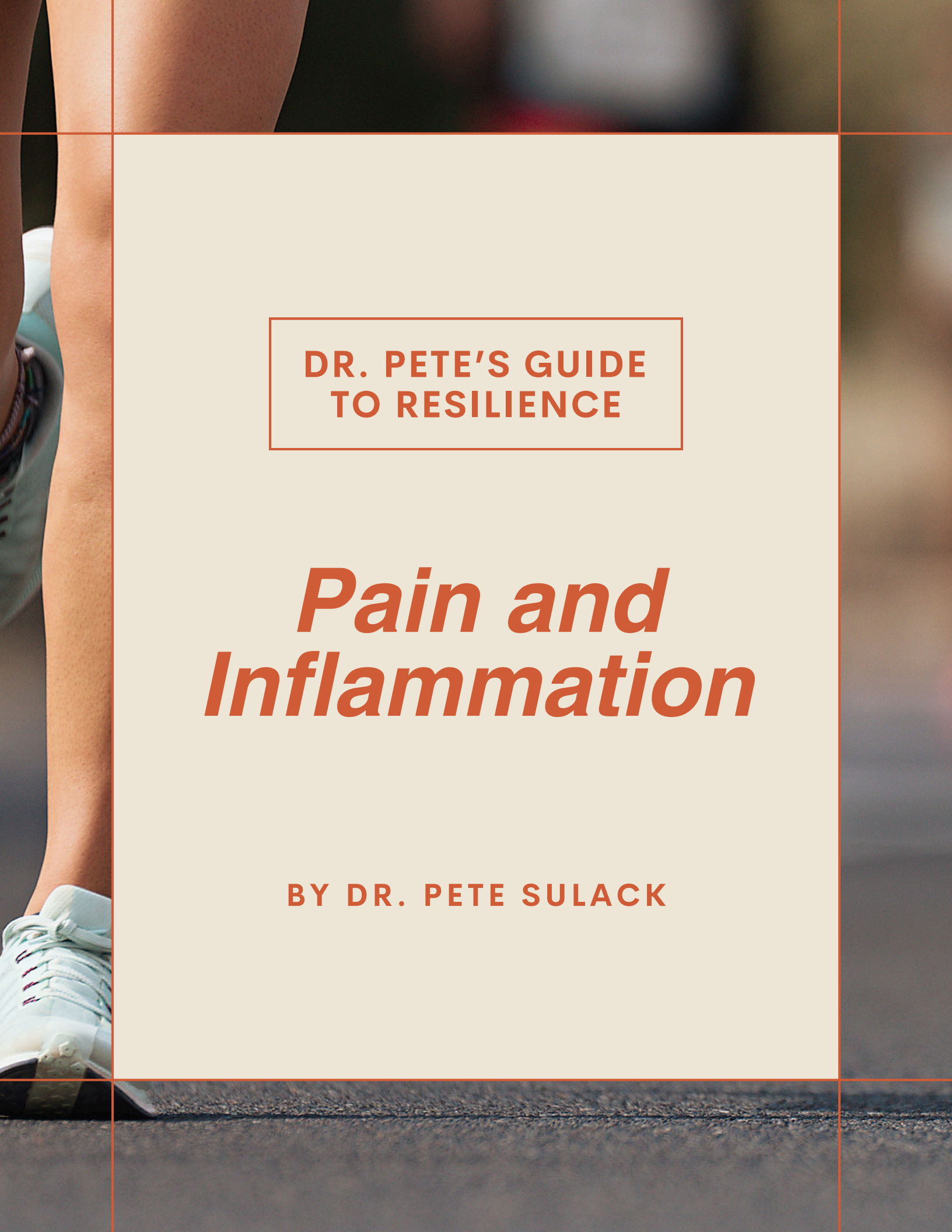


DR. PETE'S GUIDE TO RESILIENCE

Pain and Inflammation

BY DR. PETE SULACK

Are you in pain every day? Do you find yourself popping aspirin or NSAIDs like candy? Are you taking a prescription for chronic pain? If so, have you looked at the side effects of that prescription? Have you ever been addicted or dependent on opiate based pain killers? Do you have to use a walker or cane to help take some of the weight off your hips, knees, and ankles? In the last several years, have you stopped exercising because it just hurts too much? If so, you are not alone! According to the CDC, nearly 52 million Americans struggle daily with chronic pain. Interestingly, the incidence of new chronic pain cases is much higher when compared to other common chronic conditions. [1] Chronic pain affects 52.4 cases per 1,000 persons per year. In comparison, diabetes accounts for 7.1 cases per 1,000 per year, depression clocks in at 15.9 cases per 1,000, and hypertension affects 45.3 cases per 1,000 every year. Chronic pain is a significant problem!

The lead epidemiologist at the National Institutes of Health recognizes the need for the increased use of multimodal, multidisciplinary interventions to change the course of pain and improve patient outcomes. That's a highfalutin' way of saying that chiropractors, medical doctors, pharmacists, physical therapists, and alternative practitioners all need to work together to help patients feel better! I would add to that. Patients can help themselves feel better by simple lifestyle changes that reduce stress, reduce systemic inflammation, and thereby reduce pain.

Inflammation is the true culprit behind pain, and stress in one form or another is the true culprit behind inflammation. So, not only is pain a huge burden in this country, but inflammation and stress are also huge and causative problems. Only 10% of people recover from chronic pain [2], making this condition not only burdensome, but also persistent. When you are in unrelenting pain day after endless day, the future begins to look rather bleak.

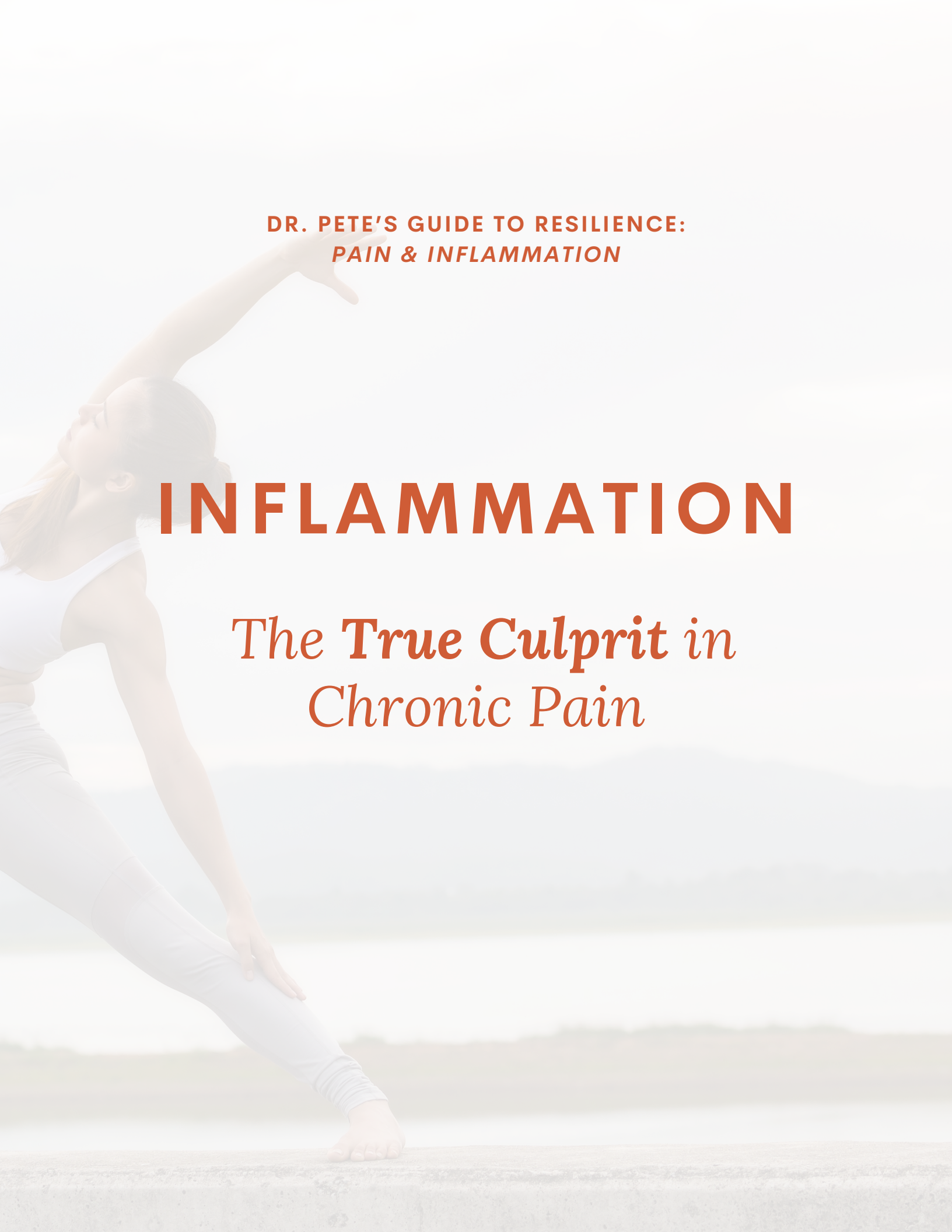
Perhaps you have lost hope for healing, or perhaps you are riding a daily roller coaster of stress, inflammation, pain, and prescriptions that have unpleasant and irreversible side effects. I'm here to tell you that there is hope for healing, and it's not as complicated as you might think! How can we tame stress, lessen systemic inflammation and recover from chronic pain? That is the million-dollar question! How can we train our bodies to be resilient in the face of such overwhelming odds against us? Keep reading and you will find ways to help you live a happy and healthy life managing, reducing, or eliminating the chronic pain that has you trapped.







