Build Your Resilient Gut
MICROBIOME & BEYOND

By Kiran Krishnan
Microbiologist & Microbiome Expert

Common GI Problems & Solutions:
Acid Reflux-GERD-Indigestion

This next one is GERD and acid reflux. So, there's going to be a lot of overlap here, because low stomach acid can also lead to this as a problem. Now, the way this is typically described is when you have stomach acid issues or bile flow that flows back into the esophagus. So, you've got a burning sensation as a result of that, and how it can flow quite high up where you're actually regurgitating it, or it can flow partially back up your esophagus where you feel this kind of heartburn sensation, because it's in the part of your esophagus, it's running right to the middle of your chest. But either way, it's significant irritation and causes people a lot of discomfort from eating.

So it could be heartburn, regurgitation, chest pain, difficulty swallowing, because it can also make you feel like your throat is swollen. Throat can be sore consistently, because of the regurgitation of acid and bile, and a lot of people may get hoarse and cough all the time, and they have a lot of phlegm being produced in that area as their body's trying to deal with the negative effects of the acid and the bile on the lining of your esophagus and your throat.

Of course, bile and acid are not supposed to be in your throat or your esophagus, and so they eat away at the lining, right? And that can cause a lot of irritation, and as a result, your body's trying to produce mucus to protect it, and so those people tend to have a lot of mucus build up and are constantly coughing, and you might hear it in the

sound, in the voice when they're eating and so on. So, this can lead to conditions like esophagitis, which is an inflammation in the esophagus, leading to more ulcers, strictures, and then Barrett's esophagus, which is a more severe issue, where over time that kind of inflammation damage can lead to precancerous lesions as well in a condition. And people often end up using antacids and PPIs, right? Because the thinking, and this is false thinking, that a lot of this is driven by too much stomach acid.

"Well, I'm making too much stomach acid, so it's all coming up." That's actually exactly the opposite. It's more often than not an issue of too low stomach acid. So, mistakenly people start taking antacids and PPIs that then further compromises their stomach acid levels, which means that they need even more antacids and PPIs as they go along. And then as we talked about earlier, PPIs then basically compromise acid production and then leads to a whole host of other digestive issues, right? There's throat and oral damage, like we mentioned, chronic sore throats, erosion of teeth enamel, and other oral health issues that can occur as well. Again, the root cause here is low stomach acid. So, these conditions are related. Even though it's a separate name from the first condition that we talked about, it is a related condition because it starts with low stomach acid and then leads to this next symptom, which is GERD and acid reflux.

Poor diet in a pregnancy because of the pressure in the abdomen area can also drive things up. That of course, pregnancy is not a negative condition, but it's a physical thing that can create the issue. Obesity is another example of a physical pressure that can create pressure on the bowels in the stomach to push things up past the pyloric valve. If you remember, we talked about the pyloric valve in the previous module. That's the valve that tries to keep things flowing back up from the stomach into the esophagus, and your valve can only do so much in terms of maintaining the positive pressure in the stomach and keeping things moving down. Typically, obesity or being pregnant and having that kind of pressure on your gut will overcome the valve or a hiatal hernia, right?

We'll talk about that a little bit more as we go along, but a hiatal hernia is a physical deformity where you actually have part of the stomach coming out through that opening

near the diaphragm where the esophagus makes its way through. Chronic stress, again, because that leads to low stomach acid. Overeating, so overindulgence is a big part, right? So, your stomach is designed to expand to numerous folds its normal size.

Your stomach can expand three, four, five times its normal size when you're eating food, but the start of the expansion of the stomach is part of the signaling to send satiety signals to your brain, so that you feel full and you stop eating. But of course, a very, very common issue is that we eat past that fullness, right? In fact, what you're supposed to do is just eat till you're not hungry anymore, rather than eating till you feel that distension and that fullness, but that distension, and then eating beyond that and going way full, we all know how horrible that feels when we eat a meal that's way too big. That gigantic fullness, what that does is it slows down the ability of the stomach to properly-

... is it slows down the ability of the stomach to properly stomach or start to break down the nutrients or the food that's coming in. So then everything sits there much longer and then starts creating gas and pressure in that environment. So then that gas and pressure can push up against it. Certain foods like spicy foods, fatty foods, acidic foods, those can all have the same regurgitation or pressure issue. For example, a lot of people can't eat spicy Indian food in the evening because between the spice and the oiliness, that can drive a lot of that reflux-like symptoms.

