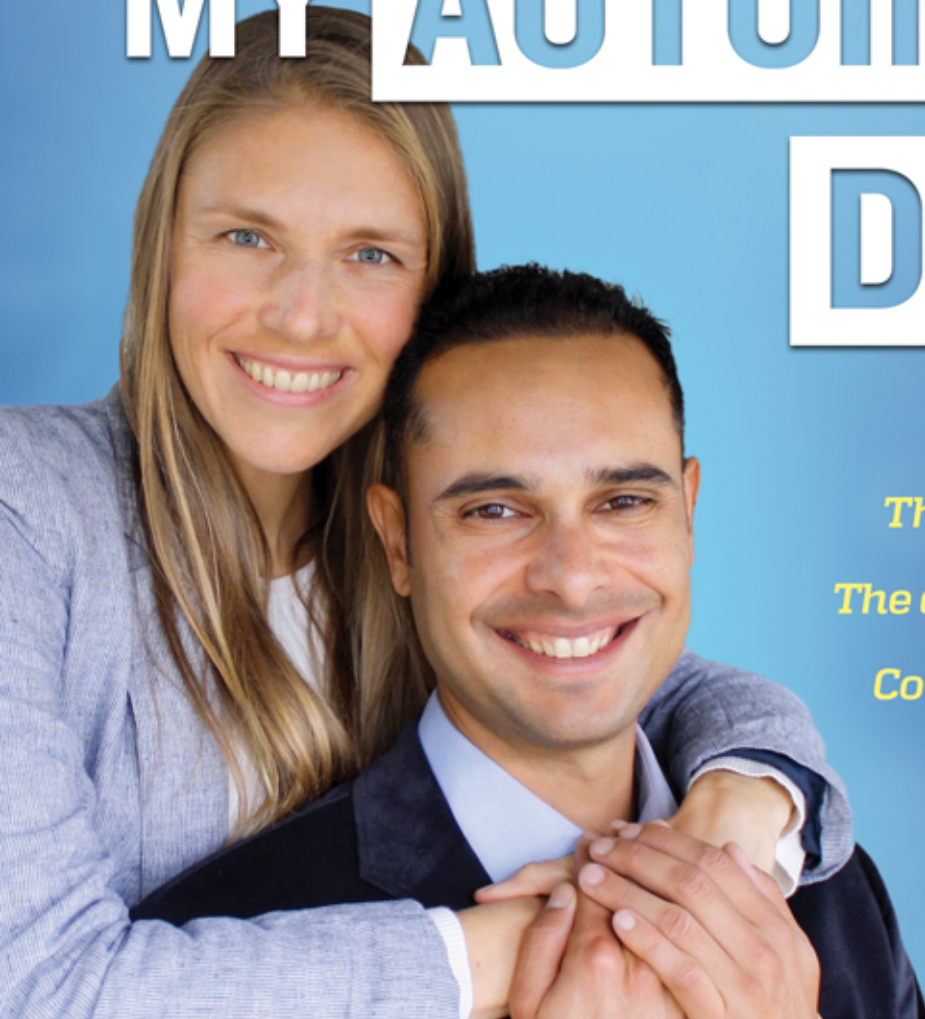


HOW I REVERSED MY AUTOIMMUNE DISEASE



The 5-Step Plan I used to heal
The autoimmune diet that worked
Counteracting the genetic link
How to heal leaky gut



GABRIEL & JENNIFER ARRUDA

“I have already made several of the changes to my regimen listed in the book ... It has been only 3 or 4 weeks, but I have experienced a vast improvement in bowel movements, energy level, and lessening of stomach upset. My condition (Crohn’s Disease) is of extremely long standing, but even this much is a blessing. Thank you!”

—JAN

“My eyes are no longer yellow, and a mysterious undiagnosable stomach pain is gone!”

—RYAN

“The three medical professionals I paid money to were not helpful. Through God’s providence I was led to your website which has mushroomed my own research. I am most the way back, but still have some progress to be made. Praise God!”

—DARKREE

“I feel SO much better than I used to, even coming from a vegan, low-sugar diet. My headaches are mostly gone, as are the crippling episodes of exhaustion, and even the bumps on my arms and thighs. I have a ways to go, but I’m learning to incorporate more and more of the suggestions into my lifestyle. One of the greatest benefits has been the increased awareness of the effects some foods and preparation methods have on me. Once one who shunned most of the gluten-free and GMO nay-sayer trends, now I can’t imagine going back. I just feel too good and wouldn’t be able to look at those foods the same way anymore.”

—SARAH

“It was a great blessing for me to come across your research that I pretty well believe would change the entire health pattern of my life.”

—DR. SWAMINATHAN, PH.D.

“Thanks so much for this book and your research, for everything you do! It’s helped me become healthier and on the road to healing.”

—DESIRAE

“Following your advice has helped me tremendously with my insomnia and with my energy levels. No more pills to help me sleep!! And I’m so grateful for that!”

—ENID

“I have made great improvements to my health after following some of the advice on diet.”

—PETER

“Helped me understand more natural ways to deal with pain, thank you!”

—YVETTE

“Thank you so much. You helped us a lot. We tried everything with our son.
This helped us so much on our food for our son.”

—FERDINAND

“I’m feeling so much better already!! I’m on day 3 of following the autoimmune protocol.
I LOVE YOUR RECIPES!! The vegan parmesan was a perfect topping to the lasagna!
Serious good flavor!! I am working on buying all the supplements and
getting into the routine. I’m so thankful I met you guys.”

—LAURA

“I am really enjoying the book so far. I have been doing research for 4 years now
and this is the best overall info that I have read. Thank you so much!”

—STACEY

“I like you. You have covered everything I needed to know about how to treat autoimmune
diseases. You have presented it in a simple and precise way. Thank you very much.”

—LALLA

“I am so thankful that you are willing to share your story. It is giving me hope.”

—LINDA

“My sleep has improved.”

—HELENA

“I have been slowly regaining health.
It’s great that you are presenting such a whole-of-life approach.”

—ROSALIE

“Thank you so much for the information. I will be excluding some of these items from my diet.
No wonder I’m allergic to wheat!”

—E.

“Thanks SO much for explaining what’s causing my inflammatory arthritis.”

—DUANE

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GABRIEL & JENNIFER ARRUDA

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ABOUT THE AUTHORS

At just 29 years old, Gabriel started seeing the first signs of the same autoimmune disease that killed his mother and grandmother, autoimmune liver cirrhosis. He suffered through chronic fatigue, migraine headaches, food allergies, problems sleeping, and a terrible skin fungus that covered a third of his body. But what began as a death sentence turned into a wonderful blessing of health and discovery. With the blessing of God through much prayer, years of research, and trial and error, Gabriel and his wife successfully reversed his autoimmune disease without taking one single medication.

Gabriel and Jennifer Arruda work together, traveling and speaking across the country full-time with *Reverse Autoimmune* and *Revelation Revealed Today*. Their passion is to share the blessings of happiness and health with as many people as they can. As a motivational speaker, Gabriel specializes in teaching the uplifting messages of hope and Bible prophecy. As a nutritionist and health educator, Jennifer specializes in teaching healthy cooking and lifestyle coaching. They have been happily married for 14 years and credit their happy home to having Jesus as the center of their lives.

My Story

Just after Christmas of 1998, my family and I were driving back from a great time at my grandparents' house in Burbank, California where we would always go to spend the holidays. During this trip my mother noticed something strange; she started itching. She itched constantly all over her body and for no apparent reason. There was no rash, just itchy skin everywhere. This itching continued for months on and off. In the process of time, she started losing weight and became jaundiced with yellow skin and eyes.



My family in 1997

In early 1999, a trip to the doctor along with several tests revealed she had scarring and fatty liver. This liver damage was characteristic of lifelong alcohol drinkers, but my mother had never had a drop of alcohol in her entire life. Strange. Well, my mom was not one to give up. Also Mom was the natural remedies queen, always healing her family, friends, and even strangers with herbal teas, tinctures, and other natural remedies. She immediately went to work researching and trying all kinds of different treatments. None of them worked. She continued to get worse

and worse till one fateful day, she had to be hospitalized and it was clear that she either received a liver transplant or she would die. The entire family was in shock. The health queen? Die? She was finally diagnosed with autoimmune hepatitis which leads to liver cirrhosis and liver failure.

Autoimmune Liver Cirrhosis

Early in the year 2000, Mom was put on an organ waiting list that had hundreds of people on it and was eventually admitted to the UCSF hospital. As her condition worsened, she quickly rose in priority on the transplant list. Soon, her condition got so bad that she was going in and out of comas and forgetting how to speak English (Spanish was her first language). She would even forget who certain family members were.



My mom at my sister's wedding, just two months after her liver transplant. She was all puffy from the heavy steroid medication she was on.

She at last made it to the top of the transplant list. However, her condition was so poor it seemed that she wouldn't last longer than another week. Suddenly the family was notified that due to a tragic car accident of a woman in Colorado who was the same size and blood type as my mother, a liver was now available and in route. Thank God for organ donors!

As soon as they received the liver they began the operation, and half a day later she had a new liver in her body. What a celebration! What a relief! Mom had a second lease on life. I am sad for the woman who lost her life, and I really feel for her family. But I am also thankful that my mom was given 12 more years of life because this kindhearted woman chose to be an organ donor.

The doctor said the old liver was so badly damaged, he didn't know how she survived as long as she did. It appeared to be a miracle that she had made it just long enough to

climb to the top of the transplant list and just then have the perfect liver come shortly before she would have experienced total liver failure. Praise God! I attribute it to a large degree to the hundreds of people praying for her to be saved.

All was happy and well as she slowly healed and regained strength. Little did any of us realize what autoimmune liver cirrhosis actually was, how it worked, and what it meant for her new liver. Within one short year of this victory, my mother's mother started failing in health and was eventually diagnosed with the exact same disease, autoimmune liver cirrhosis. By early 2002, it was clear that my Grandma Tonita would pass away if nothing was done for her. She saw the suffering that my mother went through and decided due to her age it would be better to rest in peace than fight the same grueling battle that my mother did with far less chances of winning. Grandma Toni-

ta passed away in 2002. We were all very sad, however on a good note, Mom's health seemed to be very stable.

But then in the fall of 2012, a full 12 years after my mother's liver transplant, she started experiencing symptoms of liver failure again. Ultrasounds, tests, and biopsy reports clearly showed she had scarring on her liver again. Very shortly afterwards, she began to experience ascites which is fluid buildup in the abdomen, a side effect from a very damaged liver. This fluid buildup became very severe, to the point where she looked nine months pregnant. The hospital staff had to inject a needle into her to drain the fluid periodically. One of these times they drained way too much at once and damaged her kidneys to the point of near failure.

To make a long story short, after several hospitalizations and a nearly successful attempt to heal her using natural methods while she was on hospice, my mother passed away on April 23, 2013 at 69 years old from autoimmune liver cirrhosis.



Grandma Tonita

Now It Was My Turn

A few months later, it was recommended to me by a health professional that I should get some testing done since these conditions can run in the family genetics. Considering that both my mother and grandmother died of autoimmune liver cirrhosis, I thought it was possible I could be at risk. I was doubly motivated to get tested since as early as 2010, my blood work showed that



Mom with her ascites during her second round with liver failure. You can see the large scar from her liver transplant.



I took this picture of us because I thought she was probably going to die.



Mom's funeral in Burbank, California. I'm in the front carrying her casket.

my bilirubin liver enzyme was slightly elevated. This is the same enzyme my mother always had issues with. I also had other strange symptoms at this time. My side of the bed sheets were turning a yellowish tint which reminded me of my mother's jaundice. I also started to have bad body odor which was not typical for me. And out of nowhere I developed hemorrhoids. These were all symptoms I had never had before.

We researched into these symptoms and found that they can be associated with liver disease. Immediately I started doing a liver cleanse taking milk thistle, dandelion, and drinking fresh beet juice. After doing this regimen, all of these symptoms disappeared in a matter of days, and I didn't think much of it after that.

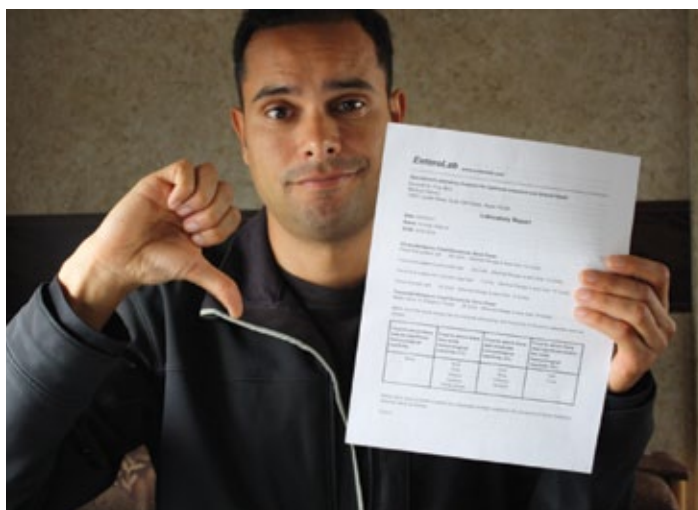
But after my mother's passing in 2013, my wife and I felt it was worth it to pay out-of-pocket for a specialized test for me from Entero Lab¹ that checks for food sensitivities. We ordered it online and it was very simple to do. This test checks for antibodies being produced in your intestinal track by examining your stool. Antibodies are part of your body's defenses against foreign invaders. Our immune system produces a specific type of antibody for each kind of substance which it is attacking. The tests can tell which foods are causing an issue in your body by looking for those food-specific antibodies (IgA).

My Test Results

Since at the time I was totally asymptomatic for any liver-related issues and had lived a very healthy lifestyle being vegan for nine years and athletic my whole life, I figured I might have a slight sensitivity to one, maybe two different kinds of foods at the most. What I got back instead was a list of 15 different foods to which my body was having an autoimmune reaction! Gluten, soy, rice, corn, oats, potatoes, almonds and the list goes on.

¹ EnteroLab.com

After I picked my jaw up from off the table, I went into a stunned daze for the rest of the day. But with much encouragement from my wife Jennifer and by the merciful grace of the Lord, I regained my composure by the next morning. We sat down and decided we had to completely change the way I ate. We thought, let's test this out. I'll go off of as many of these foods as I can, especially the ones that ranked the highest, and after several months try them again and see how I feel. The next time I tried gluten, I got a headache and felt zapped of almost all my energy. Almost the same thing happened when I ate soy. These gluten and soy sensitivity headaches have occurred dozens of times since then. At times, they would even develop into terrible migraines. It seemed that when I was continually consuming these foods, my body wasn't giving me a symptomatic response. But after a several month break, it gave my body a chance to recover enough strength to give symptoms to the various things it was actually having a problem with.



My devastating lab report showing the 15 different foods I was reacting to.

Could I really be allergic to all of these foods though? I decided to call the lab and speak personally with

one of the health professionals there to try and get a better idea of what was happening. I found out that I probably had only a few main foods I was truly having problems with that were causing a “cascading effect” that was causing my body to be in a hypersensitive state and have issues with numerous foods that were otherwise harmless.

Although this was somewhat of a shock to us, we thought it might shed light on another issue I had throughout the years. I had developed a terrible skin fungus which at its peak covered a third of my entire body. I had athlete's foot as a teen and a little bit of jock itch, but I believe due to the autoimmune disease it was able to grow out of control and spread over much of my body. We had tried many different remedies to treat it that would only pause its growth, but as soon as I stopped the treatments it would come back strong. At times when I would eat anything sweet it would flare up. I therefore had to be on a very strict anti-fungal diet which meant no sweets — not even healthy ones like honey, pure maple syrup, raisins, dates, and most fruits. I was on this anti-fungal diet for years! At several points I would wake up in the middle of the night itching and itching. I would itch so bad that my skin would sometimes bleed because I was literally scratching my skin off in certain places. This made it difficult for me to get a full night's rest. Hot water or exercise would greatly agitate it. If I tried to take a hot shower or sit in a hot tub, I would pay for it with a bad itching spell. It was miserable.

Throughout the next year, my wife and I intensely researched the cause of autoimmune diseases. We understand that in order to heal any sickness or disease, we must be detectives. The **symp-**

toms are the clues our body gives us to tell us what is afflicting it. Then we use that information to investigate the **cause**. When we find the cause, we work to reverse it by removing whatever instigated it along with reinforcing the body's immune system to do the fighting for us.

In our search for healing, we got in contact with a natural lifestyle education center that had some great insight into autoimmunity as the director herself had had a debilitating autoimmune disease. She had gone to around 10 doctors and no one could help her. She herself was a doctor from South America. In her plight, she researched and studied until she was able to reverse her own autoimmune disease. You would never know it now because she has more energy than almost anyone we know. She was very helpful in teaching us about autoimmune diseases and how they work. What we learned over the next few years was incredible.

I had to drastically change my diet overnight. We spent several months learning how to stop the autoimmunity, repair the years of damage, and cleanse my body of the agitating toxins that were causing my issues. We put together a customized program for me which I faithfully self-administered at home. Within months I stopped experiencing many of my symptoms and felt better than I had since my teens. I had blood work and a liver ultrasound done, and the test results came back showing that I had almost no inflammation in my body and my liver looked healthy. And one of the best results was that I felt great!

I was so grateful to God that my autoimmune progression had stopped, however it would still be another two years before I would see a complete elimination of all of my symptoms. This is what a lot of autoimmune sufferers don't realize. It's one thing to stop the autoimmunity and it's another thing to overcome all of the health problems that may have tagged along with it. The truth is, it was a long and sometimes difficult road. My wife and I learned a lot during those years though through researching, experimenting, praying, and hoping against hope that one day I could live a normal life again. It was all well worth it because here I am today 100% free from literally every single autoimmune-related symptom I have experienced. And hopefully, my long hard road can make your road a lot shorter and easier.

”

Symptoms are the clues your body is giving you to tell you what is afflicting it.

The Two Most Foundational Principles To Heal Any Disease

Before I continue to share how I was able to reverse my autoimmune disease, I'm going to share two absolutely foundational principles to establishing good health. In this book, I will be sharing the practical, **five-step plan** I went through that brought me to the point of being in full remission as I am today. But as important as the discovery of this five-step plan was, the most important things I learned from my experience are the two foundational principles I'm about to share now. I have found that these two principles are absolutely essential in laying the groundwork to truly heal any disease or affliction, including autoimmune diseases. If these two foundational principles do not take place, neither will true healing.

Foundation #1: Establishing the Basics of Good Health

There are basic principles of health that must be in place in order to lay the foundation for any kind of healing. Many times, disease will clear up on its own when these foundational principles of health begin to be practiced. These basic areas of health include: fresh air, pure water, temperance, nutritious diet, exercise, rest, sunshine, and trust in God (these principles are helpful to remember as the NEWSTART^{®1} acronym).

These eight principles of health are practiced by many of the world's longest living people groups. It won't help to move on to anything specifically autoimmune if these basic foundations of health are not in

N Nutrition
E Exercise
W Water
S Sunshine
T Temperance
A Air
R Rest
T Trust in God

¹ NEWSTART[®] is a registered trademark of the NEWSTART Lifestyle Program, a non-profit organization which has been in existence for 39 years.

place. For a user-friendly, detailed explanation of each of these NEWSTART principles, I would highly recommend the documentary *Eight Secrets to Ancient Health*.² Later in this book, I go into greater detail about various of these topics. I also encourage you to read unbiased research studies in medical journals on any of these principles for further confirmation of their powerful effect on your health.³

If these health principles are new to you, now is the best time to start practicing them. If you have been aware of these simple health principles but are not following them, how can God bless you with healing when you're not living up to the light and knowledge He's already given you? Here are some helpful questions to check whether or not you're including these basic principles of health in your lifestyle:

FRESH AIR

- Are you getting outside in the fresh air every day for a walk or jog in order to facilitate deep breathing?
- Do you keep a constant current of fresh air circulating throughout your house day and night year round? Even in colder weather, do you have a window cracked open as you sleep to get fresh air as you're sleeping?
- Do you live where the air is pure from pollution and dampness, above the miasma and smog of the cities? If not, have you considered moving to the hills where the country air is cleaner?

PURE WATER

- Do you make sure to get at least eight to ten glasses of water every day? (A helpful formula is to take your body weight in pounds and divide it by two = number of ounces of water to drink per day. Example: 140 lbs ÷ 2 = 70 ounces of water per day)
- Do you drink enough water to keep your urine a pale, straw-color?
- Are you drinking water that is free from fluoride, chlorine, and plastic-leaching chemicals such as BPA?

SUNSHINE

- Are you exposing your skin to sunshine every day in proper amounts (15-30 minutes) to generate vitamin D in your body but not burn your skin?

EXERCISE

- Are you doing activity where you work up a sweat and breathe hard for at least 30 minutes 5 times per week?
- Are you doing weight bearing (strength building) exercises at least 3 times per week?

² *Eight Secrets to Ancient Health*, Anchor Point Films, AnchorPointFilms.com

³ Search PubMed.gov

TEMPERANCE

- Do you abstain completely from harmful substances such as tobacco, alcohol, and caffeine?
- Have you eliminated foods and drinks from your diet that contain harmful chemicals such as artificial colors and flavors, hydrogenated oils, MSG, and high-fructose corn syrup?
- Are you abstaining entirely from all that is harmful and using in balance that which is healthful?
- Do you overeat?

NUTRITIOUS DIET

- Are you eating a plant-based diet high in fruits and vegetables and low in fat? Studies show that the healthiest diet is one that is a whole-foods, plant-based, vegan diet that is high in complex carbohydrates, low in fat, and adequate in protein (at 0.8 grams of protein per kilogram of bodyweight).⁴ This is also the oldest diet in recorded history.⁵
- Are you abstaining from harmful foods and drinks such as flesh foods, animal products (including dairy, cheese, and eggs), GMOs, fried foods, and refined sugars?

REST

- Do you stay up late or do make sure lights are out by 9pm?
- Do you rest and worship God on the seventh day according to His fourth commandment?

TRUST IN GOD

- Do you let the challenges of life stress you out and make you worried or impatient?
- Are you putting God first in your day with Bible study and prayer?
- Have you surrendered your life completely to Jesus?
- Is there any area of your life you're saying "No" to God in?
- Can you say, "Lord all I have, all I am, and all I ever will be I give to you?" If you haven't, I encourage you to tell Jesus this even now. He's a gentleman and waits for permission to have power in your life. Why delay His blessings a moment longer?
- Do you believe God loves you and wants good for you even though you're going through a hard time and suffering?

If you see areas where you can improve, now is a good time to return to these basic laws of health. If you're not observing any of these principles of health, then just take the first step "Fresh Air" and start there. Then move to the second step "Pure Water" with the full intention of bringing every one of these principles into your life. You'll notice that you can do several of these at the same

4 Campbell, T. Colin, PhD, with Thomas M. Campbell II. *The China Study: Startling Implications for Diet, Weight Loss, and Long-Term Health*.

5 *The Holy Bible*, Genesis 1:29

time. For example, if you go for a walk or jog outside in the sun, you're getting exercise, fresh air, sunshine, and you'll be wanting to drink lots of water afterwards. My wife loves to go for an early morning walk or jog and uses that time to feed her soul by talking to God and listening to the Bible on her phone. Many have seen huge improvements in their health even before addressing anything specifically autoimmune.

The truth is that if you are not following these basic eight laws of health you might be wasting your time reading the rest of this book. But, perhaps you're in the situation in which your autoimmune disease is making it very difficult to follow one or two of these laws. Maybe it's very hard to sleep or hard to exercise due to pain and fatigue. Maybe you're not sure how to cook nutritiously, or depression and anxiety are making trusting in God very difficult. If so, just do everything you can to follow the rest of the health laws, and then hopefully as you learn the protocol in this book and make some changes, the other health laws will become easier as your autoimmunity dies down.

Foundation #2: Spiritual Healing

I know you're probably thinking, "What treatments did you do, and how did you do it? Tell me quick!" However, any truly successful healing program will address the whole person. We are not just a physical being. We are physical and spiritual (which includes emotional and mental), and these are all connected. I find that the biggest mistake which almost all disease-sufferers make is focusing exclusively on the physical and completely neglecting the spiritual/emotional/mental. I did at first too. However, I have learned that as we are attempting to heal from our diseases, we must consider and address ourselves as a whole being.

As I talk about the emotional and spiritual aspects involved in my healing throughout this book, you will notice that I am coming from a Christian perspective. I personally have found that the Christian worldview has been an inseparable factor in giving me meaning in the midst of very difficult trials, the courage to keep moving forward, and unique insights that enabled me to understand how to reverse my condition. My hope is that every aspect of my testimony will provide meaning, courage, and insight for you also.

When Jesus healed people, He didn't just heal their body. He would heal their soul too. And really, there's no point in receiving physical healing if we don't receive spiritual healing too. Isn't that what God cares about the most? We're here on earth just a few short years and then there's eternity. What good is it to prosper here physically if we end up missing out on eternity? The great Physician Himself said, "*For what shall it profit a man, if he shall gain the whole world, and lose his own soul?*" Mark 8:36.

As you are reading this book, perhaps you're in the process of battling with an autoimmune disease. Perhaps you've been suffering for years and have endured many difficult challenges like fatigue, exhaustion, headaches, anxiety, brain fog, depression, joint pain, gas, and bloating. Perhaps you've found yourself saying, "Why me? I used to be so healthy. Why has this scourge come upon me? Look at all of those healthy people out there living normal lives. Why do *they* get to have that and I don't? I



feel so singled out. Why would God allow this to happen to me? Doesn't He see my suffering?" Do any of these questions sound familiar?

At one point after years into my own journey, I thought, "Wait a minute, God is all powerful. He can heal me this very instant if He chose to. And He loves me more than His own life. He gave up what He loved most, His only Son, to suffer and die for me! So, if He's all powerful and loves me so much, then why doesn't He heal me right now?" I realized that it was because **there must be something more important than my immediate physical healing!**

What could that be? Before I go there, let me make it clear that God isn't to blame for your illness. Sin is. But, God is *using* this situation to address deeper parts of your heart. In every individual we've seen suffering from an autoimmune disease (including myself), God has been using the situation to do a deeper work of spiritual healing and cleansing. I guarantee He is doing the same with you too.

Man cannot get you out of this situation, only Jesus can. The answers that are predominately found in the healthcare field for autoimmune diseases are at best managing symptoms and even often make the problem much worse because of the toxic load the medications put on the body. The sooner you cooperate with the great Physician Jesus, the sooner He can start accomplishing the most important healing in you, the healing of your heart and mind.

It's so easy and so natural to focus on getting better physically and as soon as possible, but don't miss the greater healing that is available to you in this situation of suffering. Remember, you're a whole person and God is trying to use this situation to heal your soul too.

HOW DO YOU HEAL SPIRITUALLY?

Spiritual healing comes by looking at things differently, by embracing new perspectives. The only way to be happy and content during trials is to believe that you are actually **gaining** more than is being taken away. You must perceive your trial as a **benefit** not a deficit. When you're able to look at your suffering or affliction in terms of gaining more than you're losing, you will have perfect peace about it. You may actually even appreciate it.

Consider this amazing phenomenon. Two people can go through the exact same situation and experience it completely differently. Person A and Person B both went to a baseball game. Twice in the game, the player hit the baseball so far it reached over the wall and into the crowd. The first time it happened, the ball came near to Person A. Person A became fearful, closed his eyes and cowered down as the ball came towards him, hitting him hard in the head. The second time the fly ball occurred, it came towards Person B. But Person B rushed to lean over his row reaching as far as he could, and with a beaming smile, caught the ball in the mitt that he had brought for just such an occasion. Same situation, completely different outlook and experience. This is how it can be with your illness. As an affliction or illness comes flying your way, are you going to reach for the benefits that God will bring to you through it? Or will you close your eyes and let it hit you in the head?

”

If God is all powerful and loves me so much, then why doesn't He heal me right now?

This is the perspective that Jesus had. Jesus had an incredibly hard life, but He came out a champion because He perceived Himself as gaining more than He was losing through His suffering. Hebrews 12:2 says, “*Looking unto Jesus the author and finisher of our faith; who **for the joy that was set before him** endured the cross, despising the shame, and is set down at the right hand of the throne of God.*” Jesus had a joy set before Him that enabled him to endure the cross, one of the worst torture instruments of all time. That “joy” was you! It was me. The benefit of gaining **you** for eternity made His suffering worth it. Jesus saw that even though He was suffering more than any human had ever suffered, it was worth it to bring us to heaven. “*He shall see of the travail of his soul, **and shall be satisfied:** by his knowledge shall my righteous servant justify many*” Isaiah 53:11. Taking your burden of sin and relieving you of all guilt and shame made Him feel satisfied even in the experience of being tortured on the cross.



Jesus is our perfect example. If we follow His footsteps and depend fully on Him for strength to have this new perspective, we’ll come out champions too.

So how is God using your illness to try to benefit *your* life? It is impossible for me to answer exactly what it is God is trying to do in your heart, but here are a few questions you can ask yourself:

- What is God trying to **teach** me through this?
- What am I **gaining** from this experience?
- How am I **growing** in my character through this experience?

I encourage you to take a thoughtful look at each of these three questions with a pen and paper in hand, and brainstorm a list of answers for each question. As you go through the healing process, as you do various natural remedies to help heal, your answer-list will keep growing and your experience will become more and more meaningful and valuable. This is what happened to me. These valuable benefits, lessons, and messages from God could include:

- To seek God in all things. To ask Him for help in everything.
- A closer walk with Jesus, establishing daily, two-way communication through prayer and Bible study. (I’m shocked at the amount of people in church who don’t have a daily devotional life.)
- To understand that my value is outside of what I can contribute. I’m valuable to God just because I exist.
- Trusting in God’s love and care for me even when I’m suffering

- A deeper level of submission and surrender
- Patience
- Humility
- Temperance, self-control (Maybe you're in this situation because of some of your own poor health choices?)
- Determination and persistence, not giving up
- To rest in God's hands and live in the blessing of the moment. (I've learned this can be as simple as feeling the warm sun on my back or enjoying a healthy meal knowing that these simple pleasures of life come from my heavenly Father who loves me.)
- To not complain. To be content regardless of the circumstance.

These are the truly valuable things in life. These are things you could never purchase with money. People who possess these virtues are the most happy, contented people in the world regardless of their situation.

However, being able to perceive the benefits through an affliction is based on us valuing the things that God values the most — our salvation, our character. Jesus could see the benefits in His suffering because He valued us most.

Saving you was more important to Him than living a comfortable life. If we don't value what God does, we'll never be able to look at our trials with this new perspective, and we will forever feel like victims. If you value money, nice clothes, a big home, job security, worldly honor, and even health more than the things of God such as love, truth, faith, peace, patience, contentment, and humility, then you will never have this new perspective and also never truly heal. There's nothing wrong with wanting good health, job security, or even nice clothes and a nice house, but often in our minds they rank higher on the priority list than the things that God values. This is where the trouble comes in, when our priorities are different than God's. Jesus said, *"But seek ye **first** the **kingdom of God, and his righteousness; and all these things shall be added unto you**"* Matthew 6:33. When we align our values with God's values, we will have peace in our trials, and those trials probably won't last as long.

This is the rest that Jesus was talking about when He said, *"Come unto me, all ye that labour and are heavy laden, and I will give you **rest**. Take my yoke upon you, and learn of me; for I am meek and lowly in heart: and ye shall find rest unto your souls. For my **yoke is easy, and my burden is light**"* Matthew 11:28-30. For an ox plowing a field, the yoke was an object that made its work easier. It enabled two oxen to pull together instead of one pulling all by itself. In ancient times, they would often yoke a more experienced ox with a less experienced one. The yoke could end up being a source of difficulty if the less experienced ox tried to pull in a different direction



”

Being able to perceive the benefits through an affliction is based on us valuing the things that God values the most.

than the lead ox. When your soul ceases to be at war with the values and purposes of the One you're yoked with, you will find the rest Jesus was talking about. When you stop fighting the lead ox, your Creator, your Captain, you will find rest. Often times God's delay in answering our prayer for physical healing is the very thing that is needed to grow in us a character that enables us to not be ruined by the blessings we long to receive.

ALIGNING YOUR VALUES WITH GOD'S VALUES

How do you align your values with God's values? Spend time with Him. It can really be that simple. If you chisel out time for Jesus and seek after His face with an honest, sincere heart to get to know Him more and love Him better, you will have more of His values. He will rub off on you.

And this is why we have this sure word of Scripture that tells us, "*And we know that **all things** work together for **good** to them that love God, to them who are the called according to his purpose*" Romans 8:28. God can make the bad work for our good if we have given our lives to Him.

So make it your utmost goal throughout your time of healing to be able to look at your affliction in terms of **gaining more than you're losing**. You are praying for God to heal you now, but He wants to give you something better. His delay is what is going to give you something better. Go through those questions above whenever you're in a moment of suffering or trial in your illness. What can I **learn** through this? What is God trying to **tell** me? What am I **gaining** through this? If you're not healing spiritually as you're healing physically, you're missing the biggest blessing and you won't be made *whole*.

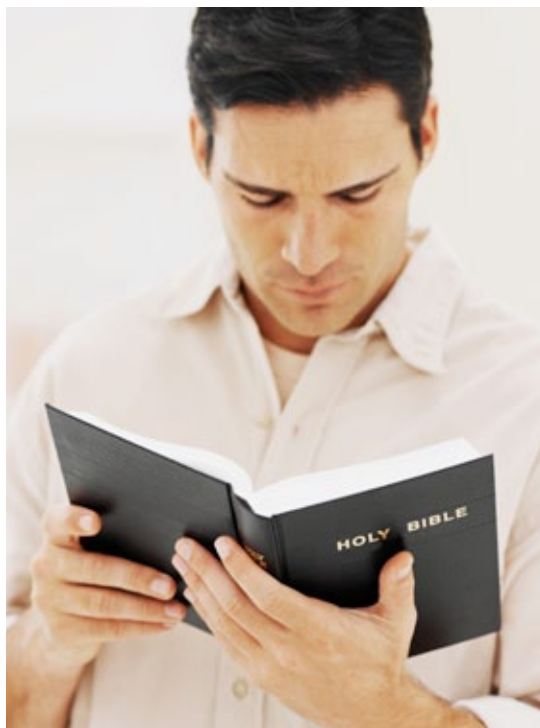
But when you are made whole, you will be able to say with the apostle Paul,

*"Not that I speak in respect of want: for **I have learned, in whatsoever state I am, therewith to be content**. I know both how to be abased, and I know how to abound: every where and in all things I am instructed both to be full and to be hungry, both to abound and to suffer need. **I can do all things through Christ which strengtheneth me.**"*

— Philippians 4:11-13

And this is what I learned that ended up being even more important than healing from my autoimmune disease.

Now that we have covered the two core foundational principles in healing any disease — establishing the basic principles of health and receiving spiritual healing — we can move on to what an autoimmune disease is and the five-step program God used to heal my autoimmune disease.



What Is an Autoimmune Disease?

Autoimmune disease includes 80-100 different diseases which occur from the immune system attacking the body's own healthy organs, tissues, and cells. It's difficult to diagnose, often taking about three-and-a-half years to receive an official autoimmune diagnosis. The average person goes to five doctors before autoimmunity is recognized as the culprit.¹

COMMON TYPES OF AUTOIMMUNE DISEASES

- Graves' disease
- Hashimoto's thyroiditis
- Lupus
- Type 1 diabetes
- Multiple sclerosis (MS)
- Rheumatoid arthritis
- Celiac disease
- Crohn's disease
- Chronic fatigue syndrome
- Psoriasis
- Vitiligo
- Ulcerative colitis

AUTOIMMUNE SYMPTOMS

- **Food allergies/sensitivities** — this is the biggest warning sign, but it doesn't have to present in order to have an autoimmune disease
- Inability to gain weight or lose weight

¹ "NCAPG News Briefing." American Autoimmune Related Diseases Association, Inc., aarda.org, March 18, 2014.

- Brain issues: headaches, anxiety, brain fog, attention deficit problems, autism, depression
- Skin issues: rashes, red flaking skin, rosacea (red bumps on face), eczema, dermatitis, psoriasis (dry, itchy, scaly skin)
- Asthma
- Thyroid issues: fatigue, exhaustion
- Stiffness, joint pain, neuropathy
- Digestive issues: stomach cramping, bloating, gas, constipation, diarrhea

Having any of these symptoms can indicate the presence of an autoimmune disease.

What Causes Autoimmunity?

There are several different factors that contribute to autoimmune diseases, and it can be confusing to try to make sense of it all. However, as I analyze the data and consider the clinical cases I've observed along with my own experience, it becomes clear that autoimmune diseases really come down to two main factors. These two factors are **genetic mutations** and **toxins**. It is the *combination* of these two factors that creates the perfect storm for an autoimmune disease to manifest itself. I'll define what exactly I mean by genetic mutations and toxins shortly. But first let me explain more about why it takes a combination of these two factors to make autoimmune diseases happen.

It's been demonstrated that toxins alone and genes alone don't cause the onset of autoimmunity. For instance, it is not uncommon for an individual to be chronically exposed to all of the common autoimmune-causing toxins yet never develop an autoimmune disease. Why? Their genes enable their body to not react to the toxicity in a manner that would trigger an autoimmune response. This is an example of the toxins without the genetic factor.

On the other hand, there are people such as the Sicilians in Italy in which high numbers have a gene mutation that is commonly associated with autoimmunity, yet not many of them have the autoimmune-related issues that stem from this mutation. Why? Because their lifestyle is largely devoid of the toxic factors that cause the bad genes to become activated. This is an example of the genetic mutations without the toxins. If you have a genetic mutation, you want to be like these folks. You can carry the genetic predisposition, yet not have the autoimmune disease because you maintain a lifestyle free from the toxic triggers. This is now the case with myself. I have the genetic link, but I am free from autoimmunity because I've rid myself of the toxic triggers.

More evidence for the genetics plus toxins formula is found in the fact that research has linked many chemicals, heavy metals, and other toxins in our society to the onset of autoimmunity, yet in the population groups that are exposed to these toxins, only about 20% of them (in the U.S.) actually develop an autoimmune disease. Why only 20% when almost 100% are exposed to the same autoimmune-inducing toxicity? Because in the genetic makeup of the other 80%, a predisposition to developing autoimmunity wasn't there. This doesn't necessarily mean the other 80% don't get sick — they may just develop another type of disease, but not autoimmunity.

The crucial autoimmune formula is:
genetic mutation + toxins = autoimmune disease²

There is a wonderful truth in understanding the genetics plus toxins formula. If it were genetics alone that caused autoimmune diseases, we would all be hopeless because once a genetic mutation has occurred it cannot be reversed. But it's genes plus toxins, and toxins are tied to what we are exposed to, and that is something we can change. This means there **is** something we can do about it. This means there is hope! So be encouraged.

Genetic Mutations

The field of genetics in relation to autoimmune diseases is a rapidly expanding field of study. Genetics play a role in both causing autoimmunity and worsening an existing autoimmune condition. First, your body can have a genetic predisposition to attack itself. Second, gene mutations called SNPs can make your autoimmunity worse.

Understanding the fact that genetic mutations can't be reversed would seem to indicate that the genetic factor isn't worth talking about since there's nothing we can do about it anyways, right? Not true. The good news is that despite the fact that genes are fixed, there is still a way to overcome the challenges they present. There are a multitude of factors that determine whether or not these genetic abnormalities are expressed.

What do I mean by expressed? Genes can become dormant or active. When a gene is dormant, whatever function or malfunction that it would normally cause doesn't happen. You can say the gene is "not being expressed." However when a gene becomes active, whatever function or malfunction it's responsible for starts taking place. Think about it like this. There are tons of laws on law books right? However, just because there's a particular law in the books doesn't always mean that it will get enforced. Some laws are enforced regularly and some haven't been enforced for decades. A gene mutation is like a law on the books — it's a reality, it's there, and it's probably not leaving. When a gene mutation is dormant and is not being expressed, it's like a law on the books that no one even knows is there and is therefore not being enforced. When a mutated gene gets activated and starts becoming expressed, it's like a law on the books that the judge starts paying attention to and starts enforcing. Make sense?

The obvious question now is, what are those factors that determine whether or not these genetic abnormalities are expressed or not? The answer is more practical than many realize. It's what we eat, what we drink, whether we exercise or not, what we think and feel. All of these factors play a role in gene expression. Our lifestyle causes chemical modifications around the genes that will turn those genes on or off over time. This can be a good thing or a bad thing based on what kind of lifestyle we are living. This understanding is a natural lead-in to the other half of the autoimmune equation, toxins. When we understand which toxins are causing autoimmunity and learn how to replace them with healthy alternatives, we've made a huge step in the road to autoimmune reversal.

² Cortese C, Motti C. "MTHFR gene polymorphism, homocysteine and cardiovascular disease." *Public Health Nutrition* 4.2B (Apr. 2001): 493-497.

SNPS

Besides genetics being a foundational cause of autoimmunity, a second category of genetic issues that contribute to it are variations in the DNA which are commonly known as “SNPs” (Single Nucleotide Polymorphisms). In future chapters, I’ll discuss more about what these are. But in short, a SNP is a change in a certain base building block that occurs at a specific position in our DNA, our genetic instructions. Every one of us has about 10 million of these genetic SNPs, but thankfully most of them are not harmful.³ But, some of these SNP variations can end up being harmful by causing either a slowing down or speeding up of chemical processes in the body. That may not seem like a big deal, but the effects from these mutations can be tremendous and if untreated, essentially make it impossible to heal from an autoimmune disease.

Some of the commonly known SNPs of this category are the MTHFR, COMT, and MAO mutations. It’s essential that someone with autoimmunity understand what these gene mutations are, which ones they have, and how to treat them. Therefore I dedicate a full chapter to these mutations and how to overcome them later in this book.

Why these mutations have developed and why they are found more among certain ethnic groups than others is still a topic of exploration. However, the handful of these SNPs that are causing problems are becoming a strong focus of study as they can produce some serious havoc in the body.

Toxins

Sadly, our modern world is a super toxic world. Many of these toxins are key culprits causing and aggravating the autoimmune epidemic our society is experiencing. Every autoimmune sufferer needs to be aware of exactly what these toxins are, where they are found, how to test for them, and how to detox them out of the system.

Here are what I have found to be the primary toxins which can cause an autoimmune disease in genetically predisposed people:

- Medications
- Chemicals
- Heavy metals
- Bad bacteria overgrowth in the intestines (gut dysbiosis)
- Molds
- Viruses
- Genetically modified foods (GMOs)
- Mutation-bred foods
- Poor diet
- Chronic stress

³ “What are single nucleotide polymorphisms (SNPs)?” U.S. National Library of Medicine <https://ghr.nlm.nih.gov/primer/genomicresearch/snp>

When these toxins interact with a genetically-susceptible individual for a long enough period of time and at a high enough concentration, boom — autoimmunity. Many times, just removing the toxic burden that’s being heaped upon the body’s organs will enable them to begin operating properly again. And I have an entire chapter later in the book on how to detox from toxins to which you’ve already been exposed.

