In such cases, raising it with bioidentical triiodothyronine is recommended. Similarly, if your T4 level is ten on a 7 to 25 scale (average of 16), you are in range, but still low. In such cases, using bioidentical L-thyroxine can help raise your T4 level. It's essential to avoid counterproductive treatments like using Armour pig thyroid due to its combination of T3 and T4.

Symptoms of an underactive thyroid include fatigue, weight gain, depression, irritability, and more. If you have low, out-of-range free T3 or free T4 levels, considering appropriate doses of Synodal (triiodothyronine) or Levelly (L-thyroxine) respectively can be a starting point. The ideal ratio of T4 to T3 in mammals is 4 to 1. Both Synthroid (T4) and Cytomel (T3) are entirely bioidentical, contrary to some beliefs. A competent physician should prescribe these medications, and self-monitoring after 90 to 211 days is advised, followed by yearly observations.

Treating an overactive thyroid requires caution, avoiding harmful methods like methimazole, radioactive iodine, or surgery. Instead, focus on a correct diet, healthy lifestyle, proven supplements, and balancing other hormones to normalize levels.

A helpful product for thyroid problems is **Thyroid Complex**, containing synergistic herbs like Bladderwrack, Ashwagandha, and Bacopa. Bladderwrack aids in supporting a healthy weight with its iodine content. Ashwagandha, a traditional tonic, helps reduce fatigue and stress, while Bacopa enhances memory and reduces mental stress. Each Thyroid Complex tablet also contains 600 mcg of iodine, promoting healthy thyroid function, improved energy levels, and normal basal metabolism.

NEUROTRANSMITTERS

Neurotransmitters are brain chemicals that help relay electrical messages from one nerve cell to another. They help regulate pain, reduce anxiety, promote happiness, initiate deep sleep, and boost energy and mental clarity. They are very important in every healing mechanism your body uses, and all neurotransmitters are made from amino acids. In the old days, I got great results treating depression and many psychological disorders simply by having the patient drink a pint of bone broth every day. This was made from boiled-down stew meat. The drink supplied all the amino acids the person needed to balance neurotransmitters. Today, there are good supplements available, and no need to drink the broth. Let's take a look at neurotransmitters and how they are related to your health.

DL-phenylalanine: This is an essential amino acid and particularly beneficial in cases of chronic pain. If you are in pain and feeling overwhelmed, unable to handle it, this will really cut the edge for you and help you feel better, almost right away. Phenylalanine is an essential amino acid, meaning the body needs it for health but cannot make it. You have to get it from food. Phenylalanine is found in 3 forms:

- L-phenylalanine, the natural form found in proteins.
- D-phenylalanine (a mirror image of L-phenylalanine).
- DL-phenylalanine, a combination of the 2 forms.

The body changes phenylalanine into tyrosine, another amino acid that's needed to make proteins, brain chemicals, including Ldopa, epinephrine, and norepinephrine, and thyroid hormones. Because norepinephrine affects mood, different forms of phenylalanine have been proposed to treat depression. Symptoms of phenylalanine deficiency include confusion, lack of energy, depression, decreased alertness, memory problems, and lack of appetite. On the other hand, a rare metabolic disorder called phenylketonuria (PKU) occurs in people who are missing an enzyme that the body needs to use phenylalanine. That causes high levels of phenylalanine to build up. If it is not treated before 3 weeks of age, PKU can cause severe, irreversible mental retardation. In the United States, newborns are tested for PKU during the first 48 - 72 hours of life. People with PKU must eat a diet that avoids phenylalanine and take tyrosine supplements to have optimum brain development and growth.

Dr. Arnold Fox, MD describes the antidepressant effects of DLPA in his book. First, it increases the production of a brain stimulant called phenylethylamine. Furthermore, it inhibits the enzymes which break down the endorphin hormone. Endorphins regulate mood, so allowing them to hang around longer will make a person feel better. Finally, DLPA helps create norepinephrine; there have been multiple studies that show a strong connection between this chemical and depression. Most chronic pain sufferers will benefit from the addition of DLPA because most are depressed. I like putting my back pain patients on 750 mg of DLPA and have them take it with breakfast, lunch, and dinner, taken with meals. Dr. Fox's book is a great resource for DLPA therapy, "DLPA To End Chronic Pain and Depression", Arnold Fox, M.D.

