

## **Introduction to Briggs Protocol for IBD**

Dr. Michael Briggs and his family

**<http://thepowerofpoop.com/briggs-protocol/>**

The Briggs Protocol for treating Ulcerative Colitis has been floating around the internet and our Facebook FMT Discussion group for a few years now. The reason it's so popular is that it has worked for many, is science based and does not pretend to be a silver bullet. Even if you have a digestive or autoimmune illness other than Ulcerative Colitis, there is still a lot to learn in The Briggs Protocol as the latest thinking on such illnesses is they all stem from the same cause.

The Briggs Protocol is a 31 page document that can be overwhelming at first. So below I've summarized the highlights to give you an overview. References to the research studies can be found in the complete paper. I do highly recommend that you take the time to read the full paper as it will give you an understanding of the rationale behind the protocol and make it easier to follow.

Once you understand the thinking behind the protocol, you will also understand why FMT only works for some with Ulcerative Colitis, or works for a while then stops. Getting the microbiota right is only one tool in the digestive illness toolbox and FMT must often be undertaken over a period of months in conjunction with dietary and other changes, until the gut wall heals.

### **Who is this Guy?**

Michael Briggs holds a PHD in Physics, works as a university lecturer and has recovered from 12 years of Ulcerative Colitis using this protocol. He is not a medical doctor.

When he became a father, Michael decided not to accept the mainstream medical view that he would face a lifetime of stronger and riskier immunosuppressant drugs, with all likelihood that he would eventually have his colon removed. So he did what a PHD scientist does best, he researched everything there was to know about the pathology of UC. He reviewed over 200 research papers, formulated a treatment plan and when it worked extremely well for him, decided to circulate it to other sufferers so that they, like him, would "never have to crap blood again". His gastroenterologist has been supportive and says his "biopsies are amazing".

### **The Theory (in brief)**

One of the frustrations Michael experienced when reading through the research is that the focus was often on trying to find one common underlying cause for all cases of either UC or Crohn's disease, and one single thing to treat the disease. Michael explains:

"As a scientist, I understand the basis for this... it is desirable to do a comparative study with only one variable between the study group and the control group, to determine the impact of that one variable. However, as a patient, my focus is on developing a treatment program *that works*, not necessarily something that only involves one medication, one supplement, or one of anything. Additionally, as IBD is clearly a lifestyle disease, to the extent that certain aspects of our western lifestyle contribute to its development, I think that a successful approach must involve adjusting those aspects of our lifestyle that can contribute to the recurrence of the disease. To date, no

studies have been done that incorporate a multitude of treatment supplements aimed at healing and maintaining the epithelial barrier as well as lifestyle adjustments – so there is no data on how this overall protocol will work. But, I have done my homework, and I feel it is very well-grounded in science, with each piece of the protocol backed by controlled studies.”

Like many others investigating modern Western illnesses, Michael believes that the underlying cause revolves around the breakdown of the epithelial barrier (gut wall), a condition known as “Intestinal Permeability” or colloquially as “Leaky Gut”. The breakdown of the gut wall allows intestinal microbiota to pass through the “tight junctions” (a process called bacterial translocation) and in those genetically predisposed, trigger a hyperactive immune response. This immune response has varying manifestations, depending on genetic disposition and for some it leads to the symptoms of IBD. Many believe that the modern epidemics of autoimmune illness, diabetes, autism and mental health issues also have their genesis in a leaky gut. The bottom line is: genetic predisposition + leaky gut = modern illnesses of varying kinds. In this case, the genetic predisposition usually involves gene variations that can provoke a hyperactive immune response to attack the bacteria as they pass through the leaky gut. In people without such a predisposition, the bacteria can leak through the gut and get into the bloodstream, where they can cause systemic inflammation that shows up as a variety of auto-immune disorders.

Current treatment of IBD focuses on anti-inflammatory and immunosuppressive medications to get inflammation under control, and then reliance on lower doses of the same medications to try to maintain remission. The Briggs approach is to first use pharmaceuticals (anti-inflammatories and immunosuppressives) to get the symptoms under control, but then transition to a strategy of fixing the underlying breakdown of the epithelial barrier, rectifying the factors that lead to the breakdown.

This is followed by a long term focus on maintaining that barrier through diet and supplementation. Wavering from that focus on protecting the barrier can result in a leaky gut beginning again, and the inflammatory cascade returning. Some modest immune suppression with natural immunomodulators (e.g. curcumin, quercetin, milk thistle, etc.) or Wellbutrin can help handle occasional leaks in the barrier due to the unavoidable circumstances of life – but it is important to do as much as possible to minimize the factors that can cause the leaky gut.

