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• The *Future* of Natural Healthcare •

• *Heal Your
Autoimmune Condition* •

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Autoimmune conditions have exploded to epidemic proportions over the last few decades, affecting an estimated 50 million Americans. To put that in perspective, there are around 14 million living Americans who have been diagnosed with cancer at some point in their lives. What was once a rarity is now commonplace.

Autoimmune conditions are showing no signs of stopping. People with one autoimmune condition are also at a greater risk of acquiring another. I see many people with what's called poly-autoimmunity, which means they have multiple autoimmune conditions at the same time.

Today there are close to 100 recognized autoimmune diseases, and an additional 40 disease processes that have an autoimmune component. Autoimmune conditions can affect every system in the body, but three that I see most frequently are:

CELIAC DISEASE

This condition is very difficult to diagnose, and many people don't know why they are sick. This disease is known for its horrendous gastrointestinal symptoms, but did you know that around 80% of celiacs don't have classic gastrointestinal symptoms? Many celiacs suffer from depression, largely due to a blunting of their serotonin receptors. Ninety-five percent of serotonin is made and stored in the gut, which is also known as the "second brain."

AUTOIMMUNE THYROID DISEASE

Research shows that about 90% of thyroid cases are autoimmune in nature, with Hashimoto's disease being the most common.

Sadly, all low thyroid patients are treated the same, regardless of whether they have true primary hypothyroidism or an autoimmune disease. Everyone is given Synthroid or Levothyroxin, even if symptoms persist. Your labs will look more normal but if the immunological factors in the majority of thyroid patients are not addressed, it will be a short-lived success at best.

AUTISM

In 1970, 1 in 10,000 children were found to be autistic. In 1995 it was 1 in 500. In 2001 it became 1 in 250. Today, 1 in 68 children are diagnosed as autistic. The reality is, genetics does not explain the epidemic growth of autism and other conditions like it. Our genetics haven't changed in the last 30 years. Better diagnosis may explain part of the astronomic increase of autism, but only marginally. In reality, the medical literature is beginning to recognize autism as an autoimmune reaction against the brain.

Hopefully by now you realize that these are not just diseases due to bad genes. So why is this all happening now? The multifaceted autoimmune puzzle may start with a genetic susceptibility, but we also have to look at three important epigenetic, or environmental factors:

1. FOOD INTOLERANCE

Our food supply has changed drastically in a relatively short period of time. Our genetics haven't adapted to the onslaught of food changes. Our bodies function because of unique, complex biochemistry. The mismatch between our foods' biochemistry and our own has greatly contributed to the rise of the autoimmune disease.

We eat far too many grains, and there's a very strong link between grain and autoimmune conditions. Getting the proper food intolerance diagnostic labs done can be the first step for many to regain their health.

2. TOXINS

The increase in environmental pollution, vaccinations, fluoridation, food additives, heavy metals, cosmetics, and other toxic chemicals have had a negative impact on our collective health, especially with autoimmune conditions. A comprehensive health history and diagnostic testing from a functional medicine practitioner can uncover this often-overlooked factor in autoimmunity.

3. GUT STRESS

Your gut is home to around 80% of your immune system. It's no surprise that just about every autoimmune condition has a gastrointestinal component. When there's chronic stress or unresolved infections of the gastrointestinal system, it leaves the body susceptible to an autoimmune response. Increased permeability of the gut lining, commonly called leaky gut syndrome, allows undigested food particles and bacteria to circulate throughout the body. This breach of your body's protective system causes your immune system to go in hyperdrive: the autoimmune response. Knowing the level and details of your gut health is a key insight to understanding autoimmune disease.

4. GENETICS

Our health and our genetics are being compromised by this onslaught of these epigenetic triggers. The great news is that we are living in the age when the understanding of these diseases is at an all-time high. We can arrest the development of the damage. So then comes the next part in determining how much of your autoimmune disease is genetics vs. environment.

