



Legendary Strength Podcast

Gluten Sensitivity With Dr. Osborne

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Logan: Welcome everyone. It's Logan Christopher with the [Legendary Strength podcast](#). Today, I have with me on the line, Dr. Peter Osborne, and we're going to be talking about I really haven't dove into in a lot of detail before, the old topic of gluten sensitivity. If we're talking about this subject I think we have the person to have on the line so thanks for joining me today, Peter.

Dr. Peter Osborne: Oh, you're very welcome. Thanks for having me.

Logan: So for people who are not aware of you, can you give a bit of your background?

Dr. Peter Osborne: Sure, I'm a chiropractor and a board-certified clinical nutritionist, and I have a practice just outside of Houston, Texas. I've been in practice for about 13 years, treating patients primarily with autoimmune diseases and musculoskeletal conditions. A large focus of that practice is on diet, nutrition, and lifestyle. We like to test for vitamin and mineral deficiencies. We like to test for food allergies and food intolerances so that we can kind of cut them out of a person's diet to maximize their health output.

Logan: So how did you get involved in the area of gluten?

Dr. Peter Osborne: Actually, I worked in the VA Hospital in the Rheumatology Department. We were treating primarily patients with severe autoimmune diseases like rheumatoid arthritis and lupus, who weren't getting better. In essence these patients would go on the medications, go on the steroids, and go on the painkillers. Nobody would ever get better and everybody just basically died sooner. I mean the

average person who has got autoimmunity dies about 20 years sooner than a person who does not. It was pretty frustrating.

One of the components to autoimmunity that anybody can look this up on the research is largely it can be food-induced and so I started doing more research while working in the hospital and I wanted to start to implement some of this information with patients, I was basically told not to. For me, it was frustrating because I knew that they weren't going to get better with the treatments that we were doing. You can imagine going to work every day knowing there are sick people who weren't going to get help by getting the same treatment that hasn't already been working. At any rate, that's when I left the hospital and started private practice. I've been very, very successful treating these types of conditions by manipulating diet and food.

Logan: Are all autoimmune disorders related to diet?

Dr. Peter Osborne: Well, one could certainly make that argument scientifically. We know of one cause that everyone in the scientific community agrees upon is a trigger for autoimmunity and that's gluten but we also know there are other triggers and those triggers that we've studied that we're fairly certain of are the vitamin deficiency as well as the potential for infection. So if somebody has, for example, [Lyme infection](#) or if somebody has, for example, [Helicobacter pylori](#) or other types of viral or bacterial infection, these can also be triggers or we suspect they can be triggers for autoimmunity.

Logan: And would you say in many cases, it's a combination of these different three factors?

Dr. Peter Osborne: In my experience it's always a combination. It's never just one thing. The body's complex and usually gets sick for complex reasons. The body has redundancy and systems built in so if a problem goes wrong in one area, the body can compensate, adapt, and then still continue to move forward and still continue to function. So by the time a person develops major illness, these adaptive mechanisms have already started to break down for multiple reasons.

Logan: Yeah, that makes a lot of sense. It's pretty amazing how powerful the human body is and what it can handle when you look at the foods that some people eat on a regular basis.

Dr. Peter Osborne: Yeah, absolutely.

Logan: So what is the difference between celiac disease and just having gluten sensitivity?

Dr. Peter Osborne: Think about celiac disease as the outcome of gluten sensitivity whereas gluten sensitivity is not a disease, it's a state of genetics. Just like we don't have gills when we're born and not being to breathe underwater is not a disease but if we try it we're going to drown, right? Well, having gluten sensitive genes and then exposing ourselves to gluten over many years creates chronic inflammation and a systematic breakdown of human physiology. So think of gluten sensitivity again as a state of genes or a genetic state that if ignored, in other words if we're not supposed to eat gluten and we do, then we end up creating inflammation that over time leads to cumulative damage and multiple types of diseases.

[Celiac disease](#) is just one type of manifestation of gluten sensitivity but there are many non-celiac varieties of gluten sensitive manifestations and some of those would be things like rheumatoid arthritis, migraine headaches, hypothyroidism, unexplained weight gain, adrenal failure, and adrenal burnout. Really there are at least 200 known diseases and conditions that we know gluten can cause or contribute to. It's just that unfortunately in our medical realm, doctors don't study nutrition to a large degree. Most of them don't and that being said, they don't really look at nutrition as a component to aiding them and treating their patients.

