

# The Wellness Family

Dr. Cuperus Keeps You Informed

## A Naturally Healthy Immune System

Everyday our bodies are attacked by organisms and substances that cause illness and disease. If we have a healthy immune system we will never notice. However, if our body isn't functioning at its best, we'll start to feel achy, feverish and, depending on the organism, any number of other annoying symptoms of illness.

### **What is Germ Theory?**

In the mid 1800s a theory was developed that said many diseases are caused by the presence of microorganisms in the body. Then in the 1860's with the research of Louis Pasteur, and the following decades with Robert Koch's studies, the theory gained medical acceptance.

This would lead to pasteurizing milk, the creation of immunizations, antibiotics and, since the 1960's, antiviral drugs. The purpose being to create ways to do what our body should be doing naturally without chemical interference.

### **Our Immune System**

The immune system is our body's natural defense against infectious microorganisms and other invaders. This system is made up of special cells, proteins, tissues and organs that work together to fight off the germs that make us sick. This smaller system is just one of many that are controlled by our body's master controller, the central nervous system.

The central nervous system is comprised of the brain, spinal cord and nerves that go out to our muscles, organs and glands telling them how to function properly. When the central nervous system isn't functioning properly, many other systems begin to malfunction, including the immune system.

### **Allergies and Illness**

The terms "allergies" and "illness" may seem unrelated but they share a common bodily system. Allergies are the responses of the immune system over-reacting; illness is the immune system under-reacting.

The word "allergy" means an altered or abnormal tissue reaction after sensitive body tissues are brought into contact with an allergen. There are three general categories of allergens: contact, food or inhalant.

Inhalant allergies – allergies experienced in response to material in the air – are the most common. The four biggest airborne allergens are pollen, pet dander, mold and house dust.

The body, when exposed to an allergen, triggers the immune system to go into action. The immune system cells, known as "mast cells", release a substance called histamine that attaches to receptors in blood vessels causing them to enlarge. Histamine also binds to other receptors causing redness, swelling, itching and changes in secretion.



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Food allergies occur when the immune system over-reacts to a food item that the body has mistaken as harmful; when this happens, it creates specific antibodies to fight what it has determined is dangerous. The next time that food is consumed, the immune system releases massive amounts of chemicals, including histamine, in order to protect the body. These chemicals then trigger a cascade of allergic symptoms that can affect the respiratory system, gastrointestinal tract, skin or cardiovascular system.

A typical immune system reaction occurs when the body creates immunoglobulin E (IgE) antibodies to the food. When these antibodies react with the food, histamine and other chemicals cause hives, asthma, or other symptoms of an allergic reaction.

If a microorganism, virus, bacteria or other invader attacks the body and the immune system under-reacts, it will begin to make itself at home resulting in symptoms of illness or disease.

### **Vertebral Subluxation**

It's clear that we want our immune system to react properly, not over-reacting or under-reacting. The best way to ensure this happens is to keep our body functioning at its absolute best. If our central nervous

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system begins to send mixed signals, the immune system is one of the many systems that can be negatively affected.

The brain sends signals down the spinal cord and out through the nerves to our muscles, organs and glands. If there is even the smallest misalignment in the spine, it may create vertebral subluxation and interfere with those signals. This may result in the body's systems beginning to malfunction. These systems can include the respiratory, circulatory and immune system among others.

It's important that these misalignments and vertebral subluxations be corrected in order to ensure the body's systems are functioning properly. Your Family Wellness Chiropractor is the only healthcare professional trained in the detection and correction of vertebral subluxations.

### ***A Healthy Immune System***

Chiropractic care, however, is only one of five factors to consider when looking to support a healthy immune system. Nutrition, exercise, sleep and decreasing stress all play a valuable role as well.

Nutrition is important because the type and quantity of food consumed is very important for overall health. Food provides energy for our bodies, and there are several vitamins and minerals that are a fundamental part of a strong immunity. Vitamins A, C, E, Beta-Carotene and Selenium are antioxidants, which are part of our body's natural defense mechanism, and are consumed in fruits and vegetables. The mineral Zinc is important because of the role it plays in increasing resistance to infection, and is found in red meats, eggs and most dairy products. Magnesium is another important mineral essential for boosting your child's immune system, and is available in legumes and milk.

Just as important as what you eat, is what you shouldn't eat. Sugar, dairy and starches are difficult to digest and the process actually overworks our bodies and may wear down our natural defenses.

As for exercise, any is better than none; walking, stretching, yoga, pilates, you name it. Moving your body increases your oxygen intake, strengthens your muscles and builds your natural defenses against illness and foreign invaders.

We all know sleep is important. Not only can a lack of sleep affect your ability to think and reason, but recent studies have also shown that sleep deprivation can actually lower our t-cells and increase inflammatory cytokines. This in turn can actually lead to a greater risk of developing a cold or flu.

Finally, decreasing stress is probably one of the most important steps to strengthening our natural immune system. Stress can be both emotional and physical but regardless of the source, too much can cause an increase in the production of the hormone cortisol and can negatively affect the immune system.

Research has shown that during a sustained period of raised cortisol levels, immune system cells begin to disappear from the blood causing the immune system function to decrease. Dr. Patrick Bouic, author of "The Immune System Cure," has stated that an immune system that is in top operating order will only be minimally affected by small causes of stress but even that can be too much for a weakened immune system.

### ***In Summary***

Nutrition, exercise, sleep and decreasing stress will only take your body so far; this is where Chiropractic Care steps in. If vertebral subluxations are interfering with your body's optimal function then your body's systems will not be operating at their best.

*Dear Patient,*

*Dr. Cuperus is dedicated to providing you with the absolute best in family wellness care. So take a moment today to discuss with your Family Wellness Chiropractor any concerns you may have regarding your family's overall health and wellness.*

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