

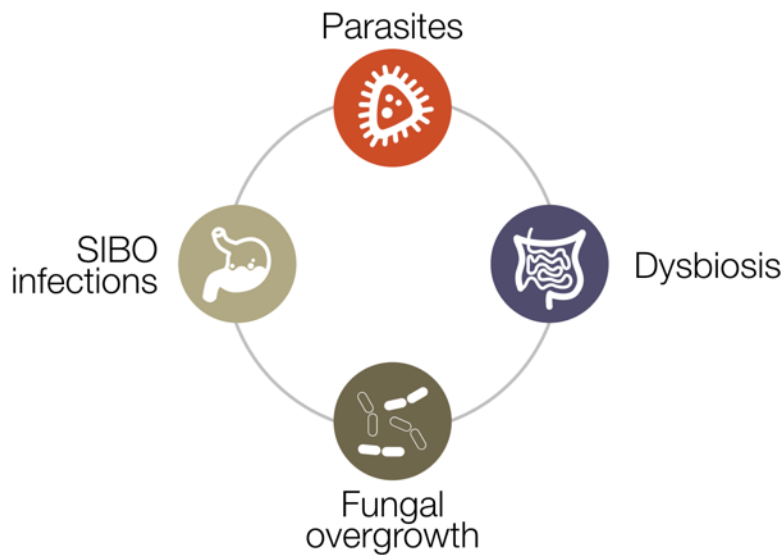
# Gut Treatment Protocols: GERD, IBD & IBS, Part 5

All right, now let's talk about some specific considerations for IBD, inflammatory bowel disease. IBS includes Crohn's and ulcerative colitis, which are both thought to be autoimmune diseases. Their etiology and pathology is not fully understood, but the current idea is that the body inappropriately attacks commensal bacteria, which leads to altered gut bacteria, inflammation, and intestinal permeability. Risk factors for IBD include genetic predisposition, antibiotic use, and infection, but also many, many more that we won't have time to go into in detail.



From a functional medicine perspective, I look at IBD the same way I look at other diseases, as an expression of the interaction between our genome and epigenome and the exposome, and this leads to the pathological mechanisms that define IBD and the symptoms that IBD patients experience. But, practically, there are three main considerations with IBD. The first is to address any gut pathologies that may be contributing like SIBO, parasites, dysbiosis, etc. The second is to address potential immune triggers and focus on balancing and regulating the immune system. And the third is specific protocols or interventions that can be useful for managing IBD if symptoms are still present after steps one and two. So let's look at these in more detail.

