



## Month 3 - Video #5

### Autoimmune

1. Most people have it and don't know it.
2. It is the fastest growing epidemic and many times testing will not show positive for ten years and even longer in some cases.
3. Typically your diagnosis relates to tissue that your body is attacking for example Hashimoto's Thyroiditis – Thyroid autoimmune, Psoriasis – skin, Crohn's Disease – the intestinal tract etc....
4. The longer you are autoimmune for one condition, the more likely you are to develop other autoimmune conditions because they are driven by the same processes.
5. Autism Spectrum Disorders (ASD) has been strongly linked to chronic inflammation and autoimmune response. Inflammatory signals appear to dominate in ASD individuals, and the more skewed towards inflammation the more severe the symptoms of autism. Cytokine production (a substance that when increased stimulates cells towards an inflammatory state) is elevated, brain cells and gut cells are inflamed and brain cells are even found to be enlarged due to chronic activation of the immune response. Genes for autoimmunity and inflammation are triggered.

Infection during pregnancy such as a bacterial urinary tract infection during the second trimester of pregnancy has been shown to increase the chances of ASD in the offspring by 40%.

Mothers with rheumatoid arthritis (RA) – 80% increase

Mothers with celiac disease – 350% increase

In other words if mom has a triggered gene and autoimmune expression their child is more likely to have a propensity for displaying autism symptomatology.

Other risk factors include asthma, allergies, insulin resistance and obesity to name a few.

There is definitely a genetic component. Stressors turn the gene on and you then express it. Gut bacteria or the microbiome as we call it plays a major roll as it does in all autoimmune conditions. 70-80% of the immune system is in the gut and dependent upon or gut bacteria and or microbiome.

6. When dealing with autoimmunity it is crucial that we remove the stressors to downregulate the inflammatory processes in motion.
  - a) Remove generally toxic substance from your environment to the extent you can.
  - b) Remove heavy metals from the body to include amalgam fillings
  - c) Remove toxins and Biotoxins from the body (mold and Lyme)
  - d) Clean up the gut / microbiome
  - e) To the best of your ability eliminate emotional and physical stressors from your environment.
  - f) Supplementation and dietary changes to assist the 5R process (Dr. Dan Pompa) and break chronic inflammatory cycles.

The closer we get to our evolutionary past environment (closer to nature) the less autoimmune we are. Pesticides, cleaning agents, genetically modified foods, excitotoxins in the food we eat are just a few things we can mention that will drive chronic inflammation in the body and push us toward autoimmunity.

In the most severe cases of autoimmunity and autism spectrum disorders (severe gut conditions) we talk about the three F's.

- a) Fasting – monitor electrolytes
- b) Fermentation – Provides critical bacteria needed and missing in the gut
- c) Fecal Transplant – Bacteriotherapy

Intermittent fasting (roughly 500-800 calories per day) has been shown to extend life. Fasting such as that used in our basic suero fast (whey water) helps to repair our sodium potassium ratios at the cellular level allowing us to better get the good things in and the bad things out of our cells. It helps to open up the detox pathways in our liver, kidneys and gastrointestinal tract. Fasting will also increase our sensitivity to hormones such as leptin, ghrelin, insulin, thyroid hormone and more. It will downregulate inflammation and help us start to burn fat for energy instead of sugar which is so crucial for diabetics.

**\*Those on insulin will need to work closely with their doctor. As you become a fat burner, you will need less insulin to control blood sugar. This is a good thing but in order to avoid a sugar low you need to monitor your blood sugar closely.**

Fermentation or the use of fermented foods helps to replace good bacteria in the gut that may have been depleted or lost due to poor diet and toxicity, infection and subsequent antibiotic use, and other insults driving leaky gut and the autoimmune response over the years. We need certain unique bacteria that we can only get from fermented products. These unique bacteria allow us to break down and digest certain carbohydrates (sugars). Without these bacteria we have decreased energy, weight gain and worse increased suppression of immune cells called T-Regulatory Cells. These cells suppress the immune response and let the immune system know that things are ok. When T-Regulatory Cells are suppressed the immune response is heightened further driving autoimmune response and inflammation. This is why we recommend grass fed organic beef. They contain good bacteria that we cannot get from corn fed beef (which are additionally laced with insecticides, antibiotics and hormones). Products produced by Youngevity, such as Suero Gold (whey water), Amasai, and cheese curds, allow us to flood the gut with good bacteria that we cannot get anywhere else. This helps us regain the proper balance of good bacteria in our gut, downregulates inflammation, helps repair leaky gut and overall downregulates autoimmune response.

Fecal transplant or bacteriotherapy may be considered in severe cases. In these situations use of fermented products hasn't brought about the desired improvement in symptomatology and this in my opinion is due to very specific bacteria missing in the individual's GI tract. The best possibility is to look to a healthy family member as a donor. Fecal transplants have turned severe cases around many times, however these individuals usually have severe gut issues and likely will need to maintain strict dietary guidelines ongoing. It is my opinion these individuals should consult one on one and may call the office to schedule a consultation or for a referral to someone experienced in the process more local to them.