DR. PETE'S GUIDE TO RESILIENCE:
PAIN & INFLAMMATION



INFLAMMATION

*The **True Culprit** in Chronic Pain*

If you have been around me for more than a minute, you know that I am all about finding the real culprit behind disease processes in the body. All modern disease processes are related to inflammation and ultimately to stress within the body. Inflammation is the one trick that the immune system uses when it detects foreign “invaders” in the body. It’s a normal part of your body’s response to injuries and invaders like viruses, bacteria, mold, fungus, heavy metals, parasites, and chemicals that have no business in our bodies. Inflammation promotes healing and helps rid the body of toxins, but inflammation left unchecked can cause a host of chronic diseases.

Fever is a good example of how your body uses inflammation to heal itself. When an invader (virus or bacterium) enters the body, your immune system sends out its first responders called cytokines. Cytokines stimulate more inflammatory cells, starting the process to trap germs or toxins and start healing injured tissue. The body heats up at its core, burning off pathogens which are then removed through the lymphatic drainage system. Unless a fever is raging out of control, you shouldn’t try to bring it down with over-the-counter remedies. Fever is your friend. It is the body’s inflammatory response doing what it does best—fighting toxins.

A blister is another example of the inflammation response at work. The area that is damaged by friction (let’s say on the back of your heel) swells with lymphatic fluid to protect the underlying tissues from more damage. If left alone, that blister will eventually pop and drain when the tissue underneath is ready to be exposed. If you pop the blister before the underlying tissues are ready, well…, we’ve all experienced that discomfort! That’s a mistake we only make once before learning to leave it alone.

There are two kinds of inflammation. There is **acute inflammation** that is sudden and temporary like when your body produces a fever, and then there is **chronic inflammation** that goes on for months or even years. Acute inflammation comes with sudden injury or illness. Inflammatory cells travel to the site of injury or infection and start the healing process. Infections in different parts of your body can cause sudden but temporary inflammation. For instance, viruses like the common cold and the flu or bacterial infections like strep can cause swelling, redness, and pain in the throat, while retro viruses like “the stomach flu” or bacteria like e. Coli cause inflammation in your intestines, triggering episodes of vomiting, diarrhea, or both!



Acute inflammation has a purpose, and that purpose is to start the healing process. In contrast, chronic inflammation is not helpful at all. It is destructive. When your body continues sending inflammatory cells even when the danger has passed, as is the case with conditions like rheumatoid arthritis, or any autoimmune condition, these inflammatory cells attack the body's tissues causing severe damage to everything in their path. With chronic inflammation, processes that should be benign and helpful go rogue and become chronic, causing pain and leaving damage and destruction in their wake.

Symptoms of Acute Inflammation

- Discolored or flushed skin
- Pain and tenderness in the area of injury
- Swelling
- Skin that is hot to the touch
- Loss of mobility in the affected area of the body; reduced range of motion

Symptoms of Chronic Inflammation

- Belly pain
- Chest pain
- Fatigue or insomnia
- Fever of unknown origin
- Joint pain or stiffness
- Brain fog
- Mouth sores
- Skin rashes
- Depression, anxiety and other mood disorders
- Intestinal issues like diarrhea, constipation, and acid reflux
- Weight gain or weight loss for no reason
- Frequent infections



When added together, inflammatory diseases account for more than half of all deaths globally!

Diseases Associated with Chronic Inflammation

- All autoimmune diseases
- Cardiovascular diseases like heart disease and hypertension
- Certain cancers
- Gastrointestinal diseases such as Crohn's and Inflammatory Bowel disease
- Lung diseases like asthma, and COPD
- Mental health conditions like depression and anxiety
- Metabolic diseases like obesity and type 2 diabetes
- Neurodegenerative diseases like Alzheimer's disease and Parkinson's disease



WHAT CAUSES INFLAMMATION

What Causes Inflammation

Injuries and infections cause acute inflammation, but in the case of chronic inflammation, exposure to toxins, underlying mold, fungal, parasitic, or viral infections that “run in the background” undetected, and certain lifestyle patterns that come from daily choices (i.e. food, exercise, and what you put in and on your body) can cause chronic inflammation. This is why it is so important to look at your daily choices and evaluate what effect those “little” choices are having on your overall health and wellbeing. We tend to think that the “big” choices in life define us, but honestly it is the little daily choices that determine our health trajectory, and ultimately our health destiny.

What Reduces Inflammation

Some choices lead to life, and some lead to death. Maybe not death in this very moment, but cellular sickness leads to cellular death, and cellular death leads to chronic illness that results in death—death of dreams, death of desires, death of opportunities, and ultimately also physical death. If you smoke cigarettes, you are ingesting all kinds of cancer-causing chemicals including heavy metals with each smoke. But wait…If you are regularly eating French fries—that’s a different kind of cancer stick! Just as damaging, just as dangerous because of the cancer-causing chemicals created when starchy foods are fried in seed oils. Pick your poison, but at least be aware that you are choosing death.



> **All modern disease processes are related to inflammation and ultimately to stress within the body.**

Have you ever heard that sitting is the new smoking? Why is that? Stress enzymes called nociceptors are released into the brain when you sit for more than an hour at a time. But when you choose movement; when you choose life, proprioceptors flood the brain with messages of health and wellbeing. The choice is yours. Do you choose to get enough sleep? Or do you burn the midnight oil? Do you drink excessive amounts of coffee, sodas, or energy drinks to maintain energy throughout the day instead of eating, sleeping, and exercising, getting enough water and avoiding toxic relationships? What are you choosing each day?

It's not entirely your fault! If you are of a certain age, you have probably realized that you used to be able to eat at a fast-food restaurant occasionally without wrecking your health, or that as a young person you could eat any of the lunch food made at school without gaining weight. Things have changed drastically in the last 40 years as faulty studies became "scientific truth" that artificial sweeteners weren't toxic on a cellular level; that high fructose corn syrup was a perfectly natural and acceptable sweetener, that meat and butter caused heart attacks; and that seed oils which are cheaper were better for you than the beef tallow. Interesting note: McDonalds used to fry their French fries in beef tallow until 1990. This switch was made because saturated animal fats were thought to be unhealthy, but we have since discovered that seed oils are one of the driving causes of the obesity epidemic. This epidemic began to rise around the same time fast food restaurants switched from beef tallow to seed oils in their fryers.

Changing our basic food supply to ultra processed foods packaged in hormone disrupting plastics and prepared with "dirty" components has created a society that is entirely and constantly in a state of inflammation and dis-ease. When scientists graded the evidence, they became convinced that diets high in ultra-processed foods are linked to the risk for premature death, cardiovascular disease, mental health disorders, diabetes, obesity, and sleep problems. Associations between these "franken-foods" and asthma, gastrointestinal disease, cancer, are also significant. [3]

What are ultra-processed foods? Ready-to-eat products like deli meat, microwaveable dinners, "lunchables," breakfast cereals, snack chips, pop tarts, packaged cookies and snack cakes, you name it—they all contain a laundry list of ingredients like sweeteners, preservatives, dangerous oils, excessive salt, artificial coloring, and fake flavoring. Trying to avoid these chemicals or genetically modified ingredients is difficult because companies keep changing the names to protect their bottom line. But, just because the food supply has been poisoned does not change the fact that you need to do something about what you purchase, store, and eat on a daily basis.



Let's talk about trajectory for a minute, shall we? When a pilot flies from San Francisco to New York, he sets a specific heading and reports that heading to the tower. This heading, coupled with a few hours of time makes sure that he lands at the airport and not in some field in New Jersey. Now imagine a compass if you will. Every circle (a compass is a circle) has 360 degrees to it. This is basic geometry. If you "click the needle" just a few little degrees from your New York bound heading, you will end up in Washington, DC! Not where you intended to go, at all. So, setting your heading by making specific life choices every single day makes sure that at the end of this day, this year, and this decade, you end up where you wanted to be health wise, and not off in some field somewhere, regretting the journey.

Remember that every seven years your body is entirely new! Where do you want to be in seven years? Can you visualize a body that is pain free? Can you visualize your body at a healthy weight? Can you visualize a future without chronic inflammation and pain? Without anxiety and depression? If you can, you need to start making choices in alignment with that vision. Everything you put in or on your body is a choice. Every minute of the day you choose how to spend that minute. Invest in yourself and make better choices if you want to achieve vibrant wellness in the next seven years.

