





## AUTOIMMUNE DISEASE IS ON THE RISE— AND WHAT YOU CAN DO ABOUT IT

## **Causes of Autoimmunity**

The rates of several diseases, including Type 1 diabetes, celiac disease, Crohn's and ulcerative colitis, multiple sclerosis, lupus and others have been on the rise for the last couple of decades. Any disease that is on the rise must be related to the environment, because human genes just don't change that fast. Once in a while, a diagnosis is on the rise because we "recognize" it more efficiently, but in the case of several autoimmune diseases, scientists have used blood stored in blood banks from decades ago and found that the rise in autoimmune disease is not about recognition.

When I went to medical school, we learned that autoimmune disease arose as a "mistake" of the immune system, which began (for no reason anyone knew) to attack cells of the patient's own body. Certain genetic types were predisposed to it—but did not always get it. And that is all I was taught. Of course if you don't know how something comes about, you have no chance of avoiding or reversing it.

Here is a list of factors associated with autoimmune disease:

- salt
- viruses
- gluten
- vaccines
- toxins
- stress
- poor beneficial bacteria
- low nutrient diet
- exercise

How many of these can we avoid, regulate, learn to minimize? Almost all.

In learning functional medicine, I've had to re-learn what I learned in medical school, except with this new slant: What are the environmental causes? How do you remedy them?

## **Easy Reversible Factors**

Let's start with the easy ones: salt. If you nearly eliminate processed food from your diet, you're there. Actually the unexpected food that contains a lot of salt is bread. Sorry. It's another reason to give up toast. Gluten-free won't help you here.

The next easiest thing to do is stress reduction. Stress implies elevated cortisol, which causes inflammation, which means that your immune system is prone to overreacting. This is the sort of thing that can lead it to attack your cells. You have probably heard my advice on stress by now—if not, stay tuned for my **New Patient Program** (free, even if you are not a new patient!--see link at bottom of newsletter).

Then there's nutrients: it may take a while to figure out which ones are missing, but a basic system of multivitamins, omega 3s, vitamin D and probiotics is a good start at replenishing most of what people need.

## **More Reversible Factors**

Then it gets harder. What do I have against vaccines, you may ask. Well, it's the fact that they only work if they stimulate your immune system to overreact to the germs in the vaccine. It's temporary, and you might be fine, but you might not. There is even an acronym for autoimmune disease that arises in the wake of vaccination: ASIA (autoimmune syndrome induced by adjuvants). In France, they determined that the Hepatitis B vaccine was *causing* (not associated with, but actually causing) multiple sclerosis, and no longer offer it routinely. Somehow we have not come to that conclusion here in the US—I can explain that some day if you like. Anyways, let's use vaccines when we absolutely need them.

Toxins are also in our environment every day. Many of us have a harmful immune reaction to certain heavy metals, or to certain substances like BPA, phthalates, dry cleaning chemicals, and the like. When we are exposed to these substances, we become inflamed, and our immune system, now overstimulated, begins to react to other things like possibly our own cells. Addressing toxins can be done many different ways: avoidance, testing, removal.

Viruses may be the hardest to treat. The damage may already be done, the virus may have transformed certain cell proteins to the point where your body sees them as "foreign" and attacks them. Or the virus maybe "chronic" and ways of addressing it

few and poorly researched. There is some hope with substances such as low-dose naltrexone and transfer factors, and it is always a good idea to lower overall inflammation and replenish missing nutrients.

I've left gluten for last because it is linked to leaky gut, a complicated topic. It is believed that perhaps 20% of autoimmune disease is mainly due to viruses, 40% mainly due to toxins, and another 40% mainly due to increased intestinal permeability, a.k.a. leaky gut. Gluten plays a role in the latter. Gluten is a protein that is very difficult to digest, and evidently humans used to do it thanks to a robust population of beneficial bacteria. Without them, gluten causes the intestinal lining to let through substances that are incompletely digested, and bacterial components that should have stayed in the gut. Modern living has decimated our gut bugs, due to antibiotics, too much sugar, pesticides and emulsifiers. Processed foods contain chemicals that help water and fat stay mixed (emulsified) but these chemicals disrupt the proper relationship between our gut bugs and our gut lining—which is where the action is, immunologically.

All of the above are the reasons why we can often reverse autoimmune disease. There are many steps, and there is no guarantee. But I think it is safe to say that the majority of people who pay attention to reducing processed foods, inflammation and stress, and increasing nutrients and their resistance to viruses will see worthwhile benefit.