What to Know Before you Start your **Biocidin®** Recommendations

When using a product that supports microbial balance like Biocidin® Liquid, Biocidin® LSF, or Olivirex®, it is possible to have a Herxheimer or "die-off" reaction if you attempt to detox too quickly. That's why it's essential to start your protocol using the smallest recommended serving size and slowly increase as tolerated.

If you have been extremely sensitive to detoxification protocols in the past, please let our office know. We may recommend that you start with binders and detox support before adding products that address microbial balance.

What is a Herxheimer reaction?

Clinically known as the Jarisch-Herxheimer reaction (JHR), a Herxheimer or die-off reaction is a temporary worsening of symptoms due to antimicrobial activity, which creates inflammation and release of toxins.

The best method to avoid a Herxheimer reaction or "Herxing" is to use a "low and slow" method of introducing supplements into your routine.

What are common symptoms of Herxheimer or "die-off" reactions?

- Flu-like symptoms
- Fever
- Chills
- Sweating
- Nausea and vomiting
- Headaches
- Rapid heart rate (above 100 beats per minute in an adult)
- Muscle/body aches
- Joint pain and/or stiffness
- Low blood pressure
- Hyperventilation
- Flushing
- Brain fog or cognitive impairment
- Fatigue/lethargy
- Gastrointestinal distress (nausea, gas, bloating, diarrhea, or constipation)
- Body itching
- Sore throat
- Swollen lymph nodes
- Increased sweet cravings
- Rashes, breakouts, or other skin issues
- Lightheadedness or vertigo
- Irritability
- Changes in sleep pattern
- General worsening of underlying symptoms

If you experience any of these symptoms or an increase in existing symptoms, it is likely a sign that you may be destroying bacteria, yeast, viruses, and other microbes too quickly, and your detoxification pathways can't keep up. The good news is that the protocol is working, but it is a sign that you are going too fast. It is important that you proceed at a pace your detox pathways can support.

How long does it last?

Typically, a Herxheimer reaction lasts a few hours to a few days after starting a treatment protocol for infections or when increasing the serving size. The duration of a Herxheimer reaction can vary from person to person.

How do you know it's a Herxheimer reaction and not an adverse reaction to what you are taking?

- Adverse or anaphylactic reactions such as swelling of the throat and difficulty breathing typically happen immediately and can be life-threatening. Call 911 immediately if you suspect this. Discontinue the use of the product and contact the clinic for further instructions.
- A Herxheimer reaction generally happens slowly and is more systemic with body-wide symptoms. Contact our office for further instructions if you feel you are having a Herxheimer reaction.
- To better understand your body's response to your protocol, keep a record of when you take your supplements or medications and make a note of any symptoms you experience.

How can I mitigate a Herxheimer reaction?

There are two main reasons Herxing happens:

- 1. You are killing off the infection too quickly.
- 2. You are not clearing toxins quickly enough. As a reminder, binders can assist with binding toxins, supporting detox pathways, and promoting a healthy inflammatory response.

Unmanageable (8-10/10 severity)

- Call our office and consider stopping the recommended protocol until negative symptoms
 resolve. Then, restart at one-fourth the previous serving size (or as recommended by our
 office), increasing more slowly to the suggested serving size and giving the body more time
 to adjust.
- Only increase to the tolerated serving size, even if you do not reach the maximum suggested serving.

Manageable (5-7/10 severity)

- Try reducing to half of the serving you were taking for 3-7 days to give your body time to adjust. Then, increase more slowly to the prescribed serving size.
- Call the clinic to discuss increasing binders to support detox pathways.

Mild (1-4/10 severity)

• This is an indication the protocol is working, and, if tolerable, it is advised that you continue the treatment plan knowing the infection is being killed.

The following suggestions may be helpful when experiencing Herxheimer or "die-off" reactions:

- 1. Take two G.I.™Detox+ (binder), even if you just took Biocidin® or just ate. This will often relieve the negative detox symptoms quickly. It will also likely bind some of the Biocidin® and nutrients from your food, so this is a temporary change in timing for the binder. You can also increase G.I.™Detox+ as needed. For example, two capsules once a day, increase to two twice a day. Ideally, take G.I.™Detox+ one hour before a meal or 2 hours after a meal, and away from other supplements or medication.
- 2. If you experience a Herxheimer reaction, it is important to scale down your serving size of Biocidin® Liquid, Biocidin® LSF, or Olivirex®. Once you have stabilized and the uncomfortable symptoms have resolved, increase Biocidin® Liquid, Biocidin® LSF, or Olivirex® more slowly (e.g., by one drop every three days instead of every day).
- 3. Slow down the detox. Decrease the serving size of Biocidin® Liquid or Biocidin®LSF to a size that is well tolerated. Stabilize and then increase more slowly. For example:
 - Increase Biocidin® Liquid by one drop every three days instead of every day.
 - Biocidin®LSF one pump is the equivalent of five drops of Biocidin® Liquid. Add one pump of Biocidin®LSF to five ounces of water. Start with one ounce (2 TBSP) of this solution. Store the remainder in a glass jar in the refrigerator.
- 4. Make sure you are drinking adequate water.
- 5. Prioritize bowel movements. Call the office if you are having trouble with constipation. If you are not eliminating regularly, you might reabsorb toxins that are being released. If you are feeling constipated or are not having at least one bowel movement per day:
 - Use Magnesium Citrate each evening before bed. Increase dose until you are having regular bowel movements one or more times per day. If you experience loose stool, back down on the amount.
 - Drink 8 to 16 ounces of warm water first thing in the morning. Drink it all at once. The
 consistent swallowing can stimulate peristalsis (contraction of the entire digestive tract) and
 promote a bowel movement.
- 6. Prioritize sleep. During your protocol, you may find that you need to rest more than 8 hours each night.
- 7. Take Epsom salt baths.
- 8. Tune in and listen to your body. Make adjustments to your self-care as needed.
- 9. Increase dietary fiber.
- 10. Schedule a lymphatic drainage massage.
- 11. Apple Cider Vinegar (ACV). Add 1 TBSP to a glass of purified water. Drink first thing in the morning. ACV can increase bile flow, which assists with detoxification.
- 12. Call the office and schedule an appointment if your symptoms persist for more than a few days.