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## **Common GI Problems & Solutions:**

### How to Restore Oral Tolerance

#### **Video Transcript:**

So, how do you calm the immune response and try to restore oral tolerance? This is a really important component, because many of you may be experiencing this already, and so we really need to think about, how do we calm that immune response down? How do we go back to having higher T-reg cells, higher secretory IgA, so that your immune system can function properly?

Number one, you have to stop leaky gut. Leaky gut becomes the biggest source of chronic low-grade inflammation, not only in the gut, but in the system, systemically as well, and it becomes a huge issue for your immune system to deal with in combat. So then your immune system gets constantly pushed towards this issue of overreaction. Also, of course, if you have leaky gut, it means you have dysbiosis, you have low diversity, low keystone species. So part of the fixing of leaky gut is where you diversify your microbiome, you increase the keystone species, you increase the protective organisms that automatically help the immune system and also seal up the lining of the gut. So leaky gut is something that you always have to keep in mind.

Then you have to optimize the microbiome in general. This is where the five pillars come in. Again, there has to be diet intervention, lifestyle intervention, stress,

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exposure, and supplementation. You have to do something from each of these five categories in order to get proper comprehensive approach to gut health.

And again, we have Module 1 goes through a lot of these specific strategies, and we also talk in Module 3 about the specific strategies around leaky gut. You want to reduce histamine load as much as you can. So, looking at the signs and symptoms of histamine intolerance, you've got bloating, diarrhea, constipation. When you eat food, you've got neurological responses. So some people get headaches, dizziness, brain fog. You could have skin issues like hives, and rashes, and flushing of the skin. Respiratory issues, so you can get a lot of runny nose, you can get stuffy after you eat, you can feel sinus pressure after you eat. And then for some people, you might even get cardiovascular issues like palpitations, or rapid heart rate, and things like that. Or you could feel completely anxious after you eat. So all of these things can be assigned that there's too much histamine being released when you eat food, which means that your immune system is not tolerant of the food, which means that you've lost oral tolerance, or at least part of oral tolerance.

Now, one of the more immediate things you can do is follow what's considered a low histamine diet initially, as you're rebuilding the system, as you're putting in the five pillars, as you're healing your leaky gut, so that you reduce the impact that histamines have on the system, but you want to reintroduce those foods after a couple of months of working on it, right? In the meantime, you can also use enzymes like DAO, which is found in this [HistaHarmony](#) product. DAO is diamine oxidase, which is an enzyme that breaks down histamine.

I mentioned earlier that a lot of people end up with what they call histamine intolerance, not just because they produce a lot of histamine because their mast cells are activating too much, but also because they don't break down histamine effectively because they're not producing enough natural DAO. So you can take DAO as a supplement in order to reduce the impact of histamine, right? As you're trying to build back oral tolerance. You can also take things like quercetin. Quercetin can slow down some of the unfavorable immune responses that leads to mast cell activation and then

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histamine release as well, and they may actually work well together. So a couple of things to keep in mind there.

And you want to stabilize mast cells. So, how do you stabilize mast cell? It's very similar to the list above, because histamine intolerance and mast cell go hand in hand. Histamine intolerance is a result of mast cell activation. So, a lot of times I hear people separating the two. They go, "I have mast cell activation, MCAS, and oh, and I have histamine intolerance as well." Well, they kind of go hand in hand. It's the same cascade of things happening. So, in terms of solutions of things you can do to support your system, so the mast cells aren't getting overly activated and all that, are the same things you would do if you have histamine intolerance as well.

Other supplements that can really help with managing the unfavorable immune responses in these conditions are things like butyrate, so in that Tributyrin-X. So butyrate, as I showed you in that schematic, butyrate is a key binder of a receptor on the lining of the gut that then activates the expression of T-reg cells. So Tributyrin-X can be really beneficial, because now you're taking butyrate in because you may not be producing enough. Your goal is to always get your gut to be producing enough butyrate, and that's where working on leaky gut and increasing diversity, increasing fiber intake, all of that stuff is what you would do to try to increase butyrate production. But in the meantime, you can certainly use some supplemental butyrate to upregulate some of those anti-inflammatory responses.

I mentioned quercetin before, so that's something that can be quite useful as well. Vitamin C. Vitamin C is known to be an immune stimulator, if you will, but in this case it upregulates parts of the immune system that are beneficial for defense, but it'll reduce the activation of unfavorable immune responses. DAO enzyme in the [HistaHarmony](#), that can be really useful. There are certain peptides that can be beneficial as well, but I would look more at things like holy basil, Chinese skull cap, ginger, turmeric, nettles, so like stinging nettles, and modified citrus pectin. These are all things that can modulate

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unfavorable immune responses and reduce the overt activation of mast cells.

So, these can be very beneficial if you are overtly reactive. You have to reduce stress, right? Michael's going to go through his module, and that's going to be very beneficial. You have to look at that, because again, stress is at the root of many of these issues, including, and especially, leading to more leaky gut and more inflammation.

And you want to adjust the environment. You want to reduce the types of things that can create unfavorable immunological responses in the environment, EMFs. EMFs can upregulate unfavorable inflammatory immune responses. There's lots of strategies around reducing EMF. There's EMF blockers you can use, there's ways of reducing it with all these screens in front of you and so on. There's mats you can stand on this, things you can wear. Just do some research and figure out if that's something you want to look at. It's probably not the main thing to worry about. I would worry more about some of the immunological responses, the gut microbiome issues and all that. But if you've done many of those things and you're still not exactly where you want to be, you might look at something like EMFs.