People struggling with unexplained autoimmune symptoms can go years without being diagnosed or having symptoms as previously mentioned, and even then are given very little options from mainstream medicine. They're told there is very little, if anything, they can do about their health problems and that their problem is strictly due to genetics. Their only option is to take medications to suppress the immune system or manage symptoms.

Is this true? Are autoimmune conditions solely due to genetics, with no solution? Let me give you a functional medicine perspective.

There's no debate over whether or not autoimmune conditions have a genetic component. A variety of autoimmune conditions tend to be found throughout families. But with an increase in just about every autoimmune condition in the last few decades, genetics alone do not give us the answer.

The old view of genetics was that it was an immutable force, that if your family had a certain health problem, it would be just a matter of time before you got the same disease. Today, science takes into consideration the field of epigenetics, the environmental factors that affect your DNA expression. Our bad and good genes are turned on and off by the world around us and the choices we make in life.

One Stanford study, published in 2015, looked at 210 healthy twins. Some were identical and others were fraternal. Identical twins share almost all the genetics, while fraternal twins have about 50% of the same genes. Because of this, studying twins is a great way for researchers to distinguish between genetic and environmental factors.

Looking at different aspects of the twin's immune systems, what the scientists found was remarkable:

- 58% of the immune system was almost completely determined by environmental and lifestyle factors.
- 19% of the immune system was largely influenced by environmental and lifestyle factors.

That means 77% of the immune system was determined by things we can control! The foods we eat or don't eat, toxins, exposure to germs, stress levels, and medications are the determinants of the majority of our health.

The past 100 years have brought about rapid development in our world. When compared with the entirety of human history, the last few decades have seen a plethora of new chemicals, foods, and toxins introduced in a short period of time. Our genes haven't undergone a similar change. The change of the world around us has caused a mismatch between our DNA and the DNA of the new world around us. This theory is at the heart of many autoimmune studies.

Take your Th17 cells, for example. They're a part of our immune system. In a healthy individual they fight bacteria and fungi, but an overreaction of these cells are linked to autoimmune diseases.

Researchers found that a high-salt diet negatively affected Th17 cells and increased autoimmune problems. Our fast food society, is filled with salt. In this case there was a mismatch between the immune system and high amounts of salt. This seems to be one of the many triggers that can cause an inflammatory autoimmune response in genetically susceptible individuals.

What we are or are not exposed to, determine our genetic expression and immune system. Though our current period in human history has brought its share of problems, be encouraged that we're living in a time like no other in terms of access to information. While autoimmune conditions are rising, so is the information and research on how to overcome them.

We are at the forefront of understanding the immune system and functional medicine is at the cutting edge of applying autoimmune research in your life in a practical way. This allows you to learn exactly what your immune triggers are and gives you natural tools to put your autoimmune response into remission. The first step in that is understanding the most common triggers of autoimmune disease.

I've already covered the multifaceted reasons for the autoimmune explosion we are seeing, and I'll also give you some effective tools to reverse autoimmune symptoms and balance your immune system.

Now, those top triggers that can flare up an autoimmune response and cause devastating symptoms in the body from full-blown autoimmune diseases like Crohn's, celiac or Hashimoto's disease to common "autoimmune spectrum disorders" like acne, or irritable bowel syndrome (IBS), it's important to know what the potential "land mines" are that can turn on an inflammatory-immune response in your body:

1. GLUTEN ■

The infamous "G" word is a protein that's found in wheat, barley, spelt, rye and other grains. This protein is linked in many different studies to an increase risk of autoimmunity.

Many people and their doctors believe you have to have celiac disease to be gluten intolerant. When their labs for Celiac come back negative, they are told that avoiding gluten is not necessary. This antiquated misinformation keeps many people struggling with an autoimmune condition very sick.

For many of my autoimmune patients it doesn't have to be a piece of bread or pasta to cause damage either. Foods cross-contaminated with gluten can be like gasoline on a fire for many people with autoimmune conditions.

2. GLUTEN-FREE GRAINS 🌾

Many people with autoimmune problems already avoid gluten, but still consume foods like corn, oats, and rice. As well-intentioned as that decision may be, these grains can be just as damaging as gluten, or even more damaging.