While particular pathogenic organisms like *C. difficile* can induce colitis, IBD does not appear to be caused by a pathogen. An earlier belief was that the bacterial dysbiosis observed in IBD was a result of the inflammation, rather than a cause of it, but more recent research is indicating the reverse. Research points to a bacterial “dysbiosis” (imbalance) that facilitates the breakdown of the epithelial barrier and facilitates the exaggerated immune response in those so predisposed. In particular, people with IBD have been found to have low concentrations of the beneficial bacteria *Faecalibacterium prausnitzii*, which suppresses inflammation. Unfortunately this isn’t available yet as a probiotic, but its concentration in the gut can be boosted with the probiotic Digestive Advantage Daily Probiotic (which contains *Bacillus coagulans* BC30, which has been found to help the growth of *Faecalibacterium prausnitzii*) and Riboflavin.

Crohn’s disease is further complicated by pathogenic bacteria such as *Mycobacterium avium* subspecies *paratuberculosis* (MAP) or an Adhesive Invasive strain of *E. Coli* (AIEC) that must first be eradicated to control the dysbiosis.

A healthy microbiota helps protect the epithelial barrier and also modulate the immune response. We have co-evolved with our microbiota – and our intestines and immune system have come to rely on a healthy microbiota for a variety of functions. Distort that microbiota, and our bodies can't function properly.

It seems that every month a new study is released shedding new light on the various tasks that our microbiota perform to keep us in good health. It is therefore not surprising that a significant shift in the composition of the microbiota (i.e. a dysbiosis) can lead to health problems. Analyses of the intestinal microbiota of IBD patients has revealed some commonalities, in particular a reduction in beneficial butyrate-producing bacteria and an increase in sulfate reducing bacteria. Both can be attributed to a combination of the low fiber, high protein Western diet combined with genetic disposition. Throw in antibiotics and stress and you have the perfect storm of conditions that will erode the integrity of the gut wall and lead to IBD.

### **3 Steps to Recovery**

The Briggs Protocol comprises 3 steps to recovery, each lasting as long as necessary. These steps are as follows:

1. Induce remission
2. Heal the Gut Wall
3. Maintain the Gut Wall

The drugs, supplements and strategies in these phases are all supported by links to relevant research, which can be found in the full document.

### **CAUTION !!!**

**Nothing in this protocol should be taken as medical advice. Before following this protocol, please discuss it with your gastroenterologist and check there is nothing in your medical history that precludes taking any of these supplements. It is recommended you take a full copy of the Briggs Research paper to your gastroenterologist so that he/she can see the research references.**

#### **Phase 1 – Induce Remission**

Remission can usually be induced with a combination of drugs and anti-oxidants. However some of the drugs used to treat IBD can also aggravate healing of the leaky gut and are to be avoided unless absolutely necessary (prednisone in particular).

Below are the therapies that work well for Phase 1. Experiment and see which combination works best for you. If you are sensitive to supplements, then work up to the full dose gradually. See the full protocol for links to the research.

#### **A. Anti-TNF- $\alpha$ therapy:**

- The anti-depressant Wellbutrin (bupropion) is a TNF inhibitor. It should be taken in its immediate release form, at a dosage of three 100 mg pills a day. Slow release is not as effective. Be careful with Wellbutrin if you have liver issues. Some people experience temporary side effects like nausea, insomnia, or anxiety – these generally go away after about a week.
- Curcumin and Quercetin, however studies have not yet clearly identified what dosage is required to induce remission and this will vary from person to person.

- The anti-TNF antibodies Remicade and Humira, but with a significant drawback – they are foreign proteins and your body will eventually develop antibodies to them. Also, they seem to have more side effects than Wellbutrin.

#### **B. Boosting methylation:**

Ascertain (through 23andme or other means) if there are any genetic mutations that inhibit your methylation pathways. If so, supplement with methyl folate to ensure adequate MTHFR enzyme production, to make N-acetyl L-cysteine, glutathione, phosphatidylcholine etc.

#### **C. Hydrogen Sulfide Inhibition:**

5-ASAs, such as Lialda (mesalamine) are effective at inhibiting bacterial production of hydrogen sulfide, which can help get the redox balance back under control. They are also potent anti-inflammatory agents.

#### **D. Prescription anti-inflammatories:**

Take only if necessary. Drugs like prednisone have serious side effects, and should be avoided unless absolutely necessary to induce remission.