Even if we take that over into the realm of an average person who's trying to build strength, build muscle, and they hit a plateau. Maybe they're trying to get their core again by eating extra bread, eating extra sandwiches or eating extra grain-based oatmeal with blueberries in it—it is a common meal for a lot of weight lifters and trainers—and let's say they're gluten sensitive. Now what we have is bonafide and verifiable muscle atrophy occurring as a result of the ingestion of food that causes muscular inflammation.

Logan: Interesting. In your experience, what percentage of people have a genetic problem with gluten?

Dr. Peter Osborne: Well, it's estimated at about 30%. That's a large number of people. That's one in three people that you can kind of point to. There is some research that says that whether or not a person is genetically gluten-intolerant, that gluten is just not healthy to eat as a staple food in the diet, meaning that a person may not react to it by making inflammation but by over consuming it, it may create, too, an excessive burden of sugar. There's a type of chemical breakdown in wheat called amylopectin that can spike the blood sugars very high. So large consumption of wheat can elevate blood sugar over time and contribute to diabetes. Again, that's not the same thing as being sensitive but it can have different effects on different people for different reasons.

Logan: Yeah, that was a question I wanted to ask. If you're not gluten-sensitive then—if you are then you obviously should completely avoid gluten as much as possible and even if you're not, then would it probably be in your best interest to get away from glutenous grains?

Dr. Peter Osborne: I would say yeah, it would probably in the average person's best intention mainly because gluten has been shown to cause a phenomenon called leaky gut or intestinal permeability. It's not that intestinal permeability caused once will create disease but again if it's a staple in the diet and you're eating it on a consistent regular basis, inducing intestinal leakage on a consistent regular basis, it can set the stage for a lot of underlying health conditions.

Logan: Most people know that gluten is found in wheat and a few other grains like barley and rye but according to information I've seen on your website, there's really gluten in all forms of grains. It's just different forms of gluten?

Dr. Peter Osborne: Yeah. There are more than 2,000 different types of gluten or variants of gluten. When doctors are referring to celiac disease, they're referring to specifically a sequence of gluten proteins called gliadins, α -gliadin to be very specific. α -gliadin has been found in wheat, barley, and rye

and in 1952, it was discovered that this particular wheat gluten triggered villous atrophy, also known as celiac disease.

But we know that other glutes cause inflammatory damage in humans who are gluten-sensitive. The problem is that information markedly gets ignored. I try to think intelligently and I think it's because the food industry has really taken gluten-free and created a lot of products with corn, rice, sorghum, and other grains, called them gluten-free, and tried to sell them for massive quantities of money to the general populace. You can a loaf of what they call gluten-free bread made out of rice. You can use eight cents of rice, genetically modified to boot, to make a loaf of rice bread and then sell it for eight dollars. I mean the mark up on that is pretty good in terms of the business owner. I don't think that these entrepreneurs who have created this gluten-free food fad, I don't think they're really after the health of people with gluten-sensitivity. I think they're just trying to sell them junk food under the auspice that its gluten-free and they could care less about the outcome of how these people feel.

Logan: Yeah, it's definitely become a very big thing to slap gluten-free labels on everything. It's on like water bottles and all the different things. It's just the marketing. You've got gluten-free in.

Dr. Peter Osborne: Yeah. It's like fat-free and sugar-free. Remember when those were at their peak, I would see fat-free on a label of hard candy or chewing gum just because it was a marketing term that people would associate with good health and buy it for that reason.

Logan: So if a person is gluten-sensitive, should they be avoiding all grains or are certain grains better than other ones? What about the more ancient grains that people like kamut and some of the other ones?

Dr. Peter Osborne: Well, even those have been studied to show that they create damage and some people have come out and said hey, well let's try to ferment the bread and create sourdough and see what happens with that. In some of those studies, those have been shown to cause damage. They've tested Einkorn grain, Einkorn wheat, which is an ancient form of wheat supposedly not genetically modified before all this popularity with the gluten-free diet has come along, and that has been shown to contribute to damage.

So my thought clinically and I've got 13 years of experience and thousands of patients that I've dealt with is that if you're gluten sensitive, you shouldn't touch any grain if you want to maintain your health. If you're not gluten-sensitive, if you're going to use grains to any great degree, you should choose non-genetically modified, non-tampered with products that haven't had pesticides and chemicals and other agents added to them that could also be detrimental to the health. I think part of it is grain, as a general rule, what we do to it before we package it is relatively unhealthy. Again, the cardinal rule in nutrition is one cannot achieve or maintain health eating food that isn't healthy. That's the most commonsense rule we can apply and follow.