The proteins in these grains are very similar to gluten, which can be like a game of Russian roulette for someone suffering from an autoimmune condition. Just like gluten sensitivities, symptoms do not have to be gastrointestinal in nature. A flare-up of any autoimmune symptom can occur with exposure to grains.

Everyone is different, so it's helpful to run immunological blood tests to see what your body is cross-reacting with.

3. QUINOA

A favorite in the health community, pseudo-grains like quinoa are high in proteins called saponins which can damage the gut lining, causing an immune response in the body. Soaking and rinsing quinoa can reduce the gut-damaging effect, but for many autoimmune conditions this is not enough.

4. STRESS

Stress has many far-reaching effects on your health; one of them is your immune system. Research has found chronic mental stress to be a trigger for autoimmune diseases.

Many of my patients noticed the onset of their health problems during a rough time in their life. Caring for an aging parent, the loss of a loved one, or a divorce can be the tipping point for an autoimmune response.

5. TOXINS

Our environment has been bombarded with toxins that were unknown 100 years ago. Studies have shown toxins play a role in autoimmune cases such as autoimmune thyroiditis.

6. SUGAR

It should be no surprise that sugar is on this list, but I'm not just talking about the stereotypical junk food. There are many "healthy" junk foods that are popular in the health food community that will not be good for autoimmune conditions.

Healthier-sounding terms like "organic turbinado sugar" or "agave nectar" on a food label may sound earthier and more natural, but sugar is still sugar to the immune system.

7. CHOCOLATE

This yummy food can cause a lot of damage to someone living with an autoimmune condition. The literature shows that some people who struggle with autoimmune problems may be negatively affected by chocolate.

8. DAIRY

Casein, the main protein found in milk and other dairy products, can be a trigger for runaway inflammation in the body. Removal of the dairy proteins in ghee or clarified butter can be a safer alternative for some people. Some autoimmune disorders can also handle fermented dairy, like grass-fed whole yogurt or kefir.

9. NIGHTSHADES

A plant group that consists of tomatoes, peppers, potatoes, eggplants, goji berries, and some spices contains compounds known as alkaloids in their skin which can cause an inflammatory response in the body.

10. INSTANT COFFEE

Beloved by many on a busy work day, instant coffee can unknowingly cause an inflammatory-immune response in some individuals with autoimmune disorders. But why instant coffee and not regular coffee? Research seems to point to the chemicals used in the manufacturing of instant coffee. With that said, some individuals respond negatively to regular brewed coffee as well. I run food reactivity blood labs to see what underlying food triggers my patients have.

11. SIBO

Small intestinal bacterial overgrowth, or SIBO, occurs when normal bacteria of the microbiome grow from the large intestines where they belong into the small intestines. This can lead to a number of localized autoimmune spectrum conditions such as IBS and acid reflux. Chronic SIBO can also lead to a leaky gut which can then cause autoimmune problems throughout the body.

12. WEAKENED MICROBIOME

The majority of your immune system resides in what's referred to as the microbiome. This highly sophisticated gut ecosystem consists of trillions of bacteria colonies. Your microbiome controls not only your immune system but your brain, hormones, and genetic expression.

Parasitic, yeast, and fungal infections have all been implicated in a variety of autoimmune type conditions such as Parkinson's and M.S. It's also important to note that you don't necessarily have to be experiencing gastrointestinal symptoms to be affected by these pathogens.

I run a specific two- or three-day stool lab to uncover these often-undiagnosed factors in autoimmunity.

13. LEAKY GUT SYNDROME

Functional medicine considers an increased permeability to the gut lining, or a "leaky gut," a precursor to autoimmunity. All of the above-mentioned triggers can lead to leaky gut syndrome. Because of this, a leaky gut can be seen as a causal trigger, but also the effect that proceeds from an autoimmune condition.

When your gut is damaged undigested food proteins and bacterial endotoxins can pass through the protective gut lining, turning on an autoimmune reaction throughout the body.