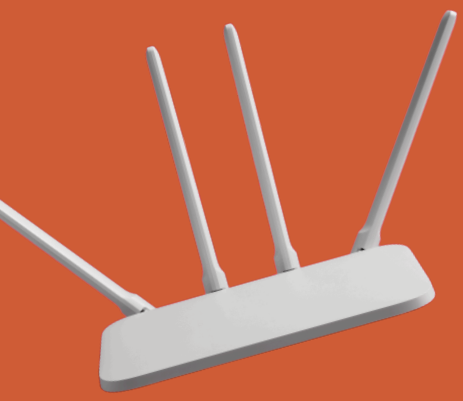


How Can You Prevent Inflammation in Your Body?

If you can lower your risk for chronic inflammation, then it means you can lower the causative factor of pain. You don't have pain without inflammation! These ideas are simple, but they are not always easy because…well, life. We get busy and we get stressed, and we forget to take care of ourselves in the most basic of ways. It needs to be a constant goal for you to reduce things in your life that create inflammation and adopt thought patterns, emotional responses, and healthful habits that reduce stress, which in turn reduces inflammation, which then in turn reduces pain. It's not easy, but it IS just that simple.

Preventing Inflammation

- Aim for 150 minutes of moderate-intensity physical activity like brisk walking weekly.
- Avoid sitting for long periods of time without getting up and moving and stretching.
- Avoid smoking and all tobacco products.
- Eat mostly fresh or minimally processed foods and avoid ultra processed foods.
- Get at least seven hours of deep, restorative sleep *(if you need help doing this, I suggest this product: Sleep MAXX from Redeem Essentials)*
- Get checked for underlying bacterial and viral infections like Lyme disease, Epstein Barr Virus, or any of the other strains of Herpes.
- Get checked for mold exposure and heavy metal toxicity.
- Get checked for parasitic infection
- Reduce exposure to EMFs (non-ionizing radiation). The International Agency for Research on Cancer (IARC) has classified non-ionizing EMFs in the radiofrequency range as Group 2B, a possible human carcinogen.
- Avoid all inflammatory foods, and adopt a Mediterranean type of diet
- Think positive thoughts. Emerging research shows that positive thinking alters the brain's response to stress, so positive thoughts decrease the inflammation response in the body.
- Practice gratitude to reduce stress and promote emotional well-being.
- Mindfulness and Meditation help you stay present, reduce the impact of negative thoughts, and lower stress levels that contribute to inflammation.
- Strong social connections significantly boost mood and reduce stress, reducing inflammation.





Sources of Non-Ionizing Radiation to Avoid

MICROWAVE OVENS

COMPUTERS

SMART METERS

WIRELESS (WI-FI) ROUTERS

CELLPHONES

BLUETOOTH DEVICES INCLUDING HEADPHONES AND EAR PODS

POWER LINES

MRI MACHINES

SMART DEVICES

TABLETS







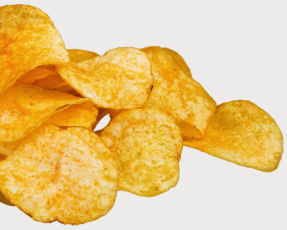
*What foods are **inflammatory**?*

FOODS CONTAINING TRANS FATS

FRIED FOODS, INCLUDING FRIED CHICKEN, FRENCH FRIES, DONUTS, CHIPS, SNACK CRACKERS, ETC.

CURED MEATS WITH NITRATES, LIKE BACON, SAUSAGE, HOT DOGS, PEPPERONI, AND DELI MEATS

PACKAGED SNACKS LIKE CHIPS AND COOKIES



BREADS THAT ARE MASS PRODUCED



GRANOLA BARS

SALAD DRESSINGS (MOST ARE MADE WITH SOYBEAN OIL OR OTHER SEED OILS AND SUGAR)

MOST BREAKFAST CEREALS WITH THE EXCEPTION OF ORGANIC, NON-GMO AND KETO FRIENDLY

SPORTS DRINKS (HIGH IN SUGAR OR SUGAR SUBSTITUTES)

MARGARINE OR BUTTER SUBSTITUTES (NO MATTER HOW EASY IT IS TO SPREAD)

FOODS HIGH IN SALT, SUGAR, AND PRESERVATIVES

REFINED CARBOHYDRATES LIKE SUGAR, PASTRIES, WHITE BREAD, CEREAL, INSTANT OATMEAL, PASTA, PIZZA, COOKIES, CHIPS, RICE, ETC.



NONDAIRY CREAMERS

GLUTEN (THE PROTEIN IN WHEAT)



MICROWAVEABLE MEALS AND MICROWAVEABLE POPCORN

FLAVORED YOGURTS

REFRIGERATED DOUGH AND BISCUITS

DAIRY PRODUCTS





Have you ever heard the advice that most of your groceries should come from the outer aisles of the store instead of the inner aisles? Why do you think that is? Because the outer aisles are packed with whole foods and minimally processed foods—fruits, vegetables, lean meats, and fish. The inner aisles of most grocery stores are filled with ultra processed “foods.” And I use the word “foods” lightly because they really aren’t feeding anything but your cravings for salt, sugar, and fat. Think of ultra-processed foods like Dr. Frankenstein’s created monster. They have been changed by science and are now almost unrecognizable from their original form. Take Veggie Straws for instance. How much of their content is actually vegetable? Veggie Straws are a packaged snack that is crunchy, salty, and often compared to potato chips. Parents give them to their children thinking they are more healthful than chips. The first three ingredients are potato starch, potato flour, and seed oils like canola or sunflower oil. The snack straws are then deep-fried to make them crunchy. They don’t vary in total fat and sugars when compared with regular potato chips, tortilla chips, and sweet potato chips. They are the highest in sodium of all the chip snacks. Many “healthy” foods are deceptive, and you must learn to read the labels for yourself and your family. Learn what to look for and avoid all seed oils and foods high in sodium, sugar, and preservatives. Substitute actual raw veggies with hummus or another homemade dip if you want to get your daily allotment of vegetables.

Gluten is the protein in all wheat products. It can cause an inflammatory response in individuals who are sensitive to it. If you think that gluten-free is just a fad to be ignored, consider **The Cereal Theory**. Researchers first linked gluten to schizophrenia after World War II. As Nordic populations ended their rationing of wheat products, researchers noted a significant correlation between abrupt increases in wheat consumption and first-episode psychosis. By 1948, case reports emerged describing the comorbidity between childhood gluten sensitivity and schizophrenia. This mountain of evidence led to the “cereal theory” which states that some individuals have hyperreactive neuronal opioid receptors that uptake excessive amounts of gluten exorphin peptides. They then postulated that excess gluten uptake in the brains of vulnerable individuals could disrupt brain dopaminergic homeostasis and increase the risk of developing schizophrenia. All mental disorders including anxiety and depression are either cause or exacerbated by inflammation, so whatever you can do to bring down inflammation will benefit the nervous system and the brain who is the captain of that system. [4]





Dairy can trigger an inflammatory response, especially in those who suffer from degenerative changes in joint cartilage that occur with age (osteoarthritis). [5]



Sulfites, substances used as preservatives and found in red wine, cheeses, and cured or smoked meats (turkey, bacon, salami, etc.) can cause an inflammatory reaction in some folks. It can show up as a skin rash, asthma, or a migraine.

How do foods increase or instigate inflammation anyway? I don't know about you, but when I started taking my health seriously, I had questions! Here's what I found out: Your body is set up to absorb and use all the good stuff—vitamins, minerals, amino acids, coenzymes, and other nutrients found in natural foods. When you eat highly inflammatory foods that have added sugar, trans fats, high levels of omega-6 fatty acids like seed oils, refined carbohydrates or processed meats, your body isn't equipped to handle them. This leads to inflammation in the form of blood sugar spikes. These spikes start a cascade of inflammatory responses that end up producing pain in muscles and joints. The standard American Diet (SAD) triggers the inflammatory response in your body. If you want to get out of pain, you will need to change your diet. Follow a plant-based diet high in vegetables and fruits that also contains fiber-rich whole grains, legumes, and healthy fats like oily fish. The Mediterranean diet has been associated through scientific studies to give the most significant reduction in overall body inflammation. [6]



Foods That Reduce Inflammation



FATTY FISH SUCH AS SALMON, MACKEREL, AND SARDINES ALL "LUBRICATE" JOINTS

FRESH FRUITS LIKE CHERRIES, BLUEBERRIES, AND RASPBERRIES ARE PACKED WITH ANTHOCYANINS



TART CHERRY JUICE DECREASES LEVELS OF C-REACTIVE PROTEIN, AN INFLAMMATORY PROTEIN



LEAFY GREENS ARE HIGH IN VITAMIN K THAT IS IMPORTANT FOR CARTILAGE HEALTH

OLIVE OIL (UNHEATED) CONTAINS UNSATURATED FATS THAT HELP QUIET INFLAMMATION

GARLIC IS TOUTED FOR ITS ABILITY TO WARD OFF CANCER, HEART DISEASE AND THE COMMON COLD

RAW, ORGANIC HONEY IS HIGH IN FLAVANOIDS THAT COUNTER INFLAMMATION



APPLES CONTAIN QUERCETIN THAT EASES INFLAMMATION



GREEN TEA ENJOYED HOT OR COLD CONTAINS CATECHINS (ANTIOXIDANTS) THAT HELP REDUCE INFLAMMATION AND HELP PREVENT DIABETES, WHILE IMPROVING MEMORY AND HEART HEALTH. [7]