#### **E. Natural anti-oxidants:**

Vitamin E, n-Acetyl L-cysteine, glutathione, milk thistle (the active component silymarin has been shown to help with maintaining remission of UC), riboflavin (mostly to help boost concentration of *Faecalibacterium prausnitzii*).

#### **F. Phosphatidylcholine:**

2 grams daily until mucus and bleeding have stopped, then 1 gram daily.

#### **G. Amino Acids:**

- L-Glutamine: 10-20 grams daily. Note that some genetic mutations can result in a person having issues with excess ammonia production or glutamate related to high intake of glutamine or protein in general.
- L-glycine: 5-grams daily

#### **H. Diet:**

Reduce the ratio of pro-inflammatory Omega 6 fatty acids to anti-inflammatory Omega 3 fatty acids. Avoid the following:

- Fiber (this will be added in Phase 2 once inflammation subsides)
- High sulfur foods, sulfite and sulfur preservatives
- Protein
- Gluten (most grains)\*
- Lectins (legumes, nuts and seeds)\*
- Sugar
- Processed foods containing additives
- Any foods that you have a high IgA response to. If you can't afford IgA testing, be vigilant and monitor your diet for irritants. Be that aware corn, soy and dairy are big offenders.

The toxic properties of foods marked with an asterisk above can be reduced by sprouting the grains and soaking the nuts, seeds, and legumes in a process called 'activation' (while soaking, phytic acid and lectins are broken down and released). These foods can be introduced in their activated form

in Phase 3. Some grains, in particular millet, sorghum, and white rice have minimal lectin activity and don't seem to need special treatment.

Note though that gluten should continue to be avoided for the rest of your life. Gluten has been shown to trigger an immediate leaky gut in everyone, whether they have celiac disease or not (it just lasts longer in people with celiac). We want to avoid that at all costs.

**I. Avoid fluoridated water:**

Fluoride depletes ATP from epithelial cells, reducing their energy reserves.

**J. Anti-inflammatory enemas:**

- 3,000 to 7,000 IUs of natural vitamin E
- 500 mg of reduced glutathione
- 1 gram of colostrum
- 500 mg of phosphatidylcholine
- 5 grams of L-glutamine
- 50 mL of water.

Anti-inflammatory enemas should be undertaken until inflammation has cleared. They are best done before bed to help with retention. Note that since inflamed tissue is ineffective at absorbing water and vitamin E has a mild laxative effect, these enemas will likely result in a loose stool in the morning – but it will still help get the inflammation under control. It can be more effective to make suppositories by mixing a reduced amount of the ingredients in melted cocoa butter and pouring into the fingers of a latex glove and refrigerating.

**K. Probiotics:**

- Lactobacillus Rhamnosus GG (“Culturelle”)
- Lactobacillus plantarum
- Clostridium butyricum miyairi
- Digestive Advantage Daily Probiotic (to boost Faecalibacterium prausnitzii)

All have been found effective at inhibiting the inflammatory response in IBD. It is important to avoid a dramatic introduction of diverse microbiota (such as in fecal transplants) while inflamed and flaring as the gut wall may reject the new microbiota or react violently. Fecal transplants are best done after inflammation is under control, however these particular probiotics can be taken during Phase 1.

**L. Reduce Stress:**

- Mindfulness Meditation
- Whatever practice you know works best for you.
- No excuses. Nothing is more important than your health.

**Phase 2: Heal the Gut Wall**

Do not move to Phase 2 until your inflammation has stopped (no more mucus or bleeding). Below are the therapies that work well for Phase 1. Experiment and see which combination works best for you. If you are sensitive to supplements, then work up to the full dose gradually. See the full protocol for links to the research.

### **A. Diet:**

A probiotic diet rich in fiber and resistant starch should be adopted once inflammation is under control, but not before. To be safe, start out slowly and work up to higher levels. Ultimately your diet should include significant levels of fiber and resistant starches for production of SCFAs (short chain fatty acids), in particular butyrate. This also feeds beneficial anaerobic bacteria that help down-regulate the immune response in the gut. Consume vegetables for fiber and beans and rice for resistant starches (soak the beans for several hours and cook thoroughly to break down lectins and phytic acid).

In addition to introducing high fiber foods, you can also supplement with 15-20 grams of fiber per day, such as inulin, fructo-oligosaccharides, oligofructose, plus 1-2 grams of chitosan oligosaccharide. Follow the other dietary restrictions in Phase 1, but increasing protein a little, which is required for cell repair. In Phase 3 you will introduce more protein, but for now it should be on the lower side. Supplementing with L-glutamine, L-glycine, and NAC can help your body get enough of those key amino acids. You could also supplement with a few grams of the branch chain amino acids (BCAAs).