You can be exposed to these toxins by breathing them, by absorbing them through your skin, and by ingesting them.

You’ll notice as you read this book that there are a variety of different factors which contribute to autoimmunity and it can be confusing to keep track of it all. To help with that, I’ve created a graphic which we’ll build on as we add more layers to the autoimmune picture. Here’s an illustration of what we’ve covered so far.



In the *Autoimmune Manual* I’ll show you how to use the fully built graph to help identify what potential factors are contributing to your autoimmune situation.

When someone with a genetic predisposition to autoimmunity ingests any of the primary autoimmune-causing toxins, it leads to what is so very common in autoimmune sufferers, a leaky gut.

Autoimmune Reaction: “Leaky Gut”

Sarah Ballantyne, Ph.D. and author of the New York Times best-selling book on autoimmune disease states,

“A leaky gut (and gut dysbiosis) has been found, in every autoimmune disease in which its presence has been investigated.”

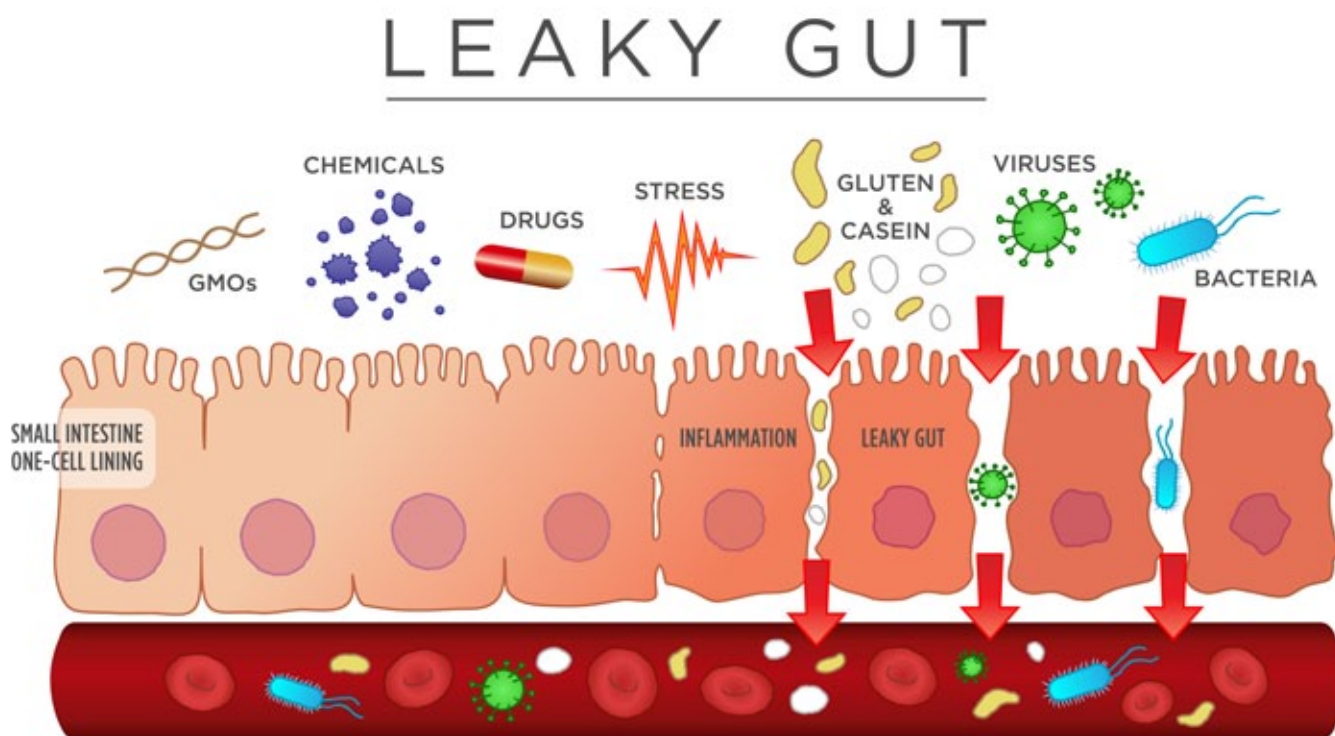
Wow! **“Every”** autoimmune disease.”

Think about it. What’s an autoimmune disease? It’s a disease of the immune system hence auto-immune. Did you know that 80% of your immune system is in the gut? So it’s no wonder that

an abnormal gut situation is the foundation of every autoimmune disease.

So what is leaky gut? Leaky gut is one of the main factors in all autoimmune diseases. Your small intestine is lined with these finger-like projections called villi. The villi are what absorb the nutrients from the food into your blood to be used all throughout the body. Specific nutrients are allowed to pass through, but toxins and large undigested food particles are blocked. However, toxins such as chemicals, fungi, a bad diet, and chronic stress can cause inflammation in the small intestine which damages the delicate lining. The body can also attack its own small intestine if the immune system gets confused (which is often the case in autoimmune).

When inflammation causes damage to the small intestine, the small intestine becomes permeable with holes. These holes in the small intestine allow large particles of undigested food, bad bacteria, waste, and other toxins to leak out into your bloodstream. This is leaky gut.



The repercussions of leaky gut are very serious. When these undigested food particles, bad bacteria, and toxic waste make it past your intestinal wall, they get into your bloodstream which is your body's highway. Once in your bloodstream, these toxins have access to every part of your body.

As these toxins lodge in various organs throughout your body, the immune system begins the attack on these foreign invaders. Unfortunately, your body's organs and tissue can get caught in the friendly fire. This would be where you have an autoimmune disease, when your body is attacking itself. But why would it get so confused as to actually attack itself? Two things can be happening here — **molecular mimicry** and/or **bystander activation**.

Autoimmune Reaction: Molecular Mimicry

Molecular mimicry occurs when our body's immune cells encounter an "antigen," a foreign substance that the body considers an enemy. To simplify, let's just call it a toxin. The immune system identifies this toxin by reading a code of amino acids on the toxin's surface. The immune system's B cells become "activated," producing antibodies which mark toxins for destruction. Then other immune cells which are like soldiers come and destroy them. These antibodies are programmed to mark only the organisms that have the same sequences of amino acids that were found on the original foreign toxin it encountered.

Here's the problem though. Some of the sequences of amino acids found on certain toxins are similar to those found on different organs and tissues in the body. For various reasons, the immune cells don't recognize the difference between the two and therefore send out antibodies that are programmed to mark for destruction not just the toxin but also parts of the body that look similar to it.

Molecular mimicry can happen in the small intestine and also in the blood. When it happens in the small intestine, you get leaky gut. When it occurs in the blood, it begins the process by which organs and tissues are destroyed leading to conditions such as Hashimoto's or Graves' disease if the thyroid is attacked, or lupus and rheumatoid arthritis if the joint tissues are attacked, or multiple sclerosis (MS) or Lou Gehrig's disease (ALS) if the central nervous system is attacked.

Before we talk more about molecular mimicry in the blood, let's first take a look at how it happens in the gut since many times its taking place in the gut is what makes it possible for it to happen in the blood.

MOLECULAR MIMICRY IN THE GUT

When molecular mimicry happens in the gut, antibodies are produced to mark for destruction the cells of your gut wall which causes the breakdown of the small intestine wall and therefore leaky gut. This happens because some food we are eating looks similar to a toxin that the body has encountered and when we eat this particular food, the body will attack it and also trigger the immune system to attack parts of the intestine wall that it believes resembles this food also. For instance, in Celiac disease part of the gliadin molecule (a protein found in wheat and rye) and part of a virus called adenovirus 12 and part of a protein on the gut wall all closely resemble each other. If the immune system does not make a differentiation between these three substances, the outcome is that the immune system will attack your gut when you eat any food containing the protein gliadin.

MOLECULAR MIMICRY IN THE BLOOD

Now let's talk about how molecular mimicry happens in the blood. Just like the introduction of a toxin is the first step in molecular mimicry in the gut, so the entrance of toxins into the bloodstream is what initiates molecular mimicry in the blood. We know how these toxins get into the gut — we eat them. But how do they get into the bloodstream? It can be by breathing them, by absorbing them through the skin, and also of course through the leaky gut. The toxins pass through the permeable gut wall into the bloodstream which means that molecular mimicry in the gut can eventually lead to molecular mimicry in the blood which results in organs and tissues being at-

tacked throughout the whole body.

Some of these toxins which leak into the bloodstream are called lipopolysaccharides and can damage the blood-brain barrier.⁴ This blood-brain barrier blocks certain things from making it to the brain. If this barrier is damaged, toxins have access to your brain causing major issues such as anxiety, depression, and deficits in brain function.

Molecular mimicry has been demonstrated in research. *The New England Journal of Medicine* published a study which found and identified 17 amino acids present on the milk protein beta casein which are also present on the surface of insulin-producing cells of the pancreas.⁵ This study makes a strong connection between dairy and type 1 diabetes. Here's where the autoimmunity can start in this case. If there is a leaky gut, the casein proteins make their way into the blood. The sequence-specific antibodies do their job and mark for destruction these milk proteins in the blood that shouldn't be there, however, once the casein proteins have been destroyed these antibodies don't just go away. They can survive in your system for many years. Eventually, they make it around to an organ in the body that has a similar sequences of amino acids, in this case the pancreas. When these antibodies find an organ with these similar sequences of amino acids, they do what they were programmed to do, mark for destruction anything with that particular sequence, and therefore that organ gets marked and attacked.

This is not just an issue with dairy only. Similar findings have suggested molecular mimicry with beef and gluten proteins cross-reacting with other organs in the body. Research also points to molecular mimicry happening when the immune system discerns proteins of certain viruses and bacteria to appear similar to self-proteins. Molecular mimicry causing self-tissues to appear as viruses and bad bacteria to the immune system has been shown to be a very possible route in which diseases like Celiac disease, rheumatoid arthritis, and multiple sclerosis take place.^{6 7 8 9}

Autoimmune Reaction: Bystander Activation

Another way in which an autoimmune response is generated in the body is called “bystander activation.” This is when the immune system tries to eliminate toxins hiding in healthy tissue. One of the nation's leaders and authorities on chronic fatigue as well as one of my favorite integrative and functional medicine practitioners, Dr. Evan Hirsch, reports seeing this autoimmune mechanism in his practice. He refers to heavy metals, mold, hidden infections, and chemicals as “usual suspects” causing and prolonging autoimmune diseases. In reference to these toxins he states:

4 Banks WA, Gray AM, Erickson MA, et al. “Lipopolysaccharide-induced blood-brain barrier disruption: roles of cyclooxygenase, oxidative stress, neuroinflammation, and elements of the neurovascular unit.” *Journal of Neuro-inflammation* 12 (Nov. 2015): 223.

5 Karjalainen J, Martin JM, Knip M, et al. “A bovine albumin peptide as a possible trigger of insulin-dependent diabetes mellitus.” *The New England Journal of Medicine* 327.5 (30 July 1992): 302-307.

6 Kagnoff MF, Austin RK, Hubert JJ, Bernardin JE, Kasarda DD. “Possible role for a human adenovirus in the pathogenesis of celiac disease.” *The Journal of Experimental Medicine* 160.5 (1 Nov. 1984): 1544-1557.

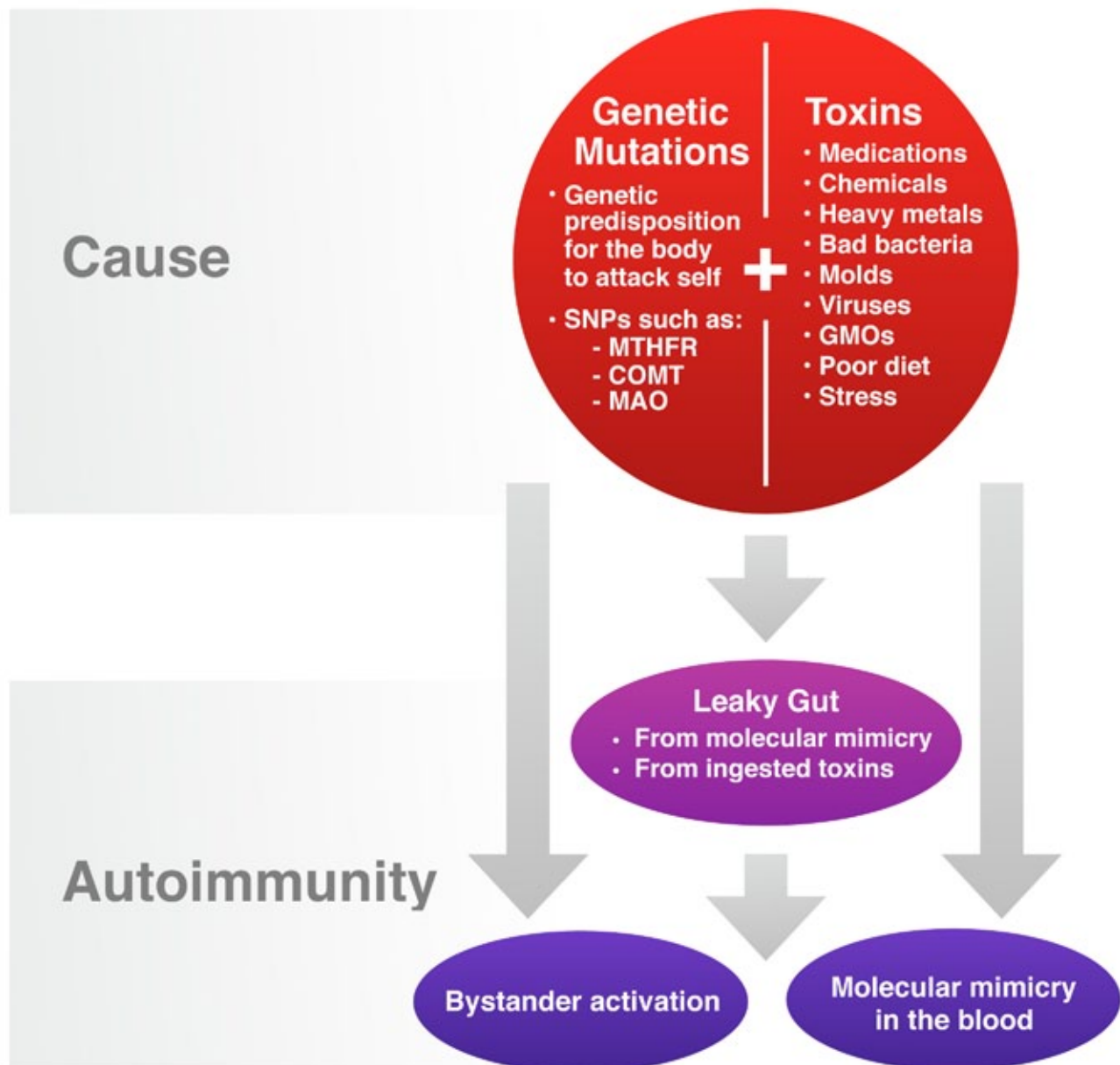
7 Costenbader KH, Karlson EW. “Epstein-Barr virus and rheumatoid arthritis: is there a link?” *Arthritis Research & Therapy* 8.1 (2006): 204.

8 Ollier W. “Rheumatoid arthritis and Epstein-Barr virus: a case of living with the enemy?” *Annals of the Rheumatic Diseases* 59.7 (July 2000): 497-499.

9 Lang HL, Jacobsen H, Ikemizu S, et al. “A functional and structural basis for TCR cross-reactivity in multiple sclerosis.” *Nature Immunology* 3.10 (Oct. 2002): 940-943.

“All those usual suspects (heavy metals, mold, hidden infections, and chemicals) will also cause autoimmunity. They’ll get hidden in the thyroid. The immune system will try to get rid of it, and it has to go through the thyroid to get there and it starts damaging the thyroid and causing autoimmune thyroid disease.”¹⁰

It’s not exactly common knowledge yet that toxins hide in our tissues, but this understanding can help autoimmune sufferers who have had high toxic exposure know what needs to happen in order to keep the body from attacking itself. Reduce and eliminate toxic exposure and detox. I have a whole chapter on detoxing later in this book. Let’s look at our autoimmune progression chart again with these elements added.



¹⁰ The Energy Blueprint. “Fix Your Fatigue and Constant Low Energy Naturally with Dr. Evan Hirsch” *YouTube*, Interview with Dr. Evan Hirsch, 9 June 2017, <https://www.youtube.com/watch?v=GXRlt9voJMA>

Results: Malnourishment

An issue which is almost certain to result from leaky gut is malabsorption of nutrients and minerals. Your small intestine is where you absorb all of the nutrients and calories from your food. When your small intestine is damaged as is the case with leaky gut, it is not able to absorb the nutrients from the food into your system properly. This malabsorption naturally leads to malnourishment where you will end up being deficient in very important nutrients. Thus, the body experiences the effects of having low nutrients such as fatigue, trouble gaining or losing weight, brain fog, etc.

Malnourishment and malabsorption causes autoimmune patients to become vulnerable hosts for infections. Unknowingly, we are continually exposed to deadly viruses, bacteria, and molds. It's unavoidable. You naturally have E. coli living in your gut right now. Every one of us has cancer cells in our bodies. Staph bacteria naturally exists on your skin, and you have probably breathed in a few viruses and mold spores today. This is why you need a strong immune system. This is why our bodies need to be operating at optimum levels to fight off the daily exposure to bugs and toxins. It should be no surprise then to find that those who end up with an autoimmune disease are found to be deficient in key vitamins and minerals.

Take lupus for example. A study published in 2001 in a journal called *Lupus* revealed that most lupus patients are deficient in vitamin D and the level of deficiency seems to be directly related to how active the lupus was.¹¹ A 2005 study published in *Clinical Rheumatology* found that those with lupus can be deficient in important minerals like zinc, copper, magnesium, manganese, and iron.¹² The body has a system called the complement system made up of approximately 30 proteins which play an important role in immune function. A recent 2016 study found that as much as up to 93% of lupus patients are deficient in a variety of these 30 complement system proteins.¹³

Other autoimmune conditions are no different. The *British Medical Journal* found that it's very common for rheumatoid arthritis patients to be deficient in iron, vitamin B-12, and folate (B9).¹⁴ This is troubling since these are the three main nutrients required for red blood cell production in the bone marrow. This would explain the high instances of anemia in people with rheumatoid arthritis.

The autoimmune disease Graves' is associated with low iron, in particular, the stored form of iron known as ferritin. Also, 30 to 50% of thyroiditis patients have an additional autoimmune disease called AMAG that attacks the parietal cells of the stomach leading to vitamin B-12 deficiency.^{15 16}

A research study in the *Journal of Nutritional and Environmental Medicine* found that magnesium levels tend to drop in patients with chronic pain syndromes like fibromyalgia.¹⁷

11 Schoindre Y, Jallouli M, Tanguy M, et al, "Lower vitamin D levels are associated with higher systemic lupus erythematosus activity, but not predictive of disease flare-up." *Lupus Science & Medicine* 1.1 (7 June 2014): e000027.

12 Yilmaz A, Sari RA, Gundogdu M, Kose N, Dag E. "Trace elements and some extracellular antioxidant proteins levels in serum of patients with systemic lupus erythematosus." *Clinical Rheumatology* 24.4 (Aug. 2005): 331-335.

13 Macedo ACL, Isaac L. "Systemic Lupus Erythematosus and Deficiencies of Early Components of the Complement Classical Pathway." *Frontiers in Immunology* 7 (2016): 55.

14 Vreugdenhil G, Wognum AW, van Eijk HG, Swaak AJ. "Anaemia in rheumatoid arthritis: the role of iron, vitamin B12, and folic acid deficiency, and erythropoietin responsiveness." *Annals of the Rheumatic Diseases* 49.2 (Feb. 1990): 93-98.

15 Larry E. Johnson. "Vitamin B 12 (Cobalamins)." *Merck Manual*.

16 Nimish Vakil. "Autoimmune Metaplastic Atrophic Gastritis." *Merck Manual*.

17 Romano, Thomas J. "Magnesium Deficiency in Systemic Lupus Erythematosus." *Journal of Nutritional and Environmental Medicine*, June 1997 Vol., Issue 2, p 107.

The list goes on. All of the previously mentioned contributors such as chemicals, molds, heavy metals, stress, leaky gut, gut dysbiosis, and the destruction of organs and tissues by molecular mimicry or bystander activation all contribute to malnourishment.

And let's not forget the fact that there's also just plain old bad eating. Toxic food. Most people living in Westernized countries have easy access to junk foods that are high in things that contribute to disease and low in nutrients that contribute to health. Not just that, your typical processed junk foods are known to proliferate the bad gut bacteria leading to gut dysbiosis (overgrowth of bad bacteria in the intestines). To reverse these contributing factors, we must look at each of them to see if they are present in our particular situation and systematically eliminate them.

Time to add one last layer to the autoimmune picture. Consider the following point. The bacterial infection *H. Pylori* is known to decrease the absorption of iron.¹⁸ This fact brings out that another culprit of malnourishment is viral and bacterial infections. In fact, infections aren't just a contributor to malnourishment but they're a large reason why people have such a hard time overcoming autoimmunity in general.

So let's take a closer look at infections and how they play a role in autoimmune diseases.

Results: Viral, Bacterial, and Fungal Infections

Viral and bacterial infections are common with autoimmune patients. When your immune system is down or malfunctioning, your gut is leaky, you have toxins hiding throughout your body, and are malnourished, you're pretty much an infection waiting to happen. There are literally hundreds of different viral and bacterial infections. These infections can induce autoimmunity through molecular mimicry or they can come in after an autoimmune disease has developed due to the immune system being compromised. Infections can cause massive damage, overwhelm the immune system, amplify autoimmune symptoms, as well as create separate problems of their own.

Since infections are quite common with autoimmune patients, it's often recommended to get tested for viral and bacterial infections. Here is a list of some of the better known viral and bacterial infections with the autoimmune diseases they most commonly tend to be associated with. This list may provide a helpful place to start with that process.

To help differentiate the not-as-obvious infections:

(V) Viral infection (B) Bacterial infection

Antiphospholipid syndrome: *Helicobacter pylori* (B)

Autoimmune thyroid disease: hepatitis C (V)

Celiac disease: adenovirus 12 (V)

Crohn's disease: noroviruses (V)

Fibromyalgia: Lyme aka "Borrelia" (B)

¹⁸ Nahon S, Lahmek P, Massard J, Lesgourgues B, et al. "Helicobacter pylori-associated chronic gastritis and unexplained iron deficiency anemia: a reliable association?" *Helicobacter*. 2003 Dec;8(6):573-7.

Graves' disease: Enterobacteriaceae family bacteria, Yersinia enterocolitica (B)

Guillain-Barre syndrome: Cytomegalovirus “CMV” (V), Epstein-Barr virus “EBV” (V)(capable of triggering 33 different autoimmune diseases), Haemophilus influenzae (B), Campylobacter bacteria (B), C. jejuni (B), M. pneumoniae (B)

Hashimoto's: Yersinia enterocolitica (B), Bartonella (V) — up to 50% of Hashimoto's patients have Bartonella as a trigger

Kawasaki syndrome: Enterobacteriaceae family bacteria

Multiple sclerosis (MS): Cytomegalovirus (V), Epstein-Barr virus “EBV” (V), Measles virus

Myasthenia gravis: herpes simplex (V), hepatitis C (V)

Myocarditis: CB3 (V), Cytomegalovirus “CMV” (V), chlamydia (B)

Psoriasis: Helicobacter pylori (B)

Rheumatoid arthritis: Epstein-Barr virus “EBV” (V), hepatitis C (V), Escherichia Coli (E. Coli) (B), Helicobacter pylori (B), mycobacteria (B), mycoplasma (B), Proteus mirabilis (B)

Sjogren's syndrome: Cytomegalovirus (V), Epstein-Barr virus “EBV” (V), Helicobacter pylori (B)

Systemic lupus erythematosus: Epstein-Barr virus “EBV” (V), Lyme aka “Borrelia” (B)

Systemic sclerosis: Helicobacter pylori (B)

Thrombocytopenia: Helicobacter pylori (B)

Type 1 diabetes: mumps virus (V), Coxsackievirus B4 (V), Cytomegalovirus “CMV” (V), Rubella virus (V)

This list should not be taken to suggest that these infections are exclusive to these autoimmune diseases only. This list simply represents the infections which are more commonly associated with certain autoimmune diseases.

Later in the book I will discuss different tips and treatments on how to fight off and kill viral and bacterial infections. To give you a fair warning, some viral and bacterial infections can be terribly persistent. It could take weeks, months, or even years of faithfully following a protocol before you get the upper hand. It took me seven years of fighting to finally get rid of my fungal skin infection. This doesn't mean that if you have an infection it will take you as long as it did me. As a matter of fact, for most of those seven years I was experimenting and just trying to figure out what in the world to do. I believe that it would not have taken nearly as long to eliminate it if in the beginning of that journey I knew what I know now.

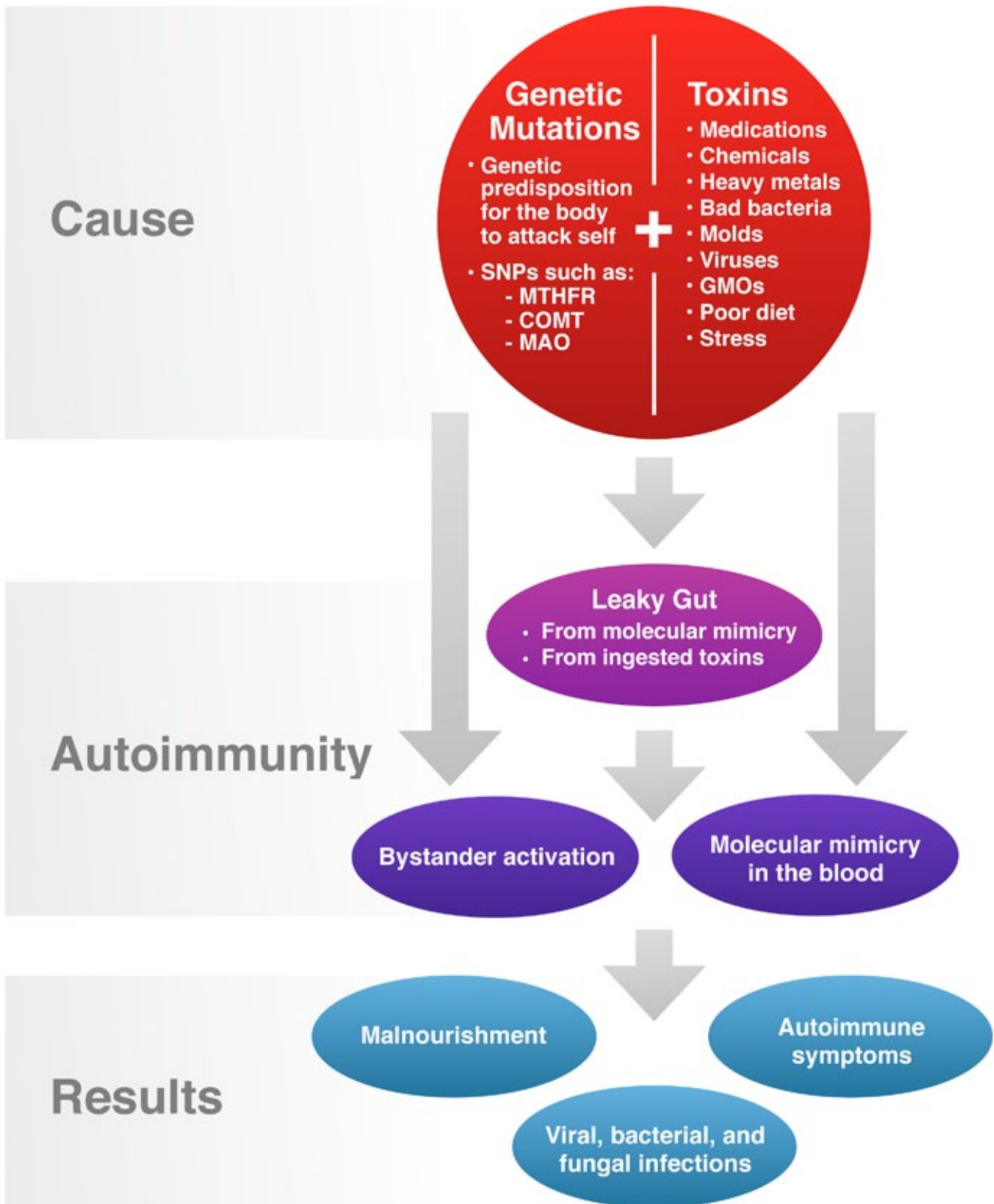
As hard it may be, don't give up. Eliminating a chronic infection for some patients is the key point at which they start really improving and feeling better.

Do you see all of the various possible contributing factors to the autoimmune scenario? There are many combined factors. This is why I've created this graph, because autoimmune sufferers need to back up and see the big picture. Otherwise they'll just be swimming in all these symptoms and terms not knowing what to make of it.

As you look at our final map (on the next page), you can see how many different factors there can be that contribute to an autoimmune disease. No wonder so many patients and health professionals have been confused as to how to treat autoimmune diseases. They're not always simple. Please refer to *The Autoimmune Manual* to see how to use this graph on the next page to help pinpoint which factors here are the key players for you.

Thankfully, there are probably very few who have all these factors occurring at once. Everyone's situation is a little different but with most of the people I know, there are usually just a few of these key factors fueling their autoimmune condition.

Now that we understand more about the problems underlying autoimmunity and why it happens, we are better prepared to understand the 5-step protocol. The beauty about the protocol is that these 5-steps address in practical detail all the main factors we just covered which cause autoimmunity. With that said let's move on to the overview of the 5-step protocol.



The 5-Step Plan I Used That Healed My Autoimmune

In all of our research and discovery about autoimmune disease, we realized that in order to cover all of our bases and have as speedy a recovery as possible, it would help to simplify our approach into a step-by-step plan. This way, I was able to make concrete goals and practically work towards achieving them. We summarized it down into five simple steps. I have a lot of confidence in these steps since every individual I have personally seen who has followed them without deviation has improved. Also, as I comb through the scientific literature I find confirmations over and over that any truly successful protocol to reverse an autoimmune disease will be based on the principles in these five steps. So here they are.

THE 5-STEP PLAN I USED THAT HEALED MY AUTOIMMUNE

1. Remove harmful foods and toxins
2. Heal the leaky gut
3. Ntrify
4. Cleanse/detox
5. Remove chronic stress

The basic underlying foundation of all disease is a combination of toxicity and nutrient deficiency. A sick body is deficient in nutrients and it's abundant in harmful toxins. So the way to heal is to stop the toxic exposure, cleanse the toxins out of your body, and ntrify yourself so that your body can do what God so wonderfully made it to do — heal and strengthen. To put it in the most simple

terms possible, the nutrients need to go in and the toxins need to come out. The beautiful thing about these five steps is that they address and correct both of these problems.

I like to think of it like this. It's as if we all have a toxin cup in our bodies. Toxins are poured into it from what we eat, drink, etc. Oftentimes, because our body can't keep up with how fast the toxins are coming in, our toxin cup gets full and starts overflowing. When it starts overflowing, we get those nasty autoimmune symptoms. So what do we need to do? We need to turn off the faucet of the toxin flow coming in. That is Step 1: Remove harmful foods and toxins. This step is huge, and many people find great relief from their symptoms just by doing this. But because we have only turned off the faucet, our toxin cup is still full to the brim and it can only take a small exposure to one little toxin to make the cup overflow again and hence bring back our symptoms. So after turning off the flow of toxins, we want to empty that cup so we can have a larger grace period when we're exposed to something toxic which we inevitably will. How do we empty the toxin cup? Step 4: Cleanse/detox. The other steps 2 and 3, heal the leaky gut and nutritify, greatly aid the body in healing and restoration. And step 5, remove chronic stress, is an overarching essential as missing that one step can sabotage all the rest.

There are secondary issues that often occur as a result of living for years in the high-toxin, low-nutrient lifestyle. These can include various kinds of infections, gut bacteria imbalances, and genetic factors. These are big topics all in themselves and we'll talk about them in later chapters.

Much of this information in the five steps may be new to you. It may be completely different than anything you've every done or any way you've ever lived. Because of this, it may feel overwhelming. But don't be overwhelmed. Just take it step by step, little by little, and before long, you will have all five steps incorporated into your life even simultaneously. As you get familiar with these things, it will become easier.

The biggest step in your healing process is actually doing something about it. You'd be surprised how many people learn this information and don't do anything with it, especially the supposedly "small" things like getting enough sleep, water, and sunshine. To me, it really brings out the truth that spiritual healing has to go along with the physical healing. But what I find is that the people who are determined and don't give up, who are faithful in pursuing healing, are the ones who get better. The good news is that you don't have to do it alone. God will help you if you just ask Him. In fact, I have found that Jesus gives us the power that we truly don't have. The power doesn't come from within ourselves. It comes from without, from Christ. And we only have to ask. There is a special Bible promise I have relied upon over and over throughout my healing process.

"I can do all things through Christ which strengtheneth me."

Philippians 4:13

It can take time to go through the healing process. Therefore it's takes determination, persistence and hope to see this process through. Chronic illnesses are just as much emotional challenges as they are physical challenges. Your faith and persistence will be tested and probably already has. Embrace the opportunity to grow and move forward with hope knowing that many people like myself have reversed their autoimmune diseases using these five principles.

Let's get into my five-step plan now in more detail.

Step 1: Remove Harmful Foods and Toxins

THE 5-STEP PLAN I USED THAT HEALED MY AUTOIMMUNE

- 1. Remove harmful foods and toxins**
2. Heal the leaky gut
3. Nourish
4. Cleanse/detox
5. Remove chronic stress

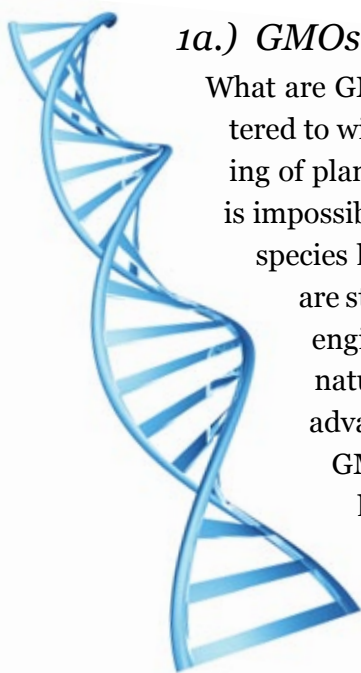
Since the problem starts with ingesting foods that damage the small intestine or being exposed to other environmental toxins that trigger an autoimmune response, I had to start there in order to heal. These toxins can come from many different sources such as contaminated water and poor air quality — for example smog, agricultural areas filled with herbicides and pesticides, mold. However, one of the biggest sources of toxic substances that we are continually exposed to is something we actually pay for, something we in fact willingly introduce into our bodies. It's our food! Yes, almost every person on a daily basis is eating food that is damaging the body. The biggest of the food culprits is genetically modified foods, also known as "GMOs."

Although I could have done an elimination diet to see what my body was having a problem with, I really didn't like the idea of limiting my diet down to only five foods for a time until I could slowly start adding them back. I opted to instead do a stool sample test to identify which foods were causing my autoimmune reaction. I was shocked when I saw that my body was producing antibodies for 15 different foods, many of which were not your typical allergenic foods. After find-

ing what was causing the issues for me, I completely eliminated 100% of all the foods that were damaging my small intestine and causing my leaky gut syndrome. Over time, I was able to gradually add back many of the foods as my leaky gut and autoimmune healed, but in strictly non-GMO form.

What I learned through this process was that the GMO soy, corn, and mutation-bred gluten were causing inflammation in my small intestine causing the walls to become permeable allowing particles of other undigested foods like oats, rice, almonds, etc. to pass into my bloodstream. Since these food particles were only partially digested, my body was naturally identifying this as something abnormal and therefore attacking them as a foreign invaders. This explains why my body was producing antibodies for all of those foods that showed up in my lab report. They weren't true allergies per say, but were foods that weren't fully digested and leaking into my bloodstream through my damaged small intestine.

Thankfully, out of all of those 15 different foods on my list, I have been able to thus far add back all except for one of them — gluten. I am now able to eat corn and soy as long as it's both non-GMO and organic, otherwise I can get a monster migraine if it's not organic.



1a.) *GMOs*

What are GMOs? “Genetically Modified Organisms” are plants that have had their DNA altered to withstand deadly doses of herbicides and pesticides. In traditional selective breeding of plants or animals, a dog may be mated with another dog to get a new variety, but it is impossible to mate a dog with a cat or with a tomato. Even when seemingly close-related species have a successful breeding, the offspring are usually infertile. This is why mules are sterile, because they come from mating a horse and donkey. However, with genetic engineering, scientists actually breach the species barriers that God established in nature. For example, one biotech company has spliced human DNA into rice and is advancing to try to get this crop into the commercial market.

GM crops are drenched in the herbicide Roundup® which, among other deadly chemicals, contains **glyphosate** as its active ingredient, very similar to the deadly chemicals used in Agent Orange during the Vietnam war. Besides having Roundup sprayed on them, corn and cotton crops are also engineered to actually produce their own insecticide called **Bt-toxin** which causes insects' stomachs to explode. Because of this, the Environmental Protection Agency now actually regulates corn as an insecticide.

Glyphosate is not only an herbicide but also a powerful antibiotic, however only to the body's beneficial gut bacteria.¹ Even a small



¹ Krüger M, Shehata AA, Schrödl W, Rodloff A. “Glyphosate suppresses the antagonistic effect of *Enterococcus* spp. on *Clostridium botulinum*.” *Anaerobe* 20 (Apr. 2013): 74-78.



amount of glyphosate exposure kills large amounts of your good bacteria and leads to the overgrowth of very harmful strains of bacteria such as salmonella.² An overgrowth of bad gut bacteria causes more inflammation,³ leaky gut, and immune reactions.

Animal studies reveal extremely serious health risks from GMOs including damaged intestines and stomachs,⁴ immune problems and allergies,⁵ liver and kidney damage,⁶ infertility,⁷ tumors,⁸ accelerated aging,⁹ and death.¹⁰ Animals exposed to glyphosate developed digestive problems very similar to that of Celiac disease, a very common autoimmune disease.¹¹

With some pressure, Monsanto itself was finally compelled to do an animal study with their GMO foods. They did a nine-week study on rats and unsurprisingly concluded that they found no detrimental health effects on the animals. France decided to do the same study feeding GMO food to rats. But instead of limiting the study to the extremely short nine weeks which Monsanto did, they extended it to the rats' entire life cycle, 24 months. What happened? They developed tumors larger than the size of ping-pong balls (check out the actual photos on the next page), they sustained liver damage, they had digestive problems, and their sex hormones were so distorted that in males fed the highest Roundup dose, their levels of estrogen more than doubled!¹² They also died premature deaths.

What I have found so interesting as it relates to me having a liver related autoimmune disease is that the newest scientific animal study done on Roundup is showing that the liver is the most affected organ.¹³ The study found that Roundup given at concentrations way below those found in the bodies of most Americans caused a serious liver condition comparable with non-alcoholic fatty liver disease (NAFLD). What's alarming about this is that, like myself, this liver condition exhibits almost no symptoms in most people until the liver is already severely damaged. This is

2 Shehata AA, Schrödl W, Aldin AA, Hafez HM, Krüger M. "The effect of glyphosate on potential pathogens and beneficial members of poultry microbiota in vitro." *Current Microbiology* 66.4 (Apr. 2013): 350–358.

3 Winter SE, Thiennimitt P, Winter MG, et al. "Gut inflammation provides a respiratory electron acceptor for Salmonella." *Nature* 467.7314 (23 Sep. 2010): 426–429.

4 Senapati T, Mukherjee AK, Ghosh AR. "Observations on the effect of glyphosate based herbicide on ultra structure (SEM) and enzymatic activity in different regions of alimentary canal and gill of *Channa punctatus*." *Journal of Crop and Weed* 5.1 (2009): 236–245.

5 Prescott VE, Campbell PM, Moore A, et al. "Transgenic Expression of Bean α -Amylase Inhibitor in Peas Results in Altered Structure and Immunogenicity." *Journal of Agricultural Food Chemistry* 53.23 (2005): 9023–9030.

6 Kiliç A, Akay MT. "A three generation study with genetically modified Bt corn in rats: Biochemical and histopathological investigation." *Food and Chemical Toxicology* 46.3 (Mar. 2008): 1164–1170.

7 Velimirov A, Binter C, Zentek J. *Biological effects of transgenic maize NK603xMON810 fed in long term reproduction studies in mice*. Austria: 2008.

8 Séralini GE, Clair E, Mesnage R, et al. "Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize." *Food and Chemical Toxicology* 50.11 (Nov. 2012): 4221–4231.

9 Malatesta M, Boraldi F, Annovi G, et al. "A long-term study on female mice fed on a genetically modified soybean: effects on liver aging." *Histochemistry and Cell Biology* 130:5 (Nov. 2008): 967–977.

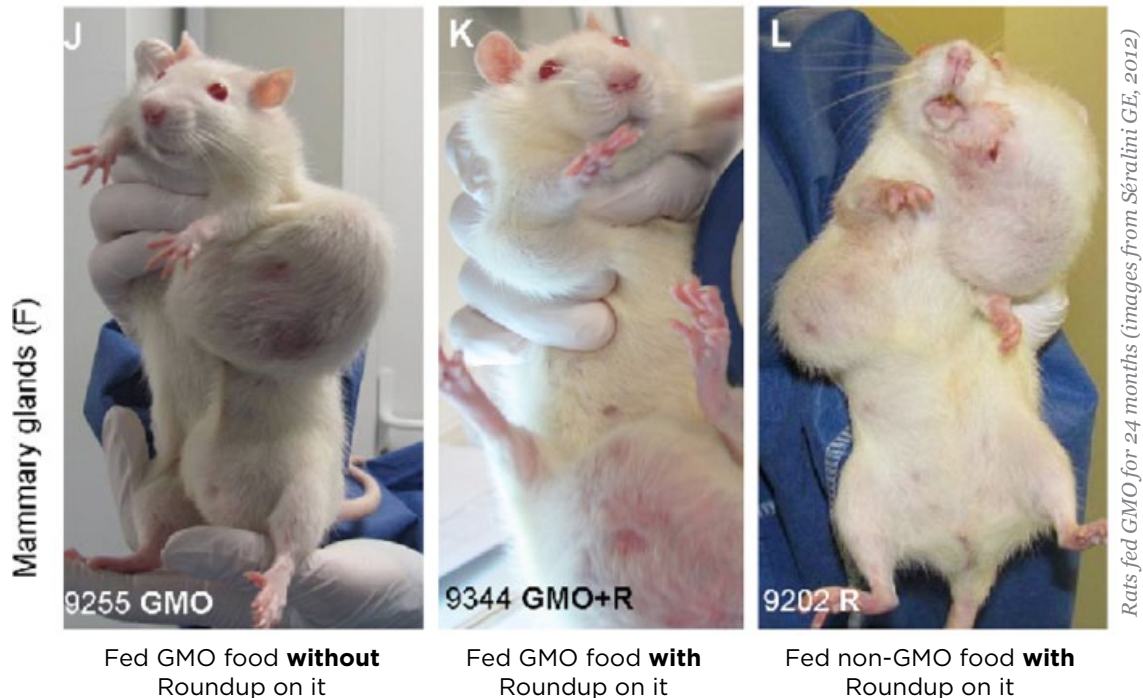
10 Andhra Pradesh. *Mortality in Sheep Flocks after Grazing on Bt Cotton Fields*. GM Watch, April 2006.