Logan: Yeah. It's very interesting just looking back historically, people say that when we turned into agricultural societies, it was the grain that really allowed us to really sort of build up society but at the same time it did, it did also lead to health problems that weren't there before, becoming—

Dr. Peter Osborne: Very much a double edged sword, I agree.

Logan: You mentioned the fermented as far as sourdoughs, is there any sort of difference in how the body reacts if you have like soaked grains or sprouting or freshly ground? Have you seen any information on that?

Dr. Peter Osborne: There's really not a lot of research that's been done on it. I can tell you clinically what I've seen which is that people react to it the same.

Logan: Okay. Something that I also saw looking over your website, you advocate getting genetic testing for gluten problems rather than blood testing, which is done in most other places, and all the problems with that. Could you discuss that?

Dr. Peter Osborne: When we look at blood tests, we're typically measuring the human body's output of what are called the antibodies our human system makes. We typically will measure IgG and IgA which are two specific kinds of antibodies that can make in response to exposure to gliadin. Now it's important to remember that I said before gluten is not one protein. We use the term singularly but it actually should be used as a plural term. It should be said "glutens" whereas gliadin is one type of gluten. There are thousands of types of glutens and even the ones in wheat, barley, and rye that are non-gliadins that have been shown to create celiac disease or contribute to damage don't get tested.

So if a person, maybe they don't have the strong response to gliadin but they have a strong response to secalin, which is a type of gluten found in other grain and we're not testing for that. So now we give like a test on gliadin, an anti-gliadin test that says is negative and basically the doctor says your test is negative, continue to eat gluten all you want when in actuality he didn't really test them thoroughly. He only tested them very, very specifically for an IgG or an IgA response to gliadin. Did that make sense?

So we're testing for one out of a potential of thousands of possibilities of gluten-based reactions. There are some labs that will test for multiple types of gluten but even those labs only test for a handful. You might see as many as 20 different forms of gluten actually being tested but 20 out of thousands again, the test is not going to come back without the strong potential for a false negative result. When it comes to telling a person, "Hey, you need to change your diet for the rest of your life," I like to be pretty certain before I can guide them down that pathway. Genetic testing offers that certainty because what genes tell us, they don't tell us whether or not a person is reacting to gluten. They tell us whether or not a person will react to it. Does that make sense?

Again, it's kind of like the gills analogy. I can tell you you don't have the genes to produce gills that extrapolate oxygen from water so I can subsequently surmise that if you go underwater and try to breath, you will drown. It's the same kind of thing with gluten-sensitive genes. If you have gluten-sensitive genes and you eat gluten, you will develop and inflammatory response to it. How much of a response there are other factors involved. If a person sits on the couch, is lethargic, doesn't exercise, and eats junk food all the time, that person is probably overall going to be sicker and respond more aggressively to gluten exposure than the person who is doing everything else right but gets occasional gluten exposure.

Logan: Okay. Going back to the vitamin and mineral deficiency, if someone is gluten-sensitive or even if he's not since we've determined grain is really not the best food, is that going to contribute to the body using up more of its available resources, more vitamins and minerals, and thus can it lead to deficiencies and why really one thing can have so many different symptoms or disease that come off of it?

Dr. Peter Osborne: Absolutely. We call gluten a hydra because it can cause so many different problems. You get exposure to the food and like you said, the exposure creates a pull on the body's resources to try to combat it and then you end up with vitamin and mineral deficiencies that can create additional symptoms and problems. Then those problems put an even greater taxing stress on the body.

One of the most common that we see clinically is vitamin B12 deficiency because gluten can damage cells in the stomach that are responsible for absorbing and breaking down vitamin B12 from the food that we eat and allowing us to absorb it. In B12 deficiency, the symptoms are widespread but some of the more one, depression, fatigue, shortness of breath, anemia can develop. People can develop neuropathies or nerve damage. So there's a whole slew of symptoms associated with just the potential for one nutrient to become deficient, let alone multiple nutritional deficiencies.

There've been a number of studies on looking at gluten and the people with gluten sensitivity and their nutritional levels, like when you measure their nutritional levels over time, even watching them follow a gluten-free diet. The general trend is that people with gluten sensitivity issues tend to be more malnourished. Now we don't really know why. Are they more malnourished because they're eating gluten or are they more malnourished because gluten has damaged their GI tract and doesn't allow them to absorb properly anymore? Or are they more malnourished just because they have a bad diet? There are a lot of variables there but there's a general trend in that gluten we know causes vitamin and mineral deficiency.