But along with that, reducing toxin exposure. Make sure your air and your water and all that is clean. Unfortunately today air is very polluted. And the air that's coming into your home, it's not polluted with microbes, that's where most people get it wrong, it's actually polluted with loads of toxins. So you want to try to get as much of a HEPA filter, or carbon filter in the system, so that you can have somewhat clean air, so your air is not a triggering factor. Same

thing with your water. We use RO systems with carbon filtration and things like that just to make sure we're pulling out all the heavy metals, toxins, antibiotics, all these things that could be present in your water. We want to pull all that stuff out as much as we can so that we're not exposed to those potentially triggering molecules.

You also can look at things like [Mega-IgG 2000](#). So that is the immunoglobulin G product. That's a bovine immunoglobulin G. What's amazing about IgG is it binds to

and inactivates things without eliciting an immune response. Very similar to IgA, IgG happens to be more specific for specific antigens. A single IgA antibody may be able to bind to 10 different things, but a single IgG antibody binds really well to one thing, right? So that's the difference between the two. So you could take bovine IgG, and when you take it into your GI tract, it kind of provides a coating or a layer of protection in your GI tract. So that a mold toxin, or microbe, or virus, or food toxin comes in, it'll bind and neutralize it so those things don't elicit an immune response. So using [MegaIgG](#) is really powerful for that.

This is a product I use all the time, especially when I travel, and I know I'm going to be exposing my system to things it's not normally seeing, I want to reduce the potential for my immune system to overreact. And then you can also temporarily avoid negative foods, and I emphasize temporarily, because again, completely eliminating foods is not a solution to an intolerance issue. Of course, completely eliminate processed foods or hyper-processed foods, that's totally fine, but I'm talking about real foods, categories of foods like nightshades, and foods with lectins in it, and cruciferous vegetables and things like that where you're like, "Oh, I can't tolerate that anymore."

...cruciferous vegetables and things like that where you're like, oh, I can't tolerate that anymore, so I'm eliminating that entire category of food. You don't want to do that long term. You can do that for short-term purposes. Revamp the system and start introducing those foods again. Modulating the immune system, the T-reg cells are supported with omega-3 fatty acids, short-chain fatty acids, and spore-based probiotics.

The psychobiotic, the [Zenbiome](#), the Calm, that psychobiotic has also been shown to increase T-reg cells. So if you want to increase your T-regs and up-regulate some of your oral tolerance, take an omega-3 fatty acid, but take one that's high in EPA. When we had formulated a product called MegaMarine, we purposely had a two or three-to-one ratio of EPA to DHA.

Remember, DHA is a component of omega-3 fatty acids that leaves the gut and

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goes to places like the brain and the eyes and all that, which is wonderful for the eyes and brain and all that, but it doesn't necessarily modulate inflammatory responses in the gut, but EPA does. So for gut-specific fish oil to improve the lining of the gut, the immunological responses in the gut, and thereby systemic immunological responses, you're going to want a gut-specific fish oil, which then has high EPA.

So that's like the [MegaMarine](#) product. Short-chain fatty acids, which will come from having a more diverse microbiome, feeding it more fiber and so on and prebiotics. But in the meantime, you can also use something like [Tributylin-X](#) to up-regulate some of that butyrate exposure in the lining of the gut. We've shown that spore-based probiotics like [MegaSpore](#) do up-regulate the beneficial parts of the immune system and reduce the inflammatory components of the immune system.

All of these things go towards calming the system down. And you want to address chronic infections. One of the most common chronic dysbiotic infectious-like organisms is Candida. Because Candida is opportunistic, it's going to overgrow. Anytime you've got a dysbiotic gut, compromised immune system, which most people do, you're going to start getting Candida overgrowth.

We had created a product called [MegaMycoBalance](#) that specifically went after Candida and plays a really important role in reducing that fungal overgrowth and bringing back bacterial balance into the system. So that's an important one as well. And then there's paraprobiotics, things like HololImmune, which can downregulate and balance immune responses to reduce inflammation to reactive foods, supplements, and environment.

So that's another tool that you can use in your arsenal to reduce the negative impacts. With stress reduction in mind and body, you have vagus nerve stimulation, which I'm sure Michael will talk to you more about, but there's lots of things you can do to upregulate your vagus nerve, deep breathing, meditation, gargling, humming. This

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actually could be an interesting part of your food hygiene that we talked about so much, where prior to eating, you want to do some deep breathing.

You want to calm the system down, maybe do some humming, maybe do some singing to upregulate and activate the vagus nerve. You want to do grounding and engagement with nature, deal with trauma therapies, Michael will give you a lot more on this, and then regulate the nervous system with all of these practices. So there's a lot of things that you can do that you'll be exposed to here, but keep in mind that stress reduction should not be overlooked as a key driver of GI issues.

Whether it's small bowel, large bowel, stomach, and so on, stress is always present in these conditions. And the thing is, the conditions increases your susceptibility to becoming stressed, which then increases your susceptibility to the conditions, and the issue keeps going round and round in a circle. So again, check out Michael's bonus module. He mentioned today that he's going to be doing that next week on the upcoming weeks, but it's all about calming the nervous system to help you improve the tolerance and reduce reactivity in your system.