11 Samsel A, Seneff S. "Glyphosate, pathways to modern diseases II: Celiac sprue and gluten intolerance." *Interdisciplinary Toxicology* 6.4 (Dec 2013): 159–184.

12 Séralini GE, Clair E, Mesnage R, et al. "Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize." *Food and Chemical Toxicology* 50.11 (Nov. 2012): 4221–4231.

13 Mesnage R, Renney G, Séralini GE, Ward M, Antoniou MN. "Multiomics reveal non-alcoholic fatty liver disease in rats following chronic exposure to an ultra-low dose of Roundup herbicide." *Scientific Reports* 7 (Jan. 2017): 39328.

Actual images of the rats from the 24-month GMO Roundup study.



Notice how all three groups had gross bodily distortion and damage, including the first group which was damaged by food that was **just** GMO, not even with any Roundup on it.

exactly what happened with my mother and grandmother. When my mom began to show symptoms, it was found that her liver was already 90% damaged. She needed the liver transplant within a year and a half just to stay alive.

GMOs were introduced into the American food supply in the mid-1990s. The FDA does not require *any* safety evaluations or labeling of GMOs. The government's lack of regulation and accountability for these biotech companies may be due to the revolving door exchange between the two's leadership. For example, Michael R. Taylor was a private attorney for Monsanto, who then became the FDA's Deputy Commissioner of Policy, then became the USDA Administrator of the Food Safety & Inspection Service, then became Monsanto's Vice President for Public Policy, then returned to the FDA as Senior Advisor and Deputy Commissioner of Foods where he is today.¹⁴ Margaret A. Miller helped develop a genetically engineered bovine growth hormone as a Monsanto scientist. Shortly thereafter, Miller left Monsanto to work at the FDA as Deputy Director of the Office of New Animal Drugs.¹⁵ This is clearly a conflict of interest.

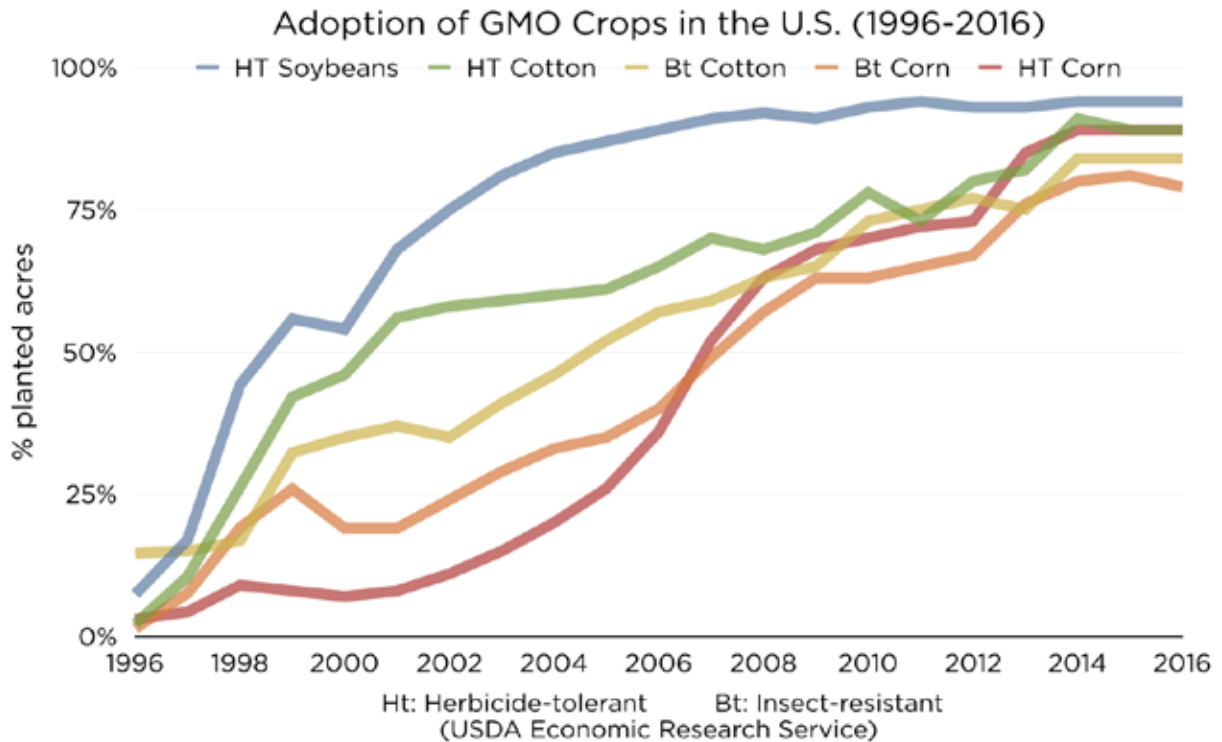
With no governmental regulation of biotech corporations, you have to be your own health advocate. No human studies have been done with GM foods. We *are* the study, and this autoimmune crisis is inevitably the result.

COUNTRIES THAT BAN GMOS

There are 38 countries worldwide that have GMO crop bans, however when it comes to the U.S.

¹⁴ https://en.wikipedia.org/wiki/Michael_R._Taylor

¹⁵ Schneider, Keith. "Question Is Raised on Hormone Maker's Ties to F.D.A. Aides." *The New York Times*, 18 April 1994.



over 70% of packaged food contains GMOs. There are much higher standards in Europe with 28 of the European countries banning GMO crops and GMO pesticides. The European Union, Russia, and Japan are among 64 countries worldwide that require GM foods to be labelled or ban them completely, however, the United States and Canada does not even require them to be labeled. The fact that Monsanto and other GE companies are spending millions of dollars lobbying to prevent GMO labeling indicates that they have something to hide.

Monsanto and the U.S. government are the two biggest pushers of GMOs. Why do they spend millions trying to keep from being obligated to label any of their crops as GMO? The bottom line is that many government agencies and food companies care more about money than you. They don't love you. They love profit, period. But the great thing is that God loves you. And that's why He has caused this information to surface.

THE 11 GM CROPS

There are 11 GM crops¹⁶ in the market today:

1. Soy
2. Corn
3. Canola
4. Cotton
5. Sugar (from sugar beets)
6. Zucchini
7. Yellow squash
8. Apples
9. Potatoes (White Russet variety)
10. Papaya (from Hawaii or China)
11. Alfalfa (used as hay to feed cattle)

¹⁶ Institute for Responsible Technology, ResponsibleTechnology.org

If these items are not specifically labeled certified “USDA Organic” or “Non-GMO Project Verified,” they are most certainly GMO. This would also include products derived from these food items including **vegetable oil** (as this will be a blend from soy, corn, canola, or cotton oils), **high-fructose corn syrup**, **citric acid**, and more. Read the labels, get informed, and make sure the package has one of these two labels on it — **USDA Organic** or **Non-GMO Project Verified**. Either of these labels will mean it is non-GMO. By law, certified organic foods cannot be genetically engineered, irradiated, or be grown with synthetic materials. An excellent documentary on GMOs is *Genetic Roulette: The Gamble of Our Lives*.¹⁷



My wife and I avoid all food that is GMO as if it is a toxic poison — well, really because it is! It is not as hard to do when you cook at home because you know what you are buying as you’re able to read the ingredients. We’ve found the Non-GMO Shopping Guide¹⁸ very helpful when trying to find who is carrying non-GMO foods.

Besides carefully avoiding GMO foods, we also try to buy as much organic as is financially possible. It’s actually not that expensive when you know how to do it. Shortly I’ll show you several tips on how to buy organic on a budget. But when it comes down to it, we feel that spending a little more money for organic produce is better than suffering from an autoimmune disease.

WHICH PRODUCE TO GET ORGANIC

Do you have to buy everything organic? It’s best of course, but not always possible or affordable. So to know which non-organic produce to avoid under all circumstances, it is helpful to know which contain the most pesticide and herbicide residues. The Environmental Working Group puts out an annual Dirty Dozen¹⁹ guide which lists the top 12 fruits and vegetables with the most pesticide residues and the Clean Fifteen²⁰ which have the least. Here are the current lists.

DIRTY DOZEN

- | | |
|-----------------|--------------|
| 1. Strawberries | 7. Peaches |
| 2. Spinach | 8. Cherries |
| 3. Kale | 9. Pears |
| 4. Nectarines | 10. Tomatoes |
| 5. Apples | 11. Celery |
| 6. Grapes | 12. Potatoes |

¹⁷ GeneticRouletteMovie.com

¹⁸ NonGMOshoppingguide.com

¹⁹ Dirty Dozen, Environmental Working Group. <https://www.ewg.org/foodnews/dirty-dozen.php>
There is also a free phone app of the Dirty Dozen which is very convenient to use when at the store.

²⁰ Clean Fifteen, Environmental Working Group. <https://www.ewg.org/foodnews/clean-fifteen.php>

CLEAN FIFTEEN

-
- | | |
|--|---------------------|
| 1. Avocados | 8. Asparagus |
| 2. Sweet corn* | 9. Kiwis |
| 3. Pineapples | 10. Cabbage |
| 4. Sweet peas frozen | 11. Cauliflower |
| 5. Onions | 12. Cantaloup |
| 6. Papayas* (from Hawaii and China
not the Mexican variety) | 13. Broccoli |
| 7. Eggplants | 14. Mushrooms |
| | 15. Honeydew melons |

*There's an additional note that says: "A small amount of sweet corn, papaya and summer squash sold in the United States is produced from genetically modified seeds. Buy organic varieties of these crops if you want to avoid genetically modified produce." This is what we do.

TIPS: HOW TO BUY ORGANIC ON A BUDGET

Many people feel that they have to be a rich Hollywood actor to eat organic. Not at all.

- a) Buy produce in season:** This means don't buy strawberries in January, and don't buy oranges in July. When it's all, try and buy produce that is naturally harvested during that time, and so forth for the other seasons. The produce will almost always be cheaper since all of the stores will be flooded with the most recent harvest and therefore will be competing with each other to get your business. Another benefit is that the produce will often be more nutritious since it didn't have to be picked a month ago and shipped halfway across the world.
- b) Simple planning:** See which store has the best deals on your favorite organic items. If you're paying attention, sometimes the organic produce is the exact same price as the conventional or even cheaper! We just bought organic apples for \$2/lb and saw that the same variety of the conventional apples were the exact same price. Another time we found organic beets which were *cheaper* than the conventional beets at the *same* grocery store.
- c) Food co-ops:** I'm not sure what they have in other countries, but in the U.S. there are several food co-ops where you can order in bulk quantities dropping the price per pound way down. For instance, we order most of our beans and grains this way and can get them for as low as \$1/lb. We buy through the co-op Azure Standard.²¹ You place your order online and then pick it up at a local drop point that gets visited by a big truck with everyone's orders once a month. They usually have excellent prices for organic grains, beans, seeds, dried herbs, and spices. They have drop points in many places throughout the country. We can save up to \$2-4 per pound by buying in bulk like this as opposed to getting the same product at a local grocery store.
- d) Buy in bulk:** If you don't have access to a food co-op, buying grains and nuts from the bulk section of your grocery store can give you close to the same savings. My wife makes a spread-

²¹ AzureStandard.com

sheet of what's a good current price for each item so she can easily price compare at the store.

- e) **Farmers markets:** Local farmers markets will usually carry organic produce that is of a higher quality and for good prices. Like any market you have to shop around and know your prices but many times you can get some real bargains, especially if you get to know the same vendors and arrange a deal for a large box of whatever they are selling. We do this with boxes of organic peaches every summer and we're able to get them for half the price of what the vendor normally sells them for.

EATING OUT

Something we have had to research by location is places to eat out. Virtually all restaurants cook with some kind of oil, and unless they have made a specific intention to use a non-GMO oil such as rice bran oil or olive oil or organic oil, they are most likely using a GMO oil (soy oil, corn oil, canola oil, vegetable oil, etc.). So we've done a lot of calling restaurants ahead of time to verify what kind of oil they use. We've found a handful of places locally that make this effort to avoid the big GMOs, and they are our go-to restaurants. We've found a great nationwide Mexican franchise (Chipotle) that does not use GMOs but uses rice bran oil instead. We've found that we can get the vegetable yellow curry dish at Thai restaurants because they typically don't use oil in their curries. And a bonus is when we also find a Thai restaurant that uses organic tofu. They're out there and they get all of our business. We've also found several pizza chains that have gluten-free crusts with no GMO ingredients, and they also have vegan cheese.



The following are our go-to restaurants in the U.S. Many of these restaurant are chains so there might be a location near you, and all of these places contain dishes that are autoimmune safe.

- **Mexican:** Chipotle — We always get the veggie bowl with brown rice, double black beans, double pinto beans, fajita veggies, double pico de gallo mild salsa, guacamole, and lettuce. Although their corn is non-GMO, it is not organic so we avoid it. I got the worst migraine I've ever had after having their corn tortillas, so it seems like it does make a difference to get corn organic (not just non-GMO).
- **Asian:** Thai — They usually don't use oil or soy to make curries, and the vegetable yellow curry is vegan. It's a bonus if you can find a place that uses organic tofu.
- **Pizza:** Blaze, Blast 825, MOD pizza, Pieology, Mellow Mushroom, PizzaRev — These pizza chains have gluten-free, soy-free crust, and you can get vegan cheese and load it with all kinds of vegetable toppings.
- **Burgers:** Native Foods Cafe, Veggie Grill, Plant Power Fast Food, Earth Burger — These all have veggie burgers that are gluten-free and soy-free with gluten-free bun options.
- Many non-chain vegan or raw restaurants offer gluten-free and soy-free options.

NOTE: This does not mean that everything at these restaurants is autoimmune-safe, but they do have dishes that are safe.

Yes, doing this research takes some time and effort, but it's worth avoiding the GMOs that are so toxic and harmful. And being prepared ahead of time makes things more convenient when we're traveling or out doing errands and we know beforehand where we can grab lunch.

Another benefit to eating more organic foods is that, by law, they cannot be irradiated. The EPA states: "*Foods which have been irradiated, no matter how they are grown or produced, cannot be labeled as USDA certified organic.*"²² **Food irradiation** is the application of ionizing radiation to food such as fruits, vegetables, eggs, and meat including beef, pork, poultry and shellfish. The FDA feels that this technology improves the safety and extends the shelf life of foods by reducing or eliminating microorganisms and insects.²³ While this is a good intention, it may be that the effects of eating irradiated foods were not considered. Molecular changes occur in foods when they are irradiated which produce radiolytic compounds. One study showed that when consumed, these radiolytic compounds caused multiple cancerous tumors in the colons of rats.²⁴

It can be depressing to consider the options that are out there. But don't be discouraged. We have been able to avoid these toxins without breaking the bank and we really enjoy our food. We feel we have plenty to eat. It may seem radical to avoid all GMOs and most conventional non-organic foods. But keep in mind that we're also pretty far removed from the days when everyone used to eat from their own gardens during the summer and preserved their garden food to eat the rest of the year. Not too long ago this used to be the norm. Having your own **garden** is definitely ideal and something to shoot for.

We're also in the process of learning more wild edibles as they have extremely high vitamin and mineral contents and can be found everywhere. Generally, the more hardy a plant is, the higher the nutritional content. **Wild edibles** can survive in harsh conditions without consistent watering and care. Some of the most nutritious wild edibles are purslane, stinging nettle, lamb's quarters, and dandelion greens. Stinging nettle has 29 times the calcium and nine times the iron that spinach has! So even if you do have a garden, it would be beneficial to incorporate some of these wild edibles into your diet for a surge of nutrients.

1b.) Gluten/Wheat

Wheat is one of the most allergenic foods today. How is this possible when bread has been the staple of life for thousands of years? Wheat in the U.S. today is not the same as it was a thousand, one hundred or even 60 years ago. Although wheat is not labeled as "genetically modified," it has been exponentially hybridized over the past 50 years using sophisticated wide-cross hybridization methods. In the U.S. we originally started with scores of different types of wheat grains, but they have now been hybridized down to just a few.

In the original strains some would rise better, others had a better texture, others would thresh easier or give greater yields and therefore higher profits. So to make the perfect bread they kept

22 United States Environmental Protection Agency, Food Irradiation. <https://www3.epa.gov/radtown/food-irradiation.html>

23 Food and Drug Administration, Food Irradiation. <https://www.fda.gov/food/resourcesforyou/consumers/ucm261680.htm>

24 Raul F, Gosse F, Delincee H, et al. "Food-borne radiolytic compounds (2-alkylcyclobutanones) may promote experimental colon carcinogenesis." *Nutrition and Cancer* 44.2 (2002): 189-191.



”

Bread has been the staple of life for thousands of years. Why are so many people having a problem with it now?

blending features of all of these different strains until they came up with a super-bread that acts exactly how they want it to. Though it sounds good, this super-bread has your body super confused because it barely resembles God’s original creation. When we ingest it our body says, “What’s that? Attack!!!”

One of the main wide-cross hybridization methods used is called “mutagenesis” or “mutation breeding.” **Mutation breeding** uses radiation and/or chemical agents to produce new kinds of mutations in the wheat. The alarming thing about this method is that it is able to induce mutations throughout the *entire genetic code* of the plant. This is just as serious as GMOs, if not even more. Treatment of wheat with these methods is scientifically proven to generate *completely new* genetic diversity and “nonsense, missense and silent mutations.”²⁵ In fact, it was found in one new wheat hybrid that 5% of its proteins were not found in either of the parents.²⁶ That’s just one wheat hybrid. The theory that random mutations produce something better is founded on an evolutionary mindset of order coming from chaos. However from a scientific perspective, random mutations only allow for life to *devolve*, not evolve.

Using these mutational breeding hybridization methods, one chemical company called BASF has even managed to accomplish the same thing with wheat that Monsanto has done with their GMO crops. Using radiation and a highly poisonous chemical called sodium azide NaN_3 which acts similar to cyanide in the body, they’ve made a new variety of wheat called Clearfield® which is resistant to their herbicide Beyond®. But legally, even internationally, this is not considered genetically modified. It can be classified under simple “hybridization” and “traditional breeding methods.” Scary. And this Clearfield wheat is being planted in hundreds of thousands of acres in many states across the U.S. The company has also applied this technology of mutational breeding and herbicide resistance to rice, sunflower, lentils, and canola. So, we’ve added these additional four items to what we strictly only get organic.

Besides the genetic mutations that have been hybridized in modern wheat varieties, it has also been highly sprayed with glyphosate since the late 1990s. In short, the body ingests genetically mutated wheat drenched in deadly chemicals and it triggers an autoimmune response.

The thing with gluten is that once an autoimmune response is triggered by the mutated, chemical-laden wheat, the body seems to have a hard time differentiating between that and non-mutat-

25 Lafiandra D, Riccardi G, Shewry PR. “Improving cereal grain carbohydrates for diet and health.” *Journal of Cereal Science* 59.3 (May 2014): 312-326.

26 Song X, Ni Z, Yao Y, Zhang Y, Sun Q. “Identification of differentially expressed proteins between hybrid and parents in wheat (*Triticum aestivum* L.) seedling leaves.” *Theoretical Applied Genetics* 118.2 (Jan. 2009): 213-225.

ed gluten. With this understanding, I have eliminated all gluten since I took the IgA test. However, a common process some have used to experiment is eliminating all wheat and gluten completely and strictly until completely symptom-free or for 90 days if healthy, and then introducing an organic, sprouted, ancient variety of wheat back into the diet to see how the body responds. Ancient wheat varieties such as spelt, kamut, Einkorn, farro, and emmer seem to be less problematic for people and have a better chance of reintroduction. (However, it would seem that experimentation such as this would not be worth it until there are years of healing accomplished in the case of an autoimmune disease.) In one study, the effects of the ancient grain Einkorn and modern wheat were tested on intestinal cells from gluten-intolerant patients. In contrast with the modern wheat, Einkorn amazingly didn't have any harmful effects.²⁷

While many countries are still growing and consuming their own non-mutated wheat, keep in mind that because the U.S. is one of the world's largest wheat exporters, many people around the world *are* consuming this dangerous mutated wheat from the U.S.

A NOTE ON OATS: Oats are a non-gluten grain, however, they are nearly always contaminated with gluten. Therefore, I had to also strictly eliminate oats until I was completely symptom-free, and then I was able to reintroduce gluten-free, organic oats back into my diet with no problems.

1c.) Meat, poultry, fish and animal products (dairy, cheese, and eggs)

Most livestock and poultry in the United States are fed with GMO soy, GMO corn, and GMO alfalfa. This includes non-organic "grass-fed beef" which are fed GMO alfalfa hay. Even as early as the 1990s, the Center for Veterinary Medicine (CVM) at the U.S. Department of Health and Human Services was questioning the safety of feeding GM crops to livestock. The director at the time, Gerald B. Guest, stated, "... CVM believes that animal feeds derived from genetically modified plants present unique animal and food safety concerns. ... Residues of plant constituents or toxicants in meat and milk products may pose human food safety problems." As GMO foods are unsafe for *us* to eat, it makes sense that it is also unsafe for us to eat the animals which have eaten GMO foods especially as whatever is in the animal flesh is at a much more concentrated amount.

Most dairy in the U.S. contains Monsanto's genetically engineered recombinant bovine growth hormone (rBGH or rBST). This growth hormone is injected into dairy cows to increase their milk-production. Milk from rBGH cows contains up to 10 times higher levels of IGF-1, a hormone considered to be a high risk factor for cancers such as breast cancer, prostate cancer, colon cancer, lung cancer and others. Higher incidences of infected udders in these cows result in finding higher amounts of pus and therefore antibiotics in the milk as well. Cheese of course has a concentration of 21 times whatever is present in milk.

Several popular and well-intentioned health advocates have recommended bone broth or other animal-based food sources to help autoimmune sufferers. While I respect their advice in other areas, I believe in this area it is off. There may be some benefits to some of the meat-based items they're recommending, but you can't ignore the massive detriments that come along with them. Studies show that animal fat actually *causes* leaky gut. Even a single meal containing saturated

²⁷ Pizzuti D, Buda A, D'Odorico A, et al. "Lack of intestinal mucosal toxicity of Triticum monococcum in celiac disease patients." *Scandinavian Journal of Gastroenterology* 41.11 (Nov. 2006): 1305-1311.

fat from animal foods causes a breakdown in the lining of the small intestine (leaky gut).²⁸ Bacteria from these animal products is then leaked into the bloodstream causing immediate inflammation all over the body.³⁰(The presence of these bacterial endotoxins are unaffected by cooking. The inflammation peaks in the body four hours after eating,³¹ just about the time when most people will have the next meal containing saturated fat from animal foods. This puts the body in a state of near-constant inflammation. The chronic inflammation from the repeated presence of these endotoxins in the blood often triggers an autoimmune response in people. This is why the Paleo Diet is *not* the answer to autoimmune diseases.



Another reason animal products are especially harmful to those with an autoimmune disease is that they put an extra burden on your liver. In the process of the liver breaking down the long-chain amino acids from animal proteins, it produces ammonia which is harmful. So the liver needs to convert the ammonia to urea to be excreted by the kidneys as urine. Your liver is already going to be working hard as the main organ in trying to detox your body from accumulated toxins, so anything that adds an extra burden on the liver is going to prevent your healing.

The inhumane ways animals are kept, transported, and killed causes loads of stress hormones to be released into their bodies which are also toxic for us to eat.

1d.) Soy and peanuts

Soy and peanuts are some of the most common allergens. Many see improvements in their condition when removed. Eliminating them completely for 90 days then adding them back after a period of abstinence helped me be able to tell what was adding to my problems. Noticing the symptoms that occurred when I had soy and peanuts again was clear evidence for me that I needed to stay off of them, at least for a long time and until I was completely better.

Soy has become problematic for many people because 94% of North America's soy is GMO and heavily sprayed with glyphosate. Soy comes in many forms and is included in numerous different items. For this reason, it was the hardest food for me to avoid especially when we would go to a friend's house for a meal. When invited for a meal, I'll tell people that I can't do gluten or soy and usually what they're thinking is "no tofu." However soy is found in soy sauce, tamari, Bragg® liquid aminos, soy oil, vegetable oil, hydrolyzed soy in multi-spice seasonings, veggie meats, and vegan butters. Concentrated, processed forms of soy seemed to be the most aggravating to me.

28 Deopurkar R, Ghanim H, Friedman J, et al. "Differential effects of cream, glucose, and orange juice on inflammation, endotoxin, and the expression of Toll-like receptor-4 and suppressor of cytokine signaling-3." *Diabetes Care* 33.5 (May 2010): 991-997.

29 Erridge C, Attina T, Spickett CM, Webb DJ. "A high-fat meal induces low-grade endotoxemia: evidence of a novel mechanism of postprandial inflammation." *The American Journal of Clinical Nutrition* 86.5 (Nov. 2007): 1286-1292.

30 Erridge C. "The capacity of foodstuffs to induce innate immune activation of human monocytes in vitro is dependent on food content of stimulants of Toll-like receptors 2 and 4." *The British Journal of Nutrition* 105.1 (Jan. 2011): 15-23.

31 Vogel RA, Corretti MC, Plotnick GD. "Effect of a single high-fat meal on endothelial function in healthy subjects." *The American Journal of Cardiology* 79.3 (Feb. 1997): 350-354.

Several times we were eating at a restaurant or at a friend's place who said the meal had no soy, but then only minutes after finishing the meal I would start to get a headache.

Peanuts have always been a serious allergy for a small part of the population. The warm humid climates in which peanuts are grown can easily facilitate fungus growth in the peanuts. The fungus releases a deadly poison called "aflatoxin" which is what people can have a serious reaction to. However, there is a variety called Valencia peanuts which are said to be void of aflatoxins because they're grown in dry areas of the country such as New Mexico.

The number of people with a peanut allergy has more than quadrupled in the last 13 years. Why the drastic increase? Peanuts grown in the U.S. are now one of the most pesticide-contaminated foods we eat. Peanut crops are often rotated with cotton crops. With the cotton receiving numerous glyphosate applications each year, the soil becomes terribly polluted. Peanuts grow *below* the ground *in* the soil, so they're being saturated in this chemical soup as they grow. On top of that, peanut crops are heavily sprayed themselves. Glyphosate severely damages the beneficial microorganisms in the soil. This leads to an increase in the number of diseases that can hurt the peanut crop which inclines farmers to increase the use of insecticides and fungicides on the peanut crop. It is common to see a conventional peanut crop sprayed with some type of pesticide every 8-10 days during the growing season.

After completely healing and becoming symptom free, I was able to add organic, unprocessed forms of soy (such as tofu, soy milk, and soy beans) and organic Valencia peanuts/peanut butter back into my diet without any problems. Besides making sure it's organic, we also try to find tofu that's made from sprouted soy beans when possible.

1e.) Medications

As much as medications may be helpful in surgery or in an immediate life-threatening emergency, drugs never heal disease. They only change its form and location in the body. Not only do they *not* heal, but they add an additional toxic load to an already struggling body.

*"The **chemicals** most often associated with development of **autoimmunity** in humans are **medications**. Although the manifestations of drug-induced autoimmunity can vary widely, they are most similar to those associated with systemic lupus erythematosus (SLE). Drugs can be considered to either exacerbate pre-existing disease or **initiate disease** in otherwise previously healthy individuals, with discontinuation of the drug leading to disease abatement in the latter."³²*

This is saying that chemicals are one of the leading causes in autoimmunity, and the chemicals that are the "most often associated" with developing an autoimmune disease are medications!

Even nonsteroidal anti-inflammatory drugs (NSAID) such as ibuprofen, naproxen, and aspirin have been shown to cause leaky gut in otherwise healthy individuals.³³

Medications have harmful side effects — damaging the liver and kidneys. How do they do this?

³² Pollard KM, Hultman P, Kono DH. "Toxicology of Autoimmune Diseases." *Chemical Research in Toxicology*, 23:3 (15 Mar. 2010): 455-466.

³³ Van Wijck K, Lenaerts K, Van Bijnen AA, et al. "Aggravation of exercise-induced intestinal injury by Ibuprofen in athletes." *Medicine and Science in Sports Exercise* 44.12 (Dec. 2012): 2257-2262.

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The doctor of the future will no longer treat the human frame with drugs, but rather will cure and prevent disease with nutrition.”

— THOMAS EDISON

The liver naturally breaks down any toxin it encounters, making it of none effect. Every doctor knows this. Therefore, in order to make the drug have an effect on the body, it must be given at a dosage which will go beyond the liver’s ability to neutralize it. So any drug that has any effect on your body has already overloaded and thereby hurt your liver. This is how I would define and tell the difference between a drug versus a natural remedy. That which causes harm to the body in any way would be a drug, and that which causes no harm is an herb or natural remedy.

This is how the greatest Healer of all time worked. Christ never used drug medications to heal even though they were popular and used by physicians since 3500 BC in Egypt. If Jesus felt that drugs were important in healing, don’t you

think He would have brought attention to them by using them when He healed? But He did make use of simple natural remedies such as clay and water as He applied His power to heal people.

We’ve known of many persons who have talked to their doctors about reducing and removing their medications with great success. And we have seen many people become independent of their blood pressure, diabetes, and depression medications by faithfully following the NEWS-TART principles mentioned earlier. Reducing and removing these safely under the guidance of a good doctor will greatly reduce the toxic load on the body.

1f.) Tobacco and alcohol

This one should be self explanatory. God says, “*Thou shalt not kill.*”³⁴ That includes yourself. Tobacco and alcohol are toxic drugs, and when you consume these things you are killing yourself on the installment plan.

Cigarettes contain 43 cancer-causing chemicals. It leads to heart attacks and strokes. The most common death of a smoker is chronic obstructive pulmonary disease (COPD) which many describe as feeling “like suffocating to death.”

Alcohol, even in small doses and regardless of the type, has been proven to be toxic and harmful to the body³⁵ in so many ways. As it relates to autoimmunity, alcohol causes leaky gut.³⁶ The process of fermentation produces aflatoxins which are so inflammatory, they can cause major intestinal damage including bleeding. Any food or drink created by rotting or fermentation are sources of these inflammatory aflatoxins — wine, vinegar, cheese,³⁷ etc. Even something such as a mild vinegar has been used to



³⁴ Ten Commandments, *The Holy Bible*, Exodus 20:13

³⁵ Allen NE, Beral V, Casabonne D, et al. “Moderate alcohol intake and cancer incidence in women.” *Journal of the National Cancer Institute* 101.15 (Aug. 2009): 296-305.

³⁶ Bishehsari F, Magno E, Swanson G, et al. “Alcohol and Gut-Derived Inflammation.” *Alcohol Research: Current Reviews* 38.2 (2017): 163–171.

³⁷ Sengun IY, Yaman DB, Gonul SA. “Mycotoxins and mould contamination in cheese: a review.” *World Mycotoxin Journal* 1.3 (Aug. 2008): 291-298.

induce the equivalent of Crohn’s disease and ulcerative colitis in rats.³⁸ As we have seen, leaky gut is one of the foundational issues in autoimmune disease.

Alcohol also causes cancer. The liver converts alcohol into acetaldehyde. This acetaldehyde causes liver cells to grow at a faster rate than normal. These new cells are more likely to be genetically mutated which is the essence of cancer. This can also happen in the mouth and intestines because the bacteria which is present there can do the same thing. Alcohol increases hormone levels such as estrogen which increases the risk of breast cancer. The American Institute for Cancer Research has stated that there is absolutely **“no safe level of alcohol consumption”** when it comes to cancer. In addition, alcohol damages DNA and then stops cells from repairing the damage. It raises blood pressure and leads to heart failure. Alcohol increases your likelihood for virtually every disease. Even moderate amounts are proven to suppress the frontal lobe of our brain which is the seat of our judgment, morality, spirituality, and where we make important decisions.

But wait! Don’t some doctors say a little wine is good for heart health? Mistakenly they do. However, the substances believed to provide red wine’s heart benefits — resveratrol and flavonoids — are found in the grapes and grape juice³⁹ which come without the harm of alcohol.

Ancient wisdom from the Bible says, *“Wine is a mocker, strong drink is raging: and whosoever is deceived thereby is not wise”* Proverbs 20:1.

We have been practicing this step for 18 years now, and we thank God! Besides the spiritual and morally debasing effects these drugs would have continued to have on me, I can’t even imagine how advanced my liver situation would have been had I continued the party lifestyle of drinking alcohol and smoking in which I participated during my high school and early college years.

1g.) Caffeine

Caffeine is the world’s most widely consumed psychoactive drug. Because it is legal and so widely consumed, some may be surprised to learn that caffeine is actually classified as a drug. But, it is nonetheless and is addictive like most drugs are. Caffeine:

- abnormally stimulates the central nervous system
- decreases the blood flow to the brain by 27%
- causes irritability, anxiety, and tremors
- worsens psychiatric illnesses such as anxiety and depression
- is dehydrating
- raises homocysteine in the blood increasing the risk of heart attacks
- decreases your overall energy throughout the day after a short energy burst
- inhibits the ability to rest at night which effects energy available for the next day (the half life of caffeine is 7 hours which means after 14 hours, there is still 25% caffeine in your system)



³⁸ Lavy A, Naveh Y, Coleman R, Mokady S, Werman MJ. “Dietary Dunaliella bardawil, a beta-carotene-rich alga, protects against acetic acid-induced small bowel inflammation in rats.” *Inflammatory Bowel Diseases* 9.6 (Nov. 2003): 372-379.

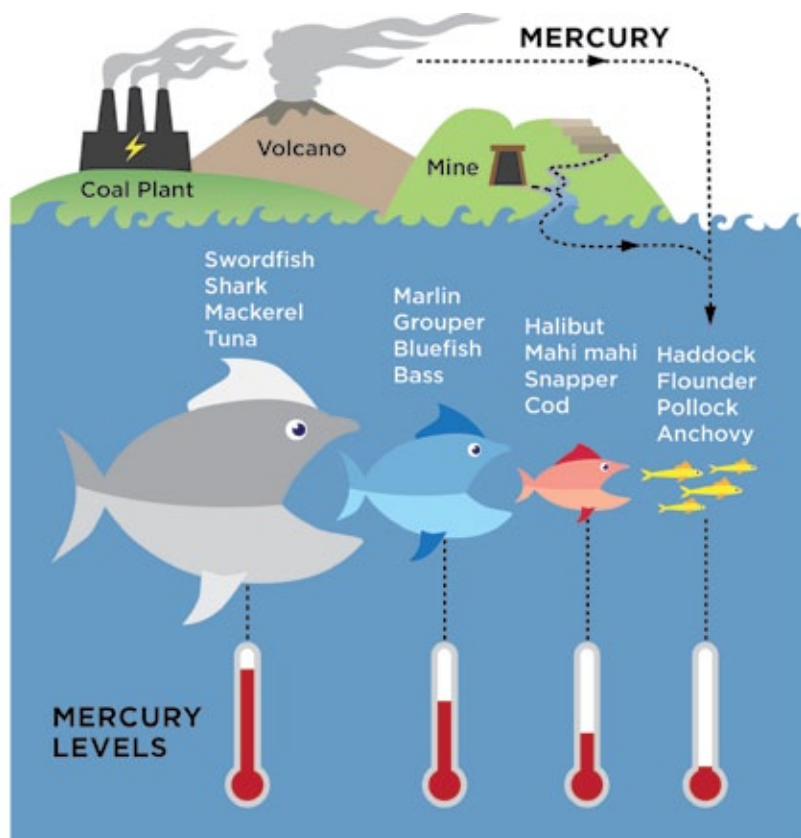
³⁹ Stein J, Keevil JG, Wiebe DA, Aeschlimann S, Folts JD. “Purple grape juice improves endothelial function and reduces the susceptibility of LDL cholesterol to oxidation in patients with coronary artery disease.” *Circulation* 100.10 (Sept. 1999): 1050-1055.

If you're drinking caffeine to get energy, you're actually depleting the amount of total energy you could have had that day and the next had you not consumed caffeine. So if you're already suffering from fatigue from your autoimmune disease, caffeine is just going to make it worse. Sleep is the main process during which your body heals and detoxes. If you're robbing yourself of good quality rest by consuming caffeine, you're preventing your healing. Also, caffeine increases inflammation in the body by 300%-600%.⁴⁰ Inflammation is the base for most if not all autoimmune diseases.

Common sources of caffeine include coffee, non-herbal teas (black, white, green teas), caffeinated sodas, and cocoa/cacao (which also contains an even greater amount of another related drug — theobromine).

1h.) Mercury and other heavy metals

There are numerous sources where we may become exposed to heavy metals. Some are unavoidable such as mercury being released into the air through coal burning power plants and incinerators. (Who would have known that mercury could be airborne?) Yet airborne mercury is one of the largest sources of mercury contamination in the U.S. While we can do a lot to reduce the amount of toxins we are exposed to by making more informed choices, we are all exposed to certain levels of unavoidable toxins each year. This is one reason why cleansing is so important, and I'll go into it in detail in an entire chapter later in this book.



Airborne mercury falls to the earth and builds up in our waters and soils. The concentration of mercury increases with each step up the food chain. As a result, large predator fish such as salmon and trout can have mercury levels over one million times that of the surrounding water.⁴¹ This includes fish caught in pristine places because once the mercury becomes airborne, it can fall anywhere. People who eat fish or other animals with high mercury levels are putting themselves at risk for serious health problems.

It is common now at grocery stores to find warnings at the deli bars such as this one we saw at a popular health food store: **“WARNING! Nearly all fish**

40 Ganapathi MK, Mackiewicz A, Samols D, et al. “Induction of C-reactive protein by cytokines in human hepatoma cell lines is potentiated by caffeine.” *The Biochemical Journal* 269,1 (1 Jul. 1990): 41-6.

41 “Pollution.” *The National Wildlife Federation*. <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Threats-to-Wildlife/Pollution>

and seafood contain some amount of **mercury.**” There is *no* safe amount of mercury. Mercury is one of the most toxic metals in the world.

And this mercury accumulation in the body can be passed on to our posterity. *“It is estimated that 8 to 10% of American women have mercury levels that would induce neurological disorders in any child they gave birth to, according to both the Environmental Protection Agency and National Academy of Science.”*⁴²

Other countries besides America may also reveal similar statistics. Heavy metals are a big issue effecting a huge number of the world populations. Consider just arsenic for example. Estimates say that several million people are chronically exposed to arsenic throughout the world. The countries that top the list are Bangladesh, India, Chile, Uruguay, Mexico, and Taiwan where the groundwater is contaminated with high concentrations of arsenic.⁴³

The largest source of mercury in most adults is **dental silver/amalgam fillings**. There is strong evidence to show that mercury is not at all stable once implanted in the tooth as a silver amalgam filling, but rather it conveys a slow continual leakage of mercury poison into the body accumulating in the major organs of the body such as the brain, heart, liver, and kidneys. Studies show that those with several amalgam fillings have around 10 times more mercury in their feces and saliva than those without amalgam, and after amalgam replacement, mercury in the feces and saliva declines 90% and declines 75% in the urine.⁴⁴

Thankfully, I did not have any silver amalgam fillings by the time I learned about this. But my wife Jennifer did, and she was able to have her silver fillings removed by a mercury-safe dentist we located by contacting Dental Amalgam Mercury Solutions (DAMS), a non-profit organization whose mission is to educate the public on dental amalgam mercury hazards.⁴⁵ We know a doctor who was barely able to function because of mercury poisoning from her dental amalgam fillings. But, she fully recovered once she had her silver fillings replaced and cleansed her body of the accumulated mercury by taking 1 Tbs of activated charcoal powder in water several times a day to adsorb the mercury.

Another huge hidden source of mercury are **vaccines**. The flu vaccine and several other vaccines in the U.S. still contain mercury (thimerosal), and many other vaccines contain aluminum,



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*Nearly **all** fish and **seafood** contain some amount of **mercury.***

42 Jaishankar M, Tseten T, Anbalagan N, Mathew BB, Beeregowda KN. “Toxicity, mechanism and health effects of some heavy metals.” *Interdisciplinary Toxicology* 7.2 (June 2014): 60–72.

43 Tchounwou PB, Yedjou CG, Patlolla AK, Sutton DJ. “Heavy Metals Toxicity and the Environment.” *EXS* 101 (2012): 133–164.

44 Björkman L, Sandborgh-Englund G, Ekstrand J. “Mercury in saliva and feces after removal of amalgam fillings.” *Toxicology and Applied Pharmacology* 144.1 (May 1997): 156–62.

45 You can contact DAMS at amalgam.org or 651-644-4572 to find a mercury-safe dentist.

another harmful heavy metal. Especially was exposure to mercury high for those who received vaccines in the 1990s up until the year 2001. This is because there were numerous additional vaccines added to the schedule during the '90s and many contained high levels of mercury way above the EPA's limits of safe exposure.

Other sources of heavy metal exposure are residential and commercial construction materials, cosmetics (60-80% of all lipsticks on the market contain lead), deodorant (aluminum), contaminated drinking water (old lead or copper pipes, arsenic), air pollution, certain food products (rice especially from the central U.S.).



Exposure to heavy metals is a very serious thing as it usually leads to many numerous and terrible problems. Here are just a few of the known effects:

- brain lesions similar to those of Alzheimer patients
- neurotoxicity and neurotransmitter disturbance
- neurological degenerative malfunctions that copy diseases such as multiple sclerosis, Parkinson's disease, and muscular dystrophy
- blood vessel damage
- impairing of any organ and irreversible changes in the vital organs
- malfunctioning of nerves, kidneys, and muscles
- skin lesions
- many types of cancers
- lung disease
- hypertension (high blood pressure) and heart disease
- diabetes⁴⁶
- microtubule destruction and mitochondrial damage
- accumulation of neurotoxic molecules such as serotonin, aspartate, and glutamate⁴⁷

Believe it or not, this is a *short* list of all the issues that arise from heavy metal poisoning. Another complication of heavy metal poisoning is that viral and bacterial infections will feed off of heavy metals and will thereby grow stronger. I think you get the point, heavy metals in the body are bad.

