

## HERX SHEET

### HERXHEIMER REACTION

The Herxheimer Reaction, nicknamed “Herx” or otherwise referred to as Jarisch–Herxheimer (J–H) is a phenomenon originally observed in the treatment of syphilis, but later found in other illnesses. In general terms, it is described as a temporary increase of symptoms when antibiotics are administered.

In Lyme disease it is thought that the cause of Herxheimer’s is the result of endotoxin release. That is, the toxins within the spirochetes that they release as the *Borrelia* are killed or broken down. This may be a result of the toxin(s) itself or the body’s immune response to such.

### SYMPTOMS

As mentioned, the general description is a temporary increase in symptoms, but also included is the development of new ones, more specifically, the most common events include: increased joint or muscle pain, headaches, chills, fevers (usually low grade), drop in blood pressure, hives, and a rash. A multitude of other symptoms have been described.

Worth noting is that hives and rash are sometimes mistaken for an allergic reaction. It is up to one’s physician to determine this, but close observation and the use of medications such as Benadryl often prevents the patient from having to stop antibiotic prematurely. In more severe cases of J–H a reduction of the dosage or temporary cessation of the treatment is an alternative.

### HOW TO REDUCE HERX SYMPTOMS (adapted from Horowitz five-step approach)

1. Alkalize: **ALKA-SELTZER GOLD** (Aluminum free), buffered Vitamin C, warm lemon water or green juice (kale, spinach, cucumber, celery, cilantro, parsley, lemon) at onset of symptoms.
2. Detox And Binders: Support the elimination of toxins with activated charcoal **BINDER BLEND** (activated charcoal, chlorella, clay, chitosan), **S-ACETYL GLUTATHIONE** (oral, intravenous), N-Acetylcysteine (NAC). For Brain Inflammation: **OPTIMAG NEURO, NT DETOX, CYTOQUEL**.
3. Reduce Inflammation: **ENHANSA** (6 cap a day), **HISTDAO** (2 caps twice a day), **HISTAQUEL** (2 caps twice daily), Non-steroidal anti-inflammatories (NSAIDS), **CYTOQUEL**, Low-Dose Naltrexone (LDN) (prescription), antioxidants.
4. Supplement: with **MINREX, OPTIMAG, and ZINC GLYCINATE**. Minerals that are lost in the detox reaction: Magnesium, zinc, copper etc.
5. “Open Up The Drain”: Nutritional supplements, extra fluids (oral, intravenous), Epsom salt baths, mild exercise (yoga), infrared saunas, ionic foot baths.

Note: Items in **BOLD** are items we carry.