A study from the Brampton Brain Clinic suggests that DLphenylalanine improves the action of other painkillers by increasing activity in the endogenous analgesia system. Disabled World notes that DL-phenylalanine has been shown to be particularly effective in patients who suffer from chronic pain due to conditions like arthritis. Another study led by H. Beckmann demonstrated that DL-phenylalanine worked as well as another common treatment in the reduction of depression symptoms, which has been linked in other studies to its role in the production of neurotransmitters. You can Google these resources and investigate the research for yourself. You cannot use DLPA or L-tyrosine if you are taking MAO or tricyclic antidepressants. L-tyrosine: Improves memory, increases mental alertness, helps overcome depression, and relieves obsessive-compulsive disorder (OCD). There has been much research linking L-tyrosine deficiency to the increased craving of cocaine and alcohol. The best sources of L-tyrosine are meats, eggs, and dairy products, but it is hard to obtain the needed amounts in normal diets, so supplementation is the desired way to get this product. Clinical studies show that L-tyrosine can control medication-resistant depression when taken properly. My recommendation is 850 mg every morning and evening. Taking 25 mg of B6 will ensure you activate the L-tyrosine. I have a friend on the other coast who successfully treats addiction disorders with L-tyrosine and auriculotherapy. You cannot use DLPA or L-tyrosine if you are taking MAO or tricyclic antidepressants.

L-Glutamine: Is a precursor for GABA, the anti-anxiety amino acid. New research demonstrates up to one-third of the amino acids released during times of stress and anxiety is glutamine. Under normal circumstances, the body can make adequate amounts of the meal lasted but a prolonged stress, anxiety, panic, trauma, or illness, the body cannot produce enough and requires glutamine supplementation. In patients who crave alcohol, 3000 to 4000 milligrams of glutamine every day can help. You can increase your IQ by taking between 500-1000 mg of Glutamine, and I do use it with ADD and ADHD. Glutamine is converted to energy and is the brain's main fuel, but it is also the main nutrient needed for intestinal repair. Whenever someone has a long history of NSAID abuse, I always recommend glutamine to heal the gut, 1000-2000 mg divided up over 2 to 3 doses every day usually will produce dramatic results. In severe cases, I will dose up to 24 grams per day. Unfortunately, you just cannot get glutamine from food very good because cooking inactivates the amino acid, so your best source is supplementation. As with Ltyrosine, B6 is a cofactor for activation. In some people, L-Glutamine can have the opposite effect and cause severe anxiety, so you need to, once again, work with a doctor when trying to alter your body chemistry.

5-hydroxytryptophan (5-HTP): There has been much talk about this product. It is the precursor to serotonin in the brain, which makes it super useful for overcoming many health problems. It is extracted from the Griffonia seed, which is a black flat circular seed that is found mainly in Africa. Serotonin helps reduce anxiety, anger, and aggression while it enhances sleep if you take it at bedtime. You cannot use 5-HTP if you are taking SSRIs (selective serotonin reuptake inhibitors) or MAO inhibitors.

Clinically speaking, you should run a urine amino acid profile test to know how your body is handling these chemicals. Many individuals have 'hidden' impairments in amino acid metabolism that are problematic and often go undiagnosed. These impairments may or may not be expressed as specific symptoms. They may silently increase susceptibility to a degenerative disease or they may be associated with, but not causative for, a disease. Because of the wealth of information provided, it is suggested that a complete amino acid analysis be performed whenever a thorough nutritional and metabolic workup is called for. Amino acid analysis provides fundamental information about nutrient adequacy: the quality and quantity of dietary protein, digestive disorders, and vitamin and mineral deficiencies (particularly folic acid, B12, B6 metabolism, zinc, and magnesium). In addition, amino acid analysis provides important diagnostic information about hepatic and renal function, availability of precursors of neurotransmitters, detoxification capacity, susceptibility to occlusive arterial disease (homocysteine), and many inherent disorders in amino acid metabolism.

I am including a copy of my clinical questions that I usually ask patients before neurotransmitter therapy. It directs us to the areas that need attention. I have found almost complete correlation between these questions and the amino profile.

