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ACUTE VS. CHRONIC INFLAMMATION

Inflammation is the body's protect-and-repair mechanism in response to a threat from injuries, infections and toxins. There are two kinds of inflammation, acute and chronic.

ACUTE INFLAMMATION is the body's immediate repair process whereby the immune response is activated to heal an acute injury, such as a scraped knee. The body sends white blood cells via increased blood flow to the injured area to repair any damage. This acute inflammation causes localized swelling, pain, redness and increased temperature. Generally, it lasts a few minutes, hours or days. Acute inflammation is a necessary and appropriate immune response that keeps us alive and well.

CHRONIC INFLAMMATION occurs when the inflammatory process lingers and doesn't turn off, leaving the body in a heightened state of alert for months or years. Research suggests that chronic inflammation is a key player in many chronic diseases, such as obesity, diabetes, autoimmunity, heart disease and even cancer. The World Health Organization (WHO) states that chronic inflammation is the greatest modern-day threat to human health. Diseases related to chronic inflammation are on the rise. Estimates by Rand Corporation in 2014 state that 60% of people have one chronic health condition, 42% have two chronic conditions and 12% have five or more chronic conditions [1].

How do you know if you have chronic inflammation? Chronic inflammation may be apparent if you have chronic symptoms or chronic disease. If you have one or more of the symptoms listed below for three months or longer, you likely have chronic inflammation [1]. Sometimes, the chronic inflammation is low-level, silent and not causing any obvious symptoms. Your doctor may test you for chronic low-level invisible inflammation with lab testing.



SYMPTOMS OF CHRONIC INFLAMMATION



Common symptoms of chronic inflammation are chronic pain, chronic fatigue, chronic Gl issues, ongoing mental health issues (depression, anxiety, mood disorders), unintentional weight fluctuations (gain or loss) and frequent illness. This chronic inflammation can be simmering and invisible and show up later in life as diseases such as Alzheimer's, heart disease, arthritis, diabetes and certain cancers, which is why it's important to address inflammation early [1].

LAB TESTING FOR CHRONIC INFLAMMATION

A common test for chronic inflammation is high-sensitivity C-reactive protein (hsCRP), which measures a protein produced by the liver that rises with inflammation. An hsCRP test level between 1-3 shows low-level chronic inflammation that needs to be addressed. However, a functional practitioner will want to see your hsCRP level below one. Often conventional and functional practitioners utilize different lab ranges because conventional lab ranges are based on people who were ill at the time of testing. A functional practitioner is looking for an optimal level of health and wellness. Another common inflammatory marker test is sedimentation rate, often called "sed rate," which measures the rate at which red blood cells fall to the bottom of a collection tube. The higher the inflammation, the faster the red blood cells fall [2]. Other chronic inflammatory marker tests that the doctor may order are homocysteine (optimal range < 7 micromoles) and HbA1C (optimal range < 5.3 percent) [3].

WAYS TO REDUCE CHRONIC INFLAMMATION

One of the best ways to reduce chronic inflammation is by living a healthy lifestyle. It is important to drop unhealthy habits such as smoking, drinking excessive amounts of alcohol and being overweight. It is advised to avoid long-term use of antibiotics, proton-pump inhibitors (PPIs) and nonsteroidal anti-inflammatory drugs (NSAIDS) because they cause changes in the gut microbiome that can lead to chronic inflammation [1]. The four pillars of a healthy lifestyle include eating an anti-inflammatory nutrient dense diet, exercising moderately, maximizing sleep quality and quantity and reducing stress.