In summary, finding out your individual underlying triggers can save you from the years of unnecessary suffering that millions with autoimmune conditions go through. I clinically investigate autoimmune cases all around the world, customizing personalized plans for the individual. However now I'd like to mention some of the basic tools you can use to start reversing your autoimmune disease.

1. KNOW THE LEVEL OF YOUR GUT PERMEABILITY.

Your gut is where the majority of your immune system resides. When your gut's protective lining is compromised, it can give rise to an autoimmune response throughout your body. I run labs to look at the level of my patient's gut permeability so we can address this major underlying component to regaining one's health.

2. HEAL YOUR GUT.

Once you know the level of your gut permeability and whether you have any secondary issues like small intestinal bacterial overgrowth (SIBO) or chronic bacterial, yeast, or parasitic infections, you will want to start the healing process. There are many approaches to this aspect of health, but here's some great general information on natural ways to heal the gut.

3. KNOW YOUR ANTIBODY LEVELS.

Depending on your specific autoimmune conditions, there will be elevated antibodies, proteins that are a part of your immune defense system. Knowing your specific antibody levels will help gauge your healing process from an objective lab perspective. Knowing your antibody levels associated with other relevant autoimmune disorders will give you insight to any secondary issues to deal with.

4. AVOID GLUTEN.

If you have an autoimmune condition, you don't really need a lab to know you should avoid gluten. This protein, which is found in wheat, spelt, rye and barley, is linked to many autoimmune conditions. Though I do run comprehensive gluten intolerance labs for some autoimmune cases to definitively know the level of their intolerance, removing gluten for 60 days, then reintroducing it, can also be a helpful test for some people.

5. FIND YOUR CROSS-REACTIVE FOODS AND REMOVE THEM.

Even gluten-free grains like corn and rice can flare up the immune system in some people. Molecular mimicry occurs when your body confuses your own body tissue for the similar proteins found in some foods, and is something that I see very often in my practice. Find out if you are having any cross-reaction with the food you are eating. This can be very helpful for people who have cleaned up their diet but are still having symptoms.

6. MAKE DETOXIFICATION A REGULAR PRACTICE.

People with autoimmune conditions can also have altered detoxification pathways, so helping your body on a daily basis to remove toxins is a good idea for people with autoimmune conditions. Eating a variety of green leafy vegetables like kale and spinach and avoiding sugar and processed foods will aid your body in many different ways.

7. ADD GREEN TEA AND TURMERIC INTO YOUR DIET.

These foods have been shown to dampen the autoimmune response in the body, especially the brain.

8. AVOID REFINED TABLE SALT.

Table salt has been shown to aggravate and increase some autoimmune conditions.

9. MANAGE STRESS.

It's no surprise that chronic stress is like gasoline for an autoimmune condition. Many of my patients even noticed the onset of their condition to have first appeared during very stressful life events. Regular practice of meditation or tai chi can help give you tools to better manage stress and balance your immune system.

10. INCREASE YOUR GLUTATHIONE LEVELS.

This important nutrient is also deficient in many people with poor health. Eating plenty of sulfur-rich vegetables like onions, cabbage and broccoli aid in methylation, a biochemical pathway which produces glutathione naturally.

Another key source of healing and aiding in the remission of your autoimmune disease would be adding in key nutrients missing from most American diets.

The father of medicine, Hippocrates, said “Let food be thy medicine, and medicine thy food”. The foods we eat instruct and build our biochemistry. When there is a mismatch between the biochemistry in the world around us and our body, or there is a lack of the nutrients that we are made of, the genetic switch for autoimmunity is triggered and grows worse. Food can either feed the worst disease or nourish you into health. There is no middle ground.

HERE ARE THE TOP NUTRIENTS AND FOOD MEDICINES THAT I RECOMMEND FOR PEOPLE STRUGGLING WITH AUTOIMMUNE CONDITIONS:

VITAMIN A

Vitamin A is essential for equipping you with a strong immune system. Vitamin A deficiency has been linked to autoimmune diseases such as rheumatoid arthritis, lupus, and type I diabetes. Why is this? Researchers seem to think it has to do with our dendritic cells. These alarm systems of the immune system, can send out a “red alert” to stimulate immunity, or a “calm down” message that tones down excessive immunity that can damage the body. The “calm down” message makes use of vitamin A.