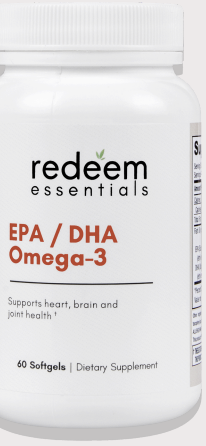
Supplements that *Reduce* Inflammation



Turmeric that is high in curcumin (also called “Indian Saffron”) can reduce markers of inflammation (like Homocysteine and C-reactive protein) and relieve osteoarthritis symptoms. [8] Redeem Essentials Turmeric supplement is packed with the finest organic turmeric root powder and organic black pepper fruit which increases the bioavailability of the turmeric. **Try Redeem Essentials Turmeric Supplement**



Muscle & Tissue is a powerful supplement designed to help reduce inflammation and pain in the body. It’s a revolutionary blend of proteolytic enzymes that helps muscles and tissues recover faster from physical activity by minimizing lactic acid buildup. Lactic acid buildup is responsible for most of post-exertion muscle pain. It also provides maximum muscular endurance.



Omega 3 Fish Oil has anti-inflammatory properties and, therefore, is useful in the management of inflammatory and autoimmune diseases [9]. Coronary heart disease, major depression, aging and cancer are characterized by an increased level of interleukin 1 (IL-1), a proinflammatory cytokine. Similarly, arthritis, Crohn's disease, ulcerative colitis and lupus are autoimmune diseases characterized by a high level of IL-1 and the proinflammatory leukotriene LTB(4) produced by omega-6 fatty acids. There have been a number of clinical trials assessing the benefits of dietary supplementation with fish oils in several inflammatory and autoimmune diseases in humans, including rheumatoid arthritis, Crohn's disease, ulcerative colitis, psoriasis, lupus erythematosus, multiple sclerosis and migraine headaches. Many of the placebo-controlled trials of fish oil in chronic inflammatory diseases reveal significant benefit, including decreased disease activity and a lowered use of anti-inflammatory drugs. **Try Redeem Essentials Omega 3**

Spices *that* **Reduce** *Inflammation*



Sulfur (MSM) is great for skin inflammation like acne and eczema. Bathing in high-mineral spring water containing elevated levels of sulfur has been shown to reduce eczema like inflammation. Purchase bulk sulfur and dissolve in a bath for skin inflammation. Or you can take homeopathic sulfur which is a purifier for the body.



Green-lipped mussels found in New Zealand are used in high quality joint supplements. They act on certain pain producing proteins and enzymes found in tissue throughout the body. In joints, scientists believe that these mussels may help keep cytokines in joints from flaring up. Cytokines are proteins that function as chemical messengers in your immune system.



White Willow Bark Extract contains salicin which has anti-inflammatory effects. Salicin works in similar ways as acetylsalicylic acid the main ingredient in aspirin. In fact, one hundred years ago, aspirin was made from salicin. Users report that although it takes longer to “kick in” than aspirin does, it is just as effective, but with no side effects. Best used for chronic lower back pain, joint pain, osteoarthritis, and soreness due to physical training. White willow bark scavenges free radicals and down-regulates inflammatory mediators including tumor necrosis factor-a and nf-KappaB. According to a 2009 systematic review, white willow bark worked as well as Nsaids like Rofecoxib.



Holy Basil is an adaptogenic herb that is especially potent for reducing nervous system inflammation. In some forms like tea, it can be called “Tulsi.”



DR. PETE'S GUIDE TO RESILIENCE:
PAIN & INFLAMMATION

STRESS

The True Culprit Behind Inflammation



Stress 101

I know, you are probably thinking, Stress? Really? I mean, who isn't under stress? That's the problem. We are all under too much stress! It makes us fat, sick, and stupid! Are you a young person; living what should be the "best years of your life" stressed out and too old for your age? Do you wonder why you are so tired and achy all the time? Modern life is stressful, and your experiences as a young person are very different than those of past generations. Not only do we experience more stress in a year than past generations did in a whole lifetime, but no two people respond to stressors the same way—even if they are the same stressors! That's because stress is the internal reaction to outside circumstances.

Here's the deal with stress: Stress is not inherently bad. Everything in life stresses us to a point—even the force of gravity that keeps us on earth! A little bit of stress motivates us because it wakes up the brain and makes us pay attention. At the first signs of stress, the immune system, memory, and ability to learn all increase. Without stress in life, our minds would become dull, and our bodies flabby and weak. Good stressors are normal responsibilities, a regular schedule, productive work and study, strenuous physical exercise, temperature variations, interaction with others, and fighting off normal germs and toxins in the environment.

Stress affects the body and mind. Pulse rate increases along with blood pressure when you are stressed. When your brain is stressed, the adrenal glands dump cortisol into your bloodstream. Cortisol is a stress hormone that activates the "fight or flight" system in your body. When this happens, you have a strong desire to escape or avoid. Do you find yourself watching mindless YouTube or TikTok videos or playing Xbox when you should be studying for finals? Yup! That's stress. When the stress hits a certain level, you start to feel out of control, and the more out of control you feel, the more stressed you become, and the more you desire to escape.

Although stress is the culprit in aging you before your time and is responsible for a lot of your aches and pains, the true cause of sickness and disease is NOT stress per se, but rather the body's inability to adapt to and recover from that stress. Because of this fact, you may be stressed and not even know it. Unless you are consciously working to avoid it, your body is under a constant, toxic burden or load. When we talk about "toxic load," we are talking about an overabundance of toxins that exist in the products we use, the foods we eat, the water we drink, the air we breathe, and the number of years that we absorb those toxins unknowingly. Even what our moms were exposed to before we were born goes into that toxic load.

Eventually we hit the "tipping point." Years and years of chronic stress wears out the adrenals and the immune system; but because it feels "normal," we may not realize what's happening. Most of us don't even know how to relax. We feel bored and fidgety when we try to relax. The problem with this is that chronic, long-term stress will destroy your health. When cortisol levels are elevated, you may experience weight gain and fatigue. On top of that, bone density is reduced. Chronic stress stretches the spinal cord like a rubber band, ultimately creating a type of nerve rigidity that leads to chronic pain. The immune system is suppressed, making it hard to fight off viral and bacterial assaults. You get sick more often. Thyroid disease and all kinds of cancers can be brought on by excessive stress. Depression, diabetes, and obesity have all been linked to an overly stressful lifestyle.

Long term stress can cause your body to overreact to substances that aren't really harmful. Ever feel like you are "allergic to everything?" When this happens, your immune system is on hyper-alert, and you are at risk for developing an autoimmune disease where the body attacks its own cells, tissues, and organs. Chronic, long-term stress can also create food sensitivities, food allergies, and seasonal allergies.

Stress comes to us in very different formats. Mechanical stress happens when we overuse a muscle group, when we injure or tear a muscle group like rotator cuff injuries, or when our joints lose their lubrication and we find ourselves "bone on bone" in the knees, hips, etc. Pain is inevitably the result of the inflammation that occurs under chronic mechanical stress. Surgery or pills are NOT your only option, though when you go to a doctor it may be that these two options are all they offer.

Stretching the counterbalancing muscles fully and consistently can often help you avoid unnecessary surgery. For instance, when the lumbar spine is giving you fits and you are having sciatica and pain around the sacral joint (just above the top of your butt crack), this can be solved with regular stretching of the hip flexors in the front of the hips. When these important and very thick muscles get tight, they pull on the lumbar area and pull the discs (especially L5) forward. Because L5 sits on top of the sacroiliac joint, you will feel pain. And because the sciatic nerve root comes out of that exact same area, you may be able to solve your sciatica with simple stretching of the counterbalancing muscles. Again, these answers are simple, but not always easy. Consistency is key! You have to stretch every single day!



Chemical stress happens when we put harmful stuff on our bodies or in our bodies (remember the skin absorbs everything that touches it). The harm can come from the ingredients or from the amount of exposure. For example, caffeine isn't bad for you by itself, but ingesting too much caffeine can make you jittery, increase cortisol levels, dehydrate your body, and cause dependency. So, the substance isn't so bad, but too much causes stress. Other chemicals like those in tobacco products, chemicals added to foods to improve flavor and texture, and alcohol have no known value but cause chemical stress. Most pharmaceuticals have side effects that are a result of chemical stress. The liver has to process these foreign substances, and when you are taking certain meds for years and years, every single day, the chemical stress can become overwhelming. I am not telling you to stop taking your prescription medications, but at least do the research on the side effects and be aware of the reactions in your own body.