THE FOUR PILLARS OF A HEALTHY LIFESTYLE

Today's environment can make it a challenge to live a healthy lifestyle. The convenience and 24/7 availability of tasty, inexpensive junk food creates addictive and unhealthy temptations to eat more than we should. Natural daily movement is replaced by machines that do most of the manual labor for us, such as cars vs. walking, Roomba vs. vacuuming, or playing video games instead of playing outside. With modern technology it seems the world never sleeps and is always on the go. Humans are not designed for this kind of nutrient-depleted, sedentary, sleepless and stressed lifestyle. Not surprisingly, these unhealthy ways catch up with us over time and can negatively affect our long-term health. The quality of life as well as life expectancy has been declining in the U.S. since 2014 mostly due to an increase in middle-age deaths from drug overdose, alcohol abuse, suicide and disease [4]. These untimely deaths are sometimes caused by an unhealthy lifestyle that negatively affects our health and shortens our life span. The good news is that there is a lot we can do to improve our health simply by implementing lifestyle changes.

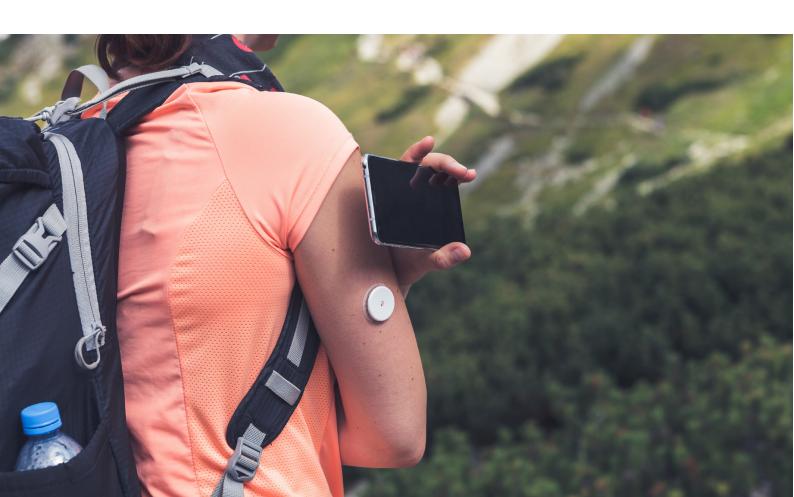
1. DIET AND NUTRITION

An anti-inflammatory diet is one that meets your nutritional needs while reducing inflammation and adverse reactions in your body. A whole-foods anti-inflammatory diet includes lots of varieties of fruits and vegetables, whole grains (such as amaranth and quinoa), plant-based proteins (beans and nuts), high-quality, grass-fed meat and pasture-raised organic eggs, fatty fish high in omega-3 fatty acids (like wild-caught salmon), grass-fed dairy, and fresh herbs and spices. (Since even high-quality meat and dairy are still somewhat inflammatory, you may want to reduce or eliminate them altogether to decrease inflammation.) Contrast that diet with the highly inflammatory Standard American Diet (SAD), which is full of processed foods high in unhealthy fats (trans fats and too many omega-6 fats) and low in nutrients. This diet should be avoided at all costs. A good rule of thumb is to stick with foods that line the perimeter of the grocery store while avoiding the pre-packaged, shelved foods in the middle aisles. Stick with foods that don't have labels, or have very few ingredients if they do, and contain raw ingredients. Avoid foods that come in boxes, cans and packages, especially if they have ingredients that you cannot pronounce or contain more than five ingredients on the label. Packaged foods are often depleted of their nutritive value through processing and contain many chemicals to make them addictive. It's no wonder we are always hungry: our bodies are seeking the nutrition they are missing from the depleted modern diet.