The passage contains some valuable information about opioid therapy and GABA therapy. However, there are a few errors in punctuation and capitalization. Here's the corrected version:

OPIOID THERAPY

The following statements are often associated with patients who are in need of opioid neurotransmitter therapy:

- Your life seems incomplete.
- You feel shy with all but your closest friends.
- You have feelings of insecurity.
- You often feel unequal to others.
- When things go right, you sometimes feel undeserving.
- You feel something is missing in your life.
- You occasionally feel low self-worth or self-esteem.
- You feel inadequate as a person.
- You frequently feel fear when there is nothing to fear.

Tranquilizers such as opioid neurotransmitters are contained in the hypothalamus gland. These neurotransmitters have two primary functions. First, opioids are released in small bursts when we feel a sense of urgency. Second, when you exercise your body, it releases extra opioids. The recommendation is to start with DLphenylalanine, take 1000 mg one to two times daily on an empty stomach. Keep increasing the dose up to 4000 mg twice a day. Lglutamine is also very effective and can increase the effectiveness of DL-phenylalanine. Take 500 mg one to two times daily on an empty stomach. Some patients may experience a rapid heartbeat, agitation, or hyperactivity, so do not take it past three o'clock in the afternoon. And remember, with all neurotransmitter therapy, always take the amino acids on an empty stomach.

GABA THERAPY

GABA is an important neurotransmitter involved in regulating moods and mental clarity. Tranquilizers such as Xanax, Ativan, and Klonopin are used to treat anxiety and panic disorders by increasing GABA. The following statements are often associated with patients who are in need of GABA neurotransmitter therapy:

- You often feel anxious for no reason.
- You sometimes feel free-floating anxiety.
- You frequently feel edgy, and it's difficult to relax.
- You often feel a knot in your stomach.
- Falling asleep is sometimes difficult.
- It's hard to turn your mind off, and you want to relax.
- You experience feelings of panic for no reason.
- You often use alcohol or other sedatives to calm down.

GABA is made from the amino acid Glutamine. So we will start by taking a small dose, 500 to 1000 mg twice daily. Some individuals may need to take it 3 to 4 times a day; it must be taken on an empty stomach. If you get a burning sensation in the stomach or a flushing sensation, substitute it with L-theanine, 100-200 mg 2-3 times a day on an empty stomach, and you should not have any problems. As an interesting side note, GABA does not normally cross the brain blood barrier, which means if you take GABA and you feel that it has an effect on you, then there is a problem with your barrier. I will use this as a simple test on patients that I suspect have a faulty brain blood barrier. If GABA is getting through, chances are many other undesirables are also getting into the brain and causing problems.

DOPAMINE THERAPY

Dopamine is a neurotransmitter associated with the enjoyment of life: food, arts, nature, your family, friends, hobbies, and other pleasures. Cocaine and chocolate's popularity stems from the fact that they cause very high levels of dopamine to be released in a sudden rush. The following statements are often associated with patients who are in need of Dopamine neurotransmitter therapy:

- You feel there are no real rewards in life.
- Unexplained lack of concern for others.
- You experience decreased parental feelings.
- Life seems less colorful or flavorful.
- Things that used to be fun are no longer enjoyable.
- You have become a less socially concerned person.

Brain cells that manufacture dopamine use the amino acid Lphenylalanine as a raw material. Start with 1000 mg of L- phenylalanine 1 to 2 times daily on an empty stomach. If you do not notice any benefits, keep increasing the dose up to 4000 mg twice a day. Additionally, you can take L-glutamine, 500 mg one to two times daily on an empty stomach to increase effectiveness. An alternative to L-phenylalanine is S-adenosylmethionine (SAMe). Start with 200 mg on an empty stomach, and if you don't see improvement, increase your dose by 200 mg each day up to 1200 mg until you do. SAMe can cause an increased heart rate and blood pressure, dry eyes, and dry mouth. Do not take it past 3 PM.

The passage provides information about norepinephrine therapy and serotonin therapy. However, there are a few errors in punctuation and capitalization. Here's the corrected version:

NOREPINEPHRINE THERAPY

The neurotransmitter norepinephrine causes feelings of arousal, energy, and drive when released in the brain. Production of norepinephrine occurs in the hypothalamus and is a two-step process. The amino acid L-phenylalanine is first converted into tyrosine, and then the tyrosine is converted into norepinephrine. The following statements are often associated with patients who are in need of norepinephrine neurotransmitter therapy:

- You often find it difficult to get going.
- You suffer from decreased drive.
- You start projects and then don't finish them.
- You feel depressed.
- You occasionally feel paranoid.
- You feel your survival seems threatened.
- You are bored a great deal of the time.