Emotional stress happens when we encounter overwhelming emotions in everyday life. Losses like death, divorce, major moves or job changes —even the need to surrender to the limitations we face during the aging process can all cause painful or difficult emotions. Loneliness and isolation affect many people and cause emotional stress in their bodies. Many times, these emotions are triggered by past experiences that we have not healed and resolved. Unresolved grief, anger, bitterness, jealousy, and shame get lodged in the fascia of the body and stress the body from the inside out. Use spiritual practices like prayer and meditation, spend time in nature, share your pain with someone trustworthy, or get professional help if you are experiencing overwhelmingly negative emotions. Remember, our emotions are "e-motions—energy in motion," and they affect the electromagnetic pathways that control which disease processes are turned on and which are turned off. Manage emotions intelligently and thoroughly to avoid further stress.



Psychological stress in the form of anxiety and regret are part of the human condition, but they don't have to rule your life! When we do the hard work of learning to stay in the present moment in an attitude of gratitude, we can overcome the natural, human tendency to fear the future (anxiety) or grieve over the past (regret). Wholeheartedness is a type of staying in the moment by putting all our current energy into whatever we are doing right now. Ancient wisdom literature encourages us to be wholehearted because it is the best way to counteract psychological stress. Angst is a type of psychological stress that comes with wishing the world or life to be different than it is. We humans are unique creatures that make pictures in our minds about how life should be and how the world should be. Unfortunately, life often disappoints us, and the world is in a terrible mess right now. Social media can make this type of stress worse because in comparison to peoples' highlight reels, our daily lives can seem dull and humdrum. Turn off the news, get off social media, and stop manufacturing stress over things you cannot change. Rejoice in this present moment and be thankful.



Spiritual stress happens when we don't live up to our own highest standards and values. We know when we have done a good job, been productive, used our time wisely, made good choices, and helped repair the world's damage by being thoughtful, kind, and generous. At the end of a day like that we lay our heads down on the pillow in peace, knowing we did right. When we cut corners, waste time, hurt or ignore others, act unbecomingly out of anger, jealousy, or fear, steal from our employer in the form of money, time, or materials; when we do less than our best out of laziness, we just don't feel good inside. Self-esteem starts with setting reasonable goals and working daily to achieve those goals. When we set unreasonable goals, or when we don't make and follow a plan to achieve those goals, we feel as if we have come up short; and indeed we have.



So how can we fight this pernicious enemy of stress? One way is through physical exercise. Physical exercise elevates endorphins—those happy hormones that tell your brain that “all is well,” and you can relax. Regular exercise or movement also causes the body to produce BDNF—basically a brain fertilizer that protects your memory center from the effects of cortisol. So next time you are feeling sluggish; instead of chugging a Red Bull, try hitting the gym instead. Your body and brain will thank you for it. Another way to combat stress is to get enough sleep. The best time to go to bed is 10 pm, because our body’s melatonin levels are highest at around 10 pm. Adults need 7 hours of sleep, but if you are still in your teen years, you need around 9 hours of sleep each night. To get better sleep, darken the room and turn off all electronics. Your pineal gland can sense light even if you have your eyes shut. Try not to fall asleep to the television or computer since any type of “screen time” stimulates left brain function which is like pressing the gas pedal when you want to slow down your brain. **Click here to get more information on Sleep MAXX!**

Another good tool is proper nutrition. Eating sugar and processed carbohydrates creates an insulin response. When activated constantly, that response will literally wear out your cells with oxidative stress. Eating organic meats, vegetables, and fruits will eliminate a multitude of toxins that add to your body’s overall toxic load. Eating a diet that optimizes gut health will calm your stress. Much of the depression and mood swings humans suffer can be traced from the brain through the Vagus nerve right into the gut. Amp up the good bacteria with fermented foods and probiotics; and avoid sugars and all genetically modified foods as they disrupt your gut’s symbiosis.





Proper Spinal Alignment is another weapon in the battle against stress. With specific spinal adjustments your brain can effectively communicate with every cell in your body. Specific spinal adjustments break old patterns and make way for new ones; creating an environment where your body can adapt to and recover from stress more effectively. A good rule to remember about stress is that some stress motivates; more stress complicates; and a lot of stress deteriorates.

WHAT YOU MAY NOT KNOW ABOUT STRESS COULD KILL YOU...

Recently a friend of mine ended up in the emergency room for what he thought was a heart attack. It felt extremely real when it was happening but ended up being “just a stress episode” according to the doctors. This man has always prided himself on being able to handle a high-powered career, a family, volunteer work, and other responsibilities without crumbling. His biggest question was, “What is going on with my body?” Followed closely by the question, “How can I make it go away?”

A “stress episode” can feel very much like a heart attack. This is not at all unusual, but for him, it was not normal. This is what we know about stress and the body: It’s not so much the amount of stress, but the amount of time you are in a state of stress. For a perfect example of this, try holding a glass of water out at arm’s length without spilling it. How much does it weigh? Probably a pound or two. No biggie. But after 5 minutes, 10 minutes, an hour—how much does it weigh now? It weighs the same, but it sure feels heavier! “Just stress” is misleading.

Stress related illnesses are really feedback from life. If you are having health issues or even health scares, your body is trying to tell you something. You should listen to your body. If your body is telling you it is stressed, it is time for a health and life makeover, but stress reduction is not something you do over a weekend; it must be done every day. One thing we know for sure is that you keep doing what you’re doing, you will keep getting what you’re getting. Chronic stress can both shorten the length and diminish the quality of your life. The stress of balancing career, family obligations—even good things like ministry or volunteer work can eventually wreak havoc on your overall health.

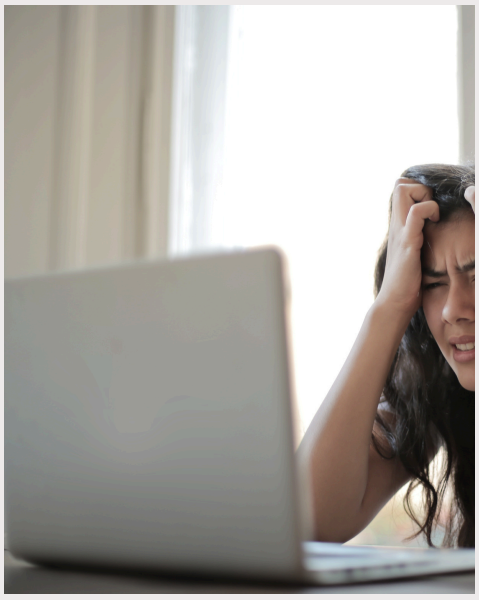
When I was growing up, church ministers used to say, “It’s better to burn out than rust out!” What a lie! If you’re out, you’re out! Period. If you drove your car at 100 miles per hour every single day all day long, didn’t get the tires rotated or the oil changed, didn’t repair what is broken, it would wear out a lot faster than it already does. “Stress is not a state of mind... it’s measurable and dangerous, and humans can’t seem to find their off switch.” These words from renowned author and award-winning neurobiologist Robert Sapolsky in the documentary, Stress: Portrait of a Killer. The stress response is a normal and necessary human function but turning it on repeatedly all day long every day causes your body to marinate in corrosive hormones like adrenaline and cortisol. Psychology Today Magazine recently called cortisol “Public Health Enemy #1 because it’s that dangerous!



> *Although stress is the culprit in aging you before your time and is responsible for a lot of your aches and pains, the true cause of sickness and disease is NOT stress per se, but rather the body's inability to adapt to and recover from that stress.*

The most common health conditions caused or worsened by stress are hypertension, anxiety, heart disease, sexual dysfunction, infertility, depression, frequent colds, insomnia, chronic fatigue, memory loss, trouble concentrating, and digestive issues. Chronic stress can make you fat because it alters the way your body deposits fat as increased cortisol levels cause your body to accumulate belly fat. Fat around the middle is the most dangerous kind of fat because it increases your risk of heart disease and heart attack. Stress affects not only your body, but also your brain. The cells in the Hippocampus portion of the brain were shown to be markedly smaller in lab rats who were put under stress. The Hippocampus is the seat of learning and memory. Memory loss is a common complaint that indicates the body is in a state of stress. Stress can trigger the degenerative process in your brain that eventually leads to Alzheimer's, and elevated cortisol levels can trigger mental illness—especially in adolescents.

The good news is that YOU have the power to change your life. By changing your environment and your responses to it, you can change your life. Get more physical exercise. Learn to say "no." Simplify your life. Spend less and enjoy more. Spend more time in nature. Get centered and balanced spiritually. Limit exposure to those people in your life who feel the need for constant drama or attention. Eat clean; avoiding processed foods that are filled with artificial, toxic ingredients. Get regular spinal adjustments to reduce stress on the central nervous system. Heal your gut because a healthy gut equals a healthy emotional life. Breathe more deeply. Be grateful. Gratitude is the sweet light we bring into the bitter darkness. You can't change all the circumstances of your life, but you can definitely work on adjusting your attitude and your response to those stresses.