### **B. Maintain TNF- $\alpha$ and hydrogen sulfide inhibition:**

If possible, stay on Wellbutrin and a lower dose of Mesalamine. Mesalamine can be gradually reduced in this stage.

### **C. Supplementation:**

- Bovine Colostrum: 5-10 grams daily during this phase, with a powder form such as that from Symbiotics being the easiest and most cost effective way of doing this.
- Phosphatidylcholine: 1 gram daily
- Increase glutathione levels with enteric-coated glutathione, or n-Acetyl l-cysteine (NAC, doesn't have to be enteric coated). NOW makes an NAC supplement that contains the selenium and molybdenum necessary for making the enzyme to turn NAC into glutathione.
- GI Revive: contains mucin (among other things) to help replenish the low levels of mucin found in people with IBD.
- Glutamine: 15 grams daily
- Selenium
- Vitamin D, Riboflavin (B2)

### **D. Avoid NSAIDs**

Non-steroidal anti-inflammatory drugs (NSAIDs) damage the gut wall and are often purchased over the counter and consumed like candy in most Western societies. Commonly used NSAIDs include aspirin (eg Dispirin), ibuprofen (eg Nurofen), naproxen (Naprosyn), diclofenac (eg Voltaren) and celecoxib (eg Celebrex). These are extremely bad for our gut. In fact, tests done on rats to assess the effectiveness of various colitis treatments use a high dose NSAID to initiate the onset of colitis in the rats. The thickening additive carrageenan (added to some processed foods, especially some milk substitutes) is also used to trigger colitis in rats, and should similarly be avoided.

### **E. Lifestyle factors**

Part of healing from Ulcerative Colitis is changing the way you live, permanently. A variety of lifestyle factors contribute to breakdown of the epithelial barrier, including emotional

stress, alcohol, disruption of the circadian rhythm, excessive high intensity exercise and bacterial dysbiosis induced by antibiotics. Know your triggers, and avoid them.

#### **F. Microbiota rebalancing:**

Microbiota rebalancing can be achieved with probiotics, fermented foods and diet. In non-responsive cases, fecal microbial transplant is an option. A diet high in fiber, resistant starches and fermented foods will help repopulate beneficial bacteria, and increase SCFA production.

Fermented foods such as sauerkraut are particularly handy as they add both fiber and probiotics to the diet. Nearly all vegetables can be home-fermented for a ready supply in the refrigerator at all times. Alternately fermented foods can be purchased at quality health food stores.

In addition to the probiotics mentioned in Phase 1, *Bifidobacterium Longum* and *Brevis*, and *Lactobacillus Casei* and *Reuteri* have been found to be beneficial, and can be added in Phase 2. Natural Factors Ultimate Probiotic contains the first three of those, and is enteric coated. Digestive Advantage (*Bacillus Coagulans* BC30) and *Clostridium Butyricum* Miyairi are extremely valuable, as they both help boost the levels of beneficial anaerobic bacteria that can't be taken directly.

#### **G. Re-test Intestinal Permeability:**

If you have the funds, it is useful to measure your intestinal permeability/leaky gut at this point. These tests are not yet available through mainstream medical practitioners but can be ordered through a number of online labs. Once the function of your gut wall has normalized, it is time to move to Phase 3.

### **Phase 3 – Maintain the Gut Wall**

The goal of Phase 3 is to keep you in remission, while allowing you to have as normal a life as possible. There is no set timeframe for progression to this final phase. By Phase 3, you know your triggers better than anyone. Listen to your body. If possible assess your progress via an intestinal permeability test.

As discussed earlier, Inflammatory Bowel Disease arises from a hyperactive immune response to the translocation of bacteria across the epithelial barrier of the gut wall. So, if the barrier can be maintained, preventing (or at least greatly limiting) bacterial translocation, IBD should not occur. A small amount of immune modulation (with natural supplements as much as possible) will continue to be valuable though, to help handle transient leakiness due to the unavoidable situations life presents us.