Tyrosine can cause headaches, so start with 1000 mg of Lphenylalanine 1 to 2 times daily on an empty stomach. If you do not notice any benefits, keep increasing the dose up to 4000 mg twice a day. As with most amino acids, you can take L-glutamine, 500 mg one to two times daily on an empty stomach, to increase effectiveness. An alternative to L-phenylalanine is Sadenosylmethionine (SAMe). Start with 200 mg on an empty stomach, and if you don't see improvement, increase your dose by 200 mg each day up to 1200 mg until you do, but do not take it past 3 PM, as it can cause an increase in heart rate and blood pressure.

SEROTONIN THERAPY

Serotonin is a hypothalamus neurotransmitter necessary for sleep. The following statements are often associated with patients who are in need of serotonin neurotransmitter therapy:

- It's hard for you to go to sleep.
- You can't stay asleep.
- You often find yourself irritable.
- Your emotions lack rationality.
- You occasionally experience unexplained tears.
- Noise bothers you more than it used to.
- You flare up at others more easily than you used to.
- You experience unprovoked anger.
- You feel depressed much of the time.
- You find you are more susceptible to pain.
- You prefer to be left alone.

You should start with 5-HTP, 100 to 200 mg at dinner and then again at bedtime to do the trick. Melatonin, mentioned earlier, is

also a precursor to serotonin, so it can help. There are several reasons why patients present with neurotransmitter problems, and these need to be addressed in addition to just taking supplementation. Some of these reasons include low protein diets, magnesium deficiency, not enough essential fatty acids, a stressful lifestyle, vitamin D deficiency, stimulants (caffeine, sugar, nicotine), adrenal fatigue, thyroid function, and adrenal gland health.

Your body has a system designed to deal with stress, called the adrenal system. The hormones secreted by your adrenals influence every major physiological process in the body. How you heal, how fast you age, and whether you get sick are all directly related to healthy adrenal glands. I always test the adrenals on every patient before accepting them into care, as it has a direct correlation with their recovery. Adrenal support through supplementation allows patients to get better faster and experience less soreness after treatment.

You can assess the status of your adrenal system at home by simply taking your blood pressure while lying down and then standing up and taking it again. Focus on the systolic blood pressure, which is the first number in your blood pressure reading. Your systolic pressure should go up about 10 points or more when you stand up and walk around for a few seconds. If your systolic pressure stays the same, goes down, or only goes up a few points, you most likely have a problem with your adrenal glands. This is a simple test to do a quick home assessment. If you are experiencing adrenal fatigue, the first solution is to get more sleep. Rest more often and for longer periods of time. If your blood pressure tends to run low, you can add more salt and water to your diet. However, avoid increasing salt if you have congestive heart failure or high blood pressure. Although there are fancy supplements on the market for the adrenals, plain and simple vitamin C, such as **Cataplex C**, can be beneficial. Take 3-12 a day, adjusting the dose if you experience loose stools until your bowels normalize.

CELLULAR EXTRACTS

This is a very controversial information, and therefore, it's worth investigating. Personally, I find them absolutely essential when treating any autoimmune disease, and honestly, most diseases are autoimmune. In the office, we recommend three products: cytosol extracts, glandulars, and protomorphogens.

Cytosol Extracts are liquid extractions from within the cell and surrounding the nucleus. This liquid, called cytoplasm, is extracted after the glands are ground up, and the cellular walls have been broken. Cytosol products work faster and are stronger than whole gland products. They are great for people over the age of 40, providing function and relief right away, making them ideal for acute cases.

By definition, glandulars (also called Whole Gland Desiccated products) consist of glands, but not specifically "hormonal" glands. Glandulars are whole organs that are dried at low temperatures, ground up, and then put into capsules. They are given for general support of various organs, providing the nuts and bolts that make up the gland. Glandulars are the easiest to manufacture and are commonly available. However, due to their hormonal effect similar to pharmaceuticals, they are not recommended for long-term use.

Protomorphogens are like homeopathics, promoting healing over time. Protomorph products are composed of nuclear proteins and used to supply a better RNA/DNA template so that the body can assemble available nutrients to repair damaged tissue in the glands being treated. What differentiates protomorphogens from glandulars and cytosol extracts is the patented extraction process. Protomorphogen extracts were first invented by a dentist, Dr. Royal Lee, in the 1940s. This man was a genius and pioneer in the field of nutrition, far advanced compared to anyone in his field during his time and even now. Protomorphology, the study of how protomorphogens work, has determined that protomorphogens are just bundles of enzymes and their activators, which are key to growth, repair, and maintaining cell health.