Some people have severe health problems, including autoimmunity, from heavy metal toxicity alone despite maintaining a health lifestyle including a healthy diet and exercise. Heavy metals can be very difficult for the body to naturally eliminate since they disrupt the very detoxification pathways designed to detox them. But there are simple ways to help your body in doing this which I'll discuss in *Step 4: Cleanse/Detox*.

⁴⁶ Smith AH, Lingas EO, Rahman M. "Contamination of drinking-water by arsenic in Bangladesh: a public health emergency." *Bulletin of the World Health Organization* 78.9 (2000): 1093-103.

⁴⁷ Patrick L. "Mercury toxicity and antioxidants: Part 1: role of glutathione and alpha-lipoic acid in the treatment of mercury toxicity." *Alternative Medicine Review: A Journal of Clinical Therapeutic* 7.6 (Dec. 2002): 456-471.

1i.) Chemicals in personal care and cleaning products

The key in dealing with chemicals is by first understanding where they are in your environment, limiting your exposure to them, and cleansing them out of your body. Eliminating chemicals from your body will relieve the burden on the different organs and systems which are being held down. Many times, just removing the toxic burden that's being heaped upon these organs will enable them to begin operating properly again.

Only 250 of the 84,000 chemicals registered for commercial use in the U.S. have actually been tested by government agencies.⁴⁸ That's less than 1%! Four billion pounds of chemicals are dumped into the U.S. environment every year.⁴⁹ In 1994, 177-million pounds of these chemicals were known cancer-causing carcinogens.⁵⁰ That figure has now increased.

Exposure to chemicals has been proven to alter our DNA and then disease is the result as the same or similar epigenetic changes are found in people with similar diseases.⁵¹ So chemicals will change your DNA to breed disease instead of health. No thank you! Which chemicals? Standard air pollution, benzene which is found in paint and gasoline, BPA in plastics, and a host of others commonly found in society.

Many personal care and cleaning products have chemicals which add to the toxic load on the body. We are exposed to these harmful chemicals by breathing them and by absorbing them through our skin. Hormone and nicotine patches work because our skin absorbs what we put on it. All of those pores covering your skin are like countless little mouths open wide to receive whatever we put on them. When you consider how many harmful chemicals you're exposed to on a daily basis from the personal care and cleaning products you use, you can see why replacing these with natural products will ease the toxic load on your body. Consider how many there are:

- cleaning products: dish soap, dish detergent, bathroom cleaners, disinfectants
- air fresheners
- laundry detergent, fabric softener, dryer sheets, wrinkle removers
- soap, shampoo, conditioner, shaving cream
- toothpaste, mouthwash
- deodorant
- hair gel, hair spray
- makeup



48 "New Report Finds Chemical Industry Is 'Blowing Smoke' When It Claims Self-Regulation Works." *Center for Effective Government (CEG)*. Project On Government Oversight, 22 Oct. 2015. <https://www.foreffectivegov.org/blowing-smoke-press-release>

49 "TRI National Analysis 2014." *EPA Environmental Protection Agency*. 2014. https://www.epa.gov/sites/production/files/2016-01/documents/tri_na_2014_complete_english.pdf

50 Schettler T, Solomon G, Valenti M, Huddle A. "Generations at Risk: Reproductive Health and the Environment." *MIT Press*, 1999.

51 Baccarelli A, Bollati V. "Epigenetics and environmental chemicals." *Current Opinion in Pediatrics* 21.2 (2009): 243-251.

- perfume, cologne
- lotion, face cream
- sunscreen
- bug repellent

Women are especially at risk for this since they use the majority of personal care products on the market. The average woman applies 168 chemicals to her body every day by the use of personal care products.⁵² Women are also usually the ones using the household cleaning products. My wife and I met a natural skin care product specialist several years ago who pointed out that women are several times more toxic than men in this area due to all of the chemicals they drench themselves in. This is no surprise when you consider that autoimmune disease is one of top 10 leading causes of death among women. People who move to more natural personal care products and household cleaners can greatly mitigate this toxic exposure.

We avoid these harmful ingredients in our cleaners and personal care products:

- **“Fragrance”**: can be any mixture of chemicals (even up to 200) to produce desired scent
- **Phthalates**, also listed as “fragrance”: disrupts hormone function, causes reproductive abnormalities decreasing male fertility, causes premature delivery and endometriosis in women
- **Parabens**: mimics estrogen, disrupts hormone function, nervous system, and immune system (99% of breast cancer samples analyzed contained parabens)
- **Mineral oil** (baby oil is simply perfumed mineral oil): contains TMPD (pristane) causes abnormal immune function similar to lupus autoimmunity, produces inflammation in liver, spleen, and lymph, linked to rheumatoid arthritis
- **Phenoxyethanol**: depresses the central nervous system
- **Polyethylene glycols (PEGs)**: often contaminated with ethylene oxide and 1,4-dioxane, two carcinogens
- **Butylated compounds (BHT, BHA)**: used as a preservative, mimics estrogen, disrupts hormone function, may induce skin allergies, linked to organ, developmental, and reproductive toxicity
- **Urea**: made from ammonia and CO₂ (two of your body’s waste products excreted in the urine and skin), releases formaldehyde which causes cancer, skin allergies, and asthma
- **Quaternium-15**: releases formaldehyde, a carcinogen
- **Diethanolamine**: linked with skin and eye irritation and possibly liver problems
- **Nonphenol ethoxylate (NPE)**: toxic to nerves, irritating to skin
- **Linear alkyl benzene sulfonates (LAS)**: irritating to skin and eyes, carcinogen
- **Petroleum distillates**: linked to cancer and lung damage

⁵² “Exposures Add Up — Survey Results.” *Environmental Working Group (EWG)*, 15 June 2004. <https://www.ewg.org/skindeep/2004/06/15/exposures-add-up-survey-results/#.W1DJYH4nbYI>

There are so many; it seems like too many to even list or keep track of. But while most of the popular brands of these products contain many of these carcinogenic, allergenic and harmful chemicals, there are also many natural products made by smaller companies which make their products toxin-free. The Environmental Working Group has a tool on their website where you can look up any cleaning product⁵³ or personal care item⁵⁴ to find each product's individualized score of how toxic they are. With this tool we've been able to identify which are the least toxic cleaning and personal care products on the market.

We also use baking soda, vinegar, and essential oils to clean and for personal care which are very inexpensive. My wife has really had fun making her own deodorant and found that it actually works better than many we've found at the store.

HOMEMADE DEODORANT

1 Tbs beeswax (or cocoa butter)

1 Tbs coconut oil

2 Tbs arrowroot powder (or organic cornstarch)

1 Tbs magnesium chloride powder (grind flakes in a coffee grinder to make powder)

1 Tbs baking soda

5 drops tea tree oil

15-25 drops preferred essential oil (lavender, rosemary, cedar wood, cypress, or sage)

Instructions: Melt the beeswax and coconut oil by placing them in a metal cup or bowl and then place that metal cup so that it is floating in simmering hot water. After they are melted, stir in the rest of the ingredients. Pour into a deodorant container and put it in the fridge to cool and harden.

1j.) Environmental toxins

In trying to reduce the environmental toxins we're exposed to, our attention turns to the **air** and **water**. They are factors that may be easy to overlook because we don't always see what's in them. But when you consider them in regard to our levels of exposure, they would rank like this from greatest to least — air, water, then food.

I had an incredible learning experience during my healing process. I was doing great, improving in my health, sticking to my program, and then we moved to a different location for three months for a series of speaking engagements. My health took a sharp dive for the worse while we were there. During this time, I suffered from terrible chronic fatigue and my skin fungus became out of control. As my health was getting worse during those three months, we were trying to figure out what was causing this decline. After learning more about the area and talking with the locals, we figured it out. It was the poor air quality!

The area was in the north central valley of California where there is a lot of agriculture. You can usually see planes flying over fields and orchards spraying chemicals into the air onto the plants. We learned that walnut trees, one of the main crops there, get sprayed very heavily. We would see

⁵³ <http://www.ewg.org/guides/cleaners>

⁵⁴ <https://www.ewg.org/skindeep/>

men on the vehicles that were spraying the trees dressed like they were going to outer space with big white one-piece outfits and ventilator masks. There were also many rice fields in that area. Right when we arrived in the fall, they would burn the fields after the harvest to get rid of the deep roots. So the air was often filled with thick smoke in the evening. This town also had a bad mosquito problem because of the flooded rice fields, and every so often a plane would fly over the town and spray the entire community with mosquito killer chemicals. Although this area was in the country and didn't have the smog pollution that a city would, the air was filled with pollution from the herbicides, pesticides and smoke. This was a tough time, but God held our hands through it.

What we learned from this experience is that poor air quality has a huge effect on our health. When we left, my health improved again. We met numerous persons in this town with autoimmune diseases. Most of them said they always felt better when they left the area for awhile. We learned of one lady who was seeing a specialist for her illness several hours away. She just couldn't get better. Her doctor finally told her that he wouldn't see her anymore until she moved out of this area with poor air quality. She moved up to a rural area not too far away but was above the lowland air pollution at around 2,000 feet. Her health immediately began to improve. She can now even tell a difference when she drives through that area.

Living in cities is another way that many are exposed to serious air pollution in the form of smog. If I had to work in the city, I would make sure and live in the neighboring hills or countryside outside of the smog and pollution of the lowlands and just commute in. If I currently lived in a city or polluted area, it would be worth the move to me.

Another source of air pollution is household mold infections. Many have found their allergies completely resolve after removing any exposure to mold or mildew in their house.

Water is another means whereby we can be exposed to environmental toxins. Making sure I was drinking clean water was key in my healing. A recent study of the nation's drinking water found more than 200 unregulated chemicals in the tap water of 45 states.⁵⁵ The most common sources were disinfectant byproducts and agricultural contaminants found at levels above government issued guidelines (not that any amount is good). Pharmaceuticals are now being found in the water supply as well.

In considering an alternative to tap water, bottled water is not any better. Around 25% of bottled water comes from the tap but with an extreme markup in price. Plastic bottles leach BPA and other cancer-causing chemicals into the water, especially when exposed to heat or sit for a length of time.

Two of the most effective methods of purifying water are reverse osmosis and water distillation. My wife and I purchased a countertop water distiller several years ago for less than \$200, and it has more than paid for itself. Water distilling mimics nature's cycle of evaporation, condensation, and then rain. The contaminants are left behind. After we run the six hour cycle on our water distiller, we open it up to clean it out and fill it up again. Every time, we find smelly white mineral deposits encrusted on the bottom and about 1 Tbs of brown liquid chlorine and fluoride. We did the math of how much chlorine/fluoride we've avoided drinking by distilling our water. Over the course of five years, the distiller has saved us from drinking over 3 1/2 gallons of straight chlorine/fluoride each! We both have our own 40 oz. stainless steel water bottle that we fill up and take with us as we go about our day. It's hard for us now when we're traveling to drink water

55 "EWG's Tap Water Database." *Environmental Working Group (EWG)*. <http://www.ewg.org/tap-water/reportfindings.php>

that tastes like chlorine because we're used to the clean stuff.

It's wonderful to have a good well as a source of water. However, it is a good practice to have your well tested as even groundwater can be contaminated. This is exactly what happened to our cousin Donny. He and his young family lived on a piece of country land up in eastern Washington. Donny developed a large tumor the size of a grapefruit in his abdomen. What's strange was that several other members of his small 12 member country church also had tumors showing up in their livers and other areas



This is a picture of what we commonly find in the bottom of our water distiller.

of the body. He tested his well water and realized what was happening. There were many farms in his surrounding area, and 50+ years of fertilizers, herbicides and pesticides had leached down into the water table over the years. He was the one who would drink the most water out of all the family. He would often drink over a gallon a day as he would be working in the hot sun. His body had become a water filter and the tumor was the accumulated result.

1k.) Refined sugar

Refined sugar feeds the growth of yeast, candida and bad bacteria. When these bad bacteria outnumber the good, it can damage the gut by creating exotoxins which eat holes in the intestinal wall. Local raw honey, organic dates, and organic raisins are the best to use for sweetening. Stevia (in the unprocessed, green powder form) is especially good if you're trying to go for a very low-sugar diet for a time.

Summarizing the List of Harmful Foods and Toxins

- a) GMOs (especially soy, corn, and canola) and pesticide-laden produce
- b) Gluten
- c) Meat, poultry, fish, and animal products (dairy, cheese, and eggs)
- d) Soy and peanuts
- e) Medications
- f) Tobacco and alcohol
- g) Caffeine
- h) Mercury and other heavy metals
- i) Chemicals in personal care and cleaning products
- j) Environmental toxins in the air and water
- k) Refined sugar

Key offending food items such as gluten, dairy, soy, and corn should immediately be removed until food sensitivity tests (via stool sample from a lab such as Entero Lab) verify that they are safe to eat again in their organic form. Unfortunately, even the non-GMO versions of foods like soy and corn can be problematic if the body has been producing antibodies against them for a long time. The immune system needs a break from them to give itself a chance to “reset,” and then they can be reintroduced. I waited six months until I reintroduced organic corn and over three years before reintroducing organic, certified gluten-free oats and organic soy. I still haven't reintroduced gluten even its organic, ancient grain form. And some foods should never be reintroduced such as dairy and meat.

All the gut healing and detoxing programs in the world won't help if food that your body is identifying as a toxin is regularly being eaten. Even a one-time, small exposure to a food your body is having an allergic response to such as gluten or dairy is enough to set you back weeks in your healing. You have to be strict. Weeks and months of healing can be thrown out the window in a matter of minutes if you are not careful about what you eat. Thankfully, this doesn't mean all joy is taken out of life. There are plenty of great autoimmune-safe recipes.

What's Left to Eat?

Those were quite a few damaging foods and toxins, weren't they? You're probably thinking, “What't left to eat???” One place to start is to do an online search for vegan and gluten-free versions of your favorite foods. This is a nice way to still enjoy your favorite foods, but using different ingredients that won't hurt you. So for example, you might search “gluten-free vegan pizza recipe.” And then just make sure that you use non-GMO, mostly organic ingredients. But a simpler place to start is to establish some basics that are easy to make and you can eat every day. Some easy staples are salads, potatoes, sweet potatoes, steamed vegetables, and quinoa. If you're concerned about losing weight and want to **gain weight**, eat plenty of potatoes, sweet potatoes, coconut milk, avocados, ripe green olives, and seeds. If you want to **lose weight**, focus on veggies such as all leafy greens, broccoli, cauliflower, etc. as they have hardly any calories. If want to stay the same weight, eat a good balance of all. Check out our website ReverseAutoimmune.com as my wife is continually adding more tasty, autoimmune-safe recipes. Start practicing new ways to shop, cook, and eat out according to an autoimmune-safe diet and healing the leaky gut.

While it may seem overwhelming, that you're just swimming in a sea of toxicity, be encouraged. The good news is that this first step “Remove harmful foods and toxins” is actually the biggest thing I did to heal from my autoimmunity. God made the body so incredibly that when we simply stop afflicting it, it actually begins to heal itself!

“I will praise thee; for I am fearfully and wonderfully made ...” Psalm 139:14.

However, I of course wanted the fast track to healing, so I also did steps 2 through 5. This is why I healed so quickly.

On to step #2!

Step 2: Heal the Leaky Gut

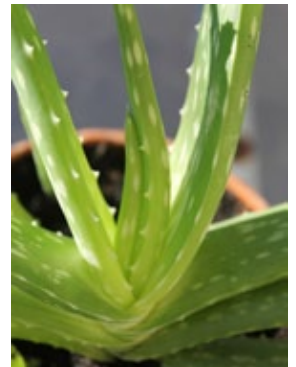
THE 5-STEP PLAN I USED THAT HEALED MY AUTOIMMUNE

1. Remove harmful foods and toxins
- 2. Heal the leaky gut**
3. Nourish
4. Cleanse/detox
5. Remove chronic stress

Once I stopped agitating my small intestine with the culprit foods and toxins, I knew my small intestine would start healing on its own. But there are several helpful things I did to greatly speed up the healing of my small intestine lining.

2a.) Aloe vera

Aloe vera is one of the best things to heal the body's tissue whether it's a sun-burn on the skin or damaged small intestines. On the healing program, I would eat the inside gel of a 1-inch piece of a fresh aloe vera leaf (no skin) 20-30 minutes before each meal to create a coat of protection in the digestive lining. The gel would activate my wife's gag reflex when she tried it, so another way is to blend the gel with water and drink it. I continued this treatment for about 6 months and tapered off when I got the good results back from my blood work.



2b.) *Anti-inflammatory healing soup*

Our naturopathic physician friend gave us a recipe for a delicious, simple healing soup. The onion, orange peel, ginger and turmeric are all very anti-inflammatory. This soup is very healing to the lining of the small intestine. I made this soup almost every night when I was administering my at home healing program and either drank the broth only or ate all of the soup depending on how I felt. You can make a double batch to last two days to save time.

ANTI-INFLAMMATORY HEALING SOUP

1 **onion**, organic, cut in large pieces

1 **potato**, organic, cut in large pieces

water, enough to cover the onion and potatoes

2 inches **orange peel**, organic

1 inch fresh **ginger**, minced

1 inch fresh **turmeric**, minced (or if not accessible, use 1 tsp turmeric powder)

1 tsp **Himalayan mineral salt** or other unrefined full mineral salt



Instructions: Bring to boil, then simmer for 20 minutes. We add a spoonful of **coconut milk** to our bowl to give it a rich, creamy taste. I would eat this soup or drink the broth as the last thing I did before going to bed to coat and heal my small intestine lining. In serious conditions, I would do a 48-72 hour onion broth fast — only drinking the broth from a chopped onion with some salt.

Onions, Italian parsley, and dill weed are some of the highest plant sources of **quercetin**, a powerful antioxidant which is anti-viral, anti-microbial, anti-inflammatory, and anti-allergenic.¹ Quercetin is incredibly healing to your small intestine. It seals the gut and acts as an antihistamine.² A side note on cancer — quercetin also reverses the phenomenon of multi-drug resistance,³ a major factor that makes chemotherapy unsuccessful in completely eliminating cancer cells.

2c.) *Turmeric*

Turmeric is around 5% curcumin, its powerful anti-inflammatory component. It is so powerful of an anti-inflammatory, I have used it for inflammatory pain from an injury and found it to be as effective as pain medications (but of course without any damage to my kidneys and liver). It is more effective when taken with quercetin and some kind of fat, hence the perfect combination of the turmeric, onion, and coconut milk in the soup. Hmm... sounds like a delicious curry dish to me. A recent study even revealed that curcumin was as effective as medications in managing depression.⁴ Incredible!

1 Chirumbolo S. "The role of quercetin, flavonols and flavones in modulating inflammatory cell function." *Inflammation and Allergy Drug Targets* 9.4 (Sept. 2010): 263-285.

2 Hattori M, Mizuguchi H, Baba Y, et al. "Quercetin inhibits transcriptional up-regulation of histamine H1 receptor via suppressing protein kinase C- δ /extracellular signal-regulated kinase/poly(ADP-ribose) polymerase-1 signaling pathway in HeLa cells." *International Immunopharmacology* 15.2 (Feb. 2013): 232-239.

3 "Quercetin." *PubChem Open Chemistry Database*, National Center for Biotechnology Information.

4 Sanmukhani J, Satodia V, Trivedi J, et al. "Efficacy and safety of curcumin in major depressive disorder: a randomized controlled trial." *Phytotherapy Research* 28.4 (Apr. 2014): 579-585.

TURMERIC ANTI-INFLAMMATORY DRINK

¼ cup water

1 ½ tsp turmeric powder

1 tsp coconut milk

1 tsp of honey (optional)

pinch cayenne pepper (optional, enhances potency of curcumin in turmeric⁵)



This drink can be taken 1 to 3x/day until inflammation symptoms go away and/or until blood work is showing a low sedimentation rate (which would indicate no inflammation).

2d.) L-Glutamine

L-Glutamine is an anti-inflammatory amino acid that is very effective in healing leaky gut.⁶ It coats your intestinal cell walls, acting as a protector from irritants. I focused on eating foods which are very high in L-Glutamine — **cabbage, beets, kale, spinach, and parsley**. Cabbage juice is known to be a number one healer of stomach ulcers,⁷ and this is attributed to its high content of L-Glutamine.

NOTE FOR THOSE WITH THYROID ISSUES: (Hashimoto's and Graves' autoimmune diseases) may choose to avoid the cruciferous vegetables in their raw form — arugula, kale, collard greens, cabbage, broccoli, cauliflower, etc. When in their raw form, they can increase the need for iodine and therefore may be a burden to an already compromised thyroid gland. If you do have any thyroid issues, you can still eat the cabbage and kale which are high in L-Glutamine, but just steamed or baked to avoid this thyroid challenge until you no longer have a thyroid issue and you have sufficient iodine in your system.

2e.) Pectin

Apples and **pears** are one of the highest sources of pectin, which does so many wonderful things. It's a prebiotic, meaning it's a great source of food for the good bacteria in our colons. These good bacteria convert pectin into short chain fatty acids that actually heal leaky gut.⁸ Pectin even binds with and eliminates some heavy metals from your body. Don't peel the apples since most of the pectin is found in the peel and core. (But then make sure it's organic since you'll be eating the peel — it's also near the top of the Dirty Dozen list.) Raw apples are great, but if you cook them, they're actually a bit easier to digest for those with damaged digestive systems and you can eat more of them in a cooked form than raw.

5 Manjunatha H, Srinivasan K. "Protective effect of dietary curcumin and capsaicin on induced oxidation of low-density lipoprotein, iron-induced hepatotoxicity and carrageenan-induced inflammation in experimental rats." *The FEBS Journal* 273.19 (Oct. 2006): 4528-4537.

6 van der Hulst RR, van Kreel BK, von Meyenfeldt MF, et al. "Glutamine and the preservation of gut integrity." *The Lancet* 341.8857 (29 May 1993): 1363-1365.

7 Cheney G. "Rapid Healing of Peptic Ulcers in Patients Receiving Fresh Cabbage Juice." *California Medicine* 70.1 (1949): 10-15.

8 Rabbani GH, Teka T, Saha SK, et al. "Green banana and pectin improve small intestinal permeability and reduce fluid loss in Bangladeshi children with persistent diarrhea." *Digestive Diseases and Sciences* 49.3 (2004): 475-484.

You'll never guess which kind of apples are known to have the most pectin — crab apples. You know the ones in your neighbor's yard that just fall all over the ground or that wild apple tree in the middle of that barren field which produces those small tart apples. Those are gut-healing pectin gold mines. So go ask your neighbor if you can glean his crab apples and make yourself a big batch of applesauce or apple butter.

CROCK POT APPLE BUTTER

- 6 lbs. crab apples, sliced
- 1 cup raw honey
- 2 tsp ground coriander
- 1 tsp ground cardamom
- ½ tsp ground ginger
- ¼ tsp Himalayan salt

Instructions: Cook in a crock pot on low for 7-11 hours or until thickened and dark brown. Mash with a potato masher or electric beater until smooth.



2f.) Licorice root tea and slippery elm tea

Licorice root has long been used to treat peptic ulcers. It relieves irritation in the intestinal and stomach linings. One study used ibuprofen to create stomach and intestinal ulcers in rats (I know, I feel bad for the poor little rats too). Licorice decreased the number and the size of the ulcers in the rats.⁹ This herb is especially beneficial if the leaky gut is being caused by stress because it lowers cortisol levels. I drank this tea several times a week.

Slippery elm is a helpful herb that coats the lining of the small intestine. We make it by simmering 1 Tbs of the inner white powdered bark in 2 cups of water for 5-15 minutes. It comes out as a thick tea and it's very tasty with carob and raw honey.

2g.) Coconut

Coconut is especially good for your gut. The medium chain fatty acids (MCFA) in coconut are easier to digest than other fats. Coconut is also anti-fungal, anti-bacterial, and anti-viral.

“Bless the LORD, O my soul, and forget not all his benefits: Who forgiveth all thine iniquities; who healeth all thy diseases.”

— Psalms 103:2, 3

On to step #3!



⁹ Dehpour AR, Zolfaghari ME, Samadian T, Kobarfard F, Faizi M, Assari M. “Antiulcer activities of liquorice and its derivatives in experimental gastric lesion induced by ibuprofen in rats.” *Science Direct* 119.2 (9 June 1995): 133-138.

Step 3: Nutralify

THE 5-STEP PLAN I USED THAT HEALED MY AUTOIMMUNE

1. Remove harmful foods and toxins
2. Heal the leaky gut
- 3. Nutralify**
4. Cleanse/detox
5. Remove chronic stress

Our small intestine is where most of our nutrients are absorbed from the food we eat into our bodies. Since damaged villi in the small intestine comes along with all autoimmune diseases, we are not going to be absorbing nutrients like we need to which results in being malnourished in key nutrients, vitamins and minerals. A whole host of side effects can stem from this problem.

I feel certain that I had a nutrient deficiency in my body. A variety of factors led me to believe this. First, I was very slender and had great difficulty gaining weight no matter how hard I tried. Secondly, I would get extremely fatigued at times and would only get my energy back after taking large amounts of liquid nutrients. And third, the fungal skin infection was overtaking my body.

I later learned that fungus preys on weak bodies and compromised immune systems. This skin problem ended up being a worse issue than my autoimmune condition itself. It took my wife and I countless hours over the course of seven years, experimenting with many different healing approaches to finally see it go away. Like myself, we've had friends who have developed side infections due to an autoimmune condition that ended up becoming an even more difficult issue to deal

with altogether.

The amazing thing about the body God designed for us is that He programmed it to heal itself. The body will work and fight to heal if we simply give it the proper tools. Therefore, I found that nutrifying my system was a key element in my recovery. The goal is to get high enough amounts of nutrients in a short amount of time. How did we do it? Juicing.

3a.) Fresh green juices

Eating the most nutritious fruits and vegetables is always a great thing to do. However when it come to rapid healing, unless you have your own garden you will never be able to eat the amounts of produce needed to rapidly replenish your undernourished body because of our greatly depleted soils. This is why juicing is so helpful.

I'll be the first to say that juicing is not convenient. You can expect to spend 30 to 60 minutes from the beginning of preparation to the end of clean up. Sometimes I would get up early and get all of my juicing done for the day before breakfast. Other times I would have to do it after work in the evening. One thing I can say for sure is that as inconvenient as it can be, it is a lot less inconvenient than being sick with an autoimmune disease.

WHICH JUICER TO GET

If you don't already have a juicer you may be wondering what kind you should get? Not all juicers are created equal. When you think of a juicer you probably think of the ones with the super fast spinning blades. These definitely get the job done quicker, however the fast spinning blade creates heat from the friction which destroys some of the nutrients. Also, these juicers aren't very efficient at juicing greens which is the most important kind of produce to juice. This is because greens are at the top when it comes to nutrient value.

The type of juicer we have is the slow kind which are called masticating or cold press juicers. This kind has an auger bit and metal screen system that slowly crushes the produce extracting the juice. The pros are that you get more nutrient value out of your juice, it will keep longer if you need it last several hours, and it juices greens really well. The con is that it takes longer.

Having said all of this, the most important thing to think about when getting a juicer is buying the one you're actually going to use. You see a lot of juicers at thrift stores. This is because many people buy them with good intentions, but then after the experience of washing and cutting the produce, juicing it, and then cleaning it, they put it away and never use it again. The point I'm making is to get a juicer that's doesn't have a million parts and isn't going to be a bear to clean. Otherwise, even if it's a really good quality juicer you probably won't use it that often, and it would be better to use a fast spinning juicer more often than to never using a slow spinning one. I think



we found a good compromise with ours. It's a slow masticating one yet only has six parts that need to be cleaned. It's a Samson — we've had it for over 12 years, and it still works great.

WHY NOT JUST BUY THE JUICE READY MADE?

Instead of spending the time juicing, why not just buy a gallon of juice at the store? Here's why. Store bought juice goes through different stages of processing in order to meet commercial standards. First, the produce is almost always put into very high-speed commercial centrifugal juicers that cause heat and oxidation, damaging valuable phytonutrients. Secondly, the juice is pasteurized, meaning it's heated for about 45 minutes at 110 degrees Fahrenheit to kill impurities but also kills more nutrients (again making the entire point of juicing obsolete). It may give you enough energy to function during a juice fast, but it won't nutfify you. Several studies have shown that the overall nutrient, antioxidant, and antiviral properties of store bought juice is far inferior to fresh homemade juices.^{1 2}

Raw fruits contain **glutathione**, the body's major cleansing antioxidant protein that helps us to detox things such as heavy metals and pesticides. While glutathione can be obtained from the livers of animals, only glutathione obtained from fruit sources has been associated with reduced risk of certain kinds of cancer.³ In contrast to freshly juiced fruits, most commercial fruit juices do not contain glutathione anymore after they've been processed.

Lastly, many juices are reduced to a concentrate in which 80% of the water content is removed. In this state, synthetic vitamins and minerals, sweeteners, colorings, and flavorings are added.

So if you stopped by a juice bar and had them make a fresh juice for you on the spot, that would be just as good as juicing at home as long as it's made with organic produce. This is a viable option if you're out and about and need something convenient.

FRESH JUICE RECIPES

3x/day for 1 week, 2x/day for 1 week, 1x/day until better
(*All ingredients should be fresh/raw and organic.*)

Super Nutfifier

- 4 midsize leaves of swiss chard, kale, or collard greens
- 1/2 bunch of parsley
- 2 cups cabbage
- 1/2 cucumber
- 4 celery stalks
- 6 carrots

1 Konowalchuk J, Speirs JI. "Antiviral effect of apple beverages." *Applied and Environmental Microbiology* 36.6 (Dec 1978): 798-801.

2 Bakkalbaşı E, Menteş Ö, Artik N. "Food Ellagitannins—Occurrence, Effects of Processing and Storage." *Critical Reviews in Food Science and Nutrition* 49.3 (17 Dec 2008): 283-298.

3 Flagg EW, Coates RJ, Jones DP, et al. "Dietary glutathione intake and the risk of oral and pharyngeal cancer." *American Journal of Epidemiology* 139.5 (1 Mar 1994): 453-465.

Anti-Pain & Anti-Inflammation

- 1/2 inch fresh turmeric (anti-inflammatory)
- 1/2 inch fresh ginger (anti-inflammatory)
- 1 orange with peel *make sure it's organic (anti-inflammatory)
- 1 inch thick cross section cut of pineapple (bromelain in pineapple is a pain reducer)
- 6 carrots
- *Stir in at the end:* 1.5 - 3g MSM Methylsulfonylmethane (pain reducer especially for joints)

Liver Healer

- 2 beets (liver cleanser)
- 3 carrots (high in Vitamin A)
- 1 grapefruit, peeled (Vitamin C helps cirrhosis)
- 1 lemon, peeled (liver cleanser)
- 1 apple (liver stimulator)
- 3 kiwis, peeled (high in Vitamin K)

Iron and Energy Booster

- 3 big handfuls of spinach
- 4 midsize leaves of swiss chard, kale, or collard greens
- 6 carrots
- 1 apple
- *Stir in at the end:* 1 serving of liquid iron

(Garden of Life Mykind Organics Plant Iron & Organic Herbs is the only liquid iron supplement I've found that derives its iron from an organic food blend and didn't have other allergenic ingredients such as gluten, soy, dairy, or citric acid.)

During the months of doing my at-home self-administered healing program, I aimed to drink 2-3 cups of fresh juice every day. I strained it well to have it absorb quickly (this way it is similar to a blood transfusion). I would make sure to drink it on an empty stomach at least 2 hours after a meal, and I would wait 20 minutes after drinking it before eating a meal. I would consume it right away or within 15 minutes of making it in order to benefit from it the most. This juice contains very high nutrients, especially the kale, collards, and swiss chard. Leafy greens are especially healing in nature.

NOTE: Those with thyroid issues (Hashimoto's, Graves' autoimmune diseases) may choose to avoid the raw cruciferous vegetables such as kale, collard greens, cabbage, broccoli, cauliflower, etc. because in being digested in their raw form, they can increase the need for iodine and therefore may be a burden to an already compromised thyroid gland. Instead, use chard, spinach, and

lettuces for the leafy greens in your juices and salads as they are not cruciferous but still very high in nutrients. You can also eat the cruciferous vegetables steamed or baked to avoid this thyroid challenge until you no longer have a thyroid issue and you have sufficient iodine in your system.

3b.) Immune builder drink

For those dealing with difficult infections, this drink greatly aids the immune system in killing and eliminating them. I used this drink to help kill my fungal infection.

3x/day for 1 week

2x/day for 1 week

1x/day until healed

- juice of 1-2 small lemons
- 4-6 garlic cloves, medium size
- 1 Tbs onion
- 1 inch piece of turmeric root or 1 tsp turmeric powder
- pinch cayenne (optional)
- *optional*: handful of cilantro, basil or parsley
- water, enough to blend

Blend. This is one entire day's recipe. I took half before or after breakfast and the other half before or after lunch (or as a salad dressing). If you opt to add in a handful of fresh herbs such as cilantro, basil, or parsley, it comes out like a pesto sauce — very delicious!

3c.) Probiotics to restore good gut bacteria

You have more bacteria living in your colon than you have human cells in your body. In fact, there are over 100 times more bacterial DNA in your gut than there are of your own DNA. The good bacteria in your intestines are important for nutrient digestion, immune health, metabolism, and hormone response.

A condition of autoimmunity in the body is often triggered when something has caused the destruction of the good bacteria in your intestines. When the good bacteria are destroyed, the bad bacteria grow out of control and can wreak havoc in the body. This gut bacteria imbalance is called “**gut dysbiosis.**” By wonderful design, the default state of the gut is that the good bacteria outweighs the bad in the ideal balance of around 85% good bacteria and 15% bad bacteria. As long as the balance between the good and bad bacteria remains in favor of the good outweighing the bad, everything is fine. The good will keep the bad in check as long as it is the majority.

So how do the bad bacteria sometimes get the upper hand? By ingesting various substances that kill off our good gut bacteria and feed the bad bacteria.



Here are common factors that lead to this bacteria imbalance in the gut:

- Antibiotics
- Birth control pills
- Use of hormones, especially immunosuppressants like steroids (Hello? The exact medications given to manage autoimmunity.)
- Alcohol
- Bad diet, especially one high in refined sugar
- Stress
- Poor digestion
- Tap water containing chlorine and/or fluoride

Antibiotics damage gut flora and good bacteria, promoting the overgrowth of fungus and bad bacteria endotoxins. (Out of all types of prescription drugs, antibiotics are also the ones most likely to cause liver damage.)⁴ Tap water with chlorine and fluoride also harm the body's good bacteria. Alcohol, chronic stress, refined sugar and a high-fat diet especially promote the growth of bad bacteria originating from *E. coli* and salmonella. Ovalbumin (the protein in egg whites) is often contaminated with these endotoxins. In fact, when researchers need to get ahold of some lipopolysaccharides (part of these bad bacteria) for a research study, they most often go to eggs.

This is how your good gut bacteria is reduced or even wiped out, allowing the bad bacteria to dominate. Bad bacteria produce gas and ethanol (alcohol) which causes permeability in the colon, leaky gut. These bad bacteria negatively effect the brain causing increased anxiety, depression, and decreased brain function. They are also linked to obesity and insulin resistance.

Conditions that are often caused by gut dysbiosis are irritable bowel syndrome, acne, food allergies, chronic fatigue, and depression.

The bad bacteria excrete many different types of waste byproducts in your gut. When the bad bacteria colonies get too large, the body gets overburden by the increased amounts of waste to remove. The body's pathways that eliminate toxins become overwhelmed, and then symptoms such as headaches, rashes, and fatigue can be the result.

What is needed to restore good gut bacteria are probiotics. Many often ask, what is a good probiotic? Commercial probiotics are unregulated so it is questionable whether or not you're actually getting the number and kinds of strains of good bacteria that are being advertised. Also, there may be specific strains of bacteria your body needs that are not present in these commercial probiotics.

Some recommend fermented products such as sauerkraut and kombucha to increase good gut bacteria. However, while fermented products do create good bacteria, the fermentation process also proliferates bad bacteria resulting in alcohol and gas. While sauerkraut has the right ph to generate good bacteria, once it enters the stomach, the acidity of the stomach kills all but several strains of the good bacteria.⁵

⁴ Chalasani N, Fontana RJ, Bonkovsky HL, et al. "Causes, clinical features, and outcomes from a prospective study of drug-induced liver injury in the United States." *Gastroenterology* 135.6 (Dec 2008): 1924–1934.

⁵ Zielińska D1, Rzepkowska A, Radawska A, Zieliński K. "In vitro screening of selected probiotic properties of *Lactobacillus* strains isolated from traditional fermented cabbage and cucumber." *Current Microbiology* 70.2 (Feb 2015): 183-194.

What is even better than sauerkraut and other fermented foods is raw cabbage. **Raw cabbage** is one of the richest sources of good bacteria. When combined with the ph of the stomach, the raw cabbage raises the ph from 2 to 4 which is an ideal ph environment to grow lactobacillus plantarum, one of the best good bacterias.

Unheated honey is high in lactobacilli which is one of the reasons it is also so effective topically in healing wounds. When you're looking to find unheated honey, make sure you confirm that it is unheated. Honey can be labelled "raw honey" and still heated up to 120 F. While this would still be a good honey, it won't have the probiotics in it as this temperature will kill the probiotics.

Sprouted seeds are one of the best ways to grow your own probiotics. You can sprout sunflowers, buckwheat, mung beans, lentils, flax, chia, alfalfa. We soak them overnight or for 8 hours, then drain and rinse well several times. Then they just need to be rinsed once to twice a day until they're sprouted and ready to eat.

Microgreens are another way to easily grow your own probiotics. Micro greens are the seedlings of edible vegetables and herbs such as kale, arugula, radish, broccoli, basil, and cilantro. You can easily grow them on your kitchen counter, and it only takes as little as a week before you can harvest them.

As essential as probiotics are to gut health, **prebiotics** are just as important. Prebiotics are foods that feed the good bacteria. Prebiotics include garlic, onions, leafy greens and fruit (all in their fresh raw state).

3d.) Raw fruits and vegetables

A friend of ours went to her annual doctor's appointment. She was surprised to receive the diagnosis of being "overweight" and "malnourished" at the same time. How can you be fat and starving at the same time? This is what can happen when you're not eating enough fruits and vegetables. Your body senses the lack of nutrients and increases your appetite in an attempt to consume more food to get those nutrients. But if you continue to fill up with sugary drinks, refined carbs such as white bread and pasta, meat, cheese, and chocolate, you will keep gaining weight but you won't be getting nourished. And this is how you can end up "overweight" and "malnourished" at the same time. Your body's cells are starving for nutrients but are being gorged with empty calories.

Nutritional myths abound in the U.S. While 90% of Americans polled in a 2011 Consumer Reports study believe that they eat a healthy diet,⁶ this does not reflect the condition of health we have in America. More than two-thirds of Americans are obese or overweight. In fact, the top leading causes of death in the U.S. are a direct result of what people eat and drink — heart disease, cancer, stroke, diabetes, etc.

I focused (and still do focus) on regularly eating many **raw fruits and vegetables**. This is where your vitamins and minerals come from, especially the dark, leafy greens. Dr. Joel Fuhrman created a scale called the ANDI, Aggregate Nutrient Density Index, that measures which foods have the highest nutrient-per-calorie density. It rates each food on a scale out of 1 to 1,000 points. Foods such as salmon, eggs and milk score in the 30's. With fruits, you start to get into the 100's with berries being at the top of the fruits. Vegetables such as cauliflower, broccoli and carrots start to get up into the 300 and 400's. But here is where you get really high into the 500 to 800's —

6 "Americans Falsely Believe Their Diet is Healthy." *Discovery News* 2011.

romaine lettuce, arugula, spinach and bok choy. The charts are topped at 1,000 with kale, collard greens, swiss chard, mustard greens, and watercress!

A great way to incorporate more raw fruits and vegetables into your diet is to begin each meal with as many as you can. So if you're going to have breakfast, start with as much raw fruit as you can. If you get full before moving on to say, a hot millet cereal, then that's great. You filled up on raw fruit. For lunch, start with a large salad. We enjoy a bed of greens topped with finely sliced cabbage, shredded carrot, bell pepper, onion, lemon juice, Himalayan salt, and our homemade parmesan "cheese."

PARMESAN "CHEESE"

1/2 cup sesame seeds

1 tsp garlic powder

1 tsp Himalayan salt

1/2 tsp turmeric powder

Instructions: Grind in a coffee grinder for about 10 to 15 seconds. Sprinkle on salad.

3e.) Vitamin D

Vitamin D is amazing. While the typical drug treatment for autoimmunity is steroids, Vitamin D actually acts as a steroid hormone, increasing your immune system's ability to differentiate between self and foreign invader.⁷ This is exactly what is lacking in the condition of autoimmunity — the immune system gets confused between self and invader and attacks your own cells. Vitamin D boosts your immune system's capacity to self-tolerate. In contrast to using drug steroids which suppress the immune system and thus make you vulnerable to every sneeze, cough and germ around you, vitamin D balances your immune system so your immune system will be a walled fortress for you during your healing.

Sun exposure is the best source of Vitamin D. The sun amazingly turns a form of cholesterol in your body *into* Vitamin D. Just 30 minutes of full sun exposure on a large surface area of your body such as your back gives you around 20,000 IU of Vitamin D₃. That is a massive amount of Vitamin D. Resting in the warm summer sun, soaking it into your back, all the while cholesterol is being turned into something that will strengthen your immune system... Isn't God wonderful and incredible to have designed us this way?

While it is important not to allow your skin to burn, sunscreen inhibits Vitamin D production. An easy solution we use is to simply go without sunscreen for the first 30 minutes or so of being in the sun and then I cover up my skin with clothes or a non-toxic sunscreen thereafter. Also, the darker the skin, the more sun exposure is needed to produce Vitamin D. Because dark skin is a natural sun protection, it requires at least three to five times longer exposure to make the same amount of Vitamin D as a person with light skin.⁸

In the continental U.S., if you live north of the 37th latitude (north of Arizona, Oklahoma or

7 Prietl B, Treiber G, Mader JK, et al. "High-dose cholecalciferol supplementation significantly increases peripheral CD4 Tregs in healthy adults without negatively affecting the frequency of other immune cells." *European Journal of Nutrition* 53:3 (Apr 2014): 751-759.

8 Clemens TL, Henderson SL, Adams JS, Holick MF. "Increased skin pigment reduces the capacity of skin to synthesise vitamin D₃." *Lancet* 319.8263 (9 Jan 1982): 74-76.

