

## Are You Sick of Being Sick?

When a foreign invader threatens a country, that country deploys its armed forces to resist and neutralize the invader. The success of the country's counter-attack depends very much on how strong their army, navy, and air force are.

That's how your immune system works. It is your body's military force whose function is to detect and defeat viruses, harmful bacteria, fungi, and other antigens. (Antigens are infectious organisms or substances that the immune system recognizes as foreign and a threat to the body).

When an antigen enters your body, your immune system recognizes it as a threat and creates antibodies. The antibodies bind to the invader and deactivate it and, in so doing, create what is called an antibody-antigen complex. The antibodies also present the antibody-antigen complex to the rest of the immune system to mount the full immune response and completely destroy the foreign threat.

How well your immune system is able to do this depends on how strong it is.

### EXPOSURE

There are some people in occupations where they necessarily have increased exposure to contagious pathogens. Teachers, healthcare workers, people working in offices, anyone who comes into contact with large numbers of people naturally have greater exposure to communicable diseases. Commuters using mass transit – airplane, bus, taxi, Uber, anywhere there have been a large number of people depositing their mucus – likewise have high exposure to viruses and bacteria.

Some of the people with greater exposure frequently fall victim to virus and bacteria, and some do not.

Why is that? The difference is entirely in how robust their immune system is.

### TESTING

Patients often ask if there is a test to determine how strong their immune system is, and the short answer is no. There is testing that can be done to determine your levels of white blood cells, antibodies (your infection-fighting proteins, also called immunoglobulins) and similar measures.

These tests will tell us whether your immune system is within "normal range"; however, many people who test within the "normal" range are subject to frequent colds, flus, and other infections. They still get sick frequently and they still have an immune system in need of some work.

Once you are actually ill, your test values can change, so the testing can determine whether you are ill (but you probably already know that symptomatically) and whether your infection is bacterial, viral, or parasitic, but it will not test how strong your immune system is overall or your susceptibility to infection.

The most reliable indicator that your immune system needs to be rebuilt is the frequency with which you get ill and the duration and severity of those infections.

If you catch a cold or a flu once or twice a year that you recover from quickly (within a few days, and generally fewer than seven to ten days) and the symptoms are mild to moderate, there is probably no need for concern. But if you are frequently ill, if the infection seems to last forever, if the symptoms are severe, the chances are that your immune system needs some help.

## REFINED SUGAR – PUBLIC ENEMY NUMBER ONE

When rebuilding an immune system, the first thing to address is diet. The immune system's number one enemy is – you guessed it – refined sugar! Refined sugar actively depresses the immune system by inhibiting the activity of white blood cells. White blood cells do many things including creating the antibodies that break down and fight bacteria, viruses, and other invaders.

Ingesting refined sugar even as little as once or twice a week is enough to hamper your immune system.

Eating refined sugar without meaning to is very easy to do. Sugar is almost always used in processed foods and beverages to enhance colour, taste, and texture and as a preservative to extend shelf life.

Processed food producers are required to list ingredients on their labels, but they don't always call sugar "sugar". They can call it "malt", "dextrose" "fructose", "syrup" and a long list of other names.

The Canadian Food Inspection Agency does try to give some measure of protection to consumers by requiring that ingredients be listed "by their common name in descending order of their proportion by weight of a prepackaged product".

Manufacturers must group each sugar-based ingredient after the term "sugar" so that consumers can easily see the concentration of different types of sugar, but there are exceptions. Grouping is not required for sugar-laden ingredients that are "visible in intact pieces of layers such as yogurt coating or pieces of frozen fruits." There is likewise no requirement to list chocolate in the "sugars" group. It is also the case that not all prepared foods are subject to ingredient declaration requirements.

Confused yet? The thing to remember is that any prepared food is almost guaranteed to contain concentrations of added sugar and salt, much more

than are good for you. If you are in the habit of eating prepared food, you are consuming an awful lot of refined sugar!

Can you entirely eliminate refined sugar from your diet? Realistically, probably not. However, you can significantly reduce your intake by eliminating fast food, junk food, and all other forms of processed foods from your diet and choosing whole foods, those that have been processed or refined as little as possible and are free from additives.

## THE IMPORTANCE OF PROTEIN

The antibody portion of your immune system is made up almost entirely of protein. Protein in your diet is indispensable to a robust immune system, both in fighting off infection and for a speedy recovery from bacterial or viral illness.