I've often wondered how cells inside the embryo break off and decide to differentiate into skin cells, hair cells, liver cells, etc. Well, inside each cell, we have hundreds of different enzymes. These enzymes are influenced by and responsive to nutrition, genetics, hormones, and the vibrations around us, including our thought processes. These protomorphogens act as one tool we can use in the healing process to provide a healthy genetic template or blueprint for cellular repair. For example, desiccated thyroid gland was first used in the late 1800s to help people with goiter and low thyroid function. Then thyroxine (T4) was isolated and used, but many doctors still preferred the whole gland as it seemed to be better absorbed and utilized. Later, the other thyroid hormones, triiodothyronine (T3) and calcitonin, were discovered, but these were always part of the whole gland. Today, both individual synthetic hormones and standardized formulas of active thyroid tissue are used to support or replace thyroid activity.

In the early 1920s, insulin was isolated by Sir Frederick Banting and Charles H. Best, who received the Nobel Prize for their discovery. Insulin has been a lifesaver for many diabetics, but it is also a very dangerous drug because it has such a narrow range of safety. Overdoses can cause very low blood sugar and shock. Insulin is destroyed in the gut, so it must be injected, but protomorphogens seem to be protected from this digestive process. The incorporation of pancreas protomorphogens and glandulars may not take away the need for insulin, especially for brittle diabetics, but it certainly can cut down the amount necessary to stabilize insulin levels.

Glandulars, like food, supply basic nutrients, such as amino acids, oils, vitamins, other active ingredients, and "Chi" or "life force," where drugs do not. Evidence from radioisotope studies suggests that glands, when eaten, do, in fact, get to their glandular counterpart within the body and influence them. One study done with **Cardiotrophin PMG** showed that within 15 minutes of taking the protomorphogen/glandular supplement, the patient's electrocardiogram detected it and shifted the electrical fields accordingly. In modern medicine, glandular therapy with the use of whole glands began in the late nineteenth century when doctors suggested that their patients eat the animal parts, usually from cows, that corresponded to the weak areas of their own bodies. So people began eating brains, hearts, kidneys, and so on as part of their medical treatment. Even the ancient Greeks and Egyptians used glandular therapy, following their basic premise that "like heals like." Protomorphogens and glandulars are safer than the more potent and specific drugs and hormones, and they have fewer side effects. The body is more able to process them, too, if you unknowingly take too many of them because you are not "in tune" with what your body needs (another good reason to have a practitioner help you with the dose you need).

I recommend to my heart patients that they purchase chicken hearts and eat an ounce a day. Unfortunately, that doesn't go over too well. People get rather queasy about eating organ meats these days. The humans would rather just "pop a pill," although some clients will purchase these items for their pets. Fortunately, **Cardio-Plus**, one of my favorite protomorphogens, is just about the best heart tonic on the market.

How do Protomorphogens work? At a cellular level, we have discovered that cells build and repair themselves by first secreting enzymes and protomorphogens into the fluid outside the cell. A layer of protein then forms using these enzyme and protomorphogen components and the other nutrients that come into the body. A wall is then built outside this protein layer using materials surrounding the cell on the outside of the cell. The internal proteins and enzymes then reproduce themselves using protomorphogen templates. Other research indicates that the protomorphogens and cytosol extracts are not species-specific and will work on any like-organ cells to repair them, so if we take a protomorphogen or cytosol extract made from pig cells, we won't turn into a pig...the pig cell components will just be like building blocks utilized by our human cells, and we won't even know the difference.

This fascinates me. It's like when you plant an acorn. How does the acorn know how to become an oak tree? It attracts to it any substances that are like an oak tree. No other substances will be used by the tree as it grows. How does the tree know what to attract and what to reject? Our cells are like that, too. Everyday we are witnessing miracles happening inside our cells.

With this day and age of Mad Cow Disease going around, it is extremely important to be aware of what you put into your mouth. Standard Process understands these concerns and has, in some cases, switched from Bovine (beef) to Ovine (sheep) or Porcine (pig) tissue in making their products for this reason. They know their sources and raise most of what goes into their products on their own 1000-acre farm in Wisconsin.