North Carolina), the sun is not strong enough for your body to make Vitamin D during the winter months of November through March. While it is possible for your body to save up enough Vitamin D from numerous days in summer sun to last you through the winter, it may also be wise to check your Vitamin D levels come mid-winter to verify if supplementing with D3 may be necessary to get you through the rest of winter. The best time to get good sun exposure is from 10am to 3pm in the spring, summer, and fall.

THE VITAMIN D LINK TO DENTAL HEALTH

Suffering with an autoimmune disease can sometimes wreak havoc on your dental health. During our journey in dealing with my autoimmune disease, I noticed a dramatic downturn in my dental health. It seemed that every time I went in for my six-month dental check up, several new cavities would be spotted. This was discouraging to me because I was the model dental patient. I don't drink sugary drinks or coffee, I brush twice a day and floss every evening. What else was I supposed to do? When I asked my dentist all he could tell me was "genetics." I didn't buy it. However, now that I know the answer, I see that in a way he was kind of right. Let me explain.



My personal dental x-rays showing many of the cavities and fillings I had during my illness.

Vitamin D is very important for dental health. Vitamin D is required for your body to absorb calcium and phosphorous, and these minerals are foundational to maintain strong, healthy teeth and bones. Therefore if you're deficient in vitamin D, you won't be able to absorb calcium, and it's likely you're going to have dental problems. I believe this is exactly what was happening with me. This discovery was hard to come by since my lifestyle lent to plenty of vitamin D. We exercise outdoors often and eat plenty of foods high in calcium and phosphorus. Why was I deficient? With the genetic factor that comes into play with autoimmune diseases, the process of converting vitamin D to its usable form in the cells can become somewhat inhibited. In combination with a damaged gut, other nutrients essential to dental health will also be less absorbable. Therefore when you're healing, it is helpful to make sure you're getting a surplus of vitamins and minerals

to compensate for a damaged gut and mutated genes. So besides juicing to get a high concentration of vitamins and minerals, I made sure I was also getting a high amount of vitamin D during my time of healing by daily sun baths in early spring through late fall. I made sure to continue my vitamin D intake in the winter with D3 in the special skin cream I was applying (which I'll talk more about in the chapter *The Genetic Factor*.)

After I began addressing the root issues that lied at foundation of my poor dental health, I still had to have a few fillings replaced over the next year from the damage that had been done. But combined with healing and incorporating an improved dental regimen that greatly decreased the amount of time acid and sugar was in my mouth, I then saw my dental health drastically improve. I haven't had a cavity since then.

3f.) Digestive enzymes

Digestive enzymes break down our food into the molecules that are body can use — proteins to amino acids, fats to fatty acids, carbohydrates to sugars. We have digestive enzymes in our saliva (which is why it's so important to chew our food very well). Additional digestive enzymes are released in our stomachs. Other enzymes and things such as bile and hormones are secreted as the food moves down through the small intestine. Because of my damaged small intestine due to my autoimmune condition, I utilized digestive enzymes which aided my digestion and absorption of nutrients.

Papaya seeds are one of the best sources of digestive enzymes — papain. We buy Mexican papayas (or organic, non-GMO Hawaiian papayas) and eat about 10 seeds with each meal. We eat them fresh for the first few days after opening the papaya and then we dehydrate the rest of the seeds to use with future meals. Papaya seeds also kill parasites and worms in the body, so you're getting an additional bonus since parasites are actually quite common (1 in 6 Americans are estimated to have parasites). Papaya seeds are also excellent for kidney and liver health.

Pineapple has the digestive enzyme bromelain which is not very helpful in digesting proteins and absorbing nutrients more efficiently, but it is very healing to the digestive tract. It's anti-inflammatory properties also make it effective in reducing pain and swelling from injuries or surgery even more than when compared with antibiotics and painkilling medications such as aspirin.⁹ The pineapple's core contains the most bromelain so we make sure the pineapple is ripe to soften the core before eating it or blending it in a smoothie.

As we age, our stomach produces less hydrochloric acid. If there is not enough acidity in the stomach during digestion, there can be a lack of signal to the rest of the digestive system to secrete the necessary digestive enzymes such as pepsin, which digests protein. Antacids which people take for heartburn make this matter even worse as they neutralize those vital stomach acids. **Lemon juice** taken before or during a meal is a great way to boost the necessary acidity of the stomach and to keep the digestive process moving smoothly along.

3g.) Omega-3s from ground flaxseed

Omega-3 essential fatty acids are excellent for lowering inflammation in the body. There are three kinds of essential fatty acids — ALA, EPA and DHA. While some recommend fish oil to get omega-3s,

⁹ Ordesi P, Pisoni L, Nannei P, Macchi M, Borloni R, Siervo S. "Therapeutic efficacy of bromelain in impacted third molar surgery: A randomized controlled clinical study." *Quintessence International* 45.8 (July 2014): 679-684.

a truly superior source is ground flaxseed. Like we talked about earlier, all fish contain some amount of mercury and this is going to be a higher amount when you're dealing with a highly concentrated substance such as the oil from fish. In addition to heavy metals, fish have more bad fats than they do good, and fish are high in cholesterol. Fish such as salmon and tuna have even more cholesterol than steak. Fish is *not* a health food.

Plant sources of omega-3s have a much higher content of omega-3s than animal sources. Consider that 4 oz. of salmon only has 1.96 grams of omega-3s. But the same amount of flaxseed has over 13 times that amount — 4 oz. of flaxseed has 26 grams, chia seeds 20 grams, and walnuts 10 grams.

	Omega-3s
4 oz. salmon	1.96 grams
4 oz. walnuts	10.30 grams
4 oz. chia seeds	20.22 grams
4 oz. flaxseed	25.92 grams

The kind of omega-3s that flaxseed has is ALA. The body converts ALA to EPA and then DHA. When on a vegan diet, the rate of conversion from ALA to EPA and DHA increases, resulting in levels of these essential fatty acids being the same between vegans and regular fish eaters.¹⁰

My wife and I use a coffee grinder to grind whole flaxseed and then keep it in the fridge so it is fresh when we add it to our smoothies or hot cereals.

3h.) Soaking and sprouting grains, seeds, nuts, and legumes

Grains, seeds, nuts, and legumes/beans are surrounded with a coating of anti-nutrients and enzyme inhibitors (lectins, saponins, and phytates) to protect the seed from beginning to sprout just anywhere. These anti-nutrients prevent the release of 40-80% of the minerals and nutrients. (I feel like I've been getting robbed this whole time!) These anti-nutrients can also damage the intestinal lining and cause leaky gut. Because of this, it is very important to remove these anti-nutrients before consuming anything that is a seed. This can be done by soaking or even better, sprouting them.

Soaking grains, seeds, nuts, and legumes removes the anti-nutrients which cause leaky gut and unlocks the nutrients that were otherwise unavailable. We make sure to soak all of our grains, nuts, legumes and seeds (except flax, chia, and sesame) for around 8 hours (or overnight), drain, then rinse well before eating.

Sprouting is even better to release more of the nutrients including vitamin B-12,¹¹ an essential vitamin for brain and neurological health. After soaking grains and seeds for 8 hours, we sprout them by letting them sit on the counter in a container for several days, making sure to rinse them 1 to 2 times per day. (Note: Don't sprout red kidney beans as they become toxic when sprouted.)

For nuts (except cashews, brazil nuts, macadamia nuts, and pine nuts), we'll soak them for 8 hours, drain, rinse well, and then we dehydrate them until they are dry again. They taste crispy, warm, and delicious right out of the dehydrator. If you don't have a dehydrator, you can put them on a pan in your oven at the lowest temperature leaving the oven door open about six inches.

With grains that we want to bake or cook with such as buckwheat and millet, we will soak them

10 Welch AA, Shakya-Shrestha S, Lentjes M, Wareham NJ. "Dietary intake and status of n-3 polyunsaturated fatty acids in a population of fish-eating and non-fish-eating meat-eaters, vegetarians, and vegans and the precursor-product ratio of α -linolenic acid to long-chain n-3 polyunsaturated fatty acids." *The American Journal of Clinical Nutrition* 92.5 (Nov 2010): 1040-1051.

11 Chavan JK, Kadam SS. "Nutritional improvement of cereals by sprouting." *Critical Reviews in Food Science and Nutrition* 28.5 (1989): 401-437.

overnight, drain, rinse well and then blend them in the blender or food processor with other ingredients to make a dough or batter for baked goods such as pancakes or waffles. It doesn't take that much more work, just a little more planning.

We noticed that especially the small grains such as amaranth and quinoa are very foamy and soapy when we drain and rinse them. These are the "soap-like" saponins we're trying to avoid so we make sure to rinse these well. Garbanzos (chick peas) and red lentils tend to be very foamy too.

Soaking and sprouting grains, nuts, beans, and seeds has been a common practice for thousands of years in various cultures across the world. While people may not have known the science behind it, they did recognize that they're easier to digest and so soaking and sprouting became a part of their culinary practice.

A special note during the worst of your autoimmune recovery: Grains, nuts, and legumes (beans, lentils) are some of the more difficult foods to digest. They're not bad; they're just more difficult to digest. So as having an autoimmune disease means having a weakened digestion, it is very helpful to remove grains, nuts, and legumes for the first two months of healing a leaky gut. (Anything that sprouts as a grass is a grain.) After not having grains, nuts, and legumes for two months or until you feel better, then reintroduce them one by one and see how you do on each one.

Remove for 2 months:

- Oats
- Rice
- Corn
- Millet
- Sorghum
- Teff
- Nuts
- Legumes (beans, lentils)

During those 2 months, eat **seeds** instead:

- Flaxseed
- Chia seeds
- Quinoa
- Buckwheat (not actually a wheat, and there is no gluten)
- Sesame seeds
- Sunflower seeds
- Pumpkin seeds
- Amaranth

When you do reintroduce gluten-free grains and nuts, make sure your oats are organic and certified gluten-free (as they are usually contaminated with gluten), and make sure your corn and rice are organic. And then of course, soak or sprout. If you want to use flours in cooking, there are sprouted flours you can easily find online.

It may feel overwhelming to think of soaking and sprouting in addition to the other changes you're making in your life. But don't worry, it doesn't really take much more time, just a little more planning. And God will help you if you ask Him. He loves you and is with you through this.

"Trust in the LORD with all thine heart; and lean not unto thine own understanding. In all thy ways acknowledge him, and he shall direct thy paths. Be not wise in thine own eyes: fear the LORD, and depart from evil. It shall be health to thy navel, and marrow to thy bones."

— Proverbs 3:5-8

On to step #4!

Step 4: Cleanse/Detox

THE 5-STEP PLAN I USED THAT HEALED MY AUTOIMMUNE

1. Remove harmful foods and toxins
2. Heal the leaky gut
3. Nutralify
- 4. Cleanse/detox**
5. Remove chronic stress

Sometimes people will hit a wall in their healing process. They're eating clean, they're getting enough nutrients through juicing, they're getting adequate rest, water, and sunshine, but they're still sick. Why? Many times it's from the body having become burdened with a toxic load over time and they've never cleansed their body. Most people go years before figuring out they have an autoimmune disease and then just as long before knowing what to do about it. During this time, the body is building up toxins from their food, their environment, and undigested food particles in the bloodstream. It's essential to stop the flow of toxins coming in like we talked about in Step #1, but there's still the need to cleanse because of all the accumulated toxins. Until these are removed from the body, they can continue to create problems such as pain, fatigue, depression, anxiety, brain fog, and insomnia.

Before we get into the nuts and bolts of cleansing, it's important to make sure that the first three steps of the plan have been faithfully followed — 1) remove harmful foods and toxins, 2) heal the leaky gut, and 3) neutralify. Since cleansing is powerful and can be hard on the body, the body

needs to be relatively strong and nourished going into it. It doesn't make sense to cleanse your body while toxic food is still being consumed, while the gut is still damaged, or big nutritional deficiencies still exist. The first three steps need to be in place first, and the body should be properly nourished when going into a cleanse.

Preparing your body by establishing the first three steps doesn't have to take years. Depending on how healthy someone is, it could easily take just weeks. On the other hand, if you notice that you're eating right, juicing, etc. with almost no results for weeks, this might be a sign that there is a nutritional deficiency due to parasites or a viral or bacterial infection. In this case, the best option is to go immediately into the cleansing program to begin eliminating these potential threats. Another possible cause for a nutritional deficiency could be due to a genetic mutation, but I will discuss more about that in the section "The Genetic Factor."

3 Parts to Cleansing

There are three parts to every good thorough cleansing program:

- 1.) Dislodging the toxins
- 2.) Binding the toxins
- 3.) Eliminating the toxins

There are several options in each of these categories to remove accumulated toxins from your body. You'll see how I incorporate various of these elements into my short, intense cleansing schedule and my continued longer term plan.

4a.) Dislodging Toxins: Fasting

The reason for the need to dislodge toxins is because toxins do a very good job of hiding in the body. They can hide in the gut by encasing themselves under a protective sheath called biofilm. They can hide in fat cells, in organ and muscle tissues, or even in fecal matter that's plastered inside the walls of the colon. Pretty gross. We want that stuff out of there, and to do this they need to be dislodged. The good news is that the body already knows how to do this; it just needs to be aided. The main way toxins are dislodged during a cleanse is by fasting.

The body occupies itself with two main functions — digestion and cleansing. When the body has nothing to digest it goes into cleansing mode. Therefore, the simple act of not eating frees up the body to go to work on eliminating toxins.

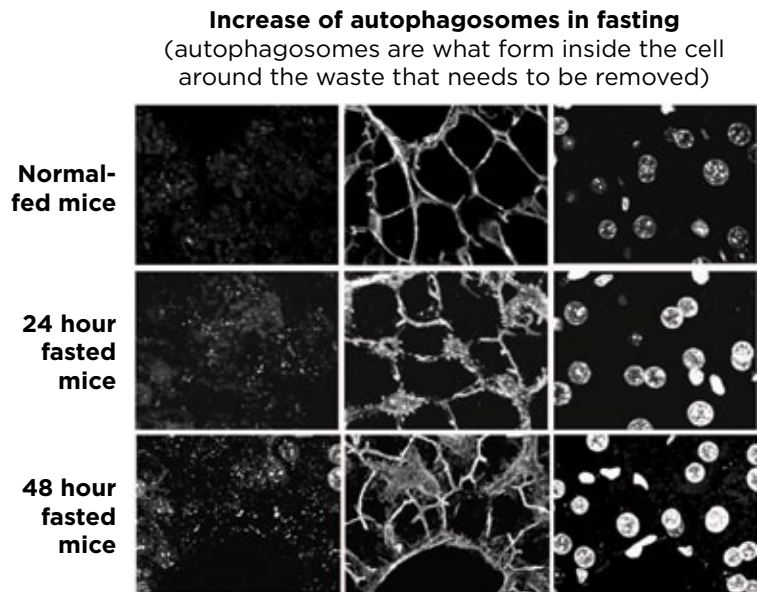
Your body cleanses and repairs itself by a process called **autophagy**, literally meaning "self-eating." This is a process where dead or diseased cells are hunted down and recycled to produce new cells and energy. It can happen in cells throughout the body, organs such as the liver, and it even happens in the brain. This process is so essential, that if it doesn't happen in the brain, it can lead to neurodegenerative disease. Increasing this cleansing is so protective for the brain that "much effort is being invested in developing drugs that cross the blood-brain barrier and increase neuronal autophagy."¹ However, short-term fasting actually accomplishes this process, even in

¹ Alirezaei M, Kemball CC, Flynn CT, Wood MR, Whitton JL, Kiosses WB. "Short-term fasting induces profound neuronal autophagy." *Autophagy* 6.6 (Aug. 2010): 702–710.

the brain and by dramatic amounts at that. Imagine, something so simple as fasting is able to accomplish what they're expending much effort and money to find in an expensive drug. And not only is fasting not expensive like a drug; it's cheaper than what it would cost you to eat for a day.

People from cultures from around the world have been doing short-term periodic fasting for spiritual and religious reasons for thousands of years. It's a practice commonly found in the Bible. But only in recent times have we begun to understand the deep health benefits of fasting. Fasting does many wonderful things in your body. Fasting:

- Detoxes your body at a cellular level, including brain cells
- Burns fat
- Increases insulin resistance
- Removes excess estrogen from the body
- Gives your stomach a chance to rest and heal the lining
- Decreases any unnecessary electrical activity in the brain, clearing your mind
- Releases 5x your body's own HGH (human growth hormone)² stimulating the body to produce more collagen and therefore more muscles and tendons



Short-term fasting effects (figure from Alirezaei M, 2010)

There are two easy extremely beneficial kinds of short-term fasting — intermittent fasting and then your 36 to 48-hour fast.

INTERMITTENT 16-HOUR FASTING

The intermittent fast is actually a type of fasting you can do indefinitely on a 3 to 7 times per week basis if you so choose. This is what my wife and I aim for and are able to do most days of the week. A daily intermittent fast is where you keep all of your eating and calorie consumption within an eight hour window. And then you are fasting on water the other 16 hours. This is actually not that hard to do if you eat enough during those eight hours. And eating enough is easy to do if you are exercising enough during the day.

We've chosen our eight-hour window to be between 7am and done by 3pm, and we do two meals with no snacking in between. (This gives the food proper time to digest and then rest before introducing the second meal.) So what this looks like for us is:

² Hartman ML, Veldhuis JD, Johnson ML, et al. "Augmented growth hormone (GH) secretory burst frequency and amplitude mediate enhanced GH secretion during a two-day fast in normal men." *The Journal of Clinical Endocrinology and Metabolism* 74.4 (Apr. 1992):757-765.

- 7:00 Breakfast
- 12:30 Appetizer if desired: green juice or fruit smoothie
- 2:00 Lunch
- 3:00 No more food or calories for the next 16 hours until the next morning at 7am.
Drinking plenty of water after giving several hours for our food to digest.
Other non-calorie drinks such as unsweetened herbal teas are fine.

At times when we're traveling or on the weekend, we may not do the intermittent fasting schedule. Instead we may have breakfast, an earlier lunch, and then a light dinner in the early evening. But most days of the week, we are shooting for the intermittent fasting.

THE 36 TO 48-HOUR FAST

This is pretty simple — nothing but water for 36 to 48 hours. This is the best way to cleanse your body in healing from autoimmune. After you've healed from your autoimmune disease, doing this kind of cleansing fast is also good for everyone to do at least several times per year as you are inevitably going to be exposed to some amount of toxins throughout the year. My wife and I do one of these fasts once every month on an ongoing basis.

To prepare your body to fast for 36 to 48 hours, it's important to load your body up with condensed nutrients in the form of fresh green juices for several days prior to fasting. We talked about the role of juicing in Step #3 Nutrify, and juicing is also very important in preparing the body to detox.

Besides being very high in nutrition, juices that contain greens are very cleansing — swiss chard, beet greens, kale, collards, spinach, parsley, mustard greens. The Bible reveals this health secret in the very beginning of the Bible when God added leafy greens to mankind's diet after sin. After Adam and Even sinned, God said, "... *Thou shalt eat the **herb** of the field*" Genesis 3:18. He knew that there was something in leafy greens that we would need in order to combat the effects of sin and disease in our bodies. This is also brought out at the end of the Bible where it says of the tree of life, "*the **leaves** of the tree were for the **healing** of the nations*" Revelation 22:2. See the "Super Nutrifier" and the "Iron and Energy Booster" in the chapter *Step #3: Nutrify* for good recipes of some green juices.

If the idea of fasting sounds intimidating to you, I'd suggest asking for help to do it. And in my opinion, I believe the best help you could get would be from someone who fasted for 40 days, Jesus Christ. He also happens to have all the will power you will ever need to do anything. Just ask Him for it. "*I can do all things through Christ which strengtheneth me*" Philippians 4:13.

4b.) Dislodging Toxins: Lemon Juice

The liver is your body's main blood cleansing organ. The liver filters the toxins out of your bloodstream, neutralizes them, and then dumps them with the bile into the small intestine to be eliminated in the feces.

When your body has a high level of toxins, the liver often becomes overtaxed and backed up.

When the liver is supported and its pathways are opened up, it enables the body to rid itself of the toxins sooner and will relieve die-off symptoms quicker. (“Die-off” symptoms or the Herxheimer reaction is the effect of toxins releasing their agitating substances into the bloodstream as they are exiting the body.)

The liver is most active at night while you sleep. So in the morning, there can be a backup of toxins in your liver from the night before that would be helpful to eliminate before you start the day. You can help eliminate these backed up toxins in the liver with lemon juice and water first thing in the morning. The strong acidity of lemon juice stimulates the liver to release bile and with it, the toxic waste the liver has been filtering.

FIRST THING IN THE MORNING:

Drink the juice of 1 fresh lemon followed by (or taken with) 1 quart warm water

Whether you take the lemon juice separately *before* the warm water or if you take it *with* the warm water, it’s just a matter of personal preference. My wife and I both prefer it separately. If you do take the lemon juice mixed with the water, just be careful of how long it takes for you to drink it as having the acid of the lemon exposed to your teeth for an extended time will not be good for your teeth.

Since the lemon juice will stimulate the liver to release extra toxins, it is helpful during a cleanse to take 1 Tbs of activated charcoal powder mixed with that last cup of water from the quart of water you would be drinking. Why? Because activated charcoal will bind with the toxins so they won’t be reabsorbed into your system again.

4c.) *Binding Toxins: Activated Charcoal*

Once the toxins are released into the gut or bloodstream, they need to be bound up as soon as possible, otherwise they can be reabsorbed into your system and re-lodge themselves back into the tissues or organs of the body. How do you do bind toxins? Binders. Thankfully God has put several very effective toxin-binders in nature.

The wonders of activated charcoal. It may very well be the single most effective treatment in many kinds of poisoning and detoxing. It is used daily in emergency rooms to counteract the effects of poisoning. Activated charcoal is a negatively charged molecule and therefore draws and binds to itself positively charged molecules including multitudes of toxic substances such as most heavy metals, chemicals such as pesticides,³ chlorine, aflatoxins from mold,⁴ BPA,⁵ and viruses. Then it is simply eliminated in the bowels. Charcoal can especially decrease the absorption of toxins if taken soon after ingestion. (Note: This includes medications too, so taking charcoal 1 to 1 ½ hours either before and after taking medications will minimize neutralization of medications.)



3 Chyka PA, Seger D. “Position statement: single-dose activated charcoal. American Academy of Clinical Toxicology; European Association of Poisons Centres and Clinical Toxicologists.” *Journal of Toxicology. Clinical Toxicology* 35.7 (1997): 721-741.

4 Decker WJ, Corby DG. “Activated charcoal adsorbs aflatoxin B1.” *Veterinary and Human Toxicology* 22.6 (Dec. 1980): 388-389.

5 Bautista-Toledo I, Ferro-García MA, Rivera-Utrilla J, Moreno-Castilla C, Vegas Fernández FJ. “Bisphenol A Removal from Water by Activated Carbon. Effects of Carbon Characteristics and Solution Chemistry.” *Environmental Science & Technology* 39.16 (2005): 6246-6250.

Activated charcoal is very different than charcoal briquets or burned toast. Charcoal is made by slowly burning hard wood, coconut shells, bamboo or other organic substances in an enclosed space without oxygen. It is then activated by steam or acid, making it incredibly porous like a sponge. This creates a vast amount of surface area at 125 acres of surface area per pound. This is what gives it the amazing ability to adsorb toxic substances.

During my healing, if I would unknowingly eat something contaminated with gluten or soy or GMOs, I would get a headache and feel achey and not well in my stomach. When this happened, I would immediately drink 1 Tbs of activated charcoal mixed in 1 cup of water to adsorb whatever toxic element I was having a reaction to.

The U.S. National Library of Medicine Toxicology recommends these amounts for an emergency poisoning of something even such as gluten:

Administer charcoal as a slurry 240 mL water/30 g charcoal⁶

(this is about 1 cup water + 3 Tbs charcoal powder)

Usual dose: 25 to 100 g (2.5 to 10 Tbs) in adults/adolescents
25 to 50 g (2.5 to 5 Tbs) in children (1 to 12 years)
and 1 g/kg (1/3 tsp) in infants less than 1 year old

When you consider that every 10 grams is about 1 Tbs, you can see how safe charcoal is as the maximum dosage for adults is 100 grams (10 Tbs). That's a LOT of charcoal. So the point is, a little can go a long way, but a lot won't hurt you either.

It is very helpful for intestinal gas and bloating which can occur in many people after eating the modern strains of wheat. If my wife gets painful bloating and gas from an accidental gluten ingestion, she'll take 1 Tbs of activated charcoal mixed with water and will feel relieved within 10 to 15 minutes. And it is also very good for diarrhea.

Studies show that activated charcoal taken orally will also even detox your blood.⁷ It does this by binding with toxins which have been expelled by the liver into the small intestine, preventing them from being reabsorbed into the bloodstream. It will also bind with any toxin which diffuses into the gut wall from blood circulation.⁸ We know a doctor who had severe mercury poisoning from amalgam fillings who took 1 Tbs of activated charcoal powder in water twice every day until she felt better and was detoxed from the accumulated mercury in her system.

EXTERNAL CHARCOAL POULTICES

Activated charcoal can also be used externally as a poultice (paste) on infections, venomous snake or insect stings or bites, and over areas of inflammation. Because of this, we always take it hiking with us and keep a small bottle of it in our vehicle in case of an emergency. We make a charcoal poultice by mixing charcoal powder and water together in the amount to make a thick, wet paste. (The ground flaxseed is to keep it moist and hold the paste together so it doesn't dry out and get

6 Hazardous Substances Databank. "Gluten." *TOXNET Toxicology Data Network*. U.S. National Library of Medicine, 20 Dec. 2012. Web. <https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/r?dbs+hsdb:@term+@rn+8002-80-0>

7 Derlet RW, Albertson TE. "Activated Charcoal—Past, Present and Future." *Western Journal of Medicine* 145.4 (Oct. 1986): 493-496.

8 Vale JA, Proudfoot AT. "How useful is activated charcoal?" *BMJ: British Medical Journal* 306.6870 (9 Jan. 1993): 78-79.

crumbly, but it is not necessary for the charcoal poultice to work.) We spread it on a paper towel and put it on the skin, covering it with a piece of plastic wrap (no tape needed if you get the kind that sticks very well.)

We've used charcoal poultices on the liver (just below your rib cage on the right side) and on the kidneys to help them detox. It has worked wonders! My wife got food poisoning one time when we were camping. Thankfully, we had activated charcoal powder with us. She took charcoal mixed in water right away after she threw up the first time and only threw up two more times after that. Then she felt achy all day. The intense achiness focused in to her lower back by late afternoon. Realizing this pain was a signal that her kidneys were struggling, I made two charcoal poultices on paper towels and put one on each kidney. Her kidney pain and achiness was completely gone within 30 minutes. It ended a light headache which was easily taken away with a cold cloth on her head for 30 minutes. We realized the sickness had been moving through her body, and were encouraged that God had led us in speeding up her recovery. By the time she fell asleep that night, she felt 100% better — so much so that she did an eight mile trail run the next day.

To detox your body from accumulated toxins, putting a charcoal poultice on the liver for several hours or, even better, overnight will help stimulate the liver to action and it will draw toxins out of the liver. It's important to take charcoal orally (1 Tbs + 1 cup water) before you do this, as the charcoal internally will adsorb whatever toxins are being released from your liver into your small intestine. This will prevent them from being reabsorbed into your bloodstream. And it can prevent your body from having an inflammation fever reaction as the toxins are being expelled by your liver.

We experienced this firsthand in helping a friend detox. His body was super toxic. The first time we put a charcoal poultice on his liver, he had it on a couple hours and didn't experience anything unusual. The next day, within 20 minutes of putting the charcoal poultice on his liver, he got very hot and the skin of his neck and chest turned bright red. We cooled him down with cold wet cloths and took off the poultice. It was exciting to see the charcoal poultice work so powerfully! It seemed like the first day, his liver was being prepped to action. But the second day, it was ready for action and his fever response was letting us know that his liver was dumping toxins into his system. This same thing happened again the next day. To try avoid this fever reaction he was having, we had the thought for him to take the charcoal internally first before we applied the charcoal poultice to his liver so the internal charcoal would adsorb whatever his liver was releasing. So the fourth day, this is exactly what we did. He took 1 Tbs activated charcoal mixed with 1 cup of water internally and then we put the charcoal poultice on his liver. The poultice heated up (which is what it's supposed to do as it draws blood to the liver), but he never experienced the fever reaction again!

When you consider all that activated charcoal does, it's no wonder that it's considered "the cornerstone of therapy for a poisoned patient."⁹

Bentonite clay is an adsorbent similar to activated charcoal. It also has negatively charged molecules and attracts positively charged heavy metals and chemicals to itself. Most bentonite packages come with instructions, but the normal usage is 1 tsp to 1 Tbs of bentonite clay once to twice daily with plenty of water through the day.

9 Derlet RW, 493-496.

Food grade Diatomaceous earth is another fantastic binder similar to activated charcoal and bentonite clay. It's strength is in its ability to kill intestinal parasites. It also absorbs viruses, fungus, methyl mercury, E. coli, endotoxins, pesticides, and drug residues. It can irritate your lungs if it's inhaled, but only if in large amounts over a long period of time.



Start by taking 1 tsp of food grade diatomaceous earth with 1 cup of water once a day on an empty stomach at least one hour before or three hours after eating. You can increase your dosage until you're taking it 2 to 3 times per day. Make sure to drink plenty of water to keep the toxins moving out.

4d.) Binding Toxins: Zeolite Clinoptilolite

Zeolite is awesome, but you probably haven't heard of it. Zeolite is a clay-like compound that comes from volcanic earth deposits that have a crystallized porous texture. There are over 40 different types of zeolites that exist which are used in industrial settings for filtering water, nuclear waste removal, and toxic soil clean up. In fact, in the 1986 Chernobyl disaster, local people were given cookies with large amounts of zeolite and thereafter tested with reduced levels of radioactivity. Sandbags of zeolite were dumped in the ocean water near the 2011 Fukushima nuclear power plant disaster because it's so good at absorbing radioactive cesium.

The type of zeolite called zeolite clinoptilolite is safe for human consumption and is associated with a lot of medical research showing it to be an effective binder of heavy metals.¹⁰ It also binds to radioactive elements like plutonium and uranium, and there is even evidence showing that zeolite improves intestinal wall integrity,¹¹ meaning it helps heal leaky gut!

One of its fantastic features is that it detoxes not just in the gut but also at the cellular level. It's believed that about 40% of zeolite clinoptilolite binds to toxins in the gut, and that the other 60% is pulling out toxins in the blood and in the cells. This is a very good feature.

NANO-ZEOLITE

It's been found that by making the zeolite particles extremely small, it enhances its chemical reactivity and performance. The smaller the particle size of zeolite, the more overall surface area a dosage would have, thus the larger amount of toxin particles its available to absorb. The smallest kind of zeolite is called nano-zeolite. From my research of all the nano-zeolites out there, the ACZ Extra Strength Nano Zeolite by Results RNA is the best in my opinion since they have made the zeolite particles in their formula over 1,000 times smaller than other nano-zeolites on the market, making it a super absorber.

Nano-zeolite has a strong attraction to many heavy metals including mercury, lead, cadmium, and arsenic. Its claims have been proven by clinical research showing an increase urinary output

¹⁰ Flowers J, Lonky SA, Deitsch EJ. "Clinical evidence supporting the use of an activated clinoptilolite suspension as an agent to increase urinary excretion of toxic heavy metals." *Nutrition and Dietary Supplements* 1 (Nov. 2009): 11–18.

¹¹ Lamprecht M, Bogner S, Steinbauer K, et al. "Effects of zeolite supplementation on parameters of intestinal barrier integrity, inflammation, redoxbiology and performance in aerobically trained subjects." *Journal of the International Society of Sports Nutrition* 12 (20 Oct. 2015): 40.

of mercury up to 103,500%, tungsten 11,100%, aluminum 10,000%, lead 500%, and arsenic 400% above normal ranges. It also binds to and removes many chemicals like fluorine and chlorine which are commonly found in drinking water, it eliminates free radicals of all types, and it reverses acute chemical and allergic reactions and all without removing vital nutrients.

Results RNA's ACZ Extra Strength Nano Zeolite particles are readily absorbed into the bloodstream so it works immediately, and has been analyzed by labs verifying that it doesn't contain any toxins of its own. The research and case studies are proving this to be a really great product that would be an excellent accompaniment to any detoxing program.

Start with two small doses a day according to its instructions, and if it causes a strong detox reaction, then take a pause on it while you support your liver and kidneys (see section below called *Organ Support Aids*). The body's elimination organs need to be strong in order to properly detox.

4e.) Binding Toxins: Modified Citrus Pectin (MCP)

Pectin is a complex carbohydrate that is abundantly present in citrus fruits. Modified citrus pectin (MCP) is a short-carb chain derived from the peel and pulp of citrus fruits that has been condensed into smaller pieces so they can be absorbed easily into the bloodstream.

Modified citrus pectin binds and removes mold, bio-toxins, and heavy metals. It has been shown to keep breast, colon, and prostate cancers from spreading and has been proven to be very effective in eliminating heavy metal toxicities.¹² One 2006 study showed that eight healthy patients which took 15 -20 grams of MCP daily for five days had significant increases of arsenic, mercury, cadmium, and lead in the urine. There was a 150% increase of cadmium and a 560% increase in lead. Minerals in the form the body needs however, like calcium, zinc, and magnesium didn't increase in the urine analysis, indicating that MCP did not deplete these nutrients. Another study found a 74% average reduction in toxic heavy metals in its participants.¹³ MCP is yet another great, safe, non-toxic way of getting rid of heavy metals from the body.

4f.) Eliminating Toxins: Psyllium Husk

The body has seven avenues of elimination — liver, kidneys, lungs, lymphatic system, blood, skin, and colon. When we're dislodging and binding toxins in our system we want to evacuate them right away.

If you're taking charcoal or clay to detox, you may notice your bowels slow down a little. If your bowels are not moving at least once or twice per day, you'll want to help them along. To help move your bowels, you can increase your fluid intake and take something fibrous such as psyllium husk or slippery elm. Psyllium husk is a lightweight super fibrous substance that scrapes unwanted matter from the colon walls as it passes through transit. People have been using it for years to help colon issues such as constipation (think Metamucil). Having a healthy colon is vital to overall health, and this is why making sure your colon is moving well is a vital part of the cleansing program. You can also do a simple water enema if you have missed a bowel movement for the day.

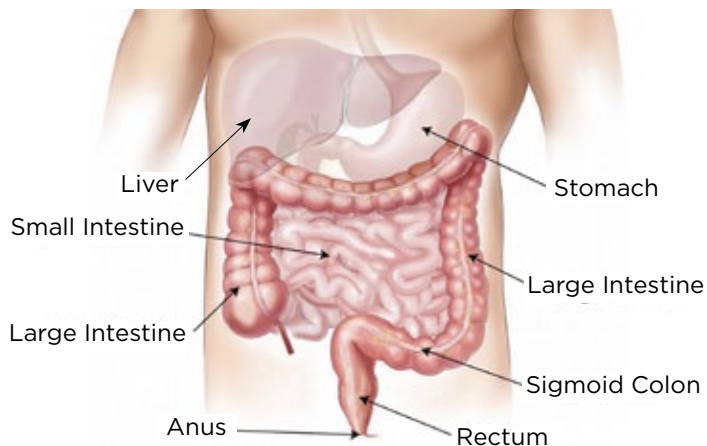
¹² Eliaz I, Hotchkiss AT, Fishman ML, Rode D. "The effect of modified citrus pectin on urinary excretion of toxic elements." *Phytotherapy Research* 20.10 (Oct. 2006): 859-864.

¹³ Eliaz I, Weil E, Wilk B. "Integrative medicine and the role of modified citrus pectin/alginates in heavy metal chelation and detoxification--five case reports." *Forschende Komplementarmedizin* 14.6 (Dec. 2007): 358-364.

You don't want the toxins to be reabsorbed into your system so it's important to make sure they keep moving regularly.

4g.) *Eliminating Toxins: Detoxing Enemas*

Detoxing enemas can be very powerful in helping the body cleanse and find relief from the effects of cleansing. As you're cleansing, your body is putting out toxins through your avenues of elimination, one of the main ones being your colon. If these toxins are not promptly eliminated, they can be reabsorbed into your system. Enemas are a great way to keep the waste moving quickly out of your body during a cleanse. Also, old fecal matter often becomes plastered on the walls of the colon over the years from eating a low-fiber diet. Enemas can help remove that old fecal matter.



Besides water enemas, there are special enemas that can be done to give relief to the effects of cleansing. I started with organic coffee enemas to aid in cleansing my body, but have since transitioned to **dandelion tea enemas** which I believe are even better. I'll briefly touch on coffee enemas and then move on to focusing in on dandelion tea enemas.

In a coffee enema, the caffeine goes through the hemorrhoidal vein into the portal system directly to the liver, stimulating the liver to release bile¹⁴ and accumulated toxins with it. It also increases the body's best detoxifying antioxidant, glutathione, by 600% in the liver and 700% in the small intestine.¹⁵ This is why natural healing facilities such as the Gerson Institute have used coffee enemas as a part of their treatment of cancer patients since the 1950s. When used with the rest of the therapy, their report of clinical findings is that "this therapy has cured many cases of advanced cancer."¹⁶ Cancer patients often experience high levels of pain. But the damage that pain medications do the liver make it impossible to heal from cancer while using them. Coffee enemas have been able to powerfully relieve pain in cancer patients without the use of pain medication. Up until 1972, coffee enemas were found in the renowned Merck Manual,¹⁷ the world's best-selling medical textbook and the global standard in medical reference for doctors, students, and consumers for over 100 years.

Why not drink coffee instead? When you drink coffee, the caffeine overstimulates the adrenals, irritates the stomach, and limits blood flow to the frontal lobe of the brain by 30%. This is why drinking caffeine comes along with the side effects it does — irritability, anxiety, tremors,

14 Kim ES, Chun HJ, Keum B, et al. "Coffee enema for preparation for small bowel video capsule endoscopy: a pilot study." *Clinical Nutrition Research* 3.2 (July 2014): 134-141.

15 Sparnins VL, Venegas PL, Wattenberg LW. "Glutathione S-Transferase Activity: Enhancement by Compounds Inhibiting Chemical Carcinogenesis and by Dietary Constituents." *Journal of the National Cancer Institute* 68 (Mar. 1982): 493-496.

16 Dr. Max Gerson. "The cure of advanced cancer by diet therapy: a summary of 30 years of clinical experimentation." *Physiological Chemistry and Physics* 10.5 (1978): 449-464.

17 Lyght CE, Keefer CS, Lukens FDW, Richards DW, Sebrell WH, Trapnell JM. "Bedside procedures." *The Merck Manual of Diagnosis and Therapy 11th ed.* Rahway, NJ: Merck Sharp & Dohme Research Laboratories, 1966: 1682-1683.

insomnia, headaches when quitting. (Since caffeine decreases blood flow to your brain, your body adjusts by increasing blood flow. When you stop caffeine that increased blood flow to the brain causes extra pressure, therefore pain). However when taken rectally in an enema, the amount of caffeine absorbed into the system in an enema is less than a third of what it is when taken orally.¹⁸ In fact, if you're eating chocolate or cocoa/cacao, you're likely getting more stimulants than a coffee enema between the caffeine and theobromine in the cocoa combined. This is why coffee in an enema has a largely different effect than it does when drinking it.

However, with the absorption of some caffeine into the system, it would be better to use something that works just as well but without the caffeine. This is where dandelion tea enemas come in. Although there are yet no specific studies on the effectiveness of dandelion tea enemas, the latest clinical evidence is showing that they are just as effective as coffee enemas, but I believe are a better alternative as dandelion does not contain any caffeine.

Drinking the dandelion tea would be just as powerful as far as detoxing is concerned, however using it also in an enema gives fast relief from detoxing effects such as feeling sick, bloated, or having gas or pain.

So, this is how I prepared and administered the enemas. I would make sure my bowels were relatively empty first by either having a natural bowel movement or doing a plain water enema first with 1 to 2 bags of water as needed. I learned to comfortably let the water in as I could take it, then expel as I felt the urge.

DANDELION TEA ENEMA

1 Tbs dried dandelion leaf, organic (or 3 Tbs fresh)

2 cups water

1 tsp epsom salt

Instructions: Bring the water to a boil. Turn off the heat, add the dandelion and cover. Steep for 30 minutes. Strain. Stir in the epsom salt. Add cooler water to total 4 cups. Let it cool to body temperature (until it feels lukewarm to touch). Place lukewarm tea in the enema bag and connect tubing. Lubricate the enema tip with coconut oil. Release clamp to expel air in tubing before inserting the enema tip. Insert the enema into your rectum either leaning forward while sitting on the toilet or while lying on your back with hips slightly elevated (whichever is more comfortable). When it is all in, turn on the right side and draw both legs in close to the abdomen. Breathe deeply in order to suck in the greatest amount of fluid into the necessary parts of the colon. I often hold a folded up paper towel over my anus to help retain it if I feel I need to. Retain for 10 to 15 minutes, then expel the enema into the toilet.

While I believe the dandelion tea enemas are superior to the coffee enemas, I'll include the instructions for coffee enemas in case they're helpful for anyone in extreme cases who are having trouble getting off of pain medications.

18 Teekachunhatean S, Tosri N, Rojanasthien N, Srichairatanakool S, Sangdee C. "Pharmacokinetics of Caffeine following a Single Administration of Coffee Enema versus Oral Coffee Consumption in Healthy Male Subjects." *ISRN Pharmacology* 2013 (2013): ID 147238.

ORGANIC COFFEE ENEMA

3 heaping Tbs **organic** ground coffee (organic is absolutely essential)

2 ½ cups purified or distilled water

Instructions: Boil for 3 minutes, then cover and simmer on low heat for 20 minutes. Strain. Add cooler water to total 4 cups. Let it cool to body temperature (until it feels lukewarm to touch). Place lukewarm coffee solution in the enema bag and follow same instructions for dandelion tea enema. Retain coffee for 10 to 15 minutes, then expel the enema into the toilet. This timing is important since retaining the coffee for too long or absorbing most of it before expelling may cause similar side effects as drinking it orally.

I had a difficult time retaining these enemas at first. But then I started praying for God to bless the treatments and to help me retain them so they could be effective and help me cleanse. After making sure my bowels were as empty as possible, I would do the enema as normal and from that point forward as long as I prayed I was able to retain every enema.

*Once you're cleansed and eating healthy, don't do enemas regularly unless you're constipated because it will remove your good bacteria.