Logan: Very interesting. I would imagine this probably also occurs to some degree although a lesser degree to people eating especially the hybridized forms of wheat and everything that's commercially available even if they don't have that gluten sensitivity?

Dr. Peter Osborne: That's the other question, whether or not these hybridized versions of grain or genetically tampered with—maybe not genetically tampered with directly but indirectly through the use of genetically altered pesticides, fungicides, and everything else—are those things that can destroy a person's health absolutely, especially those that are susceptible?

I've actually had patients who didn't really react so much to gluten as much as they did to the fungicides being used in common strains of grain for storage. So part of our testing process is to test for those different insecticides and pesticides so that we know what a person is reacting to versus what a person is not reacting to. Yeah, absolutely, the whole process of processing grain is one that can lead to a lot of health detriment.

Logan: Yeah. I remember reading Weston A. Price's *Nutrition and Physical Degeneration*. Some of the cultures ate grains, other ones didn't but there's a humorous story about Weston A. Price approaching an Indian who was grinding grain, I believe it was corn, and he was asking why the Indian didn't do a

whole bunch of it all at once. The Indian replied that something was gone if you let it just sit there, if it wasn't freshly ground. There are all kinds of interesting things. There is so much to research that not everything is really well known at this point.

Dr. Peter Osborne: You're right. What's really needed is that the human individual trumps all research. In science, doctors always tout hey, there only evidence is double blind or randomized placebo-controlled evidence but really nothing could be further from the truth because the only real evidence is what a person responds to or doesn't respond to. It's how the individual responds. That's the only thing that matters at the end of the day.

If you've got a thousand people and 40% of them do better on a gluten-free diet, so you could say there's a statistical variance difference that people going gluten-free could benefit, it doesn't mean anything for the person over here who's gone gluten-free and didn't benefit. You see what I'm saying? The only real evidence is that in the individual. That is in the experience and in the wisdom and I think we've kind of misplaced a lot of the food-based wisdom with modern technology, processing, and convenience.

I think reading things like Weston Price, it's a great book. For anyone listening, if you ever want to get a good education, background in nutrition, that's an awesome book to read. *Pottenger's Cats* is another really interesting read. Yeah, I think we have to kind of go back in time and study nutrition a little more carefully. I think a lot of the research, too, has focused more on pharmaceuticals and really left food out as a role of importance.

Logan: Yeah. So regarding the gluten testing, is this something you would advocate to everyone, just to either see if this is a really big problem for you or not? What are some of the symptoms people can look at that they may have that would give them an idea if gluten sensitivity may be a problem for them?

Dr. Peter Osborne: Early on in life, symptoms commonly from gluten sensitivity can manifest as asthma in children, failure to grow or failure to thrive, eczema, psoriasis, especially autoimmune hair loss where it comes out in patches as opposed to just generalized hair loss. What happens as children grow older, many times they tend to grow out of these symptoms and grow into autoimmune diseases so a number of the different autoimmune disease and gut problems that we see associated with gluten, irritable bowel syndrome, migraine headache, hypothyroidism. There's a condition on the skin called dermatitis herpetiformis. These are all known to be induced as a result of gluten exposure, among other things.

So anybody suffering with any of those conditions who is not following a gluten-free diet should certainly, in my opinion, be tested now. If I could advocate, I think if children could be tested at birth genetically I think it would save the world from a lot of problems. I think it would save a lot of people a lot of problems in terms of the development of disease. Before the problem starts, if we could stop it from ever starting, obviously that is the ultimate in prevention versus waiting till a problem becomes chronic and a patient becomes sick and now we have to go and not only treat it by addressing the diet but then we'd have to do all these other things to help the body recover better, help the body recover faster, because sometimes the body is so destroyed and in such a weakened state that on its own it doesn't really fully heal even with the diet change.

Logan: So this would be a great thing for anyone that's really looking to optimize their health, which every person should be interested in. It's a good starting place to go to.

Dr. Peter Osborne: It is. Also, there's a link or a list on my website of diseases linked to gluten sensitivity. I would really encourage anybody with any of those medical conditions, if they've had the diagnosis and the doctor said hey, you have this and we don't know why but take this drug, my advice is to get gluten screened because you may not need the drug. You may just need to change your diet.

Logan: I would guess for myself I don't think I am but I still plan on doing this test to find out for sure. Actually my girlfriend suffers from an autoimmune disease called Sjogren's disease. I don't know if you're familiar with that one.

Dr. Peter Osborne: Oh Sjogren.

Logan: My guess is she probably does have a problem. This is an interesting thing. I've heard that grain, I don't know if it's related to gluten or not, forms opiates in the brain or attaches to the receptors and thus people get addicted to it.