Sometimes when the body is damaged, let's choose heart muscle and use a heart attack as an example, the body will release damaged cellular contents (cytosol) into the bloodstream. The body somehow develops an allergic reaction to this cytosol, and the next time heart cells are damaged, the subsequent allergic reaction is faster and stronger, creating a mild anaphylactic reaction resulting in cardiac arrest. So, when we give a protomorphogen of heart tissue Cardio-Plus, the substances in the tablet, after being digested, will act as a decoy for the body's attack mechanisms (called auto-antibodies). As these auto-antibodies attack the protomorphogen, the heart tissue itself is spared, and the heart can begin its healing. The supplements also contain supporting vitamins and minerals, providing lots of high-quality supplies available for tissue regeneration.

Here is a short list of some of my favorite Standard Process products that contain Glandulars, Protomorphogens, and Cytosol Extracts. I use **Ligaplex II** every day to help keep my back and hip tendons and ligaments in place. This is good for degenerative conditions, including disc problems, hiatal hernias, and repetitive stress disorders like tennis elbow. Cardio Plus is great for congestive heart failure and making heart murmurs go away. It is a great natural source of Co-Q10. This product contains components that were used to support the 1991 American Everest Expedition. I occasionally use a yeast extract called **Ribonucleic Acid** to keep my brain "electric" for testing and to help my thyroid-stimulating hormone convert to the active form RNA can help with memory problems and support protein synthesis.

I also use **Whole Desiccated Adrenal** when needed but limit its use to 3 weeks or less before switching to a less powerful product. **Albaplex** is a natural form of amoxicillin that can be taken for months with no adverse side effects and no damage to the gut flora that usually results in yeast infections. It's great for dissolving sebaceous cysts and clearing up chronic bladder problems. **Antronex** is a natural form of antihistamine. **Renatrophin PMG** is wonderful for any kidney-related problems. **Bio-Dent** helps tighten the teeth in their sockets, for pyorrhea (inflamed and infected gums), and for making the teeth strong. **Cal-Ma Plus** is one of my very favorite protomorphogens for broken bones and bone deformities. It contains whole desiccated parathyroid, so it draws calcium into the bones much more effectively than taking calcium supplements by themselves. This is a miracle product.

Cataplex E2 is great for those with heart problems and chest pains that come and go. It acts as a natural nitroglycerin. Cataplex GTF and Paraplex are great protomorphogens and cytosol extracts for supporting those with diabetes. It really helps to stabilize blood sugar levels and helps some to cut back on their cravings. **Chezyn** is for eye problems, especially for the repair of retinal degeneration. I've helped many people repair detached retinas with this product as well. I used it as one of the supplements to help repair an aortic aneurysm in a 70-year-old man. Hypothalamus PMG is for those people whose memory has been damaged after car accidents or falls that involve head trauma. The theory is that it repairs the fraying of the hypothalamic stalk. Also good for vision problems (like double vision). **Immuplex** is great for upper respiratory problems in cats. Give about 1/2 capsule/day. Oculotrophin PMG helps with glaucoma. Parotid PMG helps to process and remove chemicals from the body, especially in cases where the palms are bright red. **Pneumotrophin PMG** is used for emphysema and lung damage. For asthma, it's important to start with smaller doses and gradually increase the dosage over a few weeks. Prostate PMG can help repair prostate damage, including benign prostate hyperplasia and prostate cancer. Spleen PMG is a

protomorphogen that is great for repairing the immune system and has been successfully used to treat conditions like Lupus.

Symplex F is a wonderful support for women during perimenopause, menopause, and for those seeking natural hormone replacement therapies. It contains extracts of pituitary to balance hormones, as well as thyroid, adrenal, and ovarian tissue protomorphogens. **Symplex M** is a similar product designed specifically to help men. **Thymex** is effective for dissolving fatty tumors but needs to be taken for several months. **Thymus PMG** is excellent for stimulating the body's own immunity. **Thytrophin PMG** helps repair the thyroid gland and is particularly beneficial for Hashimoto's and Graves disease.