## Address **underlying pathologies**

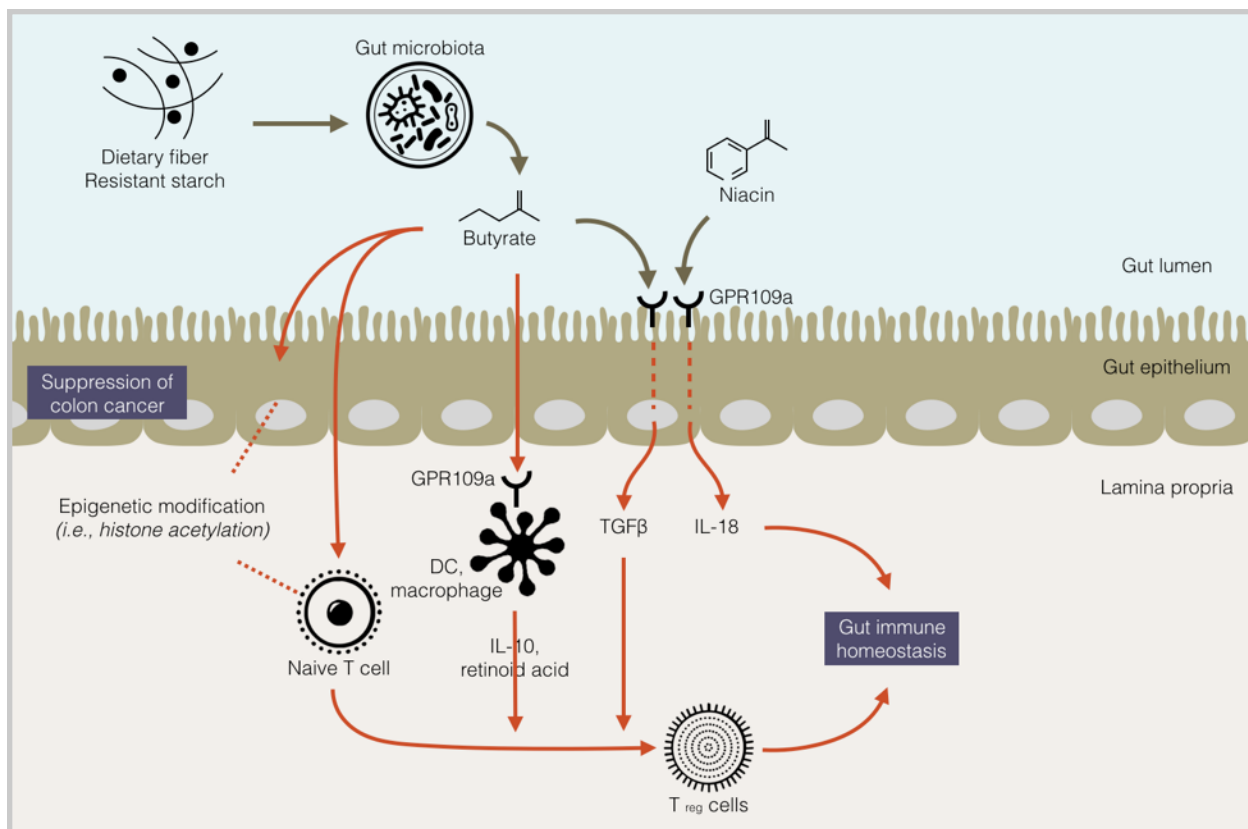


First is to address underlying pathologies, and we've discussed how to do that so far. One thing to point out is that sometimes pathologies contribute to IBD, and sometimes IBD can contribute to underlying pathologies, and sometimes or maybe oftentimes it's both. So for example, I had a patient with a diagnosis of terminal ileitis. I tested that patient for parasites, he had Blasto, we treated him, and the ileitis went away. So even though he had been diagnosed with Crohn's disease, it was actually Blastocystis parasites that were causing the intestinal inflammation that looked like Crohn's disease. On the other hand, if a patient with IBD has dysbiosis, it's possible that it's the IBD or the autoimmune issue that's causing the dysbiosis. The immune system could be creating an inhospitable environment for beneficial bacteria, so treating the dysbiosis in that case may help, but it may continue to return if that inhospitable environment is still present. So addressing pathology in that case won't necessarily cure the disease because that pathology can't necessarily be completely eliminated.

So two is to address potential immune triggers outside of the gut pathologies that we just talked about. The biggest one is food, of course, and so you can use the Cyrex arrays here to identify food intolerances. It may also be a good idea to have anyone with IBD try at least 60 days of an autoimmune Paleo protocol known as AIP, which removes eggs, nightshades, and dairy strictly. Other triggers to consider would be heavy metals, mold, or biotoxins, and chronic stress HPA axis activation, which we're going to be covering in the future.

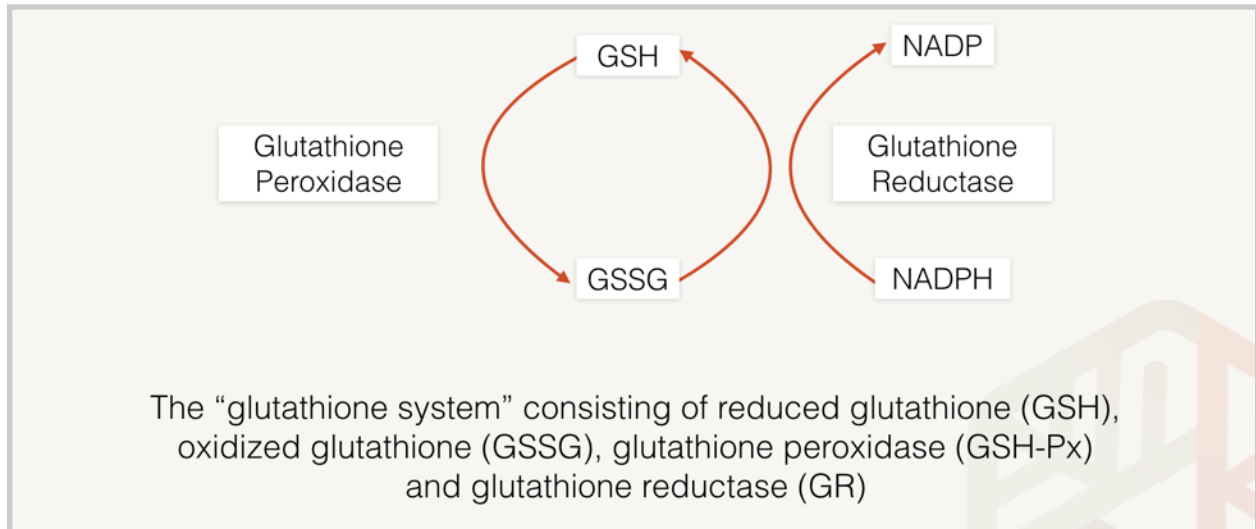
Step three is specific strategies and protocols for IBD to address inflammation, immune imbalance and other symptoms. So first let's talk a little more about diet. For some, AIP can be helpful, but if diarrhea is severe and/or AIP doesn't work, I suggest trying the GAPS diet. The GAPS diet was created by Natasha Campbell-McBride, who was a Russian physician whose daughter, I believe, or son, I can't remember which, had autism spectrum disorder, and she used the GAPS diet to restore