Millions of Americans complain of high blood pressure, lack of sleep, chronic fatigue, and feelings of free-floating anxiety; and many of them have been told by doctors to take a pill—or several pills—and to reduce the level of stress in their lives. Most of us know that stress is actually the body's reaction to circumstances and events—rather than the events themselves. Some of us are simply better equipped to handle stress; and all of us at certain times are better or worse at handling stressors in our lives. As a health practitioner, I believe in finding the underlying causes of any "pathology" whether it be chronic fatigue, high blood pressure, or whatever. Here are some surprising reasons you may feel stressed that your doctor probably won't tell you about.

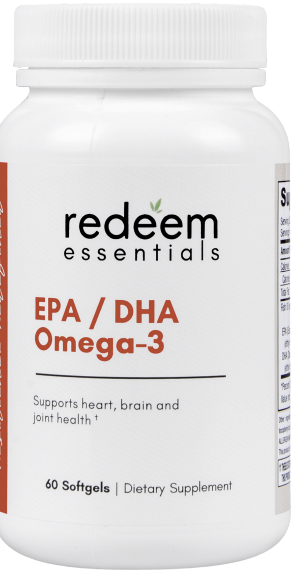
MAGNESIUM DEFICIENCY

On a cellular level, magnesium is necessary to transport energy. Depression, anxiety, brain fog, and fatigue are common symptoms of magnesium deficiency. Because of the big push in the media to increase our calcium intake (which contracts muscles), magnesium levels (which relax muscles) can dip, causing a feeling of stress. Low levels of magnesium can cause insomnia which leads to stress and fatigue. Magnesium is key for the body to regulate cortisol—the stress hormone. When Magnesium levels are low, the brain and heart are affected the most. The heart muscle becomes hyper-tensile leading to high blood pressure.

A LESS THAN HEALTHY GUT

We've talked about the dangers of having a leaky gut before, but it bears mentioning here. Within the human digestive system lives a massive ecosystem of bacteria, known as gut flora or the gut microbiota, and recent research suggests that these microbes can manipulate your brain into eating unhealthy things and even into feeling stressed and depressed. "Microbes have the capacity to manipulate behavior and mood through altering the neural signals in the Vagus nerve, changing taste receptors, producing toxins to make us feel bad, and releasing chemical rewards to make us feel good. Regular use of probiotics combined with the elimination of grains and sugar can heal the gut microbiome and soothe the vagus nerve creating a feeling of calm and well-being. Try Redeem Essentials GI Replenish or Daily Probiotic





NOT GETTING ENOUGH OMEGA 3 IN YOUR DIET

Your diet should include a high-quality source of Omega-3 fats—especially one that contains EPA and DHA as they play an important role in your emotional well-being. Good sources of Omega 3s are flax seeds, chia seeds, primrose oil, coconut oil, salmon, herring, anchovies and sardines. A high-grain, low fat diet will almost ensure high blood pressure. Remedy this by removing the grains and replacing them with more healthy fats that are high in Omega3. In addition, you could take a superior Omega 3 product like this: enter our product here. Omega + DHA gummies are the perfect solution to support your heart, brain, and joint health. The unique combination of powerful ingredients like Omega 3-6-9 and vitamin D3 can help reduce inflammation in the body while providing essential support for a healthy (not overactive or underactive) immune system. **Click here for more information on EPA/DHA Omega 3!**

ADRENAL FATIGUE

Your adrenal glands each weigh less than a grape, but they are the major players in managing stress. These important glands can get worn out and stop working properly. Some things that overwork the adrenals are:

- Too little sleep
- Too much caffeine
- Overwork, either mental or physical
- Negative emotions like anger, bitterness, fear, worry, guilt and depression
- Chronic inflammation, illness or pain
- Nutritional deficiencies

Your resilience and energy are dependent on the health of the adrenals. Classic signs and symptoms of adrenal fatigue include:

- Lowered immunity
- Extreme fatigue in the mornings and late afternoons
- Increased allergies
- Food cravings - especially for foods high in salt, sugar and fat
- Hormonal imbalances
- Skin problems
- Low libido
- Memory issues
- Reliance on coffee or soda to keep you going

Healing your adrenal glands can take up to two years, but it is a journey worth every step. Begin this healing journey by resting more, taking on fewer responsibilities, avoiding or limiting caffeine, exercising regularly, releasing negative emotions, eating more mindfully and more frequently, avoiding temperature extremes, and taking a quality DHEA supplement.

UNDETECTED FOOD SENSITIVITIES

Many people suffer from food sensitivities, but because they are more subtle than food allergies, they aren't aware of the culprit; nor are they mindful about avoiding those foods. When your body perceives your food as "an invader," it ramps up the stress hormones and prepares to make battle. This can make you feel "stressed out" for no apparent reason. The foods that most commonly cause sensitivities are wheat and gluten (the protein in wheat products), corn, eggs, soy, peanuts or peanut butter, dairy, and artificial sweeteners. If you experience diarrhea or constipation, headache or migraine headache, bloating and gas, brain fog, spaciness, or dizziness, runny or stuffy nose, perpetual nasal or postnasal drip, skin issues like rashes, eczema, or acne; you most likely have a food sensitivity. If you suspect a food sensitivity, eliminate that food from your diet for at least a week. Then reintroduce it and watch carefully for how you feel after eating/drinking it. No matter what is causing your body to be under stress, you can handle it! Some power tools that our coaches give to patients here at our center include breathwork, grounding, and daily detox protocols. All of these "power tools" will help you reduce stress in the body, which in turn will reduce inflammation, and ultimately reduce pain.

BREATHWORK

If you're like a lot of people, you may think that calling breathing "breathwork" is making a mountain out of a molehill. I mean, we breathe all the time! Is there really a science to it? Every animal breathes, so why do humans have to study how to breathe? Or why to breathe? As it turns out, since humans are the only creatures able to not only remember the past, but also contemplate the future we spend a great deal of time getting stressed out about those very things!

When we look to the past, we feel regret. When we look to the future, we often feel anxiety. Of course, we've all seen the memes about the present being all that counts, but the human mind has a lot of chatter—mostly about the past and the future. When this chatter starts, we forget to breathe correctly. We can breathe ourselves out of the stress response and back into homeostasis with some simple breathwork exercises.

Perhaps you have seen (or been) a person having a panic attack. What is the first thing most people tell them to do? "Take a deep breath!" Most likely they are breathing very fast and very shallow breaths—panting. When we pant, we breathe from the top lobes of our lungs which triggers an initiation of the stress response in the hypothalamus in the brain. This of course triggers a cascade of stress hormones being released that make us pant even more. But did you know that if you take deep breaths from the bottom lobes of the lungs, we can stop that stress response almost immediately? It's true. Breathwork is a powerful thing.

Being sedentary (which most of us are) makes it more difficult to get those deep, cleansing breaths. One way to combat this is to take a brisk mini walk every couple of hours, concentrating on taking the deepest breaths possible. While doing this, breathe in through the nose for a count of four while holding the tongue on the roof of your mouth. Imagine a cold flow of air coming up your kidneys and into the backs of the lungs. Then breathe out for four, also through the nose, but this time drop the tongue down to its natural position and picture a flow of hot air coming out the front of your body. A quick 8–10-minute walk while doing this will reset your nervous system and make you feel more alert and alive!

One of the best exercises to help restore the body to homeostasis is box breathing. Many of our special forces including Navy Seals use this technique just before going on mission to calm their nerves and clear their heads. You can do this exercise at any time in any place. Make sure you are sitting tall, lying down, or standing to give adequate room for your lungs. Expel all the air out of your lungs in a long, slow deep, exhale through your mouth. Then breathe deeply in through the nose for four counts. Feel the air filling all four lobes of your lungs. Your belly should stick out when the lower lobes of the lungs are full. Then hold that breath for four counts. Breathe out through your mouth for four counts, expelling as much of the air as you can from the lungs. Then close your mouth and hold that emptiness for a count of four. After several rounds of this exercise, you may feel the body resolve out of a stress state and into a calmer place. Like all exercises, you will get better at it the more you practice.

GROUNDING/EARTHING

Being healthy shouldn't cost a lot of money! It's wonderful when we can tap into natural solutions that build our overall wellness but aren't expensive! Earthing, or Grounding is one of those solutions. It costs nothing but time, and it is super-effective at building resilience in the nervous system by balancing positive and negative ions. The earth is a giant, electromagnetic ball. It constantly exudes negative ions—beneficial electromagnetic waves that help to counteract our daily exposure to positive ions that come in the form of free radicals.

An abundance of these positive ions or free radicals damages our DNA. Where do these free radicals come from? And are they all bad? It's not so much that all free radicals are harmful, but when the body absorbs more positive ions than negative ions, it becomes stressed and more prone to dis-ease. How do we absorb so many positive ions? When we use phones, tablets, computers, radios, microwaves, or any other device with electromagnetic components, we expose ourselves to an abundance of positive ions that need balancing. Earthing or Grounding is the best way to accomplish this balance.

