

# The Relationship Between Your Immune System and Multiple Sclerosis

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# Understanding the MS Immune System

The immune system is the body's defense system. It is what helps our bodies fight illness-causing germs and diseases that infiltrate our bodies—when it is healthy, anyway. An MS immune system is different.

With multiple sclerosis (MS), the immune system malfunctions and, instead, attacks healthy tissue. With a case of MS, the immune system attacks nerve endings. Healthy nerve endings are protected by a thick substance called myelin. When our immune system attacks us, it eats away at this protective covering, exposing nerve endings. I'm sure you have seen an electrical cord that has seen its last days: the protective covering worn away, exposing internal wires, electricity bouncing from wire to wire. Yes, that is what happens inside our bodies where MS has chosen to reside.

## What Is Autoimmunity?

Oddly enough, once the attack is over, the body tries to heal itself causing scars, or sclerosis (hardened tissue). These scars interrupt the messages being sent from the brain and so begins the rocky journey that is MS. This self-launched attack is called autoimmunity. MS is not the only disease in this category. There's also:

- Lupus
- · Inflammatory bowel syndrome
- Rheumatoid arthritis
- · Graves' disease (overactive thyroid)

These are a few of the common maladies included in the autoimmune category.

#### What Triggers This Response?

No one really knows what triggers the miscommunication in the immune system, though some researchers think it may be genetic. For people with MS, stressful situations, random infections, illness and diet can all contribute to a flare, which means the disease is active.

#### How Do You Know When MS Is Active?

When there is an active attack of the immune system, a person with MS will experience an exacerbation, or worsening, of these symptoms:

- Fatigue
- Pain affecting the joints, muscles, head

- Cog fog
- Blurry vision
- Bladder, bowel or sexual dysfunction
- Depression

You may even notice a few new symptoms. You must have these symptoms for at least 24 hours and not more than once in 30 days. Though, this can also happen when your body temperature is elevated due to fever, or through activity. In this instance, it is referred to as a pseudo exacerbation.

#### How Is MS Treated?

Most of the time, your doctor will prescribe a course of steroids, either intravenously, or with tablets that are taken orally. Steroids work faster on inflammation that may be causing the activity. There are also several medications on the market that are intended to slow the progression of MS. Theses are given in a variety of ways:

- Intravenously
- Orally
- Through an injection

Since there is currently no cure available for MS, you and your physician should discuss in depth what the best treatment option is for you. As with any medication we take, the treatments all come with side effects.

#### **Boosting the Immune System**

This has been a topic of conversation for many people with MS. I personally wonder, why we would want to give power to our enemy? Our immune systems are already boosted, and in this state, they attack our healthy tissue too. In no way, shape, or form do I want to add to its power. That is why most, if not all, of the medications made for MS work to slow down the immune system to stop, or at least spread out, the time between relapses. There are some herbal supplements we should actively avoid such as:

- Echinacea
- Elderberry
- CoQ10
- Ginseng
- Ginkgo biloba
- Some mushrooms (maitake, shiitake, turkey tail and tremella)

All these supplements and more, give your immune system a super boost that it definitely does not need.

## The Takeaway

Hand washing, stress reduction and eating a healthy diet are all great ways to stay as healthy as possible while living with MS. Supplements that are specific to boosting your immune system should be avoided, so as not to trigger a relapse.

I have mixed feelings about exercise. I used to run three to five miles every day before my diagnosis, but with all my balance and mobility issues, I have had to give it up. Exercise is a natural immune booster and we already know how I feel about that. No boost needed! Although, I have found that yoga, specifically for MS, has been a lifesaver. It is relaxing and it counts as exercise without going too far into boosting territory. You can search for "yoga for MS" on YouTube. You will find that and so much more information and exercises there.

As with any lifestyle changes, consult your physician before taking on new activities. MS is unique to each person, so what works for one may not work for another. Consider this anytime you get new treatment advice from well-meaning friends, family and even total strangers. Do your research and always talk with your doctor.