



More On The Herxheimer Reaction

WHAT IS A HERXHEIMER REACTION?

The technical definition for a Herxheimer Reaction (i.e., herxing or die off) is the release of endotoxins from the destroyed cell walls of the bacteria responsible for Lyme Disease, *Borrelia Burgdorferi*, that causes an additional inflammatory response (i.e., debilitating physical and mental state) contingent to the amount of endotoxins released, which is directly correlated to the amount of Lyme bacteria killed (i.e., lysed).

In layman's terms, a person with chronic Lyme Disease who is experiencing a Herxheimer Reaction has recently killed an amount of Lyme bacteria worthy of causing them to enter a debilitating physical and mental state in which their already present symptoms become exacerbated. They feel as horrible as the amount of Lyme bacteria that have been killed. The more Lyme bacteria that are killed, the more endotoxins that are released. Endotoxins are released from the Lyme bacteria's cell wall when its cell wall is destroyed by either antibiotics or the immune system. The more endotoxins that are released, the greater the body's inflammatory response is in order to control the pernicious nature of these endotoxins. It is chronic inflammation that is responsible for much of the symptoms a person with chronic Lyme Disease experiences and a flood of endotoxins only increases it. Having understood that premise, it should now make sense that because people with chronic Lyme Disease have ever-present symptoms, they have chronic inflammation.

HOW DO YOU RESPOND TO A HERXHEIMER REACTION?

Addressing a Herxheimer Reaction involves not just an immediate response, but a preventative response that potentially reduces the chances of a Herxheimer Reaction occurring, but if one does, its intensity will not be as great had no preventative response been implemented.

THE IMMEDIATE RESPONSE

The immediate response to dealing with a Herxheimer Reaction is to assist the body with on the spot detoxification in order to remove the endotoxins as quickly and efficiently as possible in order to reduce the inflammatory response that has caused a person a greater suffering in their physical and mental symptoms.

Many treatment protocols designed for chronic Lyme Disease, whether they're conventional or holistic, only implement antibiotics or antimicrobials. In a nutshell, the treatment protocol is solely designed to kill any Lyme bacteria the antibiotics encounter. This type of treatment protocol does not include a consistent detoxification or inflammation reducing component. Any Herxheimer Reactions that will likely be induced and experienced are consistently subjected to on the spot detoxification, or in extreme herxing cases, a person may be guided to reduce their antibiotic dosage from their physician to allow their body to catch up with detoxification.

THE PREVENTATIVE RESPONSE

The preventative response to dealing with a Herxheimer Reaction involves a treatment protocol that not only kills and reduces the load of Lyme bacteria within the body, but that same treatment protocol includes a consistent detoxification and inflammation reducing component as well.

Integrative treatment protocols for chronic Lyme Disease, the use of conventional and holistic medicine, or holistic treatment protocols, usually consist of some type of antibiotic or antimicrobial that kills the bacteria. What these protocols may also include are a detoxification protocol that consistently aims to keep the body's detox channels (i.e., organs, lymphatic system, gene mutations) open and working properly, and a component that consistently aims to reduce the chronic inflammation within the body. The preventative response is not a guaranteed escape from inducing or experiencing a Herxheimer Reaction, but the chances of experiencing one, and the intensity of that Herxheimer Reaction, are relatively less than a protocol consisting of just antibiotics or antimicrobials.

HOW LONG DOES A HERXHEIMER REACTION LAST?

A Herxheimer Reaction can last anywhere from a couple hours, to a couple weeks, and the constant fluctuation of a Herxheimer Reaction can be found in what has become known as good days and bad days. What determines how long a Herxheimer Reaction lasts will depend entirely on the ability of each individual experiencing that Herxheimer Reaction to efficiently remove the endotoxins, which will ultimately reduce the inflammatory response.

A Herxheimer Reaction usually causes near-immediate physical symptoms such as brain fog, pain, fatigue, and just an overall lack of motivation or passion for anything, but one that lasts for days on end can begin to influence the mentality of a person enduring that Herxheimer Reaction. Thinking positive and keeping a person's will high is important for continuing treatment for chronic Lyme Disease, so if a Herxheimer Reaction is not reduced to a tolerable level within a reasonable amount of time, the treating physician should mold the treatment protocol so that a person can sustain a relatively reasonable quality of life. Many people quit their treatment protocols before any real progress is achieved because the Herxheimer Reactions are so unbearable and intolerable.

A HERXHEIMER REACTION CAN KILL

If a Herxheimer Reaction is too severe, the body can shut down. Before a wave of mass hysteria ignites in those who are currently enduring or plan to experience a Herxheimer Reaction, it's important to know that this type of event is extremely rare and usually occurs in poor handling in treating chronic Lyme Disease. The body can handle a Herxheimer Reaction. In fact, it can handle some pretty challenging die off reactions, but it has its limits. This is why reducing inflammation and consistent detoxification are crucial to any Lyme treatment protocol. By reducing the amount of endotoxins released through efficient detoxification channels of the body, the inflammatory response will be much less, and a person's symptoms, both physical and mental, will be less prominent. That is how the foundation for a good day with chronic Lyme Disease is achieved. What may surprise you is that death from a Herxheimer Reaction isn't caused by the Lyme bacteria or even the endotoxins it releases. It's caused by the body's own response, a self-inflicted wound if you will, to the Lyme bacteria and the endotoxins the bacteria release - inflammation. When the body's inflammatory response is too great, which is contingent to the amount of Lyme bacteria killed in a specific time period, it causes the body's blood pressure to drop and it enters what is known as septic shock.

FOOD FOR THOUGHT

The most basic and immediately available method for preventing further, and reducing, inflammation in the body is diet. It is partly preventing and reducing inflammation that which the Lyme Disease diet spawned from. The Lyme Disease diet at its core omits gluten, dairy, and sugar, which are responsible for creating or contributing to inflammation in the body, while consuming whole and pure foods that possess inflammation reducing properties.

The problem isn't that inflammation itself is bad, it's the chronic and persistent presence of inflammation that makes it. The body needs inflammation to respond to injury or infection, and in acute cases, inflammation really shines. But when injury or infection are persistent and chronic, so will be the inflammation, and this is where the body shoots itself in the foot.