Glandulars, protomorphogens, and cytosol extracts are great products to help repair weak organs and systems. They work to repair overall systems, not just individual organs. These products can be like magic fairy dust in supporting your health, so trust their effectiveness! 8

Don't fight it, legalize it. -Peter Tosh, Bush Doctor

STEP EIGHT: CBD

C annabidiol (CBD) is one of dozens of non-psychoactive cannabinoids found in the hemp plant. Cannabinoids are characterized by their ability to act on cannabinoid receptors found throughout the body. CBD is a naturally occurring compound that is non-toxic and non-intoxicating, making it ideal for people seeking the health benefits of cannabinoids without the mind-altering effects of medical marijuana. CBD is everywhere, but is it really good for us?

Cannabidiol (CBD) oil has become the hot new product in states that have legalized medical marijuana. The non-intoxicating marijuana extract is being credited with helping treat a host of medical problems, everything from epileptic seizures to anxiety to inflammation to sleeplessness. But experts say the evidence is scant for most of these touted benefits. Worse, CBD is being produced without any regulation, resulting in products that vary widely in quality. It really is the Wild West; a CBD company could say whatever they want on a label and sell it to people.

Cannabidiol is extracted from the flowers and buds of marijuana or hemp plants. It does not produce intoxication; marijuana's "high" is caused by the chemical tetrahydrocannabinol (THC). CBD oil is legal in 30 states where medicinal and/or recreational marijuana is legal, according to Governing magazine. Seventeen additional states have CBD-specific laws on the books, according to Prevention magazine. Those states are Alabama, Georgia, Indiana, Iowa, Kentucky, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Wisconsin, and Wyoming.

Only one purported use for cannabidiol, to treat epilepsy, has significant scientific evidence supporting it. Recently, a U.S. Food and Drug Administration advisory panel unanimously recommended approval of the CBD medication Epidiolex to treat two rare forms of childhood epilepsy. For the rest of CBD's potential uses, there is simply too little evidence to make a firm conclusion. For example, some human clinical trials suggest that CBD could be effective in treating symptoms of anxiety, particularly social anxiety. This is the potential use for CBD with the most evidence after usefulness in epilepsy, but there's a decent gap between those two. There have been clinical trials in adults, but a lot smaller than the epilepsy studies that have been done in kids.

CBD's usefulness as an anti-inflammatory medication is the most promising, but those results come mostly from animal studies. The rest of the potential uses -- as an antipsychotic, antidepressant, or sleep aid -- have all been studied in animals, with only one or two examples of studies in humans.

There are also concerns about both the quality of CBD oil being produced and its potential side effects, the experts added. Because of the legally murky nature of marijuana, the FDA has not stepped in to regulate products like CBD oil. States are struggling to put regulations in place, but they don't have the deep pockets of the federal government. Meanwhile, a 2017 study found that nearly 7 out of 10 CBD products didn't contain the amount of marijuana extract promised on the label. Nearly 43 percent of the products contained too little CBD, while about 26 percent contained too much.

CBD is kind of a tricky drug because less than 20 percent of the drug is absorbed orally. If it isn't made in the right way, you may not be getting much drug into your circulation. Worse, about 1 in 5 CBD products contained the intoxicating pot chemical THC. That's a problem because THC can increase anxiety. It can actually make seizures worse. Those are the sorts of things you need to be careful about. If I were a consumer, purchasing it for myself or my kid, I would want to test it so that I knew what it actually had in it because I couldn't trust what was in it.

Studies on CBD have also raised concerns about possible interactions with other drugs. For example, epilepsy studies found clear increases in the blood levels of some anti-epileptic medications when people used CBD. This suggests that individuals taking anti-epilepsy drugs alongside CBD may need to adjust their dosage downward to avoid side effects. Additionally, there are indications that CBD might harm the liver. Approximately 10 percent of people taking CBD in studies experienced increases in liver enzymes, indicating possible liver damage. Around 2 to 3 percent of individuals had to discontinue CBD use due to concerns about elevated liver enzymes.

My bottom-line advice is that people should be under the care of a healthcare provider who understands CBD. They need proper monitoring and management by a knowledgeable individual instead of simply buying CBD without guidance. While I do recommend CBD in my clinic, it's not suitable for everyone. If your profession involves drug testing, you should be cautious since some CBD products may lead to a failed drug test.