4h.) Eliminating Toxins: Saunas and Sweat Baths

The skin being our largest organ is a very effective toxin eliminator. Many toxins which are stored in your body's tissues are actually best excreted through your sweat. Studies have shown that some toxins were abundantly found in perspiration but not in their blood.¹⁹

A great way to make yourself sweat is with vigorous exercise. Another good way to induce sweating is by using a sauna. If you have access to a sauna at your gym or somewhere else then make sure to use it.

There are special saunas which can induce deeper detoxification called **far-infrared saunas**. In comparison to conventional saunas which rely on heat only to cause the body to sweat, far-infrared saunas use far-infrared waves which have similar wavelengths as those emitted naturally by the human body. These waves penetrate deep into the body's fat cells where toxins are stored resulting in higher levels of detoxification at a cellular level and stimulate your metabolism to burn off extra fat. In fact, far-infrared saunas can burn 400-600 calories in just one 30 minute session.²⁰

The additional benefits of far-infrared saunas include pain reduction, joint and muscle support, cardiovascular healing, and are also believed to help the body handle stress better due to having a calming effect on the parasympathetic nervous system. Another fantastic benefit is that they also have the capacity to kill infections. These saunas can be purchased online, or if you don't have the money they can be found at many spas or health clubs.

Saunas are usually an easier option, but if you don't have access to one you can do a sweat bath

19 Genuis SJ, Birkholz D, Rodushkin I, Beesoon S. "Blood, urine, and sweat (BUS) study: monitoring and elimination of bioaccumulated toxic elements." *Archives of Environmental Contamination and Toxicology* 61.2 (Aug. 2011): 344-357.

20 Ward D. "Effect of Sweating." *Journal of the American Medical Association* 246.6 (Aug. 1981): 623.

at home. To do a sweat bath, wrap yourself in a big wool blanket up to your neck while sitting on a chair in a warm room, keeping a pot of steaming water underneath the chair. I would do this for 30 to 50 minutes, coming out every 7 minutes to wipe down my entire body with a hand towel soaked in ice water. You also may need to add more hot water from a kettle to your pot to keep it steaming.

Make sure to drink plenty of water during and after a sauna or sweat bath to replace your fluids.

4i.) Hydrotherapy

Hydrotherapy is the alternating use of hot and cold water to greatly speed up healing. How does it do this? *“For the life of the flesh is in the blood...”* Leviticus 17:11. It is the blood that transports healing nutrients and oxygen to your entire body. It is the blood that also carries away waste from your cells such as carbon dioxide. The flowing and circulation of this blood is your very life.

(This is why God restricts us from eating any blood. *“It shall be a perpetual statute for your generations throughout all your dwellings, that ye eat neither **fat** nor **blood**”* Leviticus 3:17. It is the blood that carries disease. We would be wise to follow God’s instructions.)

When you have a damaged or infected part of your body, the blood tends to congest or pool there. This is why hydrotherapy works so amazingly well. Water is known to be the best conductor of heat and cold. The alternating hot and cold rapidly speeds up circulation bringing healing to the area. I have found it to be more effective than any drug.

It is one of the most powerful methods of strengthening the immune system as especially the cold water application increases your white blood cell count by 200 to 300%! I would feel so good after doing hydrotherapy showers several times a week.

HYDROTHERAPY SHOWER

- get warmed up in the hot water until you feel like you’re sweating
- 1 minute hot + 30 seconds cold
- repeat 4x
- always end on cold to close the pores

The key with hydrotherapy is the *difference* in temperature, so you want the hot to be as hot as it can be without burning yourself and turn that cold all the way to the cold. When I have time, I like lying down to rest for 30 minutes after this.

RELIEVING DIE-OFF HEADACHES

It is common to experience headaches when cleansing. As I was following the regimen in this book in healing from my autoimmune, my body was in a slight but continual state of detox. Every 4 to 5 days, I would get a headache or head congestion. A simple hydrotherapy treatment is key to relieving it without medications. Hot foot baths are one of the simplest hydrotherapy treatments. If I got sinus congestion or a headache while detoxing, I would sometimes do a hot foot bath to relieve it.

HOT FOOT BATH

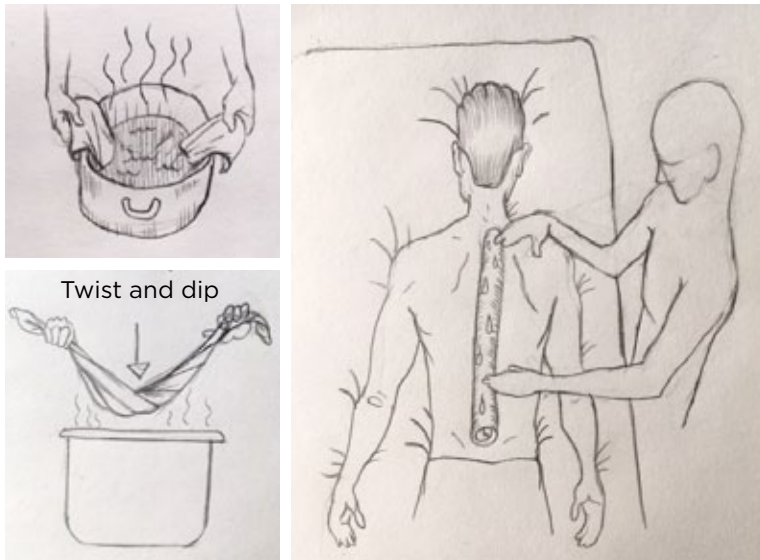
- Ice on the head and an ice-cold wet towel on the neck
- Feet and legs in a bucket of hot water up to mid-calves
- Continue adding water from a kettle as hot as you can stand it for 20 minutes

This draws the congestion away from the head down towards the feet. Often the headache is gone in 10 minutes.



HYDROTHERAPY FOR MIGRAINES

Before I realized I had an autoimmune disease and began to cleanse, I used to get terrible migraine headaches. To relieve them, I would need a more intense hydrotherapy than the hot foot bath. My wife would alternate applications of hot and cold wet towels to my spine until I felt relaxed enough to fall asleep. When I would wake up in the night or the next morning, I had no more headache.



She would put a hot pack on my feet and ice on my head and neck. And then she would put a hot wet towel to my spine for 3 minutes (using 3 hot towels, changing each towel after 1 minute). This was followed by 1 minute of a cold wet towel to the spine. She repeated this hot and cold process 3 to 4 times. It is important to make the hot as hot as possible without burning my skin of course, and the cold as cold as possible by soaking it in ice water. Towels should be wrung out so they're not dripping and the hot towels should be covered with a large folded towel on the back to retain the heat as long as possible.

Other helpful remedies I've found for headaches is massaging peppermint oil into my temples, putting a ginger poultice on the temples, or 2-3 drops of valerian essential oil on the upper lip.

4j.) Organ Support Aids

The liver, kidneys, and spleen (lymphatic system) are body's filtration system. They are incredible systems that God gave us to filter things out of our blood that would otherwise do us harm. These organs and systems can become overburdened with the load of poisons we expose them to. There are things we can do to relieve the burden on these organs and systems and help them become more efficient for cleansing and healing. With thyroid patients, Dr. Izabella Wentz, author of *Hashimoto's Protocol*, found that after treating one thousand Hashimoto's patients that by supporting their livers with high nutrition that 65% of patients felt better within 1-2 weeks.

Dandelion is highly effective in cleansing and strengthening the liver.²¹ It promotes the production of bile and removes excess fluid from the body when there is swelling due to liver problems. The entire dandelion can be eaten, including the beautiful yellow flower. We eat the fresh leaves steamed or raw in a salad or blended vegan pesto (with cilantro or basil). The dried leaves and root can be taken as a tea or tincture. The roasted root in a tea tastes similar to coffee and is a nice warm drink to have in the evening before bed when the liver gets more active. When we're picking dandelion greens in the wild, we are careful to make sure they are off the beaten path in an area that hasn't been sprayed with weed killer.

Milk thistle is an amazingly powerful help to the liver as it even helps to rebuild damaged liver cells.²² It increases glutathione levels in the body, removing toxins from the liver.

[Notice what a lovely metaphor this is: The dandelion and milk thistle are both considered weeds, outcasts of the lawn if you will. Yet these two humble plants are of the most powerful healing herbs, able to cleanse and heal our livers. Do you sometimes feel like an outcast with not much to offer the world? God can use you in a powerful way like He does these two little plants when you humble your heart and surrender your life to Him.]

Beets are another powerful liver enhancer. Beets significantly increase the production of glutathione and protect liver cells from damage.²³ We eat beets with the beet greens on a weekly basis. Steamed beets are my wife's favorite topping on salads. We eat the steamed greens as a side dish and also blend them fresh as a pesto with walnuts, lemon juice, garlic and salt. If you're juicing during a cleanse, adding 1/4 to 1 beet will help the cleansing of your blood and liver.

Juniper berry is one of the strongest natural substances to cleanse and increase the cleansing capacity of the kidneys. It also increases urine output.²⁴

Horsetail is another great herb for the kidneys as it increases urine output and helps remove kidney stones.

Selenium is necessary for your body to create glutathione. Selenium has been found to be a key factor in Hashimoto's autoimmune disease as it reduces anti-thyroid antibodies.²⁵ Just 1 oz. of brazil nuts provides 544 mcg, plenty for the body's daily needs.

Sulfur-rich foods are also helpful in boosting glutathione levels. They help detox the body because the liver uses sulfur and other amino acids to combine with toxins allowing the liver to expel them. Without sulfur, the toxins get recirculated. These sulfur-rich foods are cruciferous veg-

21 Nazari A, Fanaei H, Dehpour AR, et al. "Chemical composition and hepatoprotective activity of ethanolic root extract of *Taraxacum Syriacum* Boiss against acetaminophen intoxication in rats." *Bratislavske Lekarske Listy* 116.1 (2015): 41-6.

22 Abenavoli L1, Capasso R, Milic N, Capasso F. "Milk thistle in liver diseases: past, present, future." *Phytotherapy Research* 24.10 (Oct. 2010): 1423-1432.

23 Váli L, Stefanovits-Bányai E, Szentmihályi K, et al. "Liver-protecting effects of table beet (*Beta vulgaris* var. *rubra*) during ischemia-reperfusion." *Nutrition* 23.2 (Feb. 2007): 172-178.

24 Butani L, Afshinnik A, Johnson J, et al. "Amelioration of tacrolimus-induced nephrotoxicity in rats using juniper oil." *Transplantation* 76.2 (27 July 2003): 306-311.

25 Gärtner R, Gasnier BC, Dietrich JW, Krebs B, Angstwurm MW. "Selenium supplementation in patients with autoimmune thyroiditis decreases thyroid peroxidase antibodies concentrations." *Journal of Clinical Endocrinology and Metabolism* 87.4 (Apr. 2002): 1687-1691.

etables — bok choy, broccoli, cabbage, cauliflower, kale, collard greens, radish, turnip, arugula, mustard greens, and watercress. But remember, as mentioned earlier, if you have thyroid issues, you'll want to have your cruciferous vegetables cooked instead of raw until your iodine levels and thyroid are back to normal. Otherwise, the extra demand of iodine from the raw cruciferous vegetables may cause additional thyroid problems. Epsom salt (magnesium sulfate) is another source of sulfur you can get by absorbing it through your skin in an epsom salt bath or footbath.

There are many other helpful herbs to help aid the liver, kidneys, gallbladder, and thyroid as they are being cleansed. You can often find good combinations of organ-specific herbs together in mixed teas.

One of the most powerful herbal mixtures I have found are the Byron White herbal tinctures. I personally have not used them, but a doctor whom I respect has used them with success in treating over 1,000 patients. These herbal tinctures are made specifically for individuals with chronic illnesses and Lyme disease, and their levels of concentration are considered to be extremely powerful. The downside to this feature is that you can only gain access to them by seeing a practitioner who uses them. There is a practitioner locator on the Byron White website.

Cleansing Programs

Cleansing is powerful, and because it's powerful it has to be done right or it can be a rough process. However, for most first timers or for those who haven't done one for several years you're probably going to experience some discomfort. What do I mean by that? Any good cleanse will do a good job of dislodging stored toxins. When these re-enter the bloodstream it's not uncommon for people to get headaches, rashes, or feel tired or sick. These symptoms are often referred to as "die-off" symptoms or the Herxheimer reaction which is essentially toxins releasing their agitating substances into the bloodstream as they are exiting the body.

In the documentary *Fat, Sick and Nearly Dead*, you see Joe Cross briefly go through die-off symptoms in his hotel room in New York City during the first few days of his 60-day juice fast. Difficult? Yes. Worth it? Oh yes! He didn't feel very good the first few days, but he eventually reversed his autoimmune condition, chronic urticaria, and started feeling great with more energy and a clear mind.

Generally, there are two types of cleanses that can be done. There are short, intense 10-day type cleanses and there are longer-term, gentler cleanses. The pros of the short, intense 10-day cleanse are that you experience a deep detox in a short amount of time, meaning you will get better faster. The cons are that because it's intense, you won't be able to work at the same time and your die-off symptoms will be more pronounced. The pros of the longer-term, gentle cleanse are that the die-off symptoms are not as strong and you can, for the most part, continue on with a life and work while at the same time be healing. The cons are that it will take you longer to feel better and recover from your autoimmune.

Which should you do? I recommend doing both. A good way to start detoxing right away is to ease into it with a long-term, gentle cleanse. Then while you're beginning to detox, you can start planning for an intensive 10-day cleanse. You can do these short intense cleanses on your own at home or you can save up your money to go to an all-inclusive 10-day cleanse. I'll discuss all of these options in more detail. Let's start with the long-term, gentle cleanse.

Here is a suggested schedule which you would do every day until you are recovered from your autoimmune disease and are feeling better.

LONG-TERM GENTLE CLEANSE SCHEDULE

Morning:

- Juice of 1 fresh lemon followed by 3 cups warm water
- 1 Tbs activated charcoal mixed with 1 cup water
- Walk or jog 30 to 60 minutes

Meals:

- 1 inch of aloe vera from the inside of the leaf (no skin) 20 minutes before each meal
- 4 to 7 days per week: Two meals, breakfast and lunch, contained within an 8 hour window (16 hr. intermittent fast), no snacking
- Start each meal with fresh fruits or a salad
- Make sure your meals don't have any of the harmful foods or toxins outlined in Step #1 (vegan, gluten-free, non-GMO, mostly organic)

2-3x a day:

- Activated charcoal, bentonite clay, zeolite, or modified citrus pectin. You can rotate these binders doing a different one every week.
- Herbs to kill your specific parasites, molds, fungus, viral or bacterial infections. Can take at same time when the above binders are taken.

Evening:

- Instead of an evening meal, rotate between: water fasting (4 to 7 nights per week), green juice, and the onion potato soup
- End the day with a liver or kidney detox tea (dandelion, milk thistle, horsetail, etc.)

Several times per week:

- Sun exposure to large area of skin for 30 to 60 minutes
- Hydrotherapy shower (1 min. hot + 30 sec. cold) x 4
- Sauna or sweat bath
- Strength training (weights, push ups, sit ups, planks, pilates, etc.)

As needed: Dandelion tea enemas to relieve detox symptoms.

Timeline: Continue this program for 3-12 months or until symptoms subside.

You may notice some slight detox symptoms such as needing to sleep longer, or taking a bit longer to bounce back from workouts. If you feel the detox symptoms are too much, then simply back down on taking the binders and herbals from every day to every other day, and increase the liver and kidney detox teas and dandelion enemas to support your liver to expel the toxic die-off.

SAMPLE: MY DAILY ROUTINE ON THE LONG-TERM GENTLE CLEANSE

Here's what a sample day of my daily routine looked like. (The following schedule does not include the extra treatments for my skin fungus.)

5:00	Juice of 1 fresh lemon followed by 3 cups warm water
5:15	1 Tbs activated charcoal mixed with 1 cup water
5:00 - 6:00	Bible study and prayer
6:00 - 6:40	Walk or run
6:40	Aloe vera, shower, get dressed
7:00	Digestive enzymes, breakfast, and more Bible study
7:30	Family worship (prayer, song, Bible verse)
8:00 - 1:00	Work
11:00 - 11:30	Sun exposure on my back
12:00	Immune builder drink
12:40	Aloe vera
1:00 - 2:00	Lunch
2:00 - 5:30	Work
5:30	Immune builder drink
5:45	Green juice
6:00	Workout, take a walk, free time, no more blue screen (computer, phone, etc.)
7:25	Detox tea (milk thistle, dandelion, or licorice root) or onion potato broth
7:35	Family worship (prayer, song, Bible verse)
7:45	Get ready for bed
8:00	In bed
8:30	Sleeping (hopefully)

The specific protocol I followed was probably more time consuming than what most people would need to do because I was battling two issues. I was trying to heal my autoimmune condition as well as the skin fungus that had been steadily growing. The total time I spent focusing on my healing program per week was the equivalent to a part-time job. The autoimmune portion of the program was about 3 to 3 1/2 hours a day. Most of this time was in planning, making my juices, immune builder drinks, and onion potato broth soup. Thankfully, my wife did all of the cooking. We found that if you plan all your meals at the beginning of the week and make meals that will last two to three days, then you can shave time off. Daily exercise and devotional time with God was also a part of my routine, but I didn't include this time in the 3 hours figure since this was part of our regular life anyways.

As you start this steady, gentle detox, you can start planning for a deeper, more intense detox such as a 10-day cleanse. The benefit of this is that although it is intense, it is only 10 days long, so you will be rapidly accelerating your healing in a short time.

SAMPLE: MY 10-DAY INTENSE CLEANSE SCHEDULE

A 10-day intensive program like this will keep you busy for most of the day and you will be experiencing detox tiredness and such, so you'll want to *take the time off of work to do it*. But, you end up taking time off of work to be sick too right? Why not use that time to get better.

Here is the exact cleansing/detox schedule I used during my autoimmune healing program with several improvements I've made since then.

Days 1 - 5 Schedule:

5:00	Morning Detox	Juice of 1 fresh lemon followed by 3 cups warm water
5:15	Charcoal 1 Worship	1 heaping tsp activated charcoal mixed with 1 cup water Bible reading, prayer — gratitude to God, positive thoughts
6:00	Walk or run	60 minutes
7:00	Aloe Vera Enema prep Juicing	Eat 1 inch of the inside gel of fresh aloe vera leaf (no skin) Make a batch of dandelion tea for enemas for the next two days Juice 80 oz of vegetable juice for the entire day, refrigerate
7:30	Zeolite Cleansing Tea 1 Organ Aids 1	Take once on the first day and slowly graduate up to 3x/day Herbals for parasites, molds, fungus, viral, bacterial infections Herbals for supporting liver and/or kidneys in detoxing
7:45	Family Worship	Pray, sing, read encouraging Bible verses
8:00	Juice 1	Drink first 16 oz juice of the day
9:00	Enema	Water enema followed by dandelion enema if needed
9:50	Charcoal 2	Or bentonite clay
10:00	Sauna	Or exercise if you have energy, drink lots of water
10:00	Juice 2	16 oz
11:00	Sunbath Charcoal 3 MCP	30 to 60 minutes Or bentonite clay 1-2 capsules of Modified Citrus Pectin
11:30	Juice 3	16 oz
12:15	Zeolite 2 Cleansing Tea 2 Organ Aids 2	
12:30	Aloe Vera 2	1 inch of the inside gel of fresh aloe vera leaf (no skin)
1:00	Juice 4	16 oz

2:30	Juice 5	16 oz
3:15	Charcoal 4	Or bentonite clay
3:30	Healing Broth	Onion potato broth (or eat the soup if preferred)
5:00	Zeolite 3 Cleansing Tea 3 Organ Aids 3 Charcoal 5	Or bentonite clay
6:00	Optional Juice Walk	If you feel you need it, otherwise fast for deeper cleansing 20 min.
6:30	Hydrotherapy	Hot & cold shower (1 min. hot + 30 sec. cold) x 4
7:00	Health Video Organ Aids 4	Relax and watch an educating health video
7:45	Family Worship	Pray, sing, read encouraging Bible verses
8:00	In Bed	Lights out
8:30	Sleeping	

Days 6 - 10 Schedule:

The schedule for days 6 - 10 is exactly the same as the first five days except I replaced two of the juices with two raw vegan meals which were low in fat (such as fruit for breakfast and salad for lunch). Days 9 - 10 you can start adding in simple cooked foods like steamed vegetables, baked potatoes, and sprouted seeds (such as flax, chia, sunflower, pumpkin, quinoa, buckwheat, sesame).

As you've seen, the juices are pretty frequent throughout the day, ending with the onion potato soup in the afternoon. My wife and I have found we are able to keep our energy up pretty well during a cleanse like this with the juices and soup. The idea is to keep all of the calories within an eight hour window to be doing intermittent fasting throughout the cleanse, but if you feel you need it, simply have another juice in the early evening as the schedule suggests. Don't forget to drink lots of water and get plenty of rest throughout every day.

You probably noticed that this program keeps you somewhat busy and is something that cannot be done while working. It would really be best to do this program over the extent of two weekends while taking the week off in-between. This may not be an ideal way of spending a vacation, but what's worse — taking a week of work to do a cleanse or taking years off because of sickness? Every person I've seen go through a well administered cleansing program has improved. Many drastically improve.

Before doing a 10-day cleanse like this, you could try doing just the first three days of this cleanse over the course of a long weekend.

We feel that these cleanses are so important to our health that my wife and I try to do one cleanse every year for maintenance. Our yearly maintenance program is on average about 3 to 5 days long and we choose to do ours every October to prepare ourselves for cold and flu season. When we do this, we don't get sick even when everyone else around us is sick.

All-Inclusive Cleansing Programs

For most people, the die-off symptoms of a short intense cleanse won't be pleasant, but it is not normally dangerous. However, if you've never done a cleanse before and have a serious viral or bacterial infection or a bad case of chemical, heavy metal, or mold poisoning, then you may not want to tackle this all by yourself but rather seek the aid of a natural-minded health professional who understands how to cleanse properly.

There are several excellent cleansing programs I would highly recommend:

- Years Restored — YearsRestored.com (specializes in autoimmune)
- Modern Manna's Bella Vita — ModernManna.org
- Bayside Natural Health — BaysideNaturalHealth.com

My wife and I have personally done the 10-day cleanse at Years Restored and then also the Modern Manna cleanse at home. Here's how it went for us at Years Restored.



10-DAY ALL-INCLUSIVE DETOX PROGRAM

Soon after we received the news about my food sensitivities and autoimmunity, we signed up to go through a 10-day detox with Years Restored Lifestyle and Learning program. This was a huge boost to start my journey back to health. I had many toxins built up from who knows how many years, and at the beginning of the program I had headaches and no energy. However, the staff which included a health professional and several attendants were right there to give me fresh juices and administer natural remedies like the ones mentioned in this book that brought me relief and helped me get through the beginning of my cleanse.

This approach was fantastic since the majority of the work was being done for us. It would have been much harder to do this on my own since the 10-day detox includes making and drinking fresh vegetable and fruit juices every few hours. I wouldn't have had the energy to do this nor the presence of mind while having a headache. I was able to just relax while people handed me juices every few hours. With the assistance of my wife and the staff at this program, I believe that the great majority of headaches and fatigue I would have experienced had I been attempting this on my own were eliminated.



With the majority of the work being done for you, it enables you to have the energy to also learn about your condition and how to heal during the personal coaching sessions and health classes. Another fantastic feature is they live demos teaching you how to cook new autoimmune friendly recipes which you get to try there.

At Years Restored they personalized the treatments and were able to give me care based on exactly what kind of autoimmune disease I had. At the end of the 10 days, the program director gave me a personalized protocol to self administer at home which became the foundation of my 5-step plan we used to reverse my autoimmune disease.

After the 10-day detox, I spent the next five months self administering the specific protocol recommended to me from the Years Restored program director (this would be the equivalent as the at-home, long-term gentle cleanse). I was very motivated and very serious with it. I saw what happened to my grandmother and I saw what happened to my mother and knew that if I didn't get serious about this, I would follow them shortly.

A big mistake some make who go through this program or programs like this is that they feel so much better at the end of the program, that they go home feeling overconfident and consequently do a half-hearted effort in continuing the principles they learned. This often times brings them right back to square one, and they end up just as sick as they did before. Just because an autoimmune disease is reversible doesn't mean it's something to play with, that's for sure!

"I will say of the LORD, He is my refuge and my fortress: my God; in him will I trust. Surely he shall deliver thee from the snare of the fowler, and from the noisome pestilence. He shall cover thee with his feathers, and under his wings shalt thou trust: his truth shall be thy shield and buckler." — Psalms 91:2-4

Addressing Major Infections — Mold, Fungal, Parasites, Bacterial, Viral

Detoxing from major infections is a big topic all on its own. Thankfully the 10-day or gentle detox programs we've gone over will eliminate a large degree of chemicals, molds, fungi, viruses, and bad bacteria. However, there are some infections that can be very deep rooted and terribly persistent, and it could take weeks, months, or even years of faithfully following a protocol before you get the upper hand. Having hope and being consistent is the key when it comes to eliminating these toxins.

In eliminating infections, there is a helpful order to follow in our plan of attack:

1. Mold and fungus (includes candida and yeast)
2. Viral and bacterial infections
 - a) In the gut
 - b) In the blood

We want to go after mold and fungus first before viral and bacterial infections. Mold acts as a neurotoxin in the body. It hijacks the immune system and has the ability to nearly completely suppress it. This immune suppression can be so severe that people who have a viral or bacterial infection on top of a mold infection may not even see the viral or bacterial infections register on a test. Why? Because the mold is suppressing the immune system so badly that it can't even respond enough for the infection to give a positive test result.

However after mold is dealt with, not only will the infections now show up on tests but research has found that the immune system can actually kill infections on its own after the mold has been

eliminated. This has been found to be the case even with infections as bad as Lyme disease.

Mold and fungal infections are numerous. Some common mold and fungal infections are:

- Candida
- Ringworm
- Mucormycosis
- Pneumocystis pneumonia (PCP)
- Coccidioidomycosis (Valley Fever)
- Blastomycosis
- Aspergillosis

One of the most common ways that people get infected with mold or fungus is from spending time in buildings that have been contaminated with them. The largest study ever done on homes and an EPA study on commercial buildings found that over 50% of U.S. homes and 85% of commercial buildings have water damage!^{1 2}

The most common types of mold are:

- *Alternaria*: Very common mold that causes allergies and asthma.
- *Aspergillus*: Has many varieties. One of the most commonly found allergenic fungi found indoors. Causes sinus infections, allergies, ear infections, asthma, and cancer. The aflatoxin that some varieties of *aspergillus* produce are one of the most powerful carcinogens.
- *Penicillium*: Has many varieties. Causes allergic reactions, mucous membrane irritation, headaches, vomiting, and diarrhea.
- *Cladosporium*: Common allergen often found in air supply ducts. Can cause allergies, asthma, skin lesions, eye ulceration, skin and nail fungal infections, edema (swelling of legs or ankles), tightness in the chest, and lung infections.
- *Stachybotrys*: A greenish-black mold also known as “black mold” and considered the most serious form of mold toxicity. Causes vomiting, diarrhea, chest tightness or pain, sore throat, cough, headache, fatigue, fever, skin rash, burning, itching, muscle or joint pain.

The toxins which molds release are called “mycotoxins” and include aflatoxins, ochratoxins, and trichothecenes. They strongly suppress the immune system. Trichothecenes were used in chemical warfare in the 1970s and were found to be more toxic than the neuro toxins which were used.

Steps to Address Your Specific Infection

1. Make an educated guess on if you have an infection and which kind
2. Get tested
3. Put together your personalized protocol

1. Make an educated guess on if you have an infection and which kind

The relationship between infections and autoimmune diseases is incredibly common. You never know which infections might be contributing to an autoimmune condition until you test, other-

1 Spengler J, Neas L, Nakai S, et al. “Respiratory Symptoms and Housing Characteristics.” *Indoor Air* 4 (June 1994): 72–82.

2 JR Girman, BJ Baker, LE Burton. “Prevalence of Potential Sources of Indoor Air Pollution in U.S. Office Buildings.” *Indoor Air* 4 (2002): 438-443.

wise you're just be shooting in the dark. But how do you know what to test for?

Start by looking at your current symptoms, your health history, and your family's health history to determine where to begin testing. I don't have very much confidence in the established medical community when it comes to healing autoimmune diseases, but one thing it can be good for is testing and diagnosis of infections. I recommend going through these steps under the supervision of a competent natural-minded health professional.

Here's a list of common infections and the specific symptoms with which they are most often associated. Some symptoms such as fatigue seem to come along with virtually every infection, but then other symptoms are very infection specific. For instance, pain on the bottom of the feet is an almost exclusive symptom of *Bartonella*. In the list here, I've tried to stick with the most specific symptoms and avoid more of the common ones.

Bartonella: (co-infecter of Lyme, also known as “cat scratch fever”) pain on bottom of feet, occasional headaches, stretch marks, vascular disease, swollen lymph nodes by an area recently scratched by a cat

Babesia: (co-infecter of Lyme) shortness of breath, severe depression and anxiety, sweating for no apparent reason

Epstein–Barr: mood issues, swollen lymph nodes, brain fog, fatigue, neuropathy

Ecoli: nausea, vomiting, stomach cramps and pains, diarrhea, lots of blood in the stool, dehydration, swelling, excessive bleeding

H. pylori: aching or burning pain in abdomen, abdominal pain that's worse on an empty stomach, nausea, loss of appetite, frequent burping, bloating, unintentional weight loss, heartburn, peptic ulcers

Lyme (also known as *Borrelia*): bull's-eye spot rash, joint pain that migrates around the body (very unique to Lyme disease), fever, chills, headache, fatigue, swollen lymph nodes, swollen joints particularly the knees

Mercury poisoning: metallic taste in the mouth, stinging or needle-like sensations in the extremities and mouth, inability to feel in the hands, face, or other areas of the body, lack of motor skills or feeling uncoordinated, muscle weakness, impairments of speech and hearing

Mold: itchy eyes, nose and throat, itchy skin with possible rashes, watery eyes, eye irritation, chronic runny or stuffy nose, chronic coughing, wheezing, sneezing

Parasites or worms: mild abdominal pain, anal itching, allergies, diarrhea, constipation, gas, bloating, weight loss

SIBO (“small intestinal bacterial overgrowth”): gas, bloating, acid reflux especially after meals, constipation or diarrhea, acne, rashes, rosacea, eczema, other skin issues, deficiency in vitamins and minerals like B-12 and iron, weight gain or sometimes weight loss, abdominal pain or cramping

Yeast/Candida: toe fungus, itchy anus, groin, ears, and skin between or around the fingers and toes, fungus in the fingernails or toenails, depression, feeling worse after eating sugary foods or fruits (Note: According to the MAYO Clinic, 30%-50% of chronic sinus infections are due to yeast.)

As much as I have tried to list only specific symptoms that are unique to each infection, you can see that there is still some symptom overlap. Practitioners hope their patients have those “it-can-only-be-this” type of symptoms, but some patients have a bunch of very general symptoms. This simply highlights the necessity of the trial and error process. With these cases the approach is typically to test, treat, watch, and pray — meaning you test based on your symptoms and history, treat what seems to be the most likely candidate, and watch to see if you improve.

2. *Get tested*

If you have health insurance, by all means try to get your testing covered by your insurance. If you don't have insurance or if your insurance doesn't cover the testing you would like done, many of these tests can be ordered on your own and done yourself if you are willing to pay out of pocket.

The following is information about how you can get tested for mold, yeast, and viral and bacterial infections. As you follow the links to some of these websites, you will see that there is not just one test per infection but sometimes numerous different tests for the same issue. To determine which tests you need and which ones you don't, you may want to consult with your doctor or contact the lab.

MOLD TESTING

To test for mold, both you and your environment must be tested. If your test is too expensive but there are symptoms that point to a possible mold infection, you could simply test your home only, and then if you get a positive reading assume you have been infected with mold and begin therapy.

Testing Yourself:

- **Great Plains Laboratory:** (self-administered urine) \$300
<https://www.greatplainslaboratory.com/gplmycotox>
- **The RealTime Lab Mycotoxin Test:** \$699
<https://realtimelab.com/product/mycotoxin-test/>

Testing Your Home:

- **ERMI Dust Test through EMSL:** \$172 per sample
1-800-220-3675 • moldinspectionkit.com
- **Immunolytics Diagnostic Mold Test Kit:** \$158 for five samples
<https://microbalancehealthproducts.com/products/diagnostic-mold-test-kit-five-pack.html>
- **My Mold Detective:** \$130 per sample + \$40 per additional sample
mymolddetective.com
- **The Environmental Mycotoxin Test:** \$319
<https://www.realtimelab.com/product/environmental-mycotoxin-test/>

- **Building Biologist, Indoor Air Quality Specialist, or Mold Inspector:** For the most thorough, accurate, home mold testing you can hire a building biologist, an indoor air quality specialist, or a mold inspector. This is a specialist that comes into your house with testing equipment and gives a personalized assessment of the toxicity of your home. They should visually inspect the entire house from top to bottom and inside and out for signs of mold or water damage, narrowing in on common places where mold and moisture is often found. They will use a moisture meter to detect any signs of moisture in the walls, ceiling, and floors. They should do an air sample or dust sample to determine a mold spore count and what kind of mold it is. Mold counts should be equal to or below outdoor counts (so it is standard to take an outdoor air sample for comparison). There should be no stachybotrys (black mold). Not one spore. Aspergillus should be present only at very small levels. Make sure you can see the report. It's important to see the numbers for yourself. Choose a company that is NOT involved in the remediation process to avoid a conflict of interest. Besides doing an online search for a specialist in your area, here are links that may also help you find the right person.

<http://www.iaqa.org/find-a-pro/>

<https://hbelc.org/find-an-expert/environmental-consultants>

Sometimes the mold problem may be so bad, you will have to treat it like a fire and abandon the house with everything in it. But often, it can be removed. To get rid of the mold, hire a good quality mold remediator. Make sure you ask: **Do you believe mold is harmful?** The answer must be yes. It essential for the mold to be removed safely with proper containment and barriers so to not cross-contaminate the rest of the house with airborne spores, endangering you and the rest of your house. Try to find someone who will guarantee their work, who will redo it for free if mold comes back in the same place.

YEAST TESTING (*including candida*)

- **Direct Labs:** (self-administered stool test) \$119
DirectLabs.com — Click Order a Test > Search for “Yeast”
- **Great Plains Laboratory:** (self-administered urine test) \$249 - \$309
Organic Acids Test (OAT) — <https://www.greatplainslaboratory.com/organic-acids-test/>
- **Vaginal Yeast Infections Test:** (self-administered) \$15
At home kits such as Monistat are available online and at most drug stores.

VIRAL INFECTIONS TESTING

Lyme (aka “Borrelia”), Bartonella, and Babesia:

- **IGeneX:** (Order kits) \$371 - \$1,350
These virus tests can be done individually or all in one test. It is a very comprehensive quality test, but also pretty expensive.
<https://www.igenex.com/testing/how-to-order-test-kits/>

Lyme (aka “Borrelia”):

- **Direct Labs:** (walk-in lab blood test) \$53
Order through website by locating their closest partner lab to your location. All Quest Diagnostics Labs work with Direct Labs.
DirectLabs.com — Click Order a Test > Search for “Lyme”

Epstein-Barr:

- **Direct Labs:** (self-administered blood test) \$88 - \$251
DirectLabs.com — Click Order a Test > Search for “Epstein-Barr”
- **Walk-In-Lab:** (lab or kit blood test) \$69 - \$141
<https://www.walkinlab.com/infectious-disease-tests/epstein-barr.html>

BACTERIAL INFECTIONS TESTING

One of the ways to find if there are any intestinal yeast and bacterial overgrowth infections is with a urine Organic Acids Test (OAT). Harmful forms of yeast and bacteria excrete their own waste products and this test looks for high amounts of the various wastes they produce to signal an overgrowth infection. For other bacterial infections, stool tests will detect what’s living in the colon, and breath tests will determine what’s in the small intestine.

E. coli:

- **Direct Labs:** (self-administered stool test) \$53
DirectLabs.com — Click Order a Test > Search for “E. coli”

H. pylori:

- **Direct Labs:** (self-administered stool test and breath test) \$119 - \$259
DirectLabs.com — Click Order a Test > Search for “H. pylori”
(During a breath test, you swallow a pill, liquid, or pudding that contains tagged carbon molecules. If you have an H. pylori infection, carbon is released when the solution is broken down in your stomach.)
- **Doctors Data:** (doctor ordered)
<https://www.doctorsdata.com/h-pylori-antigen-stool/>

SIBO:

- **Direct Labs** (self-administered stool test) \$239 - \$359
DirectLabs.com — Click Order a Test > Search for “SIBO”

Now if you don’t have the money, then a possible option is to do what I did. I simply made the best educated guess as to which infections I had based on my symptoms and family history, then I began experimentally treating it. (The nice thing about this kind of self-experimentation is when you’re using natural remedies, in moderation of course, they’re harmless. The worst that can happen is that they don’t work if you misguessed which infection you have.) If after several weeks the protocol seems to be helping, then you probably guessed correctly. This is obviously the cheapest

option, but the downside is that it may take longer doing trial and error protocols without seeing positive results.

Here are some ways you can allocate the money you do have for health testing. I recommend to stop buying coffee, alcohol, and other unnecessary unhealthy drinks. Cut your cable TV, Netflix, Hulu subscription, Redbox purchases and other entertainments. Then take that money and find out which infection could be causing your autoimmune disease.

3. Put together your personalized protocol

Do steps 1-3 first:

#1) Remove all harmful foods and toxins #2) Heal the leaky gut #3) Nutrify

All of the testing and treatment in the world is worthless if you don't first change your environment or are not practicing the NEWSTART principles such as getting enough sleep, drinking 8-10 glasses of water, eating a clean diet, exercising, etc. You have to stop adding to the problem before you can start taking away from it.

Make sure you've made a thorough effort in trying to get rid of chemicals, heavy metals, molds, and fungus in your body before going after viral and bacterial infections. Mold has the ability to hijack the immune system, and chemicals and heavy metals all overwhelm the immune system to the point where it cannot get enough steam to launch an attack on the infections. This is why it is much better to try to detox these things first. Remember the order in eliminating infections:

1. Mold and fungus (including candida and yeast)
2. Viral and bacterial infections
 - a) In the gut
 - b) In the blood

Go after gut infections before blood infections. It will be more difficult to heal from an infection in the blood if the gut is still out of balance and struggling. Gut infections like yeast, E. coli, H. pylori, and SIBO will make the absorption of important nutrients for healing difficult and perpetuate leaky gut which allows more toxins to enter the bloodstream making your problem worse. Therefore, balancing your gut by eating a whole foods, plant-based diet providing lots of fiber and killing off any gut infections is a very good idea before dealing with infections in the blood.

Treat easier infections first before going after the more difficult infections. Go after the low-hanging fruit first before you reach for the higher ones. This means easier-to-kill infections like Bartonella, Babesia, Epstein-Barr, and human herpes virus would be a first target prior to Lyme.

Chemically sensitive persons may need to address infections first because the infections may grow by feeding on the die-off substances being released while detoxing mold, chemicals, and heavy metals. This can cause the infections to flare up with a bad reaction, making con-

tinuing very difficult. Therefore, if you have a particular infection that gets worse, this may be a sign that you need to go right for it.

Compensate for the MTHFR gene mutation if you have it. Because this gene is so key to giving the body its ability to detox, it's super important to make sure you are compensating for this gene mutation if you have it by giving your body its proper nutrients that will enable it to methylate and detox efficiently. How do you know if you are effectively bypassing the MTHFR mutation? Check your blood for homocysteine levels. High homocysteine is one of the indicators of an active MTHFR gene mutation, but if it is within or close to normal ranges this indicates that the the MTHFR mutation is being bypassed. I dedicate a whole chapter to this and other mutations later in the book in the chapter *The Genetic Factor*.

Neurotransmitter support during detoxing is helpful for anxiety and depression. Infections can mess with your hormones which can increase anxiety and depression. So neurotransmitter support will enable you to more calmly navigate through the ups and downs of detoxing. This means making sure you are getting enough foods high in B vitamins. There is a whole section on B vitamins in the chapter *The Genetic Factor*.

Before tackling infections on your own or through your doctor, get tested for nutrient and hormone deficiencies, inflammatory markers such as your sedimentation rate, as well as cholesterol, and blood sugar levels. These should be as good as possible before attempting to remove infections, otherwise the body can be damaged in the process of treating the infection.

Killing Infections

An anti-infection program is like the general detox program in the sense that it can be done in an intensive manner, or in a longer gentler manner, or as a combination of an intensive followed by a long term program like I did. The intensive infection program is essentially the 10-day cleanse along with taking the specific concentrated anti-microbial herbs. Whenever you see “Cleansing Tea” on the 10-day detox schedule is when one of these anti-microbial herbs could be taken.

A gentle, long-term, anti-infection program would essentially be the exact schedule of the long-term gentle cleanse. The difference would be the kinds of binders and herbs that are taken. In the instruction that says take “2-3x a day” simply choose the specific binders and herbs for your infection.

In eliminating infections, remember the helpful order to follow in our plan of attack:

1. Mold and fungus (includes candida and yeast)
2. Viral and bacterial infections
 - a) In the gut
 - b) In the blood



There are scores of amazing herbs that the good Lord has put on earth that specifically kill unwanted bodily residents and stimulate the elimination organs into action to search and destroy. A good cleansing program should involve the use of these if there are worms, parasites, molds, yeast, and fungus, or a tough layer of biofilm that needs to be broken up and attacked. The use of concentrated herbals was very useful in eliminating the fungal infection I had. I'll talk more about that in the chapter *My Accompanying Skin Fungus*.

The following is a summary of many of the powerful but simple herbs which have been used to remedy various chronic infections.