The problem is that very few people spend time standing on the earth with bare feet. Children of this generation don't run in the sprinklers or lie on their backs on the earth watching the clouds. They spend most of their time inside in front of screens of some sort. Most of us have an imbalance of positive/negative ions. Grounding is the simplest and least expensive way to balance our nervous systems. How does this practice help us be more resilient?



It reduces overall inflammation in the body. Because it reduces inflammation, it also reduces pain. Pain comes from inflammation in the nervous system. Because of its anti-inflammatory capability, grounding is also a good way to manage autoimmune diseases that are made worse by systemic inflammation. Earthing slows down the aging process since it is the abundance of free radicals in the body that speeds the aging process. Grounding thins the blood, making it less "sticky" which improves circulation and balances blood pressure. Most importantly, this practice balances the release of cortisol, lowering stress hormones, and "flipping the switch" from sympathetic (stress state) to parasympathetic (balanced state) response in the nervous system.

We know that to build neural resilience, we must adopt practices that help the body to stay in homeostasis (balance and rest). Anytime you are sitting, lying, or standing barefoot on the earth, you are promoting wellness and increasing resilience in your nervous system. It will be time well-spent.

RED LIGHT THERAPY

Red light therapy is a powerful tool for detoxifying the body and restoring neural resilience. Just a short hundred years ago, our great-grandparents spent much of their daylight hours out in the sun. They walked to work and to school, they farmed or grew much of their own food in their gardens, and they sat on the porch at the end of the day. At night they may have gathered around a fire, or lit candles for indoor light.

Today we absorb far too much blue light and not nearly enough red light. This imbalance is caused by the constant use of television, computers, phones, and tablet screens. These screens emit light waves that are on the blue spectrum instead of the red spectrum, and these blue waves create a “wired but tired” state that stresses the body. Blue light tricks the body into thinking it is daytime, so it suppresses the release of Melatonin—a hormone that helps provide balance to the natural circadian rhythm and helps you achieve deep, restorative sleep. This hormone declines as we age, and the constant exposure of the eyes to the blue light emitted by screens doesn’t help either.

Red light is calming, restorative, and helps the body detoxify itself. The first devices to emit red light were developed in 1967, and then in the 1990s NASA began experimenting with red light therapy (also called low level laser therapy) for pain relief. Scientists found that red light energy is absorbed by cells in the same way that a weak battery is recharged by a charger. In addition, they found that exposure to red light increases the production of nitrous oxide—a chemical known to repair cellular damage, decrease inflammation, and decrease pain.

How does red light detoxify the body? As cellular energy increases, toxin elimination begins spontaneously resulting in healing, healthy tissue production and sharpness of mind. By boosting blood flow, red light helps speed nutrients to damaged cells and creates new blood cells (angiogenesis). Old, toxic cells are cast aside by the body in favor of these new, healthy blood cells and the healthy tissues they are feeding.

Several devices exist for red light therapy, but spending time each morning before noon in the sun is a simple, inexpensive way to increase red light exposure. Make sure to take off your sunglasses so your retinas can absorb the light. Later in the day, those signals sent by the retinas to the brain will also trigger the release of Melatonin and help you have better sleep. During the day, take regular breaks away from your computer, phone, television, or tablet and get out into the sunshine without sunscreen or sunglasses. Absorb those red rays given freely to us by our Creator in the form of sunshine.

DAILY DETOXIFICATION

These days, the word detox is heard everywhere. Everyone seems to be doing a cleanse of some sort. Detoxification refers to the natural removal of toxins or pathogens from the body. Daily, the liver, kidneys, intestines, and the lymphatic systems do this work without our ever thinking about it! So, if it happens naturally, why do we need to work at detoxification? I'm so glad you asked!

- Some people have a genetic mutation called MTHFR that keeps their bodies from detoxifying naturally. They will definitely need support in this area. How do you know if you have this? It's a simple blood test that most insurance carriers pay for, so it may benefit you to find out. Don't know if you have it? You can get tested here: **Be Resilient Comprehensive Program**

- We are exposed to so many more harmful chemicals now than previously in our air, water, food, and cleaning and personal care products that detoxifying the body is a necessity.

- Sometimes we make less than stellar choices when it comes to food and drink, and we need to clean out the damage.

- The body can't heal when it is in a state of stress, and a heavy allostatic load (toxic load) definitely puts the body in a stress state.

- Sometimes random circumstances like having to be vaccinated for one's job, or coming down with Covid, or living in a house with mold, or exposure to some heavy metals can require that we detoxify from the assaulting substance. **Redeem Essentials Heavy Metal Detox Kit**

How do you know if you need to detox?
If you experience any of the following, it's a good sign that your body needs a detox:

1 Unexplained Fatigue
2 Poor elimination (not pooping well)
3 Skin blemishes or irritation
4 Repeated infections
5 Allergies
6 Bags or dark circles under the eyes
7 Bloating
8 Irritated or wandering mind
9 Emotional instability (depression/anxiety/mood swings/lack of motivation)

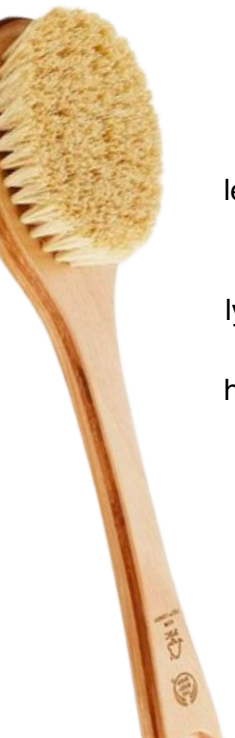
EVERY DAY DETOX BEST PRACTICES

Most people don't think about detox until they read about a juice fast or a liver cleanse and then they go after it full tilt. There is magic in baby steps though, and they will get you where you want to go with fewer complications and less disruption to your daily life. If you can adopt one of these habits every month AND stick with it (!) you will be much farther along the road than if you just do a cleanse once a year.



Oil pulling is a traditional folk remedy originating in India. Practitioners claim that this practice can cure at least thirty systemic diseases when done regularly as directed. This detox strategy offers oral health benefits as well as overall wellness. Because the mouth is the mirror of the general health of the body, paying attention to the billions of microorganisms in the mouth can help stop systemic diseases like cardiovascular disease and type 2 diabetes. Take a tablespoon of cold pressed, organic coconut oil and swish in the mouth for 20 full minutes. This needs to happen before you brush your teeth or eat and drink anything. The oil is pulled between the teeth and around the mouth. Do NOT swallow the oil as it is filled with toxins that have surfaced in the mouth during the night while you were sleeping. Spit out the oil into the trash can (it will clog your sink drain), then brush your teeth as you normally would.

Oil pulling generates certain antioxidants that damage the cell membrane of pathogens and kill them off. Bacterial infections like strep are attracted to the oil and leave the body during this process. Plaque is removed during this process, so it naturally decreases bad breath or "morning breath." Because coconut oil contains lauric acid, it reacts with the alkalis present in your spit to form sodium laureate—a soap like substance that cleans teeth and gums. In addition, coconut oil is antibacterial, antifungal, and antimicrobial. This is a much more healthful choice than mouthwash that destroys the good microbes that fight germs in your mouth! The regular use of mouthwashes containing phenols and fluoride produces staining of the teeth. Better to try oil pulling since coconut oil destroys Staph, Strep, Candida, bacteria that cause intestinal and urinary tract infections, and H. Pylori (the underlying pathogen for stomach ulcers).



Dry Brushing is an ancient practice with many health benefits. The main system affected is the lymphatic system of the body. This system is the "trash chute" responsible for the removal of toxic debris by draining excess fluid from the tissues. Although there are other ways to stimulate lymphatic drainage, dry brushing is by far the simplest one! Start at the feet and move up the legs, one at a time—always in the direction of the heart. Make sure to get the fronts and backs of the legs, hips, belly, and buttocks. Then move to the hands and arms—again, always brushing towards the heart. If you are fortunate enough to have someone brush your back, then take advantage of that! The benefits of dry brushing are many. Brushing the skin regularly helps stimulate normal lymphatic flow, in turn detoxifying the body. Dry brushing acts to exfoliate the skin—loosening dead skin cells and making your skin softer after brushing. Adding a moisturizing cream (without any harmful chemicals) finishes out this wellness routine. Many claim to notice after the regular practice of dry brushing a reduction in their cellulite (those dimples that occur when fat pushes up against connective tissue beneath your skin). Dry brushing also gives an energy boost because it increases circulation. When you feel lethargic and stale, this may be the perfect remedy.

Detoxifying Baths or Footbaths are another way to keep the body resilient. The skin is the largest organ in the body, and because it contains approximately five million pores, it is one of the body's primary detoxification pathways. It's more than just a blank canvas for tattoos, blemishes, and wrinkles! Part of the integumentary system, the skin can be the first place where allostatic load (excess of toxins) and nutrient deficiencies show up, and it can be the first line of defense in detoxifying your body. When you take a detox bath—even if it's only a footbath, you can make a serious dent in your allostatic load. Of course, like all good habits it only works if you do it on a regular basis.