NUTRITION TIPS TO REDUCE CHRONIC INFLAMMATION

1) **Reduce or eliminate sugar -** Experts agree that sugar causes a pro-inflammatory response in the body and should be reduced or eliminated as sugar offers no nutritional value. This also goes for foods that act like sugar once consumed, such as white bread and simple, processed carbs. One way to protect against eating too much sugar is to educate yourself about low-glycemic foods and have a general sense of where foods fall on the glycemic index. It is important to note, however, that the same foods can impact people differently. One way to determine how a food affects your blood sugar specifically is to use a continuous glucose monitor. The name of the game is to keep your blood sugar stable throughout the day, as opposed to having it spike and drop, to tame inflammation. The glycemic index (GI) is the ranking of carbohydrate-containing foods by their effects on your blood sugar levels as compared to 50 grams of pure glucose. There are three levels of the GI: low (55 or less), medium (56-69) and high (70 or more). It is best to stick with foods that rate lower on the GI to keep blood sugar from rising or dropping too quickly. However, the GI does not take into account the quantity of food eaten. The glycemic load (GL) can be a better measure that takes into account both the GI ranking and the quantity of food consumed (grams per serving). The GL also has three levels: low (10 or less), medium (11-19) and high (20 or more). According to the Glycemic Index Foundation, the goal is to keep the total GL under 100 per day. There are several free apps that can help you determine both GI and GL and track them, such as Glycemic Index, Health Index and Glycemic [5].



- 2) Reduce or eliminate processed and fast foods Processed foods usually contain high levels of sugar, salt, unhealthy trans fats and empty calories with very little nutrition topped off with a plethora of chemical additives to make it taste or look good [6]. High salt (sodium) is connected to high blood pressure and increased inflammation in certain people. Avoid a high-sodium diet if you have high blood pressure. When you choose your source of sodium, not all are created equal. White table salt is processed and lacks minerals present in unprocessed salts such as grey Celtic sea salt and Himalayan pink salt. Choosing these types of salts is part of a healthy whole-foods diet.
- Reduce or eliminate alcohol Alcohol is very inflammatory and hard on your liver. If you have chronic inflammation, your liver health is especially important for eliminating toxins from your body. Don't make it work overtime by adding excess alcohol to the toxin load our bodies naturally process.
- 4) Eat the rainbow! Aim for a variety of fruits and vegetables to ensure you get a wide range of vitamins, minerals and antioxidants. Be mindful not just about the variety but also the actual colors that you eat each day. Different colors of fruits and vegetables have different nutrients, and the larger the variety of nutrients the better. Think of your plate like a blank canvas waiting for splashes of color! Aim for a minimum of 5-9 servings a day.
- Eat anti-inflammatory superfoods Increase your intake of anti-inflammatory superfoods such as berries [7], omega-3 fatty fish [8], broccoli [9], avocados [10], green tea [11], peppers [12], mushrooms [13], grapes [14], curcumin [15], olive oil [16], dark chocolate [17], tomatoes [18], cherries [19], nuts, mung beans and sesame oil [1]. These foods are considered superfoods due to the high level of nutrients and antioxidants they provide. A word of caution though: even healthy foods may not be healthy for you. For example, those with autoimmune conditions may react poorly if they consume nightshades (e.g., tomatoes and peppers). Those with histamine intolerance should avoid high histamine foods (e.g., fish that is not fresh or is flash frozen, avocados, green tea, dark chocolate). Those who are mold sensitive may need to avoid high-mold foods (e.g., mushrooms, grapes, dark chocolate and many types of nuts). It is important to know which "healthy" foods affect you adversely, and an elimination diet or specialty lab testing can help you figure that out.
- 6) Cook with anti-inflammatory herbs Add in fresh herbs such as turmeric (curcumin) and ginger to reduce inflammation. A 2007 study of rats has shown that turmeric can reduce oxidative stress in those with diabetes [20]. In another study, ginger has been shown to be more effective than NSAIDs in reducing inflammation in some cases [21].

