

Anti-Microbial Protocol

PRINCIPLES:

- Antimicrobials are used along with probiotics and targeted nutrients to help reestablish a healthy gut microbiome. We will tailor your specific supplements based on your test results and symptoms, so you will take some combination (but not all) of the supplements described below.
- Antimicrobials (GI Synergy and Lauricidin) should be taken at least one to two hours before or after taking the probiotics.
 - For probiotics, TerraFlora is somewhat unique as a probiotic in that it is best taken with, or just after, food. Therefore, we recommend it be taken around lunch when the only antimicrobial you are taking is Lauricidin, which is the least potent of the antimicrobial supplements.
- InterFase Plus or Biofilm Defense is used to disrupt biofilm, making microbes more susceptible to the antimicrobials.
- For your probiotics, TerraFlora is best taken with or just after a meal.
- Iberogast and MotilPro may also be recommended as part of your treatment plan to help support normal bowel motility (normal muscular contractions of the gut help to sweep bacteria through the small intestine, treating or preventing overgrowth).
- Start out slowly with the supplements and gradually increase your doses as tolerated. (Please see specific dosing recommendations below.) Symptoms of microbial die-off are varied, and may include any of your usual symptoms in addition to digestive distress, skin rash, and fatigue. If you experience any of these symptoms, reduce the antimicrobial doses for a time before increasing. You do not want to exceed your body's detoxification capacity.
- As you increase your protocol supplements, if you experience gas, bloating, or undesired changes in stool frequency, then decrease the dose until the symptoms pass. You may then either continue on at the lower dose or try increasing to two capsules daily.

Keeping in mind the above principles, there is flexibility in timing your antimicrobials and probiotics. If you are taking activated charcoal as part of your treatment, it can be taken at any time when it will be at least 90 minutes before or after other treatments. Here is one example of how to time your therapies, based on eating three meals a day. This sample protocol is designed for the maximum doses, but as you start your healing, you will not be taking your treatments at the frequency described.

Your specific combination of supplements will vary depending on several factors. In this example, the following antimicrobials are used: InterFase Plus (more specifically this is a biofilm disruptor), GI Synergy, and Lauricidin. And, the following probiotic is used: TerraFlora. This example also uses ox bile, Digestzymes and Betaine HCl (since SIBO is often associated with low stomach acid and decreased digestive capacity).

Sample Day

On rising	InterFase Plus
Breakfast (at least one hour after taking InterFase Plus)	Ox Bile (pre-meal) Digestzymes and Betaine HCl Lauricidin GI Synergy
Lunch	Ox Bile (pre-meal) Digestzymes and Betaine HCl Lauricidin TerraFlora
Late afternoon (at least one hour before dinner)	InterFase Plus
Dinner	Ox Bile (pre-meal) Digestzymes and Betaine HCl Lauricidin GI Synergy
Before bed	

Specific dosing information:

ANTIMICROBIALS

InterFase Plus may be started with one capsule twice daily, on an empty stomach, and slowly increased to three capsules twice daily. Dose increases should be gradual and only as tolerated based on your symptoms. (Specifically, this is a biofilm disruptor and can be taken with probiotics.)

Lauricidin pellets may be started from 1/4 teaspoon to one full teaspoon two to three times daily, taken with cool liquid. Increase up to one full teaspoon three times daily, with meals, as tolerated.

GI Synergy may be started at one pack daily, and increased up to one pack twice daily, with breakfast and dinner.

PROBIOTICS

TerraFlora, one capsule daily and best taken with or just after a meal.

Ideal Bowel Support (containing *Lactobacillus plantarum*) and/or BioGaia Gastrus (containing *Lactobacillus reuteri*) may also be used if you have high methane gas on your SIBO breath test. We recommend these probiotics based on research indicating that this specific strain of *Lactobacillus* may help address methanogen overgrowth. Please take one capsule of Jarrow

Ideal Bowel Support twice daily throughout the protocol. BioGaia is taken once daily with or without meals.

MOTILPRO

MotilPro supports healthy gut motility, or muscular contractions, by supporting the neurotransmitters in the gut. Take two to three capsules of MotilPro twice daily between meals. MotilPro is not necessary or recommended for patients with diarrhea.

IBEROGAST

Iberogast is an herbal formula that improves GI motility and can be thought of as an adaptogen, meaning that it increases bowel motility in people with constipation and decreases motility in people more prone to loose stools. During the first 30 days of treatment, about 20 drops of Iberogast should be taken at the beginning of meals. Iberogast may be used beyond treatment to support normal motility and prevent SIBO recurrence with a maintenance dose of about 20 drops before bed.

DIGESTIVE ENZYMES AND BETAINE HCL

Bacterial overgrowth is often associated with low stomach acid and impaired production or secretion of digestive enzymes. These supplements can be taken at the beginning of meals to improve digestion and nutrient absorption. You can experiment with the dose of Betaine HCl that is right for you, but no more than six to seven capsules per meal should be used. You may find that with smaller meals you need less of this digestive support.

OX BILE

Ox bile supplementation is used to improve fat digestion and absorption. It is particularly useful in patients who have had their gallbladders removed. It is taken right before meals in doses from 100 to 500 milligrams.