Make the water as warm as you can stand it. ALWAYS test the water with your elbow or some other area of the body where the skin is thinner before you get into it neck deep. Make sure you have a non-skid mat or stickers in your tub to prevent falls. Load the water with your goodies for detox. Here's a recipe I give to patients that will help remove heavy metals and other toxins:

BAKING SODA — 1 CUP



BORAX — 1 CUP



EPSOM SALT — 1 CUP



1 CUP SALT

HIMALAYAN OR SEA SALT



SOME BENEFITS OF BORAX

- Relieves arthritis
- Detoxifies the liver
- Detoxifies fluoride
- Improves heart health
- Balances hormones
- Decalcifies the pineal gland
- Improves cellular function
- Helps with the absorption of minerals
- Improves wound healing
- Reduces levels of inflammatory biomarkers
- Improves brain electrical activity

EPSOM SALTS are a naturally occurring pure form of magnesium and sulfate. Magnesium plays several roles in the body including the regulation of more than 325 enzymes.

- Relieves pain and inflammation
- Helps ease bronchial asthma and migraine headaches
- Heals wounds
- Helps improve the absorption nutrients
- Flushes toxins
- Prevents hardening of arteries and blood clots by improving circulation
- Makes insulin more effective to help ward off diabetes
- Relieves constipation

Increasing Consumption of **Cruciferous Vegetables** is an easy way to get nutrients and detox at the same time. What are these vegetables? The stinky ones. You know, the ones that tend to smell bad when you cook them—asparagus, broccoli, cabbage, cauliflower, Bok choy, Brussels sprouts, radishes, turnips/turnip greens, kale, rutabaga, and arugula. They stink because they are full of glucosinolates, sulfur-containing compounds that make them strong-smelling and bitter-tasting. Why are they good for detox? These sulfur compounds break down and increase the efficiency of the liver's detoxification enzymes. The liver is central to detoxifying the body. It works through a series of enzymes along pathways referred to as Phase I and Phase II detoxification. Especially good for balancing hormones and reducing the risk of estrogen related cancers, cruciferous vegetables should become your new stinky friend! Eating them most days of the week is a great way to detox the body.



Glutathione is the body's master detoxifying element. Evidence shows that glutathione can help eliminate mercury, lead, and aluminum, all three of which are neurotoxic heavy metals. This amazing chemical also blocks excess inflammation, improves insulin sensitivity, enhances the immune system, and ultimately slows the body's aging process! It makes sense then that low levels of glutathione in the body are associated with autoimmune conditions. Eating cruciferous vegetables on the reg increases the body's production of glutathione. Can't I just take it as a powder or pill? Sadly, glutathione supplements are not nearly as effective as eating foods that increase the body's natural production. Don't like the taste or smell? First realize that your gut bacteria composition determines what foods you like and don't like. As you eat more of these amazing vegetables, your gut composition will change, and you will tolerate them well. Same goes for your kids. A work-around for getting them in while you are still balancing your gut is to put frozen cauliflower rice or frozen riced broccoli into a protein smoothie. You (and your kids) will never know the difference!

***If you have Hashimoto's Thyroiditis, or struggle with low thyroid function, remember to cook (roast/steam/sauté) your cruciferous vegetables and make sure your iodine levels are on point (most of us have low iodine levels) to avoid issues.**

Drinking more water helps detox the body. The liver and the kidneys work together to daily clear the body of toxins that are by-products of metabolism like uric acid and lactic acid. Though the kidneys are small, they are mighty when it comes to clearing toxins, but they need water to do this! Chronic dehydration negatively impacts health because without a constant stream of water flushing out the body, we could drown in our own toxic, metabolic waste. Some recent studies show that women who stay well-hydrated can reduce their risk of breast cancer by 79 percent, and that those who drink more than five glasses of pure water a day have a 45 percent reduced risk of colon cancer compared with those who drink only a couple of glasses of water a day.

Could you be chronically dehydrated? Here are some things to watch for:

- Drinking alcohol and too much caffeine causes low-level, chronic dehydration.
- When it's very hot outside, it's difficult to replace all the water we lose through breathing, and sweating.
- If we drink lots of plain water without electrolytes, we can still become dehydrated.
- People who suffer regular headaches can be unknowingly chronically dehydrated.
- One factor that causes chronic constipation is being (even mildly) dehydrated.
- Brain fog can often be caused by low water levels in the body.
- Fatigue sets in when we don't get enough water.
- Urine that is scant, dark colored, or strong-smelling (It should be clear)
- Dizziness, weakness, and lightheadedness can be signs of dehydration.
- Swollen legs or feet can be a sign that you need more water.



Most alternative practitioners agree:

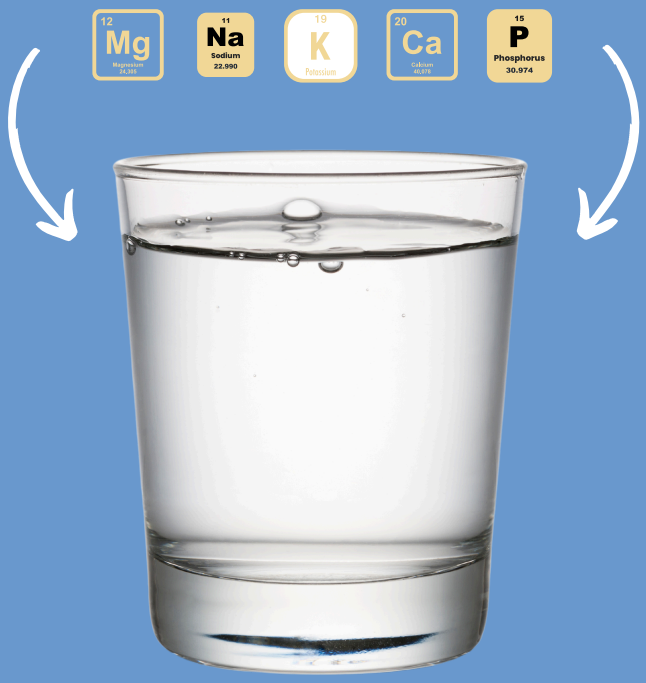
- You should drink ½ your body weight in ounces of pure, filtered water daily.
- You should add a low sugar electrolyte powder to some of that water.
- You need more water if you are actively losing weight.
- By the time you feel thirsty, you are already dehydrated.

Electrolytes: The Spark Plugs of Life

Electrolytes are a vital part of hydration! I can't tell you the number of times someone has said, "If I drink that much water, I'll be in the bathroom all day!" Maybe you are already thinking this to yourself. Chances are, when you were drinking a lot of water in the past, you made multiple trips to the bathroom. My question is, were you adding minerals/electrolytes of some form to your water?

Water depends on electrolytes for proper absorption. Electrolytes are minerals that become capable of conducting electricity when dissolved in water. But not all minerals are electrolytes! Electrolytes are the minerals: sodium, potassium, magnesium, calcium, chloride, bicarbonate, and phosphorus. Adding unrefined sea salt or liquid trace minerals is a great way to get electrolytes in your water. You can also get electrolytes in through a nutrient-dense whole foods diet.

Those little spark plugs of life (electrolytes) are needed to help us absorb and use the water within our cells and body. When we don't have the assistance of electrolytes to absorb the water we drink, we will have the water run through us like a faucet.



Roles of Electrolytes in the Body

- Maintain pH Balance
- Serve as Co-Factors Needed for Optimal Activity of Enzymes
- Regulate Fluid Balance
- Regulate Blood Pressure
- Conduct Nerve Impulses
- Increase Absorption of Different Nutrients Through the Gut
- Assist in Contraction and Relaxation of Muscles
- Aid in Energy Production (ATP)

Using a sauna for releasing toxins from fat tissue has become a much more standard treatment for toxic overload. Infrared sauna manufacturers claim that infrared technology can produce more sweat at lower temperatures, and they claim that they can pull from deeper, visceral fat instead of from fat that resides right beneath the skin. While this lower temperature may make you more comfortable, sweat is sweat at the end of the day, and most toxins are stored in shallow fat tissue. By releasing these toxins from fat, the body can sweat them out. One thing to note is that the body can't sweat out what the liver hasn't processed and stored in fat tissue. So, if you overindulge in alcohol at night, and try the next morning at the gym to sweat that poison out in the sauna, you are barking up the wrong tree. First the liver must do its magic, then the sauna can do what it does best—helping you sweat.



Right now you may be feeling completely overwhelmed! I get it. I really do. I was there just a few short years ago. Even though I ran a super successful chiropractic office and helped thousands of people, I didn't put some of these principles into practice. But you know after 40 that "check engine light" comes on, doesn't it? We all have to take a hard look at the stress in our life that causes the inflammation that lies beneath all our pain. That's what I did, and that's what I am inviting you to do with me. Join me on this fabulous adventure to reduce pain by addressing the stress and the inflammation through simple, affordable, daily practices so you can live that happy and healthy life you always dreamed of. We will be there beside you, encouraging you every baby step of the way!

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