- fatty acids Typically, the SAD diet contains a ratio of omega-6 to omega-3 of 20:1, compared to an optimal ratio of 2:1. This dramatic difference contributes to higher inflammation levels. Omega-3 fatty acids can be found in fatty fish. An easy-to-remember acronym for fatty fish is SMASH: salmon, mackerel, anchovies, sardines, herring. Omega-3 fatty acids are also found in avocados, nuts and seeds, such as flaxseed, chia seeds, pumpkin seeds and walnuts, and in supplements such as fish oil or flaxseed oil. Omega-6 fatty acids are found in red meat and dairy products. If you eat meat and dairy products, choose quality meats and dairy that are organic and grass-fed since they have a more favorable ratio of omega-6 to omega-3 fatty acids. Another inflammatory source of omega-6 fatty acids to avoid is vegetable oils: canola, corn, cottonseed, sunflower, safflower, soybean and peanut. These oils are often used in restaurants to fry foods or in processed and packaged foods because they are cheap. Not all omega-6 fatty acids are inflammatory, however. A good source of healthy omega-6 fatty acids comes from plant and seed oils, including evening primrose oil, borage oil and black currant seed oil [22].
- 8) Eat a diet high in fiber - Aim for over 35 grams of fiber a day, soluble and insoluble fiber combined. A high-fiber diet is linked to lower hsCRP levels and thus lower inflammation. Most Americans only eat 14 grams of fiber a day or less [23]. Soluble fiber is fiber that dissolves in water and turns into a gel-like substance. Some examples are lentils, navy beans, sweet potatoes, nuts, seeds, berries and apples. Insoluble fiber is fiber that doesn't dissolve in water, is bulky and helps sweep out the colon. It is found in whole grains, greens, snow peas, cabbage, Brussels sprouts and nuts such as almonds and pine nuts.



Take supplements - Supplements can help with chronic inflammation. Micronutrients that help reduce inflammation include, but are not limited to, magnesium, zinc, vitamin D, vitamin E and selenium. Other supplements that are known to reduce inflammation are turmeric, fish oil, resveratrol and probiotics [1].

- **Maintain a healthy weight and BMI (body mass index)** for your height, age, sex, build and activity level. Not sure what your weight or BMI should be? Look at the NIH website, www. nih.gov, and search for "BMI calculator" and "body weight planner" to see what a healthy range is for you.
- 11) Try intermittent fasting (IF) - Fasting reduces monocytes, which are a type of immune cell that can cause inflammation in the body. Recent studies show that the typical SAD diet produces a lot of monocytes and thus a lot of inflammation. IF simply means there are periods of eating followed by periods of fasting. A few common variants on intermittent fasting include time restricted feeding (TRF), 5:2 fasting and alternate day fasting (ADF). TRF involves daily restriction of eating times, such as the popular 16:8 method which has a 16-hour fasting window followed by an 8-hour eating window. For example, you could eat within the window of 10am-6pm daily and fast from 6pm-10am. Common variations on this method include 18:6 or 20:4. OMAD, or one meal a day, is the strictest form of TRF and involves fasting 23 hours with a one-hour eating window. The 5:2 approach is where you eat normally for five of seven days in the week and fast on the other two days. On each of the two days, which are not consecutive, you can consume a total of 500 calories per day. ADF is similar to the 5:2 plan but instead of only fasting two days during the week, you fast every other day. There are additional fasting regimens that last more than 24 hours; however, they may be associated with risks and complications and are best undertaken with supervision from a health care practitioner. In addition to reducing inflammation, IF is also known for improving metabolism, decreasing high blood sugar, boosting the immune system and helping with weight loss [24-28].



TYPES OF ANTI-INFLAMMATORY DIETS

There are several whole-foods anti-inflammatory diets that are delicious and nutrient dense. Examples of a select few anti-inflammatory diets include:

The Mediterranean diet consists of healthy fats like olives, nuts, olive oil, lean protein and fish, healthy whole grains, fruits and vegetables. The focus is on avoiding sugar and refined carbs, processed meats, margarines and fried foods [29].