FOOD MEDICINE: True vitamin A, retinol, is only found in animal products like fish, shellfish, fermented cod liver oil, liver and other organ meats, and butterfat from grass fed cows. The conversion rate of plant carotenes, found in sweet potatoes or carrots, to the usable retinol, is very weak in the human body, especially for people with autoimmune conditions. Only 3% of beta-carotene gets converted in a healthy adult. Research estimates that 45% of adults don’t convert any beta-carotene into vitamin A at all!

VITAMIN D

The sunshine vitamin is essential for many metabolic and immunological pathways in the body. For example, Th17 cells are helper T cells that we all have and they produce a number of inflammatory chemicals, such as interleukin-17. With autoimmune conditions, such as inflammatory bowel disease (Crohn’s and ulcerative colitis), multiple sclerosis, psoriasis and rheumatoid arthritis, Th17 cells are out of control. Vitamin D in conjunction with Vitamin A have been shown to synergistically dampen the Th17 inflammatory response.

Food Medicine: As with vitamin A, vitamin D in its most abundant and bioavailable form is found in animal and dairy fats. Also, spend some time in the sun! Make sure to get tested every few months to make sure your vitamin D levels are just right for you!

VITAMIN K2

One of the most common nutrient deficiencies in the western diet is vitamin K2. One study in the *Journal of Neuroimmunology* found that K2 was effective at inhibiting the pro-inflammatory iNOS in the spinal cord and the brain immune system, the glial cells, in rats that had MS (multiple sclerosis) symptoms.

FOOD MEDICINE: Vitamin K2 is best paired with the other fat-soluble vitamins, A and D, in whole-food form such as grass-fed butter oil (ghee), or organ meat. Natto, a Japanese superfood made from non-GMO fermented soybeans, also has high levels of K2. The synergy between these nutrients allows your body to get maximum use out of them and decreases the potential for nutrient overload.

IRON

Iron deficiency anemia (IDA) is linked to many autoimmune diseases for different reasons. One reason is that a large amount of stored iron, ferritin, is absorbed in the enterocytes of the intestines. In functional medicine, damage of the gut lining and leaky gut syndrome are considered preconditions for autoimmunity.

Another reason for IDA can be a bacterial *h. pylori* infection which has been shown to trigger an autoimmune response and decrease nutrient absorption.

FOOD MEDICINE: It is essential to deal with the underlying mechanism that is causing the iron deficiency. Healing of the microbiome and removal of any underlying infections is essential for healthy nutrient absorption, especially iron.

Once the gut is healed, iron-rich foods such as grass-fed beef liver and spinach, as well as cooking with cast iron cookware can be effective.

MICRONUTRIENTS

Micronutrients such as selenium, magnesium, and zinc deficiencies are linked to several autoimmune diseases. This is mainly due to chronic inflammation, decreasing the absorption of these vital nutrients. This causes a vicious cycle because they are needed for hormonal and immune balance.

Autoimmune thyroid problems such as Hashimoto's disease are the most common autoimmune conditions. These micronutrients are needed for the healthy production and conversion of thyroid hormones!

FOOD MEDICINE: A variety of nuts and seeds, such as Brazil nuts as well as oysters are good sources for these nutrients.

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IN SUMMARY

Autoimmune disease is not curable, but can be manageable, and there's so much you can do naturally to put your autoimmune into remission.

These tips are great steps to reversing autoimmune disease and living a vibrant, healthy life. I've seen countless people with horrible autoimmune symptoms completely regain their health.

We coach people all around the world through our virtual Functional Medicine clinic. Phone and webcam consultations offer people personalized natural healthcare wherever they are. Take advantage of our [free evaluation](#) to get your questions answered and to see if Functional Medicine is right for you.

Call 724-772-9833 if you are in the united states or visit www.drwillcole.com.