

Stress Hormones and Your Immune System

by Dr. Michael Nowazek

When you are under stress, your adrenal glands produce certain hormones in response to the stress. One of the hormones they produce during stress is cortisol, a steroid hormone commonly called “the stress hormone”.

The stress hormones are made from cholesterol and then converted into the various stress hormones, including cortisol. Your body requires a lot of vitamins and minerals to convert cholesterol into hormones and that’s why a good diet and the supplementation that’s right for you is so important. Your body needs the nutrients required to build the hormones.

Cortisol is the main hormone that is released during periods of stress and it is important because of the effects it can have on your body and on your immune system.

Long-term cortisol production has three major effects on your body:

- It increases blood sugar
- It decreases protein
- It decreases muscle mass

This creates a significant impact on your immune system because your immune system needs protein to function properly.

Cortisol also affects your ability to focus and your memory, and especially short-term memory. If you find yourself wondering why you came into a room or forgetting what you were supposed to be doing, that could be an effect of cortisol and stress.

Cortisol affects mood and sleep cycles as well. It can lead to symptoms of depression or anxiety, it can also lead to difficulty sleeping. Mood changes and

sleeplessness increases the stress on your body and further weakens your immune system.

Another thing that cortisol does that can weaken your immune system is lower your copper levels. Copper is a mineral that your immune system needs. Zinc can also interfere with your copper levels. Zinc can sometimes be helpful to the immune system in a specific way and under certain circumstances, but zinc competes with copper for absorption. This competition between zinc and copper can also lower copper levels. That’s why it’s important not to take supplements randomly; you need to take the vitamins and minerals and herbs that are right for you.

It’s not possible in an article such as this to give sweeping advice about the “best” diet or what specific supplements to take to support your body during stress. Each person’s individual situation with regard to overall health, medications they are taking, and other factors is different, so each person’s requirement is different. Your best course of action is to consult your naturopathic doctor for a full assessment of your specific needs.

Even though our clinic is temporarily closed to help to flatten the coronavirus contagion curve, our doctors are still virtually available to patients via video and telephone. We are available to all of our patients with a virtual follow-up consultation so your care continues with little or no interruption. You can [book online](#) or call the office at (780) 485-9468.