The MIND Diet (Mediterranean-DASH Intervention for Neurodegenerative Delay diet) is a combination of the best parts of the Mediterranean diet and the DASH diet to slow cognitive decline. The MIND diet, like the Mediterranean and DASH diets, encourages eating lean meats, fish, whole grains, fresh produce and olive oil and reduces salt. How it differs is that the MIND diet specifies the types and quantity of fruits and vegetables to eat. It encourages berries, green leafy vegetables, and one other vegetable of choice daily. It avoids foods that have an unhealthy effect on the brain such as processed meats, fried fast foods, sweets and pastries, and margarine. There is a study coming out this year (2021) on the effects of the MIND diet on seniors [30].

Another popular diet is the autoimmune protocol diet, or AIP. This is a very restrictive elimination diet in that it removes many foods that are included and considered acceptable in other anti-inflammatory diets. AIP eliminates processed foods, refined sugars and sugar substitutes, coffee, alcohol, refined fats and oils, eggs, nightshade vegetables and fruits (tomatoes, white potatoes, peppers, eggplant, paprika), grains, legumes, dairy, nuts and seeds. The diet emphasizes eating nutrient-dense foods, such as organic, grass-fed meats and organ meat, wild-caught seafood, healthy cold-pressed oils (olive oil, avocado oil, coconut oil), and an abundance of vegetables that are not in the nightshade family, some fruit (limiting fructose of 20 grams), probiotic and fermented foods (kombucha, water kefir, kimchi, sauerkraut), and glycine rich foods (bone broth, collagen). These foods are all geared towards removing inflammatory stimuli while promoting health.



2. EXERCISE

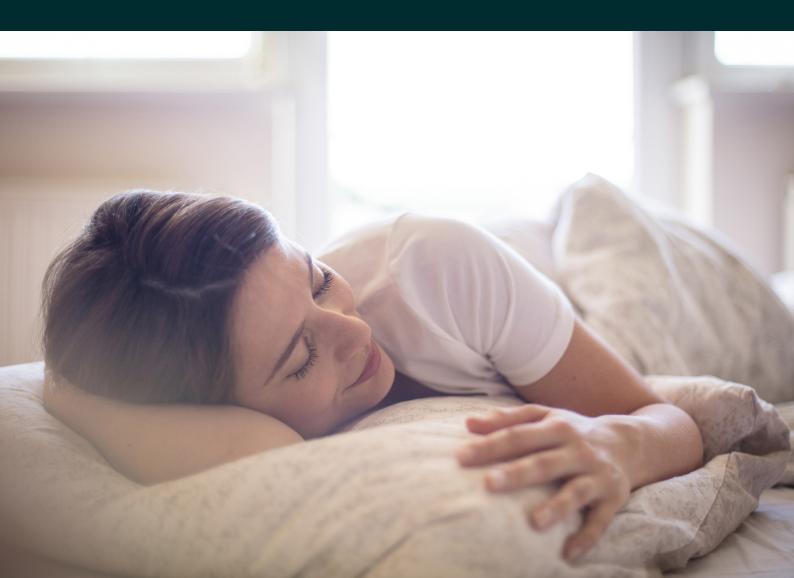
Exercise is an important part of reducing chronic inflammation. When we exercise, our bodies produce an anti-inflammatory protein called interleukin-6 (IL-6), and the longer the workout, the more IL-6 is produced. Post-workout, the IL-6 level is at its highest until it drops over time back to pre-exercise levels [31]. Getting and staying active is an important part of reducing chronic inflammation and chronic disease.