Phase 3 is a preventative, modified version of Phase 2. Most of the supplements that are effective at rebuilding the gut wall have also been shown to be effective at helping to maintain it, at lower doses. Protein can be increased gradually but it is still important to minimize the other foods listed above that have been shown to cause damage to the epithelial barrier, while adopting the dietary factors (outlined in Phase 2) that have been shown to help maintain and repair the barrier. Grains, seeds and nuts can be introduced to the diet, provided they are activated or combined with a lectin binder such as N-Acetyl L-Glucosamine. A few products are available that contain a variety of lectin binders: "Lectin Lock", Lectin Control Formula", and "GI Revive". Consumption of lectins can be limited by using sprouted grains or fermenting dough, soaking and thoroughly cooking legumes. Taking lectin binders when lectins are consumed will reduce damage to our epithelial barrier by lectins.

A very important point: after you have been healthy for a while, it is easy to become complacent. It is easy to start slacking on supplements, and get loose on the diet, and think that occasionally using NSAIDs for a muscle pain or headache will be ok. That is a path that can lead back to misery though. If you are still unhealthy while reading this, write a note to the future, healthy you, telling yourself to NEVER get lax. You don't want to end up there again. The dietary restrictions of this protocol are nowhere near as severe as more commonly known diets (SCD, GAPS, FODMAPS, paleo, etc.). There are a lot of supplements to take. You may have a bad headache and think "what could one or two ibuprofen really do?". It can initiate damage to your gut wall, allowing bacteria to pass through, initiating the inflammatory cascade that can bring you right back to a full-blown flare. So DON'T DO IT!

### **Reflections on Other IBD Diets**

There are a variety of diets that have become popular among people with inflammatory conditions, especially IBD, in particular the Specific Carbohydrate Diet and Paleolithic Diet. Michael Briggs believes that both diets overlook the importance of our microbiota for our health, and applauds the fact that some Paleo advocates have recently started advocating the consumption of some resistant starches (in particular potato starch) to help feed the microbiota.

The Specific Carbohydrate Diet has achieved considerable success in helping many people with IBD and other intestinal issues, but Michael Briggs believes it controls IBD without healing the gut wall. He says the SCD is based on the idea that these digestive problems are purely the result of a bacterial dysbiosis, which needs to be fixed by "starving off the bad bacteria". The problem is that the so-called "bad bacteria" feed on the same things as "good bacteria" – complex carbohydrates, especially fiber and resistant starches. The diet focuses on removing 26 complex carbohydrates to starve off the bad bacteria, but the unavoidable result is starving off all of bacteria, essentially a similar slash and burn of the microbiota to taking antibiotics. This may be why many people who have been ostensibly cured by SCD find that they have to remain on the diet indefinitely, as eating any complex carbohydrates feeds the microbiota and leads to the return of symptoms. SCD may therefore control IBD, by reducing the numbers of bacteria that translocate through the epithelial barrier causing an immune reaction, but it won't often cure it and could jeopardize overall health long term.

It is worth noting that not even the inventor of the SCD, Elaine Gottschall, never intended it to be a long term diet. Since we rely on our microbiota for many important functions – including maintaining the epithelial barrier – starving off all the bacteria would not seem a good approach to repairing that barrier or maintaining general health.

It is also interesting that the SCD forbids many probiotics, but does allow Lactobacilli. Studies on the rate of translocation of different types of bacteria found the lowest rates for Lactobacilli. So, it may be that the reason Lactobacilli are allowed under SCD is that the barrier remains broken, and any other strains of bacteria will cause inflammation due to translocation through the broken barrier.

### **Where to from here**

Even in its condensed form the the Briggs Protocol may seem onerous to those still addicted to the standard Western diet. A radical change in diet. All those supplements. Fecal transplants. Really? Ultimately only you know the sacrifices you are prepared to make to beat this monster and save your colon. They say it takes 3 weeks to change a habit and 3 months to keep it. Are you up for it? Briggs Protocol – the complete paper



### **Briggs Protocol Shopping List**

Curcumin  
Quercetin  
Milk thistle & Phosphatidylcholine  
Vitamin E  
Lactobacillus Rhamnosus GG  
Lactobacillus plantarum  
Bacillus coagulans  
Clostridium butyricum Miyairi  
Natural Factors Ultimate Probiotic  
GI Revive  
Butyrate  
Branched Chain Amino Acids  
Glycine  
NAC  
L-glutamine  
Vitamin D  
Vitamin B Complex

### **Natural Treatment For Ulcerative Colitis\***

**PLEASE NOTE:** This is the short version of these treatments, to get more details, dosages, etc. please **sign up for my free COLITIS QUICK-START GUIDE in the pink box at the top left side of this page.** You'll receive Chapter One of Listen To Your Gut, my in-depth Probiotics Teleseminar, top reader questions - and my answers, and a list of Inflammatory Bowel Disease (IBD) resources.