MOLD

- Activated charcoal
- Bentonite clay
- Oil of oregano (derived from “*origanum vulgare*” or “*thymus capitatus*” one of the best at killing mold)
- Cloves
- Schisandra berry
- Rosemary
- Thyme

FUNGUS (*includes candida and yeast*)

- Diatomaceous earth (1 tsp in water 2-3 x day)
- Garlic (9 to 12 raw cloves per day, finely minced in lemon juice is easiest)
- Oil of oregano (derived from “*origanum vulgare*” or “*thymus capitatus*”)
- Pau d’arco
- Grapefruit seed extract
- Olive leaf
- Black walnut
- Oregon grape root
- Licorice root (25 anti-fungal compounds)
- Wormwood
- Fennel
- Turmeric
- Rosemary
- Schisandra berry
- Cinnamon ceylon (the ceylon variety is non-irritating like other cinnamons are)
- Cloves

- Thyme
- Tea tree oil (external use only)

Since I personally had a fungal infection, I put together my own anti-fungal program, and it worked. See the chapter *My Accompanying Skin Fungus* for my detailed protocol. But the basic formula I used is:

low-fat (5%) plant-based diet with good probiotics
(no sugar, peanuts, mushrooms, and yeast products such as breads and nutritional yeast)

+

natural anti-fungals internally

+

natural anti-fungals externally

WORMS AND PARASITES

- Diatomaceous earth (1 tsp in water 2-3 x day)
- Garlic (9 to 12 raw cloves per day, finely minced in lemon juice is easiest)
- Cloves (believed to be the only herb that destroys almost all parasite eggs)
- Wormwood (kills worms, go figure)
- Black walnut (using black walnut, wormwood, and cloves together is the most powerful combination to kill every developmental stage of at least 100 parasites)
- Chinese goldthread
- Oregon grape root
- Yellow dock root
- Pomegranate seeds
- Pumpkin seeds (not the fastest, but does kill tape worms and other worms)

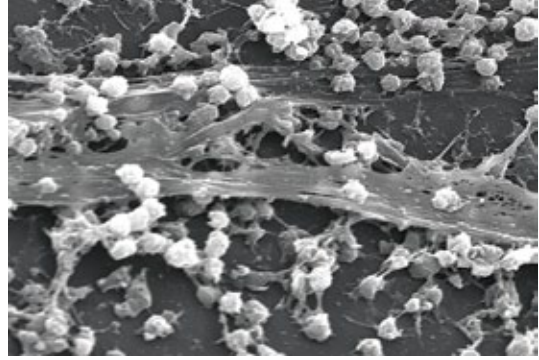


BIOFILM

Biofilm is a protective coating that covers colonies of bad bacteria in the colon. These colonies become very hard to eradicate because the biofilm coatings are resistant to chemicals and antibiotics. Biofilm can even provide refuge for heavy metals.

- Stevia leaf
- Berberine

- Andrographis
- Turmeric
- Cloves
- Garlic
- Oil of oregano (derived from “*origanum vulgare*” or “*thymus capitatus*”)
- Artemisia
- Wormwood



What biofilm actually looks like

BARTONELLA

- Neem
- Noni
- Grapefruit seed extract
- Poke root

LYME (*Borrelia*)

- Otopa bark³
- Samento bark (closely related to cat’s claw)
- Stevia leaf (kills all of three of its forms plus biofilm, outperforms drugs in killing Lyme)⁴
- Black walnut green hull
- Vitamin B-rich foods, coconut, magnesium, licorice root: In their efforts to treat Lyme, some doctors can end up doing damage to the adrenal glands, leaving the patient with chronic fatigue after the Lyme has been treated. This can be avoided by supporting the adrenals and nutritional deficiencies during treatment.



Lyme’s classic bullseye

When taking essential oils orally, be cautious, do research, and read directions. Some essential oils like tea tree oil should never be taken orally as they are poisonous internally. Others can be taken orally but often need to be diluted as they are very strong on their own. You can mix it with a carrier oil in a veggie capsule to prevent it from burning your mouth or esophagus.

Oregano oil should be followed with a probiotic since it like many others are indiscriminate microbial killers and will eliminate both good and bad gut bacteria.

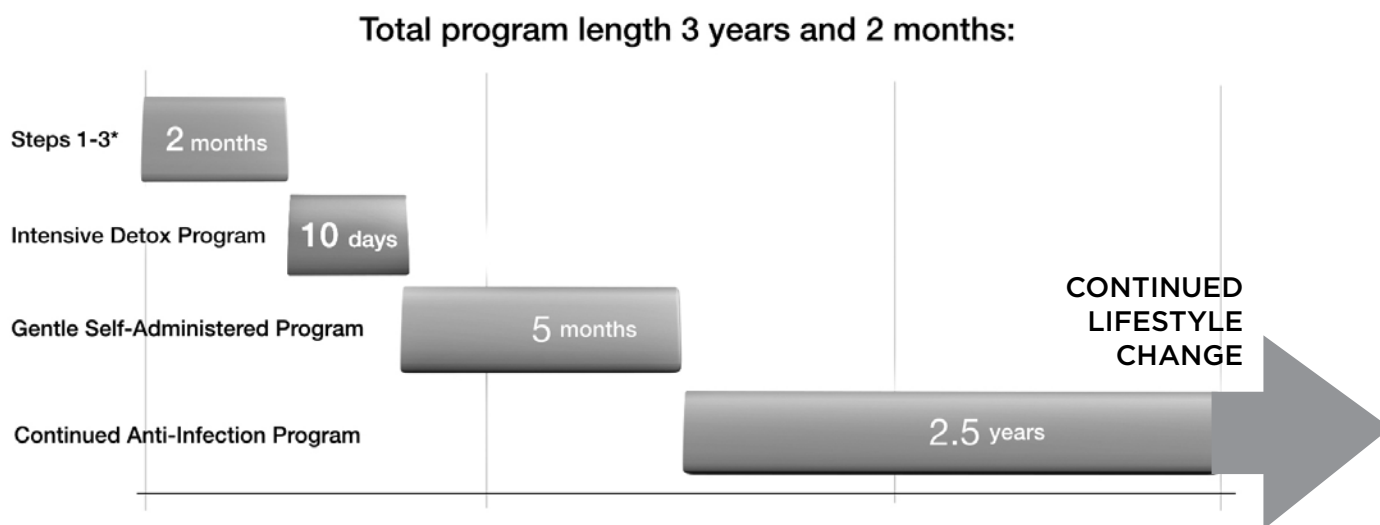
³ Goc, A, Matthias R. “The anti-borreliae efficacy of phytochemicals and micronutrients: an update.” *Therapeutic Advances in Infectious Disease* 3.3-4 (June 2016): 75–82.

⁴ Theophilus PAS, Victoria MJ, Socarras KM, et al. “Effectiveness of Stevia Rebaudiana Whole Leaf Extract Against the Various Morphological Forms of *Borrelia Burgdorferi* in Vitro.” *European Journal of Microbiology & Immunology* 5.4 (2015): 268–280.

Many essential oils burn when they come in contact with your skin because they are so concentrated. Oregano oil and grapefruit seed extract I know for a fact burn like crazy when applied topically without being diluted. I learned this the hard way. Therefore, they need to be mixed with a carrier oil such as a coconut oil or olive oil if they are being applied to the skin for a fungal infection.

How Long Will It Take?

Don't expect infections to always vanish quickly, especially in serious cases. It may take months of getting the autoimmunity under control and making the body stronger before being able to focus solely on dealing with infections. Before I started aggressively treating my fungal skin infection, I first made sure I had down steps 1-3 of the 5-step protocol. After this, I did an assisted 10-day detox at Years Restored followed up by a five month gentle detox program at home and then finally a specialized anti-fungal program. Here's a graph illustrating the total timeframe it took from the time I first learned of my autoimmunity to when I was healed of my skin infection.



*I continued Steps 1-3 throughout the entire program.

My fungal infection was so persistent that I spent several additional years tweaking my fungus detox program before I was healed from it. Despite how tough it might be dealing with infections, it is very well worth it since these bugs can be huge factors contributing to and even causing autoimmune diseases in many patients.

It's recommended that when moving forward with attempting to detox a major infection, that you do so under the supervision of a competent natural-minded health professional who can help you navigate through the twists, turns, and bumps that may be experienced along the way.

“But if we walk in the light, as he is in the light, we have fellowship one with another, and the blood of Jesus Christ his Son cleanseth us from all sin. If we say that we have no sin, we deceive ourselves, and the truth is not in us. If we confess our sins, he is faithful and just to forgive us our sins, and to cleanse us from all unrighteousness.” — 1 John 1:7-9.

On to the last step, #5!

Step 5: Remove Chronic Stress

THE 5-STEP PLAN I USED THAT HEALED MY AUTOIMMUNE

1. Remove harmful foods and toxins
2. Heal the leaky gut
3. Nutralize
4. Cleanse/detox
- 5. Remove chronic stress**

Don't downplay the stress factor. I saw the tendency in me to lightly esteem this step, but I came to realize that neglecting this step had the potential to undo everything else I was doing. These prior four steps would have been absolutely useless had I not been closely following this one.

There is a powerful relationship between mental/emotional stress and your physical state of being. We feel emotions in a very physical way. We may feel a "lump in our throat" or a "knot in our stomach" or our "blood begins to boil" when experiencing various negative emotions.

This physical response to emotion is not imagined. When we are stressed, our hypothalamus releases hormones that signal the pituitary and adrenal glands to release stress steroids such as adrenaline and cortisol. This triggers your body's immune system to kick into high gear and bring you into "fight or flight" mode. This puts your body in a state of inflammation. But after the stressful event is over, your body calms down and settles back into its baseline state.

When this happens repeatedly and too often, your body remains in a low-level state of stress,



giving your body a constant low dose of inflammatory chemicals. This is when it becomes problematic. Chronic stress results in chronic inflammation and disease. The National Institutes of Health published an article in the journal *Autoimmune Diseases* in which it says “chronic stress affects the composition of the gut microbiota” and “chronic stress also makes the gut leaky.”¹

There can be many different sources of chronic stress. **So what are your biggest stressors?** I bet they fit into one or several of these main stressor categories:

health challenges, financial challenges, marriage, work, school, kids, damaged family relationships, emotional trauma from war, and childhood and adolescent trauma.

During my years as a Christian motivational speaker, I have noticed that the one source of stress in particular that seems to be worse than them all is **unresolved traumatic childhood wounds**. I have seen that this stressor is typically the wellspring that feeds and aggravates most every other stressor. It’s been shown that unresolved deeply traumatic wounds from childhood can be a source of chronic stress that contributes to the onset of autoimmune disease.² That’s right, unresolved issues from the past can be directly contributing to your current autoimmunity.

The Center for Disease Control and Prevention (CDC) did a study on childhood trauma with 17,000 Kaiser Permanente healthcare members called the ACE (Adverse Childhood Experiences) study. From this study they developed a test to determine your level of childhood trauma. The interesting thing is that a high ranking score on this test has been proven to correlate with an increase in chronic disease.^{3 4} As a matter of fact, for every 1 point increase in the ACE score the risk for developing an autoimmune disease like type 1 diabetes, lupus, and rheumatoid arthritis goes up by 20%!⁵ An ACE score of only 2 or more increases the chances of being hospitalized for an autoimmune disease by 70 to 80%. How do you know if you have a high ACE score? You can easily take a simple version of this test online by going to the link in the corresponding footnote below.⁶

So how do you resolve these unresolved traumatic childhood wounds? Can you go back and undo everything? No. The only way to close the door on these wounds is with true forgiveness. Most people, even Christians, don’t have the full picture of real forgiveness. Let me show you what I believe to be true and thorough forgiveness in four steps.

1 Campbell AW. “Autoimmunity and the Gut.” *Autoimmune Diseases* 2014 (2014): ID 152428.

2 Dube SR, Fairweather D, Pearson WS, Felitti VJ, Anda RF, Croft JB. “Cumulative childhood stress and autoimmune diseases in adults.” *Psychosomatic Medicine* 71.2 (Feb. 2009): 243-250.

3 Mock SE, Arai SM, “Childhood trauma and chronic illness in adulthood: mental health and socioeconomic status as explanatory factors and buffers.” *Frontiers in Psychology* 1 (2010): 246.

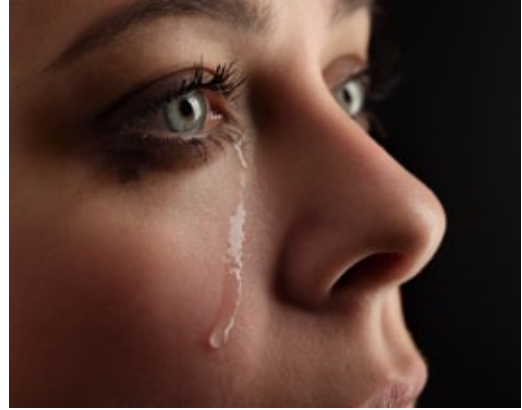
4 Brown MJ, Thacker LR, Cohen SA. “Association between Adverse Childhood Experiences and Diagnosis of Cancer.” *PLoS ONE* 8.6 (11 June 2013): ID e65524.

5 Dube SR, 243-250.

6 <https://www.necfcj.org/sites/default/files/Finding%20Your%20ACE%20Score.pdf>

5a.) *Forgiveness*

Forgiveness is monumentally important to physical healing. But how does one truly forgive? The answer to this question is very elusive for many. If forgiveness were easy, we all would have done it by now. However, when we open ourselves to God's help, true complete lasting forgiveness becomes fully possible. This is a forgiveness that even results in physical healing.



Here are the four steps for true Biblical forgiveness:

- Step 1:** Realize your offender can never pay back your debt. Only Jesus can.
- Step 2:** Remember the debt you've been forgiven too.
- Step 3:** Divorce your anger and bitterness by God's power.
- Step 4:** Accountability.

FORGIVENESS STEP 1:

Realize your offender can never pay back your debt. Only Jesus can.

In the Bible, the ideas of sin and debt are closely related. When someone does something to hurt you, they actually incur a debt. It's a spiritual debt, a moral debt. They have taken something from you. Maybe someone spoke mean words to you and took your peace, maybe someone abused you and took your innocence as a child, maybe a drunk driver hit a family member and took away your sibling, or perhaps kids at school bullied you and took away your joy and self-worth. Whatever it may be, they have incurred a moral debt for taking from you what was not theirs. Here's the thing though. They have incurred a debt they can NEVER pay back. If someone speaks a mean word, can they ever take that back? No, they said it. Period. All the apologies can never undo the fact that they spoke a mean word to you. If someone takes away your innocence, your self-worth, your family member, can they pay you back? No, never. Yet people spend their whole lives seeking repayment from someone who can never pay them back! We get angry at our offenders and say, "You took something from me, give it back to me!" But even if they wanted to, they can never repay you.

But there *is* someone who can pay you back. That is Jesus. If someone stole your innocence, Jesus can give it back to you. If someone stole your joy, Jesus can give it back to you. If someone stole the life of a loved one, in many cases Jesus can give them back to you too at the resurrection. Whatever you lost, Jesus can give it back. But in His way and in His time.

There are a few instances in which you may not get back exactly what you lost for example a broken marriage. Someone else's free will is involved. But Christ can take away the pain of that event and give you happiness and contentment instead. The debt never vanishes, someone is still left holding the bill. But Jesus says, "I will hold the bill, and you can have my healing." Jesus said, "*The thief cometh not, but for to steal, and to kill, and to destroy: I am come that they might have life, and that they might have it more abundantly*" John 10:10. Christ's death on the cross

paid all moral debts. He took what was ours, the punishment for being a debtor, and in exchange offers us what was His — the love, joy, peace and healing of heaven. This is one of the reasons I'm a Christian, because the God of the Bible is so good!

FORGIVENESS STEP 2:

Remember the debt you've been forgiven too.

The Bible says, *“And be ye kind one to another, tenderhearted, forgiving one another, even as God for Christ's sake hath forgiven you”* Ephesians 4:32. I've counted at least five places the Bible where the basis for forgiving others is because we've been forgiven ourselves. It's so easy to keenly remember with near perfect accuracy all the times we were wronged, but then we somehow have almost complete amnesia when it comes to remembering the times we wronged others. We remember the times when people spoke behind our backs but forget the dozens of times we did it to others. We remember when we were teased but forget the times we teased others. If we have sinned against someone even just once, then we are part of the problem. (If you're anything like I am, I doubt it was just once.) Perhaps you have never done something as hurtful to someone else as was done to you, but when it comes to sin debt is debt. It may not be equal in severity but it's equal in the fact that it's debt and has caused someone pain.

As we consider the wounds given to us, it is very helpful to remember that we have given wounds too. As you think about those who owe you a moral debt, don't forget that you owe a moral debt to others also.

FORGIVENESS STEP 3:

Divorce your anger and bitterness by God's power.

The most common greek word for “forgive” in the New Testament is the word “aphiemi.” This word is also used in the Bible to mean “divorce.” It means “to send away or depart.” It is the word that Paul used in 1 Corinthians 7:11 when he said, *“let not the husband put away his wife.”*

That's strange. The same word for forgiveness is also used to mean divorce?

Divorce doesn't seem related to forgiveness to me. What could this mean? This is the message. When we forgive, we are supposed to divorce something (and it's not your spouse). What are we supposed to divorce or “send away” when we forgive? Remember, it's not the debt, because the debt must be paid by someone. It's the sinful thoughts and emotions that the offense has caused — the bitterness, resentment, the desire for revenge, the right to pay them back. Divorce it, send it away. Proverbs 20:22 says, *“Say not thou I will recompense evil, but wait on the Lord and **He** shall save thee.”*

For a hurt, resentful person to do this, it is a divine miracle. The verse just quoted tells us how it happens. Instead of revenging evil we are told to “wait on the Lord.” That Hebrew word “wait on” literally means “to bind together.” In order to send away our anger and resentment we must bind ourselves to Jesus, press closely to Him, cry out to God when we are experiencing those feelings, determine to do the right thing, and fully rely on God's promises, *“I can do all things through Christ who strengthens me”* Philippians 4:13. Jesus will give you the supernatural ability to forgive! This is not always a one time action. You may need to do this over and over again when those old memories and bad feelings pop back up. But as long as you do this, having faith in God,

He *will* deliver you and heal you.

FORGIVENESS STEP 4:

Accountability.

Have you ever heard the phrase “forgive and forget” and “time heals all wounds”? These popular mottos are missing an important key, accountability. Accountability is a huge concept you almost never hear about when it comes to forgiveness. Matthew chapter 18 has two famous sections in it. The first is in verses 15 to 20 which deals with the process of accountability when one person sins against another. The second section in verses 23 to 35 is the parable of the two creditors. In this parable, a man is forgiven his large debt by a rich lord. He then turns around and puts someone in jail who owes him a very small debt. The rich lord finds out what happened and says, “*O thou wicked servant, I forgave thee all that debt, because thou desiredst me: Shouldest not thou also have had compassion on thy fellowservant, even as I had pity on thee?*” Matthew 18:32-33. This second parable deals with forgiving others because we’ve been forgiven our debts. These two sections are always looked at as separate issues — with accountability at one end of the room and forgiveness at the other end. However, the close reader will notice there is a verse in the middle that joins both of these sections. Verse 21, “*Then came Peter to him, and said, Lord how oft shall my brother sin against me, and I forgive him?*”

In the beginning, Jesus talks about how to provide accountability when someone has wronged you. This prompts Peter to ask a question about forgiveness and Jesus tells the story of the two debtors. They are part of the same thought process. The two sections are connected. This demonstrates how accountability is a part of forgiveness.

This is the reason why so many people never truly forgive and heal, because they don’t understand that accountability is actually a part of forgiveness. What does this mean? When someone has wronged you, part of the healing process is kindly confronting them.

My wife and I have personally experienced this on several occasions. We have had family members treat us very cruelly right after having helped them. We went through all the points I mentioned and still could not have peace over it. We decided to confront them by writing letters. In the letters we recounted the situation, kindly but clearly pointed out what they did that we felt was wrong, and asked for reconciliation. Only until we put those letters in the mail did we feel the burden lift. Unfortunately they responded with even more hatred and bitterness, but that didn’t affect us adversely at all. We were sad to see them persist in dysfunction, but we felt peace that we had done the right thing.

A friend of ours and her sister were sexually abused as young girls. When she was 12 years old, she spoke up to the family about what was happening and exposed the perpetrator. Thankfully it put an end to the abuse. Her sister however never talked about it. Our friend moved on to become an emotionally healthy individual, but her sister developed severe mental issues. Our friend believes that her sister’s mental problems stem from her unwillingness to confront or even talk about the abuse.

When we are wronged and the wrongdoer is accessible and we do not confront them, we are actually keeping ourselves in a state of perpetual victimhood. When we do not confront them, we actually send a message to ourselves that what they did to us was ok. Do you remember a time when

you were a child when your sibling hit you and your parents saw it and didn't punish or correct your sibling? Do you remember the message that that sent to you? Mom or Dad must not have a problem with my sibling hitting me. They must think that's ok. If it was bad it would be corrected, but it's not being corrected so it must not be bad. We can send that same message to ourselves when we don't confront our abusers. If it was bad I would correct you, but I'm not correcting you so it must not be bad. By not holding those that wrong us accountable, we generate self-hate in feeling partly responsible for the wounds. We keep ourselves in a state of perpetual victimhood.

These are actually the very instructions Jesus has given us in dealing with personal conflict. He says, *"Moreover if thy brother shall trespass against thee, go and tell him his fault between thee and him alone: if he shall hear thee, thou hast gained thy brother"* Matthew 18:15. We often tell everyone else except the very person who has faulted us, but this does not help us emotionally, and it does not help the remedy the situation. If we follow this process of accountability, not only will we experience the emotional release we are desiring, but this is also the best opportunity to mend the relationship in a healthy way without sweeping the problem under the rug.

If you follow the previous three points and look to God for strength to bravely carry out this fourth by holding those who hurt you accountable in a kind way with the intent of reconciliation, you will experience a wonderful release from your burden. Now, there are times when someone may not be safe enough to do this in person, or there may still be trust issues where appropriate boundaries are necessary until trust has been built back. Accountability is a principle and may look different in different situations. Prayerfully consider your situation, seek God for wisdom, and I trust He will lead you.

5b.) Cognitive behavioral therapy

Cognitive behavioral therapy changes patterns of thinking or beliefs to change the way we feel. It is incredibly powerful in treating depression and mental disorders. A key factor in chronic stress is when for a prolonged period of time a person perceives they have little or no control. But when you have surrendered your life fully into the hands of Jesus, then He is in control of your life, and you don't have to worry because He loves you more than anyone else does.



When we filter the events of our life through the truths of God's word, we will experience them in a healthier way emotionally. For example, when finances are low, we may experience stress because we are worried and afraid of what will happen. But when we have the understanding and belief from the promises in the Bible that our Father is the Creator of the universe and that He loves and cares for us, our worry and therefore stress will be abated as we rest in His care. This is why we've made studying the Bible and praying every morning the first priority of our day. It reshapes our thoughts and understanding to prepare us for the trials of the day. When we are hit with the storm, we are prepared and able to get through it with a song in our hearts and a smile on our faces.

These three practices are the most effective cognitive behavioral therapy there is:

- (1) Daily reading encouraging **Bible promises** and **believing** them.
- (2) **Thanking God** for His care and blessings. Being grateful for all that you do have.
- (3) **Trusting in God's will** and His love for you.

5c.) Eliminate stressors

While it's important to handle stress in a healthy way, there *are* stressors that we can simply eliminate. The pace of our modern go-go-go life often becomes very stressful, making us feel tired and worn down. This is very serious as your health can go downhill very fast if you persist in a daily grind that is causing you a lot of stress. You may be wearing yourself out when you really need to be healing. In sacrificing some of the things in your schedule that you're used to, you are investing in your health. You can actually cut out or at least reduce many of the things that are causing you stress. Here are some ideas:

- **Work:** Your job may be a huge stressor in your life. Cut down your hours at work to part-time and eliminate unnecessary spending to enable yourself to do this financially. Your health is worth more than money. You need the time to take care of yourself. You're worth it. This is exactly what I did. My wife was able to keep up steady work and I cut my work hours down to part-time to focus on my healing program. Yes, our finances went down some, but it was worth reversing my autoimmune disease. We tightened the belt with our spending, and we always had our needs met. God always took care of us and provided for us through this difficult time.
- **School:** If you're in college, take a semester or two off and postpone your studies until you're well. Studying takes a lot of time and energy. Your health is worth delaying your education.
- **Marriage:** If you're having marital problems I have several fantastic resources to recommend that have been the reason why my wife Jennifer and I have had the success and happiness we've had in our marriage. Number one, the Bible. I'm not saying this because it's the right thing to say. Starting every day by reading the Bible and earnestly praying for help has literally changed our characters and our marriage. It hasn't been easy; we've had to really work hard to prioritize it in our busy schedules, but it does work. Amazingly. If it's currently not your habit, I challenge you to do try it. We also make it a priority to have a short family worship together every morning and evening. What that looks like is we take 5 to 7 minutes in the morning and evening where we come together to pray, sing a song of gratitude to God, and read a few Bible verses, praying again at the end. The saying has been true for us, "A couple that prays together, stays together."

Also, a fantastic online resource that has really been a blessing to our relationship is Marriage Conversion University.⁷ We learned one particular piece of advice that literally changed the way we communicated during conflict almost overnight which led to actually hearing each other and actually being heard. Check it out. We also dedicate one night a week to reading a

⁷ MarriageConversionUniversity.com

marriage book, where we talk about how we can apply what we're learning to our relationship and our struggles. It takes us about one hour to do it and it's been a great investment in the most important earthly treasure we have, our marriage. And of course we reserve one night a week as date night, can't forget that!

- **Kids:** I will try to be as tactful on this point as I can, and please forgive me if what I'm about to say stings a bit. My wife and I have counseled with enough couples with kids to see that parents who are really struggling with their kids are usually simply experiencing consequences of their parenting choices. Changing the parent is always the easiest way to change the child. Besides the Bible, two other resources I would pick for myself on parenting are the books *Child Guidance*⁸ and the book *Raising Godly Tomatoes*.⁹ Both of these books share timeless principles and practices that have been producing happy, respectful children for millennia.
- **Damaged relationships:** Issues with an ex-spouse, parents, siblings, children, friends can be terrible. Relationships take two people to work, and although you can't control the hearts and mouths of others, there is still something you can do to make relations as good as possible. Poor treatment by family members may be unavoidable, but I find that in many cases the hurt from poor treatment itself is made doubly worse by our own dysfunction in how we handle it. Yelling back, holding grudges, making snide passive aggressive comments, sweeping it under the rug, never dealing with the issues — these are all common dysfunctional ways of handling relationship difficulties. Whenever we participate in dysfunctional behavior we double our pain since it ends up adding guilt to our hurt. Why guilt? Because in our hearts we know we've stooped to a low level too. This increases our resentment because we have the sense that we have let the other person control us by allowing them to cause us to act in a wrong way also.

When we deal with family issues in an mature and Christ-like way, I find that the burden is much lighter and we are able to even feel sorry for the person for being so dysfunctional. To do this it comes down to three major points. First, we need to prepare ourselves. If you have participated in the dysfunction, then be honest about it. Even if they've provoked you, you know how the old saying goes "two wrongs doesn't make a right." Confess it to God, and be prepared to apologize to the family member too. Secondly, pray for them earnestly every day. Ask God to prepare their hearts for what you're about to do next. Third, kindly confront them. Sound familiar? Just like step four of the forgiveness process. This accountability will break the cycle of sweeping things under the rug. It will free you from feeling like they can control you, and thus decrease your resentment for them. It will also give you the assurance that regardless of how they act, you did the right thing by admitting your faults in the matter if there were any. Be aware that most people aren't used to dealing with issues like this. Some respond well and others really fight against it since it no longer allows them to act up without accountability. They may even cut you off for a time, but I say that if their terms for the relationship are that they get to mistreat you and you can never speak to them about it,

8 Ellen G. White. "Child Guidance." 1954.

9 RaisingGodlyTomatoes.com



then the space will probably be a blessing. Especially while you're trying to heal. Continue to pray for them, hope for the best, and possibly try again when the time is right.

- **Health challenges:** Health challenges for some can be the main stressor, but I find that for many it's an amplifying factor to the more serious already existing ones. Autoimmune diseases often effect neurotransmitters and hormones that strongly impact our emotions. Therefore, being persistent and taking the necessary steps to deal with your health condition will lighten the burden of other stressors.

Simply incorporating the NEWSTART principles into your daily lifestyle would make a big difference for most people. I'm estimating that 97% of people do not follow these health principles, even if they are well aware of them. Many think that they are living a healthy lifestyle, but actually are not. They think they're living a healthy lifestyle, but in reality they're staying up late, not exercising, not drinking enough water, not trusting their problems with God. You would be doing yourself a tremendous service by doing all you can to follow these health principles for it's medically proven that they're connected to longevity and vibrant health. When your body is strong it enables your internal systems to do their jobs better which lends to overcoming chronic illnesses such as autoimmune diseases.

Also don't forget the points from foundational principle #2. Realize there must be something more important than my immediate physical healing. Stop asking "why me" and start asking, "what about me" do I need to learn. What am I gaining from this experience? How am I growing in my character through this? Think about what the Biblical historical individual Job went through. Come to God with an open heart and be willing to value the spiritual lesson which will last forever more than the temporal health which only lasts a few decades in this sad world.

- **Take time to laugh and play** with your family. "*A merry heart doeth good like a medicine: but a broken spirit drieth the bones*" Proverbs 17:22. Tickle your spouse, wrestle with your kids, play a game of tag at the playground together. Laughter releases endorphins that even increase your tolerance to pain.¹⁰

¹⁰ Dunbar RI, Baron R, Frangou A, et al. "Social laughter is correlated with an elevated pain threshold." *Proceedings of the Royal Society B* 279.1731 (22 Mar. 2012): 1161-1167.

- **Turn off the noise** — the TV, the radio, the news. Allow your nerves to marinate in quiet. If anything, play some soft, classical music to calm the nerves and relax. Use time when you're driving or walking to talk to God.

5d.) *Stress relievers*

Minus the hot baths (since we didn't have a bathtub), I consider everything below an essential part of my healing from stress. The baths would have been really nice though.



- (1) **Sleep** is when the body heals itself. No amount of herb or remedy will compensate for not getting the sleep you need. Get at least 8-10 hours of *early* sleep each night. In bed with the lights out by 8pm (aiming to fall asleep by 8:30pm). Taking naps as needed.
- (2) **Exercise** regularly. Doing something that makes you sweat and gets your heart rate up for 30 minutes or more at least 5 times per week.
- (3) **Hot baths** with epsom salt (magnesium is calming). Many persons are low in magnesium and this is a good way to absorb more.

“The LORD doth build up Jerusalem: he gathereth together the outcasts of Israel. He healeth the broken in heart, and bindeth up their wounds. He telleth the number of the stars; he calleth them all by their names. Great is our Lord, and of great power: his understanding is infinite.”

— Psalms 147:2-5

SUMMARY: THE 5-STEP PLAN I USED THAT HEALED MY AUTOIMMUNE

1. Remove harmful foods and toxins
2. Heal the leaky gut
3. Nutrify
4. Cleanse/detox
5. Remove chronic stress

My Accompanying Skin Fungus

Autoimmune sufferers can develop other conditions due to having a compromised immune system and malnourished body. This was the case with my skin fungus.

As I mentioned earlier, my skin fungus ended up being more difficult and taking longer to heal than even my autoimmune disease itself. At its worst, the skin fungus covered about a third of my body. At times the itching was very severe.

But, probably the most difficult part of the skin fungus was not even the physical discomfort but how discouraging it was to be continually battling against it for close to five years while watching it slowly get worse and grow the entire time.

During this time, I developed new insights on how to depend on the word of God for strength in the moment of temptation. God's word has creative power, and it can create life, strength, courage, and peace in your heart out of your weakness and discouragement. When we cry out to God in the moment of temptation, choose to do His will, admit our weakness, speak a Bible promise out



This is when my skin fungus started to become more noticeable. This patch is on my lower back.



At its peak, my skin fungus covered one third of my entire body.

loud and move forward while believing it with all our heart, an incredible miracle takes place. After doing this I would receive supernatural strength in the midst of trying circumstances. Courage and peace would come to me which, I know of my own efforts, I never could have obtained. I can naturally be pretty melancholy. I wasn't always as consistent as I needed to be in doing this but whenever I did as the apostle Peter puts it, I became "*a partaker of the divine nature*" 2 Peter 1:4.

As the years rolled by, we tried many different remedies to treat my skin fungus from all kinds of different diets, to dozens of natural anti-fungal herbs and teas, to different topical applications. Some of these treatments were very time consuming, very humbling and some were even extremely painful as we were trying to figure out what worked. Yet nothing could completely get rid of it. Medications were not an option for me because #1 medications are harmful to the liver and kidneys, #2 anti-fungal medications are exceptionally hard on the liver, and #3 medications don't heal disease, they only change its form and location. (We had read countless cases of people taking anti-fungal medications where they seemed to work at first, but then ended up feeding the fungus and making it worse.) With my already compromised liver, I wasn't going to gamble on it.

At one point the light clicked on in my mind. I remembered I had heard a natural health practitioner state that to treat cancer you have to take an aggressive, multifaceted approach. You won't be successful just by treating it from one angle. I already knew that the same was true for treating autoimmune disease. Maybe the same was true for my skin fungus!

We had always just tried one or two things at a time, but never made a full-fledged attack on the fungus. Here's a brief summary of the protocol we put together which eventually wiped out my skin fungus. I knew that the more of these I could do the better. Fungus needs to be aggressively and frequently attacked because it is so tenacious. I continued the protocol for an additional 8 weeks after all of my symptoms disappeared to make sure the fungus was completely gone. Fungus is tough stuff. (You will notice some crossover from the 5-step autoimmune protocol.)

Killing Fungus With the Three-Pronged Attack

1. **Starve** the fungus.

This means moving sugars out of the blood as fast as possible. The same root cause of diabetes type 2 is the same root cause of fungus — too much fat either in the food or stored in the body. Too much fat in the blood blocks insulin receptors (which are like keyholes in the cells), preventing the insulin from unlocking the body's cells to let sugar in from the bloodstream where it can be burned as energy. This causes more insulin to be released by the pancreas which can cause insulin resistance. This allows sugar to accumulate in the bloodstream which is an invitation to candida to come to the rescue and eat it all up. Therefore, what I focused on was eating a **very low-fat diet** and **strength training** every day. I focused on eating many fruits, vegetables, and seeds and aimed to keep my total fat calories below 15%. This was the key in my healing.

I also didn't eat things that aggravate fungus including **no**:

- Gluten
- GMOs
- Oils and especially no heated oils
- Peanuts or pistachios
- Mushrooms
- Yeast of any kind (including baking yeast and nutritional yeast)
- Refined sugar or refined carbohydrates
- Corn, rice, or millet *until* itching stopped and rash was receding

2. Kill the fungus from the **inside** using natural anti-fungals.

- Vitamin C — 1,000 mg, 3 times/day (I used the whole form in acerola cherry powder and camu camu powder)
- Garlic — 3 to 9 organic raw cloves per day (I took it minced with lemon juice)
- Grapefruit seed extract — 15 drops with 1 cup water, 2 times/day (can put in a capsule)
- Olive leaf tea — ¼ cup dried leaves steeped in 2 cups water for 10 minutes, blend, strain, 3 to 4 times/week (can also be taken as a dried powder)
- Pau d'arco tea — 1 Tbs in 2 cups water boiled 20 minutes, 3 to 4 times/week
- Activated charcoal powder — 1 to 2 Tbs mixed a glass of water
- Eating good probiotics and prebiotics to promote and restore good gut bacteria (microgreens, raw cabbage, unheated honey, sprouted seeds, leafy greens, garlic, onion)

3. Kill the fungus from the **outside** using natural external topical anti-fungals.

- Fresh onion juice on skin with sun exposure — 30 minutes to 1 hour per day

- I would apply one of these three topical ointments 3x/day
 - » Oregano essential oil mixed with coconut oil 1:2
 - » Cedarwood essential oil
 - » Grapefruit seed extract drops mixed in water, spray on the skin (it can sting if it's too strong) or mixed with coconut oil 1:1
- FOR TOENAIL FUNGUS:
 - » 1/2 cup each of apple cider vinegar mixed with 1/2 cup hot water, soak toenails in it for 15 minutes/day
 - » Oregano essential oil mixed with tea tree oil 3:2 and applied to infected nails 4x/day

This three-pronged attack was laid on the foundation of what I did to heal my autoimmune disease including: healing my leaky gut, nutrifying, cleansing/detoxing, addressing my MTHFR gene mutation, and trusting in God. (Refer to previous chapters as needed.) Through this process it was so helpful and comforting to remember that Jesus loved me and had a greater purpose in my suffering. Now I'm able to encourage and help other people who have fungus and autoimmune diseases which makes what I went through well worth it.

How Long Did It Take? My Timeline

My wife and I have personally witnessed half a dozen individuals improve and some like myself totally reverse their autoimmune conditions following these steps. After I learned about all of my food sensitivities, the first thing I did was completely eliminate as many of the 15 foods items on my list as I felt I reasonably could. It was difficult to eliminate them all since that would have left me with very little to eat besides fruits and vegetables. For some, this may have not be an issue especially for someone who was looking to lose weight, but seeing how I was already very slender and needed more substantial foods to hold me, this would have been difficult. Even with continuing to eat just a few of the items on my allergen list, it was a big change in our diet.

Thank the Lord for my wife who right away started researching and testing out different types of foods. She's an excellent cook, and over the years has developed an impressive spread of delicious recipes that cater to people who are reversing an autoimmune disease. Despite all of our new dietary restrictions she was still able put together dishes like enchiladas, lasagna, pizza, macaroni and cheese, pot pie and many different kinds of desserts and hot breakfast cereals. Next year, she'll be releasing an autoimmune cookbook sharing these recipes which are whole foods, plant-based (vegan), gluten-free, soy-free, peanut-free and oil-free — but *not* taste-free. We will let you know when it's out.

The Results

So what were the results? After the 10-day cleanse and another five months of self administering the 'at home' program I got blood work done. I told my doctor what I was dealing with and had

them test for all of the inflammation and autoimmune markers. We soon received the results and with great anticipation opened the envelope. All signs of autoimmunity and inflammation came up negative! My liver enzymes were totally within normal range. No inflammation, no signs of autoimmunity in my body! I've had blood work done several times since and each time, because I've stuck to these health principles, all of the autoimmune and inflammation markers come out negative. Now I have energy, I feel better, and after several more years my skin fungus has even completely healed! Praise God.

After the positive results of that first blood test I began reintroducing into my diet many of the foods on my list with no problems. I did however learn a hard lesson when introducing corn. I had introduced organic corn back into my diet after the first year of my healing program. I had no reactions or problems with it. Then, one of our favorite Mexican restaurants announced that they were completely GMO free. We would normally get veggie bowls with brown rice, black beans, pinto beans, pico de gallo mild salsa, lettuce and guacamole. This had been sufficient for us to have a tasty meal while we're out and about, but we were excited to add their corn tortillas to our veggie bowls now that their corn was non-GMO. It was not organic, but we thought because it was non-GMO, it would be ok. So we both had the corn tortillas with our veggie bowls.

Immediately my stomach didn't feel good. Jennifer didn't feel the best either. Then later that night I developed one of the worst migraine headaches I've ever had that made my head feel like it was going to explode. My wife did hydrotherapy treatments on my back along my spine alternating damp hot and ice-cold towels. It relaxed me to the point of putting me to sleep, and thankfully when I woke up the headache was gone. Hydrotherapy is awesome! You would be shocked to find out how many ailments can be helped just by using hot and cold water to circulate blood in the body.

Now when it comes to corn, we only eat it if it's both non-GMO *and* organic. Even if corn is non-GMO, if it's not organic it can still be heavily sprayed with pesticides and herbicides especially since it's such a massively produced crop.

How long should one expect to be on a personalized health program? It depends on how sick you are, how much toxic buildup you have, how healthy you lived before you got sick, and how faithfully you stick to healing your body. In total it can be as short as a few months or it can take as long as up to two years. But symptoms will quickly be reduced if you make concerted efforts to heal and cleanse. I believe that starting the whole process by doing a 10-day detox like the one I did at Years Restored potentially shaved many months and even years off of my healing time.

All autoimmune sufferers should be prepared for some degree of a permanent life change. Whether you knew it or not, it's damaging health practices that caused this situation and now your ticket is up and it's time to either change or continue to suffer. There may be certain foods you can never eat again, such as gluten. However, on the flip side you'll probably discover new foods that you love like we did. You may need to exercise more, drink more water, spend more time outdoors, look at your trials differently, and most importantly spend more time with God in Bible study and prayer. My wonderful report is that I feel better and healthier *now* than even *before* I got sick. I believe being obedient to God's health principles offers the best possible quality of life we can have.



The Genetic Factor

There is an undeniable link with genetics and autoimmune disease. It is not uncommon to find the same autoimmune disease among relatives as was the case with my grandmother, my mother, and myself. I also have three additional family members on my mother's side who are also having symptoms of autoimmunity. In this chapter we will be looking at the three genetic mutations which are often present in autoimmune sufferers — **MTHFR**, **COMT**, and **MAO**.

In 1990, the Human Genome Project began with the goal to sequence and map the makeup of the human DNA. The project was completed in 2003 and gave birth to a field called nutrigenomics which has produced some interesting finds — one being the MTHFR gene mutation. This is a genetic factor that's contributing to many of the autoimmune diseases our society is dealing with today. A large number of people who suffer from neuro-immune syndromes such as autism, ADD, ADHD, fibromyalgia, multiple sclerosis, and other autoimmune related diseases most likely have this gene mutation.

MTHFR Gene Mutation

The MTHFR gene (methylenetetrahydrofolate reductase) has the instructions for making the MTHFR enzyme. The MTHFR enzyme has an extremely important job because it facilitates an action in the body called **methylation**. The reason why this is important is because there are about 250 crucial processes in the body that require methylation. Methylation is essential for the right function of nearly all of your body's systems, and especially your ability to detox. Methylation is an absolutely critical part of our biochemistry, and if this process isn't happening right some pretty bad things will happen.

WHAT CAN GO WRONG IF YOU'RE NOT METHYLATING PROPERLY?

The following is a list of many of the things methylation does and what can go wrong when it's not functioning at full capacity.

Here's what methylation does:

Turns genes on and off: Methyl groups are like on-off switches. They turn things off like cancer promoting genes and our stress response. In short, without methylation it will be very difficult to beat cancer and difficult to calm down after a stressful situation.

Reduces aging: Aging is equivalent to DNA damage. At the end parts of the DNA strands there are things called telomeres that keep the DNA from coming unbound. When we have enough methyl groups, these telomeres can keep the DNA together but when we don't, they unravel much easier. This means rapid aging.

Supports glutathione production: Glutathione is the body's main detoxing agent. Not having enough methyl groups means not enough glutathione which means detoxing will be inhibited. This also involves being even more sensitive to chemicals and heavy metals than the average person, making toxic exposure that much worse. This is why it's especially important to aid the body in cleansing if you have this gene mutation like I do.

Helps break down hormones: This is especially important when it comes to removing toxic estrogens. Without the ability to do this efficiently there will be a buildup of too much of estrogen hormones in the body that will lead to estrogen dominant problems like prostate cancer, breast cancer, and fibroids.

Activates and regulates the immune system: This is a big reason why the MTHFR gene mutation is so commonly associated with those who have autoimmune diseases. If a gene that's responsible for regulating your immune system is tweaked, it should be no surprise that a dysregulated immune system will be the sure result. This dysregulation of the immune system also effects the building of immune cells which will mean there will be fewer immune cells leading to a weak immune system and a vulnerable host. This helps explain why so many with autoimmune diseases and the MTHFR gene mutation can get bad infections as was the case with my skin fungus infection.