EXERCISE TIPS TO REDUCE INFLAMMATION

- 1) Get moving! Any movement counts, including housework, yard work and getting chores done. A study conducted by Medicine & Science in Sport & Exercise found that those who did 2.5 hours of moderate to vigorous activity per week had the lowest levels of inflammation, even if they didn't lose any weight.
- Move every 30 minutes. Don't remain sedentary for more than 30 minutes at a time during the day. Studies have shown that prolonged sitting is detrimental to long term health. It is advised that for every 30 minutes of sitting during the day that you get up and walk briskly for five minutes.
- 3) Exercise moderately for a minimum of 30 minutes, five days a week. These are the guidelines suggested by the National Institutes of Health (NIH). A Study in Brain, Behavior & Immunity found that even just 20 minutes a day of moderate exercise like walking on a treadmill is enough to reduce inflammation levels [32].
- 4) Don't overdo vigorous exercise, especially if you are over 45 years old. Studies show that overdoing vigorous exercise if you are middle aged or older can cause cardiac issues. The recommendation is to do not more than 4-5 hours of cumulative vigorous exercise per week and to be sure you allow rest days in between vigorous workouts so that your body can fully recover. This is called the "Goldilocks Zone": you are getting enough exercise but without the negative side effects caused by overdoing it [33].
- 5) Incorporating two or more days of strength training a week, using all the major muscle groups, will help build muscle mass, according to NIH guidelines. Research shows that resistance training promotes anti-inflammatory balance as well as better cognitive function in older women [34].
- **Stretch your muscles for 10 minutes, two times a day after exercise.** Animal studies show that stretching the muscles for 10 minutes, two or more times daily after onset of acute inflammation will decrease proinflammatory mediators and reduce inflammation and pain [35].

3. SLEEP AND ITS LINK TO INFLAMMATION

People today are getting less sleep per night than is required by our bodies to adequately rest and recharge. This reduction in sleep is due to several reasons: modern-day lifestyle, age and an increase in sleep disorders. You can go weeks without eating, about three days without drinking water, but try functioning on one or two nights without sleep. It doesn't work too well. Studies have shown that there is a correlation between less sleep and more inflammation. During sleep, our bodies produce human growth hormone and testosterone; both are important in reducing oxidative stress and inflammation [1]. There is an important neuroimmune link between sleep and the immune system. Studies have shown that sleep enhances the immune system and the immune system encourages sleep in a very symbiotic way. The quality of sleep we get is just as important as the amount of time we are asleep. Sleep quality is measured by the amount of rapid eye movement (REM) stage sleep and deep delta stage sleep that we get. It is during these deeper stages of sleep that the brain rids itself of toxins and the body repairs cells.



TIPS TO MAXIMIZE SLEEP AND REDUCE INFLAMMATION

- 1) Get 7-9 hours of sleep a night for optimal health and wellness.
- 2) Be consistent with sleep and wake times every day of the week so your body is programmed to sleep when it should.
- 3) Keep your room cool at night (68 degrees) as that helps initiate sleep.
- 4) Get 20 minutes of light every morning. Sunlight triggers the brain to be awake and alert and influences the natural sleep/wake cycle known as the circadian rhythm. Ideally, getting outside for morning light is best, but in locations where this isn't always possible, it's still helpful to sit near a sunny window for 20 minutes or try using a light therapy lamp. These lamps simulate daylight and are often used to treat seasonal depression. They are available online for approximately \$30 to \$40.
- Avoid blue light and electronics that emit blue lighting after the sun sets, especially within 2-3 hours of your scheduled bedtime. This is important for your circadian rhythm and cueing your body to release melatonin to get sleepy and fall asleep. Some tips to assist you in avoiding blue lighting in the evenings are:
 - a) Use blue light filters on your electronics to change the setting to a night-time setting. Many devices such as iPhone have this in their setting options on your laptop you can run a program that does this, such as F.Lux, Night Shift or Twilight.
 - b) Wear blue light blocking glasses. These are available for purchase at many retailers. The cost can vary widely from \$15 to over \$100, depending on materials and frame styles.
- Avoid electromagnetic fields (EMFs) in the bedroom. Studies show that some people are sensitive to EMFs and they can disrupt sleep. Try keeping electronics out of the bedroom and turn off your Wi-Fi at night. It's also beneficial to either turn your phone off or switch it to airplane mode or, better yet, charge it in another room at night.