However, for many people, CBD provides significant relief. Personally, I only recommend a full spectrum low THC product like Nuleaf, a company from Colorado, which I believe offers the highest quality. Starting with 10 drops under the tongue before bed delivers about 25mg of CBD into the system (2.5 mg per drop). If necessary, patients can increase the dosage gradually. Some severely ill patients have taken twice that dose, and I have personally experimented with as much as 100 mg of CBD in a single dose. When someone claims that CBD does not help, it's often because they are not taking a high enough dose. Still, if you are considering CBD, I advise you to do your research and start with a slow approach. Here is a corrected version of the text:

Here is a personal story about the use of CBD and THC. In 2018, I started experiencing anxiety. Being a generally healthy person and having a type A personality, I brushed off how I was feeling and went about my busy lifestyle. But as the weeks went by, it just got worse. Then, one day while driving home from work, I started having severe chest pain, leading me to rush to the emergency room, thinking I was having a heart attack. They ran some tests, including an EKG, and everything came back negative. The diagnosis was a panic attack. Despite all my training and education, I refused to believe I had an anxiety disorder. It took almost a year for me to accept the diagnosis and start working on it.

While many suggestions in this book formed the basis of my recovery program, a physician friend of mine suggested medical marijuana along the way. Trusting this doctor, I agreed to a trial period. He started me on a 1:1 dose of THC to CBD 3-4 times a day, and surprisingly, in just a few days, my anxiety disappeared like a miracle. My entire type A personality changed; I got along with everyone, and nothing bothered me. However, looking back, I realize I was completely stoned during that time. It's important to note that this prescription was from a specialist who assured me I could still function, work, and drive while taking the medication. However, in retrospect, he was wrong, and no one should be doing anything while under the influence of THC.

Unfortunately, the story didn't end well for me. After about 3 weeks, I started losing myself. My wife noticed a drastic change in my personality, and I became someone else. Although the anxiety was gone, so were my emotions and interests. I felt a sense of disconnect and got scared. I knew it was time to stop taking the drug, so I quit cold turkey, which might not have been the best approach. The withdrawal was difficult, and I fell into a clinical depression. It took six months to completely clear my system and mind from the effects of THC.

As a result, I can't say I'm a fan of medical marijuana, and I generally do not recommend it to patients due to the harmful effects of THC. However, during my withdrawal period, I read about people using CBD alone and getting positive results. Some mothers were giving CBD to their children to prevent brain seizures. This intrigued me, but I was hesitant to go back down that rabbit hole I had just climbed out of. Eventually, I started experimenting with CBD, trying various brands.Most of them still contained enough THC that it made me feel high and I did not want or like that feeling.

Nowadays, I have much more experience with CBD, and I have discovered through trial and error (unfortunately lots of error), that for me a concentrated form of CBD is not the best option. I now use a **full spectrum Hemp Oil** to help balance my bodies I found that a full spectrum Hemp oil was the best supplement for me. This has a natural profile of the Hemp plant and does contain some CBD, but it is minimal and not in a concentrated form. This assists the receptors in the nervous system but does not make me feel high or really feel anything at all. What Hemp oil does is balance my nervous system so it can work better, instead of trying to force it to behave a certain way. Everyone is different, and I understand you may have a very different opinion but, I would recommend trying the full spectrum hemp oil and staying away from concentrates and of course THC products. Science cannot solve the ultimate mystery of nature. And that is because, in the last analysis, we ourselves are part of the mystery that we are trying to solve. -Max Planck, Physicis

THE CONCLUSION

ealth cannot be neatly packaged in a few hundred pages. Remember that generality will provide more powerful results than specialization. It is impossible to isolate hormone concerns from digestion or mitochondria disorders from autoimmune disease. This is the theme of my book - everything must be observed and treated together in a holistic format (treating the whole). Sometimes, when something doesn't respond to efforts, it's a good idea to temporarily leave it and work on something else. For instance, if you can't improve your adrenals, maybe focus on helping your liver detoxify better. The body is a closed circuit, and everything works together, like a group of singers coming together to produce a beautiful song in tune. Improving the individual parts always enhances the whole.

The Universe has granted us the ability to heal ourselves. A human body operating correctly doesn't get sick. While there are many details in this book, don't get overwhelmed or obsessed. Do the best you can. Remember that not everyone is designed to be 100 pounds or live 100 years. We must accept who we are and cherish the precious gift we have been given. As my dad used to say, "You cannot push a piece of string."

I wish you sincere happiness and connection through these seven steps. If you want to delve deeper, please consider reading my other book, **The Philosophical Physician: Maintaining The Balance**.

Sincere Happiness, Stephen