Part of it is also because when you eat spicy food or you eat oily foods, you drink a lot of water as well, because the spice of course requires you to drink water. And then imagine anywhere where you have oil and water, the oil sits on top of the water. So if you've got oily and spicy food going into your system and you drink a bunch of water with each meal, the water goes in and fills the stomach, and then it pushes the oil up because the oil is sitting on top of the water. And so then now also you've got this full distended belly that's full of water, and then the oil is being pushed up with pressure underneath, so then it can regurgitate up the esophagus as well. And then delayed gastric emptying, we'll talk about that as a separate condition. But this is a fermentation issue that can occur in the stomach itself, and then dysbiosis, and SIBO,

and other conditions that we'll touch on here.

So let's talk about the solutions again. So from a lifestyle perspective, again, good meal hygiene. Elevate the head of the bed. If you're going to be sleeping or going to bed within two hours or so after eating, meaning that the food is still in the stomach, then you might want to elevate the upper part of the body in the bed so that you're not sleeping flat or even on your belly, because that can create enough pressure for things to come back up. So this is why understanding that transit time is important, because what you really want to do is make sure you're eating no sooner than three hours before you go to bed. If you're eating 30 minutes before you go to bed, 40 minutes before you go to bed, that's an unusual situation because part of the movement of food down the system is using gravity as well. So if you're laying down, gravity is going to work against you in that situation. So you want good meal hygiene, you want to elevate the head of the bed, you want to eat at the right time. Again, avoid laying down after a meal, manage the stress, maintain a healthy weight, again, obesity and all can put pressure on those systems that then create this regurgitation and reflux.

And you want to improve fiber intake from a diet perspective. So from a diet perspective, avoid the triggering foods like spicy, fatty foods, sugar, highly acidic foods. You also want to limit alcohol and caffeine consumption. If you're drinking or taking caffeine regularly throughout the day, you want to reduce those as well. You do want to increase fiber, if you can, to improve motility. And then if you're sensitive to lots of carbohydrates, you could eat a carbohydrate like rice. Rice tends to be a low viscosity carbohydrate and it's low in gas. Not a lot of microbes in the system can break down rice the same way. It has a much more of a complex carbohydrate structure, which means that it doesn't produce as much gas as some other carbohydrates. And it's low in allerginicity, so it's not going to trigger inflammation and irritation in the same way.

And from a diet perspective, one of the best diets that has been shown to help and improve GERD and acid reflux is a Med diet, a Mediterranean diet. So look at the Mediterranean diet as a good option there if you're trying to find a diet that suits your reflux.

From a supplement perspective, **MegaGuard** is a product that's been designed to help with gastric emptying, better bile flow, HCl production, and at the same time negating H. pylori establishment in the stomach. Because when H. pylori is established in the stomach, you have a negated amount of HCl, which causes more fermentation in the stomach, and then causes more reflux and GERD. So you want to use something in there that helps negate HCl. And then you want something that helps with gastric emptying so that the food doesn't sit in the stomach for too long, causing an opportunity for fermentation and gas buildup as well. So **MegaGuard** really, really can improve that. And it's a product we had created five years ago, six years ago, and it quickly became the top four sellers at Microbiome Labs because it just was so effective, even with just one dose prior to a meal.

HCL Guard, as recommended before, especially with the HCl side, because again, more likely than not, if you have acid reflux or GERD, you have low stomach acid, so you do want to have some supplementation to improve stomach acid. And then DGL can also really help. Aloe, slippery elm, and ginger can also also help with gastric emptying and improving HCl production, but then also with the motility aspect of it. So you want to be able to address all of those things. So you've got a few options here of things to think about.