normal function, and the basic theory of GAPS is that it's similar to low-FODMAP in a lot of ways; it's also based on the specific carbohydrate diet that was created by Elaine Gottschall, and the idea is that complex, longer-chain carbohydrates are difficult to absorb and may become food for pathogenic microbes in the gut, and so restricting, cutting back on the intake of these types of carbohydrates can lead to a clinical benefit. So the GAPS intro diet in particular can be helpful for diarrhea, because it's basically just meat and broth and then some peeled and very well-cooked vegetables, in some cases. You could have a patient do that for three to five days, two to three days maybe, until the diarrhea subsides, and then they would proceed through the five stages of the intro GAPS diet. We're going to have a handout for you that describes the GAPS protocol, there's a lot of information freely available online and some books about it, and we found that that five-step intro GAPS protocol to be really effective in some cases, when the diarrhea is severe. However, as with the low-FODMAP approach, you want to be careful about doing this for the long term, because the GAPS diet, like the low-FODMAP diet, would be expected to starve the beneficial bacteria in the colon as well.



The second consideration is increasing butyrate levels. Butyrate is a short-chain fatty acid that is anti-inflammatory, it has an immuno-regulatory effect, and it also promotes T-regulatory cell differentiation. It's produced by our own beneficial bacteria, especially Bifidobacteria in the colon, but you could also supplement with butyrate. If a patient's having a flare or active disease condition, we might recommend about three to five grams of supplemental butyrate a day. BodyBio makes a sodium potassium form that I think is better than the calcium magnesium form.

Instead, if the disease is not active, you could use prebiotics and fermentable fibers to increase butyrate production. Soluble fiber, resistant starch, and non-starch polysaccharides, anything that increases Bifidobacteria levels, would also be expected to increase butyrate.



Next compound to consider is glutathione. It helps promote T-regulatory cell production and differentiation. Glutathione levels have been shown to be low in patients with autoimmune disease, including IBD. Liposomal glutathione is our preferred form, and the dose would be one to two teaspoons a day on an empty stomach.

Make sure vitamin D levels are normal; there's a strong association between vitamin D deficiency and IBD, and that may explain why latitude is correlated with IBD, so we see much higher rates of IBD in far southern and far northern latitudes where there's less sun exposure. Vitamin D is a T-regulatory cell promoter as well, and it probably explains part of why low vitamin D is associated with IBD.

Curcumin is another compound that can be helpful in IBD. It's anti-inflammatory and it also promotes t-regulatory cell function and differentiation. Curcumin is not very absorbable when it's taken orally, so you need to use special forms if you want to use it therapeutically. There's a lot of controversy about what the most bioavailable form of curcumin is, and I've used several over the years, including BCM-95, TheraCurmin and liposomal. At the time of this recording, I've been favoring liposomal or the Longvida form of curcumin. Small studies showed that the Longvida form has 65 times higher bioavailability than generic curcumin preparations, and liposomal preparations of many nutrients, including curcumin, have consistently been shown to have higher bioavailability than other oral forms. Longvida is found in several products; one is CurcuBrain from Now, and another is Optimized Curcumin Longvida from ProHealth; if you're going to use this form I'd suggest starting with two capsules a day for seven days and then one capsule a day thereafter; for the liposomal form, I suggest starting with two teaspoons per day for seven days, and then one

teaspoon per day thereafter. And for liposomal curcumin, Seeking Health has a good product that we like to use..

Colostrum is another compound that can be helpful. This is from the first milk produced after birth, and it's particularly rich in immunoglobulins, antimicrobial peptides like lactoferrin and lactoperoxidase, and other bioactive molecules including growth factors. Studies have shown benefit from colostrum in a wide variety of gastrointestinal conditions, including inflammatory bowel disease. The preferred form is Tegriceal, which is an immunoglobulin-rich extract from colostrum whey, containing important bioactive compounds including IgG, proline-rich polypeptides, growth factors, and nucleotides. Tegriceal has been clinically shown to support mucosal immune protection and healthy gut integrity. The recommended dose is 500 to 600 milligrams three times a day. So one thing to keep in mind is that colostrum is about 9 percent lactose, so be careful if the patient is lactose intolerant.