Gives us energy: The biochemical cycle of methylation leads right into another cycle called the Krebs cycle. The Krebs cycle is where we get our energy from, and involves the production of ATP, L-Carnitine, and other energy chemicals. Therefore having the MTHFR gene mutation can lead to having less energy.

Breaks down histamine: If you don't have enough methyl groups, you will not be able to break down histamine. Histamine is the hormone that signals an allergic response, therefore excess histamine will lead to being in a hyper-allergic state and many allergies.

Repairs cell membranes and myelination of nerves: Can't remember where you put things often? It could be due to not enough methyls since they are involved in making the myelin sheath

of the nerves which allows for smooth transport of chemicals and neurotransmitters.

Supports neurotransmitters: Neurotransmitters need methyls to work right and not having enough leads to neurological issues. The MTHFR mutation also inhibits the production of your feel-good hormones such as serotonin, melatonin, and dopamine. This may lead to symptoms of depression, insomnia, brain fog, and attention problems.

Converts water-soluble vitamins to fat-soluble vitamins: Certain systems in our bodies are covered in or contain high concentrations of fat, namely the nervous system and parts of the immune system. Most of the food we eat contains water-soluble vitamins. However, to deliver nourishment to these systems that contain a high percentage of fat, our body needs to convert these water-soluble vitamins into fat-soluble ones. Two key vitamins involved are folate (B-9) and B-12. This action of converting key vitamins from water-soluble to fat-soluble is part of the process of methylation. When this is compromised, the nervous and immune systems will be malnourished and have a tendency to malfunction.

One of the biggest negative impacts of not being able to methylate properly is the lack of usable folate (Vitamin B9) in the body. The MTHFR enzyme converts dietary folate into the usable form called methylfolate. You see, when we eat dietary folate it is not yet usable to the body but needs to be converted to methylfolate in order to be used. This process involves attaching a compound called a methyl group (also referred to as “methyls”) to the folate. If we can’t methylate correctly, then we become partially inhibited from being able to convert folate into its usable form. This is really bad because almost everything good thing that happens in the body involves folate.

WHO HAS IT?

There are many millions of people who carry this gene mutation, and most of them don’t even know. It is estimated that 40% of Americans have some variation of this gene mutation. It is more common in certain ethnic groups such as in those of Italian, Hispanic, or northern Chinese descent. The two points of this gene mutation that we know the most about and that are the most problematic are at the C677T and A1298C. These gene mutations can be passed down from one or even both parents. The combination will effect how symptoms are expressed in your body. With the MTHFR gene mutation, the methylation process is slowed down from between 30% to 70% depending on whether you have the gene mutation from one or both parents. You’ll often hear the terms “heterozygous” and “homozygous” when reading about MTHFR. Heterozygous means you have one copy of the gene mutation from one parent only, while homozygous means you have a copy from both parents.

Individuals who are:

- Heterozygous (one parent) for C677T have an estimated 40% loss of function
- Homozygous (two parents) for C677T have an estimated 70% loss of function
- C677T and A1298C – compound heterozygous – 50% loss of function¹

¹ <https://www.drbenlynnch.com/resource/folate-the-dangers-differences/>

If you have some of the issues I in the above section “What Can Go Wrong If You’re Not Methylating Properly?” then you might have the MTHFR gene mutation. Having an autoimmune disease is a pretty good indicator that you have this gene mutation. But you can also get tested.

GETTING TESTED FOR MTHFR

Ask your doctor if they can order the MTHFR gene test. If your insurance does not cover the test (as it often does not), then you can easily get a saliva DNA test done through MTHFRdoctors.com for \$130, and it will give you a report back about this gene mutation. If you discover that you have this mutation, you may want to encourage your family to get tested also. You can also look at your family history.

Does anyone in your family have:

- Heart disease?
- High homocysteine?
- Birth defects?
- High instances of miscarriages?

You can also find clues in your blood work to discover the MTHFR mutation. Here are some physician recommendations about determining if you have the MTHFR mutation based on a blood test:

Homocysteine > 8

Elevated red cell folate levels while not supplementing: It’s high possibly due to not absorbing it.

Low white cell count, low neutrophils, and low lymphocytes

RDW level of 13% or more

Low hemoglobin

GGT (liver enzyme) > 30: Due to low phosphatidylcholine because it needs methyl groups.

Low fat-soluble vitamins A, D, E, K: We need methyls to process fat efficiently. If you are overweight even while eating a low-fat, whole foods plant-based diet and yet cannot lose weight, it’s possible that you might have low methyl groups.

High or low cholesterol

Low thyroid function: Especially if your T4 is too low.

TSH outside of the 0.5 to 2 range: Above 2 can be a sign of early thyroid issues.

WHAT CAN I DO TO COUNTERACT MY MTHFR GENE MUTATION?

It is exciting to discover this because there are things that you can do to work around this gene mutation and help your body where it is weak.

1. Avoid anything with folic acid

Folic acid is the synthetic form of Vitamin B9 folate. Folic acid is not found in nature, nor is it naturally found in the human body. Sounds bizarre right, since this is the common form of folate proscribed by doctors and is found in anything that gets fortified with vitamins. Folic acid actually slows down the chemical process of the folate cycle, by which the body creates the usable form of folate. This goes both for those with the MTHFR gene mutation and those without it. For those who have the mutation, eating folic acid is double whammy and for those who don't have the mutation, consuming folic acid essentially produces the same effects in the body as if they did have the gene mutation. Yikes!

Not only that, the folic acid (called “unmetabolized folic acid”) that never makes it through the folate cycle floats around in the blood. Despite what many are now saying, it does in fact have several detrimental effects in the body such as masking B-12 deficiencies for example.²

By U.S. and Canadian law, all enriched flour must be fortified with folic acid. So most store-bought breads, buns, breakfast cereals, pasta, etc. will be slowing down your methylation process. We've already looked at this topic in prior chapters, but the folic acid issue is yet another reason to go gluten free. Folic acid is in many supplements and processed foods so this is another opportunity to be a detective and read the labels, avoiding anything which contains folic acid.

2. Maintain good gut health

Gut health plays a huge role in the methylation cycle and, well, virtually everything else in the body. Healing your leaky gut and gut dysbiosis can help your MTHFR situation if you have it. (Refer to the chapter *Step 2: Heal the Leaky Gut.*)

3. Don't drink alcohol

Perhaps you feel like I just dropped a bomb on you with that statement, but the fact is that alcohol specifically depletes our B vitamins. I heard a doctor who has the MTHFR gene mutation say that he gets a nose bleed if he drinks wine. There really is no safe limit of alcohol when it comes to physical, mental, and spiritual health. Replace happy hour with healthy hour. Go to the gym, take a warm bath, spend time with family. Drinking alcohol is going to be fighting against any health measures you are currently making in reversing your autoimmune disease.

4. Eat plenty of beans and dark leafy greens to get folate

Folate comes from the word “foliage.” Can you guess why? Because that's where the folate is. The reason why meat has it is because the animals got it from the plants they ate or ate other animals that got it from plants. The plant foods that have the most folate are the dark leafy greens and legumes — beans, lentils, etc. Make sure you get as much of your folate from these plant-based sources before jumping into supplements. With a gene mutation like this, it may be that a supplement will be needed but trying to get quality dietary sources first is always best. Here's a helpful chart showing the highest plant based sources of folate.

2 <https://www.drbenlych.com/folic-acid-side-effects/>

Plant-based foods high in folate

B9 (Folate)	mcg per serving	% Daily Value
Lentils, 1 cup cooked	358	90
Pinto beans, 1 cup cooked	338	85
Garbanzo beans, 1 cup cooked	282	71
Spinach, 1 cup steamed	262	66
Black-eyed peas (cowpeas), 1 cup cooked	210	52
Asparagus, 8 spears steamed	178	44
Brussels sprouts, 1 cup cooked	156	40
Beets, 1 cup cooked	136	34
Broccoli, 1 cup steamed	104	26
Mustard greens, 1 cup steamed	104	26
Green peas, 1 cup cooked	94	24
Kidney beans, 1 cup cooked	92	24
Romaine lettuce, 1 cup	64	16
Turnip greens, 1 cup steamed	64	16
Avocado, ½ cup	59	15
Spinach, 1 cup	58	15
Papaya, 1 cup	54	14
Collard greens, 1 cup	46	12
Parsley, ½ cup	46	12
Orange, 1 small	29	7
Banana, 1 medium	24	6
Kale, 1 cup	19	5
Cantaloupe, 1 wedge	14	4

Note: The recommended daily value (DV) for folate is 400 mcg.

Neuro-Immune Stabilizer Cream

For those who have the MTHFR gene mutation, even getting large amounts of dietary folate may still not provide enough folate for daily needs, and especially not for healing. I found this was the case with myself. Depending on how much of the gene mutation you have, your ability to put out methylfolate through the foods you eat will be limited by various percentages. Let's say it's 50%. You're eating dietary folate, but because of your gene mutation, you're actually only getting 50% of what you need. Where are you going to get the other 50% from? Until a way is found to increase the MTHFR process for those with the gene mutation, the next best option for now may be getting methylfolate in a supplement like I do.

There are now various doctors who are recognizing the seriousness of the MTHFR gene mutation, one of them being Dr. Kendal L. Stewart. It was in listening to one of his lectures that the light went on, and I was able to grasp what this gene mutation was and what it meant to me personally. It was incredibly enlightening in regards to the genetic factor in autoimmune diseases. I ordered the Neuro-Immune Stabilizer cream made by his company Neurobiologix³ to get the methylated folate which my body was not converting enough of due to the gene mutation. Being in a cream which is readably absorbed through the skin is so helpful for someone who has a damaged small intestine from an autoimmune disease. About a week after I started applying this cream, my skin fungus improved by 90%. It seemed to be a huge missing link in being able to completely heal my skin fungus.

A Word of Caution In Supplementing with Methylfolate

When some people, like myself, start to get good levels of methylfolate, they feel absolutely wonderful. However, many people have reported some very nasty side effects when after the first week of taking methylfolate or even right away including rashes, fatigue, migraines, nausea, insomnia, anxiety, and extreme depression. This is because methylfolate needs other cofactors to be present in the body in order to be made. If you don't have enough of these cofactors such as B1 (thiamin), B2 (riboflavin), B3 (niacin), B5 (pantothenic acid), B6 (pyridoxine), B7 (biotin), B-12, zinc, NADP, and SAM, the cycles that methylfolate goes through will be blocked and your methyls will get backed up which will bring on the nasty side effects I mentioned. So the idea is to make sure that you are getting enough of these vitamins before taking methylfolate.

Is there anything you can do if you start feeling really bad after taking a methylfolate supplement? Niacin (B3) neutralizes the side effects from methylfolate, so increase your foods that are high in niacin (see the chart on niacin sources on the next page).

As always, I suggest trying to get as many of these B vitamins as possible from eating organic, plant-based foods before doing any supplements. Here are a number of wonderful plant foods high in B-vitamins.

Plant-based foods high B vitamins

B1 (Thiamin)	mg per serving	% Daily Value
Durian, 1 cup	0.91	76%
Flaxseed, ¼ cup	0.69	58%
Sunflower seeds, ¼ cup	0.52	43%
Black-eyed peas, 1 cup cooked	0.44	37%
Green peas, 1 cup	0.41	34%
Macadamia nuts, ¼ cup	0.40	33%
Acorn squash, 1 cup baked	0.34	28%
Teff, 1 cup cooked	0.30	25%
Brazil nuts, ¼ cup	0.20	17%

3 NeuroBiologix.com

HOW I REVERSED MY AUTOIMMUNE DISEASE

B2 (Riboflavin)	mg per serving	% Daily Value
Spinach, 1 cup steamed	0.43	36%
Beet greens, 1 cup steamed	0.42	35%
Almonds, ¼ cup	0.41	34%
Black beans, 1 cup cooked	0.29	24%
Carob powder, ½ cup	0.24	20%
Tomato puree, 1 cup cooked	0.20	17%

B3 (Niacin)	mg per serving	% Daily Value
Red potato, 1 large baked	4.77	28%
Tomato puree, 1 cup cooked	3.67	22%
Green peas, 1 cup	3.23	19%
Sweet potato, 1 cup baked	2.98	18%
Mung beans, 1 cup cooked	2.70	16%
Avocado, ½ cup	2.20	13%
Butternut squash, 1 cup baked	1.99	12%

B5 (Pantothenic acid)	mg per serving	% Daily Value
Sweet potato, 1 cup baked	1.91	38%
Avocado, ½ cup	1.68	34%
Lentils, 1 cup cooked	1.26	25%
Split peas, 1 cup cooked	1.17	23%
Tomato puree, 1 cup cooked	1.10	22%
Acorn squash, 1 cup baked	1.03	21%
Russet potato, 1 medium baked	0.75	15%

B6 (Pyridoxine)	mg per serving	% Daily Value
Chickpeas, 1 cup cooked with broth	1.14	88%
Russet potato, 1 medium baked	0.70	54%
Banana, 1 large	0.50	38%
Amaranth, 1 cup cooked	0.46	35%
Brussel sprouts, 1 cup cooked	0.45	35%
Spinach, 1 cup steamed	0.44	34%
Acorn squash, 1 cup baked	0.40	31%
Tomato puree, 1 cup cooked	0.32	25%

B7 (Biotin)	mcg per serving
Sweet potato, 1 cup baked	4.80
Sunflower seeds, ¼ cup	2.60
Almonds, ¼ cup	1.50
Spinach, 1 cup steamed	1.00
Broccoli, 1 cup fresh	0.80
Oatmeal, 1 cup cooked	0.40

Note: There is not yet enough data available for a recommended daily value for B7 biotin.

5. Supplement with methylated B-12 (methylcobalamin) if needed

The natural source of B-12 is bacteria. The primary source of B-12 rich bacteria is from unwashed organic produce. But for most of us who do not eat from our own gardens anymore, it is hard to get these good natural microbes as we wash our fruits and vegetables before eating. If there is a need to supplement B-12, instead of taking the synthetic B-12 which is cyanocobalamin (which breaks down into B-12 and the poison cyanide in the body), I make sure to get the B-12 in its methylated form, **methylcobalamin**. This is the kind that is in my Neuro-Immune Stabilizer cream and is also available as an oral supplement from any health food store.

Vitamin B-12

After you make sure you're getting high levels of B vitamins for two weeks, then add in B-12 in the form of either:

- **Methylcobalamin:** Works best for those with neurological issues. Most tolerant this form of B-12 very well.
- **Adenosylcobalamin:** Works best for those with energy issues, chronic fatigue, etc.
- **Hydroxocobalamin:** Good for those who have really low blood pressure since it mops up nitrous oxide out of the blood which can contribute to low blood pressure.

Start with 500 mcg of B-12 for 3-4 days and see how you feel. Double it for another 3-4 days. Do this until you can take 2,000 mcg per day.

Then after another 2-4 weeks, you can try methylfolate again and see how you do. Start small and gradually increase your amount. 80-90% of people who start taking methyls get little headaches and muscle pains. This is why you start slow and see how you feel.

What if your B-12 supplementation doesn't seem to be helping? There could be several reasons for this. It could be **mercury toxicity** since it interferes with the ability of B-12 to cross the blood-brain barrier. So if there is mercury stored in the body, it will stand in the way of the effectiveness of any B-12. In this case, it will be helpful to detox the mercury with activated charcoal, nano-zeolite, and modified citrus pectin (MCP).

Also, there may be **additional gene mutations** that can dictate which forms of B-12 will work best. Below are the different gene mutations and which form of B-12 works best for each mutation. This won't make much sense to you unless you order a genetic test and see which mutations you have.

COMT - Methylcobalamin	MMA - Adenosylcobalamin
MTRR - Methylcobalamin	MMAA - Adenosylcobalamin
MTR - Adenosylcobalamin	MMAB - Adenosylcobalamin
FUT2 - Methylcobalamin	MMADHC - Adenosylcobalamin
TCN1 - B-12 shots or cream	MUT - Adenosylcobalamin
TCN2 - Methylcobalamin	MMACHC - Adenosylcobalamin

Lastly, if there is **damage** to the stomach or in the last part of the small intestine, it can prevent B-12 from being absorbed. Intrinsic factor secreted by the parietal cells in the stomach is necessary for good B-12 absorption. So if the stomach lining has been damaged from years of coffee, spicy food, and junk food, or if it is inflamed as in the conditions of gastritis or Crohn's disease, it will not be able to produce the intrinsic factor needed to absorb B-12. Gastric surgeries where the last part of the small intestine has been removed such in the case of Crohn's disease will also prevent B-12 absorption. In cases like these, monthly B-12 injections are what would normally be recommended to get the B-12 directly into the body. However, now there is the option of getting it through a cream like the one I use as I mentioned before the Neuro-Immune Stabilizer cream (which I much prefer to getting shots.)

Medications that Effect Methylation

One reason why some eat the right foods without seeing any improvement could be because medications which are being taken are interfering with the methylation cycle that makes the usable form of folate. Here's a list of drugs that interfere with methylation:

Antacids: Prevents B-12 absorption

Cholestyramine: Prevents B-12 and folate absorption

Colestipol: Prevents B-12 and folate absorption

Methotrexade: Inhibits methylation

Nitrous oxide: Inhibits the B-12 cycle

High-dose Niacin: Depletes SAME, B6

Theophylline: Limits B6

Cyclosporin: Decreases kidney function

Metformin: Prevents B-12 absorption

Phenytoin: Lessens or negates the chemical actions of folate

Oral contraceptives: Depletes folate

Antimalarials JPC-2056, Pyrimethamine, Proguanil: Inhibits methylation

Antibiotic trimethoprim: Inhibits methylation

Ethanol: Depletes B-12 and folate

Bactrim: Inhibits methylation

Sulfasalazine: Inhibits methylation

Triamterene: Inhibits methylation

How Do I Know If I Have Enough B-12?

It would be nice if there was a simple test for B-12. You can ask your doctor for a B-12 test, and they will have it done for you. However, the only B-12 test they have is testing for cyanocobalamin, which is the synthetic form of B-12. If you're not taking this synthetic version, your B-12 test will show up as very low. Blood tests for vitamin B-12 deficiency are known for being highly inaccurate anyways. So how *can* you know if you have enough B-12 since you're not taking the synthetic form? These tests are fairly reliable for testing for a B-12 deficiency.

If your:

- **MMA** < 260 nmol/L in blood test or < 2 mg/g creatine in urine test
- **Homocysteine** is < 10 umol/L
- **MCV** is < 98 (on your CBC)

... then you probably have **enough** B-12. These levels are all elevated in a B-12 deficiency.

6. Cleanse from time to time

Although I have reversed my autoimmune disease, I still think it is a good idea to cleanse from time to time throughout the year because I know I have this gene mutation which inhibits the natural production of glutathione in my body. This means I do not naturally eliminate and break down toxins and heavy metals as well. So my wife and I will do a 3 - 7 day cleanse once a year in the fall just before cold season begins. My wife and I have both avoided getting the cold and flu for years by doing this. I'll do a detox enema once a month or every few weeks depending on how I feel. I'll do a hydrotherapy shower every other week. I'll drink dandelion tea here and there. If I have the opportunity to use a far-infrared sauna, I'll enjoy a good sweating from time to time. Simple things like this have helped make up for me having this gene mutation.

COMT Gene Mutation

The COMT gene provides instructions for making an enzyme called "catechol-O-methyltransferase." This enzyme is responsible for breaking down and getting rid of certain neurotransmitters such as dopamine, adrenalin, noradrenalin, and serotonin. After these neurotransmitters have run their course, they need to be removed from the body because if they hang around, they can build up and change their function and end up being very toxic to the brain. The body doesn't like excess or insufficient hormones but rather prefers a balance, not too much and not too little. Therefore, the body is always trying to achieve this balance and COMT enzymes are the key for this.

What happens when the COMT gene is mutated, is the process of getting rid of these excess hormones is slowed down, causing them to build up in different parts of the body. The side effects from this excess hormone buildup directly impacts our mood. If you have too much adrenaline or

dopamine, small stressors can feel like big stressors, or you might feel anxiety for no reason, or you might struggle with insomnia or paranoia. Also, if there's too much dopamine, it can go into inflammatory pathways and turn into harmful chemicals such as ammonia and formaldehyde leading to the destruction of neurons and cause inflammation in the brain. Say hello to dementia, Alzheimer's, and Parkinson's disease. Excess dopamine in the brain can also cause DNA breakdown which essentially will cause you to age super fast. Any takers?

Is the COMT gene mutation something worth your attention? Yes, in fact, we now know that about 80% of the population have a SNP in the COMT V158M gene.⁴ Researchers also have found that this mutation can slow down the COMT system by 300%!

HOW DO YOU KNOW IF YOU HAVE IT?

Unfortunately, the symptoms of a COMT mutation are common ones that can also be related to many other conditions. Take a look.

Symptoms of **too much adrenaline** are:

- Insomnia
- Chronic pain
- High blood pressure
- Heart arrhythmias
- Excess sweating
- Tingling or numbness
- Poor circulation
- Digestion problems
- Mood issues
- Low thyroid

Symptoms of **too much dopamine** are:

- Insomnia
- Chronic pain
- High blood pressure
- Tachycardia
- Feeling burnt out
- Delirium
- Anxiety
- Paranoia
- Schizophrenia/psychosis

The fact that the COMT mutation symptoms are very common ones can make it tough to nail down as the cause. However, a simple genetic test can put the mystery to rest. Because the effects of the COMT mutation are so prevalent and so devastating, it seems like a good idea to test for it. If you have some of these symptoms and have been trying to treat them for years with no success, this may be the underlying issue.

WHAT CAN YOU DO TO COUNTERACT THE COMT GENE MUTATION?

Thankfully, genes are our tendency and not necessarily our destiny. There are ways to help speed up a slow COMT mutation. We've already covered many of them:

- 1. Reduce inflammation and heal the gut:** The gut must be functioning properly before the rest of the body can heal. Any digestive issues are going to be a barrier in obtaining health for

⁴ Lachman HM, Papolos DF, Saito T, Yu YM, Szumlanski CL, Weinshilboum RM. "Human catechol-O-methyltransferase pharmacogenetics: description of a functional polymorphism and its potential application to neuropsychiatric disorders." *Pharmacogenetics* 6.3 (June 1996): 243–250.

the rest of the body, including the brain. Fixing digestion problems may even do the trick itself in reducing or even eliminating symptoms of the COMT mutation. Refer to the chapter *Step #2: Heal the Leaky Gut* for ways to improve a damaged and unbalanced gut.

- 2. Calm down the immune system:** The autoimmune activity in the body needs to be turned off. This means eliminating exposure to the toxins causing it whether it be GMO foods, chemicals, heavy metals, mold, etc. Secondly, this involves detoxing the body from the toxins that are already in it. Sound familiar? This is *Step #4: Cleanse/Detox*.
- 3. Increase the GABA/glutamate ratio in the brain:** GABA and glutamate are two neurotransmitters that need to be in balance in order to have good brain health. Having an imbalance of GABA and glutamate in the brain will produce similar problems as in the COMT and MAO mutations. If you already have these mutations, then this imbalance will further aggravate the problems they are causing. Wonderfully, this ratio is balanced by following the NEWSTART principles and following the 5-step autoimmune protocol. It's amazing how many issues clear up by these two treatment plans.
- 4. Correct any MTHFR issues:** It's all connected isn't it? Having an MTHFR gene mutation means you're not producing the usable form of folate which breaks down into glutamate. This lends to having a GABA/glutamate imbalance which, as just mentioned, compounds the COMT mutation issue.
- 5. DHA:** DHA is an omega-3 fatty acid that is big for a healthy brain, heart, and improved mood. Instead of getting it from fish oil which also comes with the liability of mercury, get it from ground flaxseed. Remember that the body makes DHA by converting ALA to EPA to DHA and when on a vegan diet, the rate of conversion increases to produce levels equivalent to regular fish eaters. So skip the mercury and cholesterol, and love your body with flaxseed instead.
- 6. Relax:** Be intentional to do something relaxing every day. Having excess hormones in your brain doesn't mix well with excess stress in your life. The simpler and more low key you can make your life the better. Look at the tips in the chapter *Step #5: Remove Chronic Stress*.

MAO Gene Mutation

The MAO gene provides instructions for making the enzyme monoamine oxidase A. The MAO gene mutation actually involves two different genes — the MAO-A and MAO-B genes. The main practical difference between the two enzymes are how they affect people. MAO-A tends to involve symptoms of depression while MAO-B more involves symptoms of Parkinson's disease. But I'll just focus on the main one, MAO-A.

Like COMT, the MAO enzyme is also partially responsible for breaking down adrenaline, nor-adrenaline, dopamine, serotonin, and additional histamine. Since the MAO enzyme also helps break down histamine, those who have lots of allergies might find this gene mutation to be a foundational issue. Unlike the COMT mutation, the MOA mutation can actually go either way in decreasing or increasing enzyme speed. This means that this mutation can cause there to be either too much or too little neurotransmitters. If you don't know which version of MAO-A you have,

then you can order a test from 23andme.com and then run it through MTHFRSupport.com's variant report. This will tell you if you have the MAO mutation and if it is sped up or slowed down.

Symptoms of the MOA gene mutation are:

- Mood swings
- Irritation
- Anger
- Tendencies to physical violence

Whatever hurts the mitochondria of your cells will increase the speed of the MAO mutation. The mitochondria are the energy centers of the cells and the things that hurt them in a nutshell are environmental toxins. MAO-A also plays an important role in the metabolism of tyramine, and therefore foods that are high in tyramine such as cheese, smoked fish, cured meats, and some types of beer can have very dangerous effects when eaten.

WHAT CAN YOU DO TO COUNTERACT THE MAO GENE MUTATION?

All the steps listed for the COMT mutation will also help the MAO mutation, however here are some additional things that help:

St. John's Wort: Better suited for people with depression due to a fast MAO causing a decrease in neurotransmitter levels.

Vitamin B2: This vitamin is helpful for those with a slow MAO gene. Without adequate B2 our bodies can't even produce the MAO-A enzyme, however when B2 levels are ideal it has been shown to actually increase MAO-A activity.

Reserpine from *Rauvolfia serpentina*: This is another helpful herb for a slow MAO gene. Also called Indian snakeroot or sarpagandha, this plant is found from India to Indonesia and has great properties. Reserpine is an MAO-A agonist which means it promotes MAO-A activity, and in doing so helps to process serotonin. Reserpine is also a calcium blocker, so make sure you're getting enough calcium and magnesium while taking reserpine.

Other Helpful Tips

Here are several other helpful tips and resources that we learned along the way that can also be very important for those dealing with an autoimmune disease.

Antigenic Food Sensitivity Stool Panel Test

When the immune system finds any foreign or toxic substance such as bacteria or viruses, it creates antibodies to identify and eliminate them. These antibodies, also called “immunoglobulin” (Ig), come in several different classes — IgA, IgD, IgE, IgG and IgM.

Food allergy and food intolerance/sensitivity are different. With a food allergy, the immune system triggers the release of histamine and affects numerous organs in the body causing a range of symptoms. On the other hand, a food sensitivity or intolerance is more so limited to inflammation in the digestive system until it causes leaky gut and spreads throughout the body. While food allergy tests usually involve examining the blood for IgE type antibodies or pricking the skin to determine a reaction, food sensitivity is best determined by checking the feces for higher than normal levels of IgA secreted in the intestines. The mucous lining of the small intestine is the body’s first line of defense in shielding against toxins and pathogens.¹ Therefore, this is the first place you find elevated IgA antibodies if the immune system is being overstimulated.

This can be done via a stool sample through a lab such as Entero Lab.² It is very helpful to see

¹ Mantis NJ, Forbes SJ. “Secretory IgA: Arresting Microbial Pathogens at Epithelial Borders.” *Immunological Investigations* 39:4-5 (2010): 383-406.

² EnteroLab.com

if you can add foods such as organic corn back into your diet or to see if you need to eliminate any other foods such as oats. I tested for gluten, soy, oats and corn. Results showing a reaction to a wide variety of foods is usually indicative of a leaky gut as it was in my case. When the leaky gut is healed (it can take up to it two years), it may be possible to add some of these foods back into your diet as I have. Besides being vegan, I am now only off of gluten. I have even been able to add organic soy, organic Valencia peanuts, and organic gluten-free oats back into my diet which has been so wonderful as my wife makes an amazing granola.



Nightshades

Some people have challenges with nightshades (tomatoes, bell pepper, eggplant, and potatoes) because they have saponins and lectins. If the condition is serious, it may be helpful to try eliminating these for 30-90 days or until you're feeling better, and then add them back into the diet to see if there are any problems.

Vitamin Supplements

The best place to get our vitamins and minerals is from the plants that God packaged them in. However, it is understandable that there is a challenge even in organic farming to put the necessary nutrients into the ground for optimal plant nutrition and still make a profit. We have friends who are commercial organic farmers who have told us that financially, they cannot put into their organic farm soil what they put into the soil of their own personal garden.

So without having your own garden to eat from, which is of course the ideal if you can, you may feel the need to supplement some of your vitamins or minerals. Maybe you're also thinking, can't I just take some vitamin supplements and save myself the time?

However, I would give a big word of caution. Most vitamin supplements come from synthetic, made-in-a-lab, non-plant sources that are not used well in our bodies. You may be surprised to see how many supplements contain wheat, soy, dairy, all of which are damaging for those with autoimmune. A growing number of vitamin supplements are even made with GMO ingredients such as GMO corn to make citric acid or to make Vitamin C in the form of ascorbic acid. This is where you will really want to be your own detective if you choose to supplement. Vitamins can be labeled as "natural" if they contain as little as only 10% of the natural form of the vitamin. Synthetically-made vitamins include:

- Vitamin B-12 as cyanocobalamin
- Folate (B9) as folic acid
- Vitamin C as ascorbic acid
- Vitamin D2 as ergocalciferol
- The "dl" form of any vitamin is synthetic

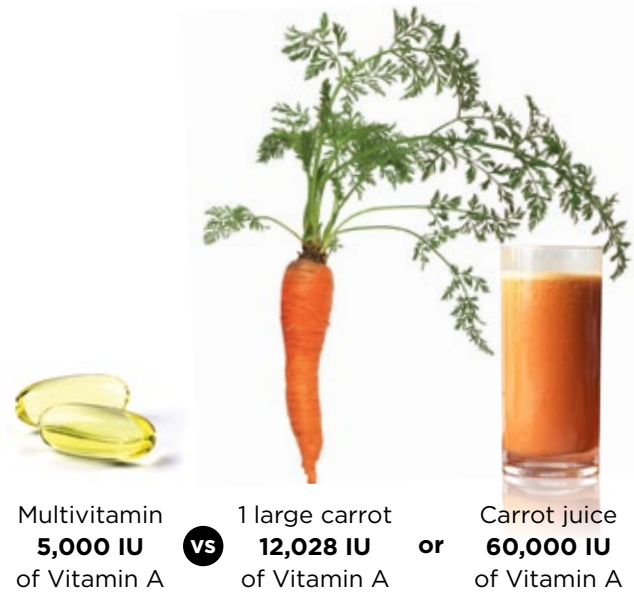
Vitamin supplements are often lacking the other elements which God designed them to come with because they have been isolated and created in a lab. But the vitamins and minerals in fruits and vegetables come packaged in just the right proportions with other nutrients to balance them.

Contrary to what some may think, the amount of nutritional content in fresh produce completely blows away the amounts of nutrients found in most supplements. For example, your standard multivitamin will have around 5,000 IU of vitamin A, but one large carrot has 12,028 IU, and

you can easily eat a carrot as a part of your meal or put 4-6 large carrots in one fresh juice. One medium baked sweet potato has a whopping 34,592 IU of vitamin A! Your typical multivitamin has 80 mcg of vitamin K, but just half a cup of steamed collard greens has 530 mcg of vitamin K. Your typical potassium supplement contains 99 mg of potassium, yet only a half cup of cooked beet greens has 655 mg. Since getting high levels of nutrition is our number one goal here, the choice is clear.

To get the highest levels of vitamins and minerals in their most natural form, we eat a whole foods, plant-based diet, high in vegetables, fruits, seeds, nuts, and beans. We try to buy in season and local as this will give the ripest fruits and vegetables. You can tell the nutrient quality (also called “Brix”) of any produce by how it tastes and long it lasts. In fact, produce at top nutrient value does not go bad, it only dehydrates. This was illustrated to us by a friend of ours who is a master gardener. He entered one of his watermelons into a contest at the county fair and won first prize. The next year, he entered the same watermelon and won again. He entered the same watermelon in the contest again the third year. It didn’t win first place that year but it made it into the top three, and it was still able to even be entered into the contest the third year! This is without refrigeration or anything to preserve it. This is what high-nutrient produce can be like.

We’ll also make fresh vegetable juices from time to time. And then what we do (if you want to call it supplementing), is we research the plant sources of the nutrient we’re looking for in the highest amounts. Vitamin C for example is found in the highest concentrations in the camu camu fruit, acerola cherry, and rose hip. So we’ll buy a pound of one of these as a whole powder, which is simply the whole fruit dehydrated and then ground down into a powder. This way, we’re getting the nutrients in their full package. This is different than an extract. Extracts are formed by taking the herb and making a tincture with a blend of alcohol and water. The alcohol and water dissolve the parts of the herb that are soluble in it. But when the alcohol and water are removed, the beneficial oils and chlorophyll are lost with it. What is left of the herb is the extract. So when taken as an extract, although more concentrated, the herbal extract is lacking the co-enzymes that aid our body in its absorption. But when taken in its whole form, you get the plant’s full spectrum of phytochemical nutrients which work together synergistically.



Cooking Pans

Pots, pans, and bakeware that are aluminum or are prepared with non-stick surfaces release harmful chemicals which are especially damaging for the brain. So for cooking, we only use cast iron, glass, or stainless steel. For baking, we use stoneware, cast iron, or we will place an unbleached piece of parchment paper on top of a cookie sheet or in a 9 x 13 glass dish. Ceramic cookware can also be a good option as long as you're able to confirm with the company that there are no heavy metals in the ceramic glaze.

Microwave

Microwaves use electromagnetic radiation to force water molecules in the food to reverse their polarity billions of times per second. This friction of the disordered motion of molecules colliding into each other creates heat.

Strangely, there is an absence of scientific studies done on how eating microwaved food affects human blood. You'd think there would be numerous studies available about what happens to human blood when a person eats microwaved food since microwaves are approved as safe and are so widely used in the U.S. To my knowledge, there is only *one* known study done on this by Dr. Hans Hertel in Switzerland in 1992. He did the most simple, logical experiment that you could think of to test the effects eating microwaved food has on human blood. People were fed food that had been microwaved, and their blood was compared with people who ate the same food but not microwaved. The results were that those who ate the microwaved food had decreased white blood cells and decreased hemoglobin indicative of anemic tendencies. This study is often represented as being unreliable because it is not published in a peer-reviewed scientific journal. However, a powerful trade organization called the Swiss Association of Dealers for Electroapparatuses for Households and Industry seemed to think his results were significant and immediately took him to court to try to silence the results. The case has not been resolved to this day as Hertel challenged the court for a fair hearing and the court has made repetitive delays.

While one isolated study may seem like not enough with which to make a proper conclusion, the results do raise an eyebrow. But even more dubious is the fact that there are no other studies done on this. People eat microwaved food every day. This would be an extremely easy study to repeat on a large scale. But where are the other studies disproving this study?

It is known that microwaving food destroys much of its nutritional benefit. A study published *The Journal of the Science of Food and Agriculture* showed that microwaved broccoli lost up to 97% of its antioxidants as opposed to only 11% when steamed.³ In simple terms, something bad is going on there.

It would be nice to be able to trust our regulating facilities in regards to matters pertaining to our health. However, in a country that encourages farmers to poison crops and soils with massive amounts of harmful chemicals and allows food processors to use additives that enhance shelf-life of foods regardless of the likelihood of harming our health, I believe it is time to be your own detective when it comes to health and lean more on the side of caution. We do have one of the highest rates of cancer in the world. That should tell us something.

³ Vallejo F, Tomás-Barberán F, García-Viguera C. "Phenolic compound contents in edible parts of broccoli inflorescences after domestic cooking." *The Journal of the Science of Food and Agriculture* 83.14 (Oct. 2003): 1511-1516.

Snacking

My wife and I have made it a practice to not snack between meals to give our stomachs a rest. Allowing 5-6 hours between meals gives time for the gut to heal and eases the burden of the digestive system. Often times when we get hungry after only an hour or two from eating, we know it's because we're either thirsty (so we'll drink water), tired (so we'll go to bed if it's in the evening), or we didn't have a decent enough meal beforehand. So we aim to eat breakfast like a king, lunch like a prince, and dinner like a pauper (which means we don't always have dinner and if we do, it's light with fruit, smoothies, or cereal). This way, our energy needs for the day are met and there is not a large meal sitting in our stomachs while our body is trying to rest at night.

How to Deal With Those Who Don't Believe You're Sick

One shocking reality that many autoimmune sufferers have to deal with is that on top of being sick there is the additional burden of family, friends, and even doctors not believing anything is wrong with them. This scenario is especially true in autoimmune patients whose primary symptom is chronic fatigue. A rash you can see, damaged organs and tissues can be proven through biopsies and tests, but chronic fatigue is just how you feel. This unfortunate situation adds to the overall stress picture.

If you are in this circumstance maybe you have even asked yourself, am I just being lazy? Am I losing my mind? However, there are definite biological and testable reasons underlying chronic fatigue, but unfortunately most doctors are not looking in the direction that would reveal these findings. The sad fact is that the prevailing view among most doctors today is that chronic fatigue syndrome (CFS) is a psychological problem not a medical one. Wow what a slap in the face! You went to your doctor in hopes of finding out how to get your energy back only to have them tell you you're crazy.

Unfortunately, many suffering from some form of chronic fatigue are only given two options crazy or lazy, but not sick. So how does one deal with this scenario? Here are some thoughts.

a.) Gather evidence.

What makes this situation turn around faster than anything is some good hard evidence that you are not well. Get some testing done. Unfortunately if your doctor doesn't think you're really sick, he may not refer you to some of these tests in which case you may be on your own. Here are the common culprits behind fatigue which can give you an idea of what to start testing:

- Leaky gut, gut dysbiosis, or food sensitivities
- Viral or bacterial infections
- Heavy metal poisoning
- Chemical poisoning
- Mold or yeast infection
- Underlying autoimmune disease

All of these issues can lead to damaging the mitochondria which are the energy centers of our cells

as well as impairing the energy delivery mechanism like the adrenals and thyroid glands. When some good hard proof of any of these conditions is produced through testing, it will likely raise some eyebrows and open some ears to the reality of your situation.

b.) Show research proving that chronic fatigue is a real condition.

Thankfully there are many natural-minded practitioners who can be located on the internet who have dedicated a lot of time and experience to explaining the ins and outs of what chronic fatigue is and why it happens. Listen, gather research, show your family and your doctor, and hopefully they'll come along.

c.) Talk to the best Counselor in existence.

You have a friend in Jesus. Whether you love Him or not, He loves you. Pour your heart out to Him in prayer. He wants to be your best friend. When no one else in the world understands you, He understands. Jesus knows the truth. Tell Him all of your frustrations and hurts, and ask Him to heal you. All human beings will let you down, but God will never fail you. He will give you strength to be misunderstood, for Jesus Himself was misunderstood His whole life and still is today by billions.



Conclusion

If you want to stay healthy, every autoimmune sufferer needs to realize that there will be some permanent lifestyle changes. Realize that your body will never be able to deal with certain foods you used to eat. Some can be added back into the diet as I did, but some foods may never be able to be added back. Sadly, it's just the kind of world we're living in right now. Besides food, other permanent changes may be things to reduce your stress level, exercising more, sleeping more, and improving your relationship with God. Whatever it is for you, just understand it's what you have to do to be well.

At times when I've been mourning the loss of gluten or the ability to go out to just any restaurant, God has brought to mind this favorite quote of mine.

“Live like no one else, so you can live like no one else.”

— Dave Ramsey

It's so true! If you want to eat and live like everybody else, then you're going to get sick like everybody else does. But if you want to live a life of being in remission from an autoimmune disease, then you need to take the road less traveled. I chose health and the road less traveled. It comes with some sacrifices, but as far as I'm concerned it's not nearly as much sacrifice as a life of sickness and an early death is.

And think about this. At some point when you've recovered your health, you will be able to help someone else that is suffering from an autoimmune disease. This will be wonderful because since there is the genetic factor in autoimmune diseases, there very well may be someone else in your

own family who either has an autoimmune disease or will get one. You will be confident number one in encouraging them in their recovery of health.

I'm so glad to be around to share this testimony. My grandmother died at age 84, my mother would have died at 56 were it not for the transplant, and I know I would have died even younger than both of them were it not for this wonderful intervention God led me to. My wife and I have learned so much during our journey of healing my autoimmune disease and skin infection, and I would like to encourage you by saying that there is light at the end of this tunnel. There is hope for you! It is my prayer that my testimony has given you hope, food for thought, and a greater measure of the presence of Jesus Christ as He has been my greatest strength, help, and comfort through all of this.

May the Lord bless you in your pursuit of health and healing, and may He keep you in the grace of His strength!

“Happy is he that hath the God of Jacob for his help, whose hope is in the LORD his God: Which made heaven, and earth, the sea, and all that therein is: which keepeth truth for ever.”

— Psalms 146:5, 6

Resources

BOOKS:

- *The Holy Bible*, by God **by far, best book there is for anything in life*
- *The Ministry of Healing*, by Ellen G. White
- *The China Study*, by Colin T. Campbell

DOCUMENTARIES:

- Eight Secrets to Ancient Health, www.anchorpointfilms.com/dvd/ancient-health
- Forks Over Knives, www.forksoverknives.com/the-film/
- Genetic Roulette, GeneticRouletteMovie.com

CLEANSING PROGRAMS:

- Years Restored Lifestyle and Learning — YearsRestored.com
- Bella Vita — ModernManna.org
- Bayside Natural Health — BaysideNaturalHealth.com

OTHER HELPFUL LINKS:

- Entero Lab — EnteroLab.com
- Neurobiologix — Neurobiologix.com
- MTHFR Genetic Testing — MTHFRdoctors.com
- Environmental Working Group — ewg.org
- AzureStandard.com — A once-a-month drop-off coop where we buy most of our bulk dried items. They usually have excellent prices for organic grains, beans, seeds, dried herbs, and spices. They have drop points in many places throughout the U.S.
- MarriageConversionUniversity.com — An excellent tool for marriage and relationships which has improved our communication tremendously.