THE TUESDAY MINUTE

IT'S TIME TO FEEL GOOD AGAIN

THIS WEEK'S TOPIC

Autoimmunity & Excitotoxicity

"Excitotoxins are the cause of many neurological conditions and excitotoxicity is the most destructive mechanism behind autoimmunity."

Autoimmunity has increased every year for the last three decades and has become a mainstream condition. Neurosurgeon, Dr. Russell Blaylock, and author of Excitotoxins the Taste that Kills, asks the question, what else is going on besides immune dysregulation? For example, in some cases, as in multiple sclerosis, the immune reaction has burned itself out, but the disease continues to progress. He has shared for decades that glutamate and excitotoxins are the cause of many neurological conditions and now claims excitotoxicity is the most destructive mechanism behind autoimmunity. Let me explain.

Glutamate receptors are found in most tissues and organs. That makes sense since glutamate is naturally present in the body and is in fact one of the strongest excitatory neurotransmitters in our brain. Dr. Blaylock shared research where elevated levels of glutamate are found in the joints of patients with rheumatoid arthritis. And when glutamate blockers are used, the result is less pain and deterioration than standard therapies. Excess glutamate has been linked to Alzheimer's, Parkinson's, seizures, strokes, headaches, fatty liver disease, glaucoma, diabetes, autism, brain fog, MS, ALS, etc.

IL-1B and TNF alpha are both cytokines that are associated with inflammation. Dr. Blaylock links the interrelationship between inflammation and excitotoxins in the following quote. "Experiments have shown that injecting IL-1B into the brain of a rat with an inactive immune system will not cause any destruction. But if microglia in the animals' brains are activated, the IL-1B injection will cause extensive destruction. So, what is the difference? In the second example, microglia are secreting glutamate and other excitotoxins. Blocking these excitotoxins will block most of the damage."

Think of the inflammatory process with all its cytokines like gasoline and glutamate like a "smoldering fire." Diets high in glutamate or other excitotoxins adds fuel to the "smoldering fire." Remember, glutamate occurs naturally in our body. But add inflammation and the free radicals that accompany it, and we see activation and an intensification of the cellular and tissue destruction, which is taking place by glutamate.

Inflammation impairs the normal mechanisms in place that break glutamate down. For example, when we have sufficient levels of B6 and magnesium, glutamate is converted to GABA, the number one calming neurotransmitter. Dr. Blaylock shares, “inflammatory cytokines can greatly enhance excitotoxicity. And inflammation and excitotoxicity together account for most of the tissue damage seen in diseases that were previously thought to be purely autoimmune. It's the excitotoxicity that is causing the progressive destruction once the immune system has exhausted itself.”

He suggests a three-prong approach to reduce tissue destruction:

1. Reduce dietary sources of glutamate and other excitotoxin food additives.
2. Introduce glutamate receptor blockers.
3. Increase antioxidants that protect against free radicals.

Foods that are naturally high in glutamate include:

- Soy
- Tomatoes
- Cow's milk
- Cheeses (especially Parmesan)
- Nuts
- Green peas
- Mushrooms

Excitotoxic additives introduced to foods during processing often appear veiled behind different names, such as autolyzed yeast, aspartame, aspartate, protein extract, plant protein extract, and soy extracts. Even the term “natural flavors” is used for many such additives.

Let's come back to the glutamate receptor blockers. Drugs are available, but I just learned that curcumin is a natural glutamate receptor blocker, and curcumin has multiple health benefits. You can see a link to the right for a discussion of its benefits from anti-cancer to antibacterial. Curcumin has antiviral properties, lowers glutamate levels, and protects against MSG monosodium glutamate neurotoxicity. It also supports brain derived growth factor (BDNF) which stimulates brain repair. According to Dr. Blaylock, TNF-alpha was the primary cytokine that triggered excitotoxicity. Curcumin also reduces elevated levels of TNF-alpha. Before curcumin can be utilized, it must be emulsified.

Biotics Research uses a curcumin source that uses “turmeric root nutrients” as emulsifying agents in their product, CurcumRx. The research shows absorption is 5-6 times greater than the other leading emulsifiers. CurcumRx supplies an all-natural turmeric complex, providing up to 50% total curcuminoid content, plus turmeric's 200 other naturally occurring compounds.

The other nutrient that reduces free radicals as well as TNF-alpha is N-Acetyl Cysteine or NAC. NAC preserves glutathione by chelating mercury and other heavy metals. Dr. Blaylock as well as other authors have shown that NAC enhances the production of glutathione intracellularly. NAC counteracts a neurotoxin called gliotoxin produced by intestinal candida. NAC can therefore be a key factor for yeast infections including systemic or chronic vaginal, penile, jock itch, thrush, etc. You can also see a link to the plethora of benefits from NAC.

When you talk about therapies for autoimmune conditions, there are obviously other factors to consider: leaky gut, food sensitivities, digestion, and dysbiotic flora to name a few. So, I don't want to give you the impression that every autoimmune condition will be healed with curcumin and NAC and by reducing glutamate and other excitotoxins. But I never heard anyone make the connection between excitotoxicity and inflammation as it relates to autoimmunity. My thanks to Dr. Blaylock for his work. You can see an expanded discussion in his June 2024 issue of The Blaylock Wellness Report.

Thanks for taking time to be with me today. I look forward to being with you again next Tuesday.