Getting plenty of sleep at night but don't feel rested in the morning? If so, you may want to talk to your doctor about sleep apnea. Sleep apnea is a disorder characterized by the starting and stopping of breathing during sleep. This can lead to disturbed and unrestful sleep short term. Longer term it has been linked to increased inflammation, heart disease and cognitive decline. Let your doctor know about your concerns relating to sleep apnea. If warranted, they will request a sleep study to diagnose if you suffer from this sleep disorder.

4. STRESS AND INFLAMMATION

Lately, it seems everyone is always so stressed. Stress can happen from positive experiences as well as negative experiences. In health and wellness circles, stress is considered the new smoking because it can be that harmful to human health. Stress activates the nervous system with a multitude of chemical mediators that start many biological changes, including increased breathing rate, increased heart rate, diverted blood flow to major muscle groups and increased alertness. These biological changes allow for our bodies to fight or flee, which is great if we are running from a tiger but not so good if it's because someone cut us off in traffic. And unfortunately, our bodies physiologically react the same in both situations. When the body experiences stress, our nervous system can get stuck in the fight-or-flight mode called the sympathetic state. Being stuck in an alert state is hard on our bodies over time and suppresses the immune system, making us more susceptible to disease and infection. Despite this, there are many ways we can reduce the effects of stress in our lives. Stress is not going away, but we can reframe and change the way we respond to it.

TIPS TO REDUCE STRESS

- 1) Start a daily mindfulness meditation practice. Start small with 5-10 minutes a day and set a goal to increase your practice to 40 minutes a day over time. Working from the cellular level, meditation calms the mind and relaxes the body. Some useful meditation apps include Calm, Headspace and Insight Timer.
- Write. Journaling is a great way to get your feelings and emotions out. Don't worry about content, spelling or punctuation or who might read it just write. When done, you can keep it in your journal to reflect on, or some choose to tear it up or burn it to release it.



- system. In fact, Navy SEALs are trained in breathwork for use in stressful situations. One very effective breathing technique for calming the nervous system is alternate nostril breathing. To do this technique, place the index finger and thumb of one hand on each side of your nose. Close off the right nostril and breathe in through the left nostril, then let go of right nostril, close the left nostril and breathe out through the right nostril. Next, breathe in on the right side then release the left nostril, close the right nostril to breathe out the left nostril. Be sure to go slowly with your breath. That was one round try doing 3-5 rounds and increasing to up to 10 rounds.
- 4) Practice yoga. Yoga is shown to reduce biomarkers of inflammation by calming the stress response. Yoga increases the activation of the parasympathetic nervous system (the relaxation side) without decreasing the influence of the sympathetic side (the arousing side), thus allowing you to be calm but also alert [36].
- **Get a massage.** Swedish massage therapy lowers inflammation and stress hormones after just one massage by activating relaxation hormones and decreasing inflammatory compounds such as cytokines [37].
- **Try acupuncture.** Acupuncture was recently shown to stop systemic inflammation in animal studies done by Harvard Medical School neuroscientists [38]. Acupuncture works by stimulating the central nervous system to release chemicals that promote the body's healing [39].
- 7) Have a chuckle a day! Laughter is great medicine and can even lower inflammation and help raise your good cholesterol [40].
- 8) Take a break in nature. Research shows stress hormone levels are reduced 21-28% by spending time in nature for 20-30 minutes, three times a week [41].
- 9) Enjoy time with a pet. Pets are known to reduce stress and thus inflammation. According to the CDC, research shows that having and loving a pet helps with far more than just stress, it also helps improve cholesterol, blood pressure and is a great reason to exercise while reducing loneliness [42]. Don't have a pet of your own? Volunteer to play with or walk shelter animals, or visit a friend who has pets.
- Try a digital detox. A digital detox is when you go without electronic devices, such as your smartphone, for a period of time. Start with a day or two until you can build up to a week. Preliminary studies show that taking a week-long digital detox reduces stress biomarkers in humans [43].