Dr. Peter Osborne: Yeah, so there's a compound that we know called gluteomorphine which is a gluten-based opioid. It basically can create addiction.

Logan: Also, sort of a related question, do you find that people that have gluten sensitivity often times actually get more addicted to it or is there any sort of relation between being addicted and having the sensitivity?

Dr. Peter Osborne: Well, not necessarily. In other words, an opioid protein is going to create an addiction in people with genetic predisposition to having that type of addiction. Some people can get addicted very quickly to drugs and others, they can take them and then walk away from them without any issue, kind of like smoking or alcohol or anything else. It's almost the same thing with grain. I have some patients who are gluten sensitive who have severe addiction and go through severe withdrawal. I mean you name it, shakes, fevers, irritability. And I have others who can quit cold turkey and they're okay with that. They don't go through that same withdrawal.

Logan: If you are sensitive or just want to optimize performance and get away from grains, obviously you can't eat by the US FDA food pyramid where you get your 6 to 12 servings of grain, what do you advocate that people eat if you can't go for the gluten-free breads and the other things that they have? I remember my friend, Tommy, he was telling eat gluten-free without eating "gluten-free." Don't go for anything packaged that has that.

Dr. Peter Osborne: Right.

Logan: So what do you recommend for people?

Dr. Peter Osborne: Generally, I recommend, and this depends because I do a lot of unique testing to try to discern what a person should or shouldn't eat, but if we're just saying generally across the board

without any kind of testing, I would say safe foods are meat, vegetables and fruits as well as tree nuts. Legumes less so. They have a lot of similar properties to the grain in that they're hard to digest and that they have enzyme inhibitors in them. That's one of the theories, newer theories in medicine behind why gluten damages so many people is there's something called an amylin, an amylase trypsin inhibitor, which is basically an enzyme that inhibits pancreatic enzymatic release. So it shuts down a person's pancreas and it prevents them from being able to digest.

To devote just a moment on that, if you think about that in terms of what a seed and a legume are, in Mother Nature they are vesicles to perpetuate and preserve the species, right? That goes to say they don't really want to be digested and eaten. They want to pass through your poop and come out on the other end with fertilizer intact so that they can grow and perpetuate their species. So it makes sense that they would have chemicals that would inhibit our ability to properly break them down and degrade them, which is why if you look historically at the way people consumed grain and legumes in the past, hundreds of years gone by, is they would soak them, they would sprout them, they would add enzymes or add bacteria to them to help pre-digest them or ferment them. Part of this was because many of these things are difficult to digest.

Logan: All right. So what are some of the other common things that you look or test for to see if people have problems with them?

Dr. Peter Osborne: Kind of standard is we look at vitamin and mineral deficiency because I want to know whether or not a person's diet is providing all the nutrients that their bodies need to repair and recover. We look at food allergies and chemical allergies in the environment. We look at fungus. We look at potential for gastrointestinal infections. We measure the level of probiotics inhabiting a person's gut to see whether or not they have bacterial insufficiencies. We measure DNA patterns to see how well a person detoxifies.

So there are just a number. Science is great right now in the realm of functional medicine because there's just so much new technology that can doctors can use to really kind of narrow down what a person should and shouldn't be doing as an individual versus as a generalized piece of advice.

Logan: Yeah, I think that's very important. If you can get this testing done, all these different things, to find out what you really need and also with some things like vitamins and minerals, then you can see if you add something in, does that correct the balance? Does that really help you out? So I think, like you said, it's a very exciting time because we can become very personalized in what we're doing with our diet and find what works best for us. As I say, peak performance, that's certainly something I plan on investigating even more in the future.

Dr. Peter Osborne: Yeah, especially peak performance, right? Optimize it.

Logan: Yeah, absolutely. So where can people go to to find more information about gluten, gluten testing, and any other information you have?

Dr. Peter Osborne: They can check out our foundation. GlutenFreeSociety.org is the website and its spelled just like it sounds. That could be where they can get a lot of information on gluten. We have a number of videos and kind of tutorials to kind of walk a person through who's new to it and they're really starting from scratch.

Logan: Yeah, I've just been looking at the website, a lot of great information there. Thank you very much, Peter, for taking the time to talk with me today.

Dr. Peter Osborne: You're welcome, Logan, and thanks for having me on. I'm always happy to share the knowledge.

Logan: Absolutely. So everyone, I will have this podcast up shortly and there will be links to all the relevant things on the website as well. Once again, that's GlutenFreeSociety.org.