

# Immune Response To Today's Gluten

**"The immune system becomes activated to combat what it identifies as an invader when foreign protein enters the gut, creating inflammation."**

Two major causes behind inflammation are toxins and an over-active immune response. And since gluten is a source of both, I wanted to provide some updates and word pictures to help you convince your patients to avoid this potential poison until tested or an elimination trial can be performed.

Today's gluten inhibits certain proteases. Proteases are needed to digest protein. Currently due to genetic modifications in wheat, over 300 different proteins are found in wheat that was not present for centuries. It's not the same food our ancestors ate. So we are consuming new proteins that we can't digest.

What happens to foreign sticky proteins in the gut? Exactly, the immune system becomes activated to combat, what it identifies as an invader. An over-active immune system always equals inflammation.

Consider the flu. As your immune system fights the virus, your joints hurt, your head is foggy, you feel blah because of the inflammatory



cytokines your immune system uses to fight the infections.

Dr. David Perlmutter, a neurologist, and author of the *Grain Brain: The Surprising Truth about Wheat, Carbs, and Sugar--Your Brain's Silent Killers*, says when he sees people devour gluten laden carbohydrates it's like watching them pour themselves a cocktail of gasoline. Just as gasoline intensifies an existing fire, gluten intensifies whatever inflammatory fire that is occurring.

Dr. Fasano, a GI specialist and one of the world leading researchers in gluten/ceciac

disease says every time you eat wheat, you get a leaky gut, every time. Yes, the gut heals quickly, cells are replaced every 3-7 days, but you get leaky for a while.

Dr. Tom O'Brien gave an interesting analogy when he compared the fingerlike microvilli in the small intestine to shag carpeting. The shags are where nutrients are absorbed. Picture that the shag are lined with cheesecloth. Just as we use cheesecloth to filter out solids and larger food particles when cooking, our microvilli cheesecloth should only allow select materials into the bloodstream. What everyone calls leaky gut are tears in the

cheese cloth that are happening faster than they can be repaired.

Many experts have called the gut, the "second brain." Dr. David Perlmutter says if his patients have "brain problems" he always looks to the gut first. He believes no organ is more susceptible to the deleterious effects of inflammation than the brain. Yes, the blood brain barrier protects it to a degree; but as I have mentioned before, if we have a leaky gut, we probably have a leaky blood brain barrier which increases oxidation as well as immune over-activation.

Let's look at another word picture that may stimulate a change in behavior. Perfusion is a process where blood is sprayed into the brain much like a garden hose spray. Due to inflammation and agglutination, the gluten sensitive individual often has reduced blood spray; less blood and therefore less oxygen to the brain. One study showed that plaque buildup in the brain as documented by MRI was reversed in several individuals with wheat allergies when they got off wheat for one year.

Let me repeat that because it has such profound implications. For wheat sensitive patients with documented plaque in their brains, when they got off gluten, the plaque buildup reversed and disappeared. This is the type of plaque buildup that is found in Alzheimer's and multiple sclerosis as well as other advanced neurological conditions.

How many people have reduced mental capacity because they have gluten/gliadin sensitivities?

How many children or adults have ADD or ADHD? How many people with anxiety or depression are suffering because they don't have enough blood to their brain and get confused by the complexities of life?

And right behind gluten is dairy. For 50% of celiac patients with accompanying dairy allergies, if they consume dairy even when they remove gluten from their diet, they still make gluten antibodies. Studies show there are 6-20 times more people with gluten intolerance who do not have celiac. However, people with gluten intolerance are often sensitive to dairy as well. So until you know your patient is not sensitive to gluten and dairy it is wise to take them off both until you know for sure.

The clinical pearl here is: Stop pouring gasoline on the fire by eliminating gluten and dairy, and put out the fire by healing the gut.

There are many approaches but in the literature, the top 6 supplements used to heal the gut are curcumin as found in KappArest, vitamin D found in Bio-D-Mulsion Forte, fish oil found in Optimal EFAs or EFA-Sirt Supreme, Glutamine, probiotics found in BioDoph-7 Plus, and colostrum found in Immuno-gG.

Leaky gut causes immune over-activation. The immune system makes antibodies and then the antibodies look for things to attack. If the resulting antibodies are attracted to thyroid tissue, we call it Hashimoto's Thyroiditis. If antibodies are attracted to connective tissue, we call it Lupus; to skin tissue, psoriasis; nerve tissue, MS. Can you see why the prevalence of autoimmune diseases are growing and have become the number three class of disease?

Gluten may or may not be a direct poison to every patient, but the research is pretty clear, it increases inflammation. The sicker the patient, the more valuable the conversation.

Going gluten and dairy free may be an inconvenience but it can give some patients their life back. I know I've seen it more than once.

Thanks for reading this week's edition of the Tuesday Minute. I'll see you next Tuesday.