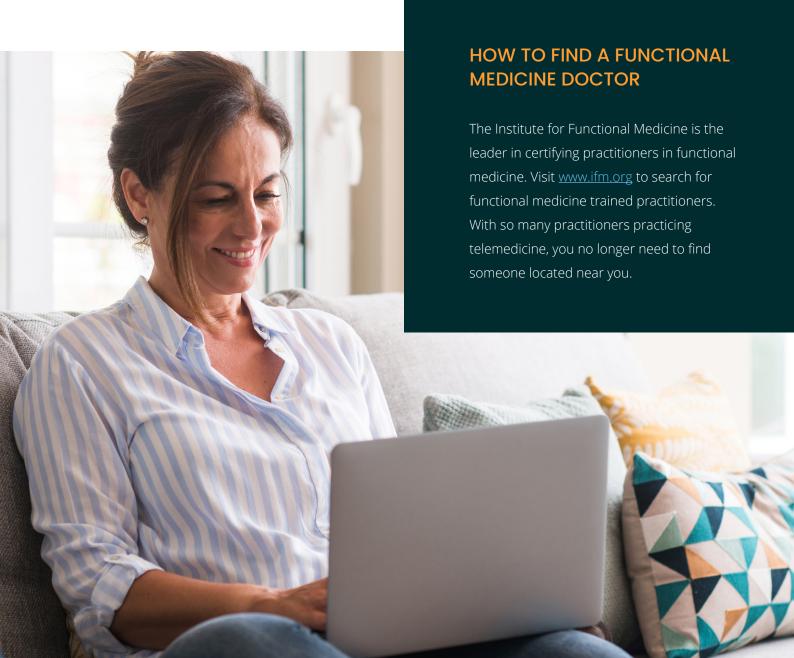


LIFESTYLE CHANGES CAN BE HARD - A HEALTH COACH CAN SUPPORT YOU

There are many ways to reduce chronic inflammation that are within your control. However, making those changes alone can be challenging. This is where a qualified health coach comes in. Skilled health coaches won't tell you what to do but instead will partner with you to utilize your strengths and skills to identify lifestyle habits that work for you and your lifestyle. When looking for a health coach, be sure to check their credentials. Since there is currently no licensing for health coaches, anyone can call themselves a health coach with little to no training. To ensure you work with a well-trained health coach, seek out people with the NBC-HWC designation. These health coaches have met the rigorous educational and testing standards created by the National Board of Health and Wellness Coaches (NBHWC) in partnership with the National Board of Medical Examiners. Together, these organizations have set standards around training, knowledge, ethics and continuing education for its members. To locate an NBC-HWC health coach, search their directory: https://nbhwc.org/.

BEYOND THE BASICS FINDING THE ROOT CAUSE OF CHRONIC INFLAMMATION

If you have incorporated a healthy lifestyle into your life but still have chronic disease and chronic inflammation, seek out a functional medicine practitioner to get to the root cause. A functional medicine practitioner will dig deeper and spend more time looking beyond your symptoms. For example, the root cause could be due to a chronic infection from hidden microbes or a build-up of toxins. Possible sources of infections include bacteria, viruses, fungus and parasites. Possible sources of toxins include heavy metals, mycotoxins (mold) and other environmental toxins. In addition to educating you about your condition, your practitioner will implement protocols designed to reduce or eradicate the source of your chronic inflammation.



SUMMARY

Chronic inflammation and chronic illness are on the rise. Fortunately, there are many lifestyle choices you can make to reverse and even stop inflammation in its tracks. These choices are centered around the key areas of nutrition, exercise, sleep and stress management. If you are trying to implement these lifestyle changes and are struggling, it may be time to partner with a certified health coach for assistance and support. If you have made significant improvements to your lifestyle but are still chronically ill, there may be underlying issues that are best addressed with the help of a functional medicine practitioner. Chronic inflammation may be common but should not be considered normal. We hope the information included in this eBook will help you combat chronic inflammation and put you on the road to health and longevity.





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