Good sources of high-quality protein are lean meat, poultry, fish, and eggs. Yogurt is also a good source of protein for those who do not have a reaction to dairy products (but be sure to read the label carefully as many brands contain added sugar).

When selecting meat, be sure to avoid the processed meats as they are often high in added salt and sugar. Remember that only packaged foods will be labelled. The meat that you have sliced at the deli counter of the grocery store, for instance, will not have a label listing the ingredients.

## EXCESS SALT – NOT A GOOD IDEA

Your lymphatic system is a network of tissues and organs. The main function of the lymphatic system is to transport lymph (the fluid containing white blood cells) throughout the body to fight infection and to remove infection debris (the debris that can accumulate once an infection is defeated or while it's being attacked; swollen lymph nodes are an example).

Excess salt thickens the blood and makes the

lymphatic system sluggish and less able to deliver white blood cells and antibodies to the parts of the body where they're needed and to remove the waste and debris.

## BE KIND TO YOUR BOWELS

A significant portion of your immune system resides in your bowels. If the bowels are overloaded with metabolic waste, it puts a tremendous burden on your immune system. Having fewer than one bowel movement a day, such as once every two days or even less frequently than that, will depress the immune system.

Sufficient fiber in your diet will help to ensure the removal of those wastes through regular, daily bowel movements. Fiber acts as a sponge, soaking up toxins, debris, sugar, salt, bad fats and other waste and removing it. Water intake plays a big part, too. Fiber needs sufficient water, otherwise it becomes a rock rather than a sponge. Most people who "fail" with fiber are simply not getting enough water.

Fresh fruits and vegetables are excellent sources of fiber as are unprocessed beans, legumes, and nuts.

## EXERCISE IN MODERATION

There's no question that exercise is a good thing, for many reasons. But, like most good things, it is possible to have too much. Frequent strenuous exercise can not only burn off the proteins that are vitally needed by the immune system, it will also increase metabolic waste that can put a strain on your bowels and your lymphatic system. Both of these biological responses to overdoing exercise can result in a weakened immune system.

It's a question of balance: frequent moderate exercise will help your immune system; a punishing regimen will not. The amount of exercise has to be right for you.

## FOOD SENSITIVITIES

The reaction to certain foods to which your body objects (called food sensitivity) is actually an immune system response. Your immune system perceives what it thinks is a foreign invader when you ingest food to which you are sensitive, and it acts to destroy it. When you eat food to which you are sensitive, your immune system becomes so focused on the food that it can't produce the response required for a viral or bacterial invasion.

## NOXIOUS SUBSTANCES IN THE BODY

Toxic agents have long been recognized as immune system suppressors. Your immune system recognizes toxins as foreign dangerous invaders and, like the immune system's response to food sensitivities, can become so focused on the toxins that it cannot mount a strong defense against bacterial and viral invasions. Additionally, because your body has a difficult time removing toxins, the toxins can build up in the lymph and tissue, often in the tissues where the body is trying to create antibodies.

Interestingly, there are also some noxious substances that will create a false appearance of a vigorous immune system. People who ingest a high volume of toxic chemicals can be misled into thinking that they have a robust immune system because they seldom get colds or flus when, in reality, the exact opposite is true. Their immune system comes to depend upon the toxic chemicals to kill bacteria and viruses and becomes weakened and unable to detect and respond to such things as rapid growth of mutant cells.

The poisonous smoke and chemicals from cigars and cigarettes, alcohol, silver and a few other heavy metals will kill pathogens. Unfortunately, they also kill everything else in their path. They damage the body and often lead to fatal diseases such as smoking-related cancers, or alcohol-related diseases of the liver, esophagus, stomach, and bowel.

## IMMUNE SYSTEM-FRIENDLY NUTRIENTS

Much has been written on the efficacy of vitamins, minerals, and herbs and many of these nutrients are particularly helpful in immune system support. There are some herbs, for instance, that actively kill bacteria and viruses and others that boost the immune system. These nutrients can be used in both treatment of infections and in rebuilding a person's immune system so they do not get frequent or severe colds, flus, or infections.

## BOLSTERING YOUR IMMUNE SYSTEM

If you are plagued with frequent colds and flus, recurring infections, or other symptoms of a battered and beleaguered immune system, we can help.

The doctors at Green Apple Health Care will conduct a thorough analysis of factors affecting your immune system -- whether they be IGG-related disorders, salt, sugar, protein deficiencies, or other sources -- and design a custom program to quickly and effectively create outstanding positive outcomes!

**Are you sick of being sick?  
Call us at (780) 485-9468.**

