



Don't wait for a "cure"...

Be proactive and create a robust immune system!



We have been inundated with Covid-19 news for a solid 9 months now. It has been constant and there has been an enormous focus on mortality statistics and graphs and projections. There is a great deal of confusion and fear projected in the media and from our leaders and a hope that a rushed through vaccine will save the day. While having a healthy respect for this virus is certainly important, I have noticed that there has been little promotion on how to create a robust immune system so that we as individuals, can get through this virus effectively. Just like a cold or a flu going through a community, Covid-19 needs to run its course. I think taking a proactive, inside-out approach is the most powerful thing we can do. So, how can we create a robust immune system?

The immune system is designed to be extremely powerful naturally, we just need to support it well and avoid things that suppress its function. The suppression of immune function can be either physical, chemical or emotional.

Here are some key principles in supporting a healthy immune system:

A healthy nervous system is vital to having a healthy immune system. The immune system has been likened to a circulating nervous system. There is a constant communication between the brain and the immune centers of the body, and this communication is vital for proper function. Stress and interference to the nervous system will directly stress and interfere with immune function. That stress can be physical, chemical or emotional.

Physical stress on the nervous system can be from a poor functioning spine. Spinal misalignment, poor range of motion and postural distortion can exert a lot of stress on the nervous system which directly affects the communication between the brain and immune centres of the body.

Any activity that is promoting or restoring spinal function and motion will likely have immune benefits. Therefore, therapies like chiropractic, osteopathy, massage therapy, physiotherapy, Pilates...could be beneficial. Likewise, pain and excessive inflammation is an immune suppressor, therefore, therapies that restore function and reduce pain will help immune function.

Adequate and regular exercise is another key component of a healthy immune system. Exercise stimulates better circulation which helps distribute immune products throughout the body. It also promotes endorphin release and healthy, anti-inflammatory cellular pathways in the body. Exercise will also aid in flushing out toxins from the body.

Maintaining a healthy weight is important for the immune system. Obesity is an immune suppressor and is characterized by a state of low-grade, chronic inflammation in addition to disturbed levels of circulating nutrients and metabolic hormones. Obesity was a risk factor in the 2009 H1N1 pandemic and is likely a risk factor with the Covid-19 pandemic.

A healthy mental attitude is another no brainer, but do you know why? We are all under stress in life, but it's how we process that stress that determines how it influences our health. It can motivate us if it is turned into a positive, or it can cause prolonged fear and anxiety and become an overwhelming negative. Stress, fear and anxiety causes the release of the hormone cortisol. When this is prolonged it turns into a negative, lowering lymphocyte counts in the body, driving up inflammation and depleting energy reserves. It makes us more prone to viral and bacterial infections.

Faith There are almost endless reasons for us to live in fear and anxiety and we need to have a solid foundation to always put life's conflicts and stresses in perspective. A person's faith can therefore be an important factor in our immune health.

I can only comment on faith from my perspective as a Christian and I know that having a personal loving relationship with God makes a big difference. As Jesus said, *"Come to me, **all** you who are **weary** and **burdened**, and I will give you rest. Take my yoke upon you and learn from me, for I am gentle and humble in heart, and you will find rest for your souls."* Matthew 11:28-30

It was also said regarding fear; *"**There is no fear in love**, but perfect love casts out fear. For fear has to do with punishment, and whoever fears has not been perfected in love."* 1 John 4:18

Are you grounded in love? Or being tossed about by the waves of fear and uncertainty all around us.

Nutritional support of the immune system is also critical. Our diets should be as natural as possible. Diets that are full of refined flours and processed oils tend to drive up inflammatory pathways in the body. A diet rich in a large variety of vegetables and rich in essential fats and adequate protein will support a healthy immune system. Excessive sugar in the diet is inflammatory and is an immune suppressant. Some of the key vitamins to support immune function are listed here:

Vitamin D: Having optimum levels of this vitamin is critical for exposure to viruses, especially relating to respiratory function. Most people who have struggled with Covid-19 had low vitamin D levels. It is important to get tested and see if you have optimum levels, because this is a major factor in how you respond to a virus. The typical Canadian does not get enough sunshine to have optimum levels and often should take more than they think.

Vitamin A: This is another critical vitamin that supports a vast number of processes in the immune system and works hand in hand with vitamin D. It is stored in the liver and fat tissue and is released into the system when we need to fight infections. It is found in Cod liver oil, eggs, fortified milk and cereals and a large variety of vegetables.

Omega 3 fatty acids: These are typically derived from fish oils, nuts and seeds and flax oil. They also support the function of all the different immune cells and reduce inflammatory pathways in the body.

Vitamin C: Similar to the above vitamins, vitamin C supports numerous immune pathways and is essential for the epithelial barrier so that pathogens can't invade our tissues. We should regularly maintain high levels of vitamin C to resist infections.

There are many other nutrients and foods that support the immune system. I just wanted to highlight a few of the primary ones that we should be aware of, that are easy to maintain with a healthy diet and simple supplementation.

It has been said that the best laboratory and best doctor in the world is the one that resides within your body. We have adapted to trillions of germs since time began. If we have a great baseline immunity our immune systems will recognize new viruses like Covid-19 as a foreign pathogen immediately and develop the appropriate response. You may not even notice that you have developed antibodies to it. If the media, our political leadership and Public Health emphasized how to have a robust immune system for the past 9 months we would be in a much better position to get through this pandemic and back to a sense of normalcy much quicker. Have a deep appreciation for the design of your immune system and give yourself the best chance to get through this pandemic well, by staying healthy from the inside-out.

Suggested further readings relating to this topic:

For further reading relating to the relationship between the nervous system and the immune system and Chiropractic please refer to the International Chiropractic Association site here; <http://www.chiropractic.org>

For further reading on the relationship between vitamin D and the immune system and Covid-19 please refer to these articles:

Aranow C, Vitamin D and the Immune System, J Investig Med., 2011 Aug. 59(6): 881-886

<https://www.grassrootshealth.net>

<https://medicalxpress.com>

For further reading on obesity and the immune system please refer to this review article:

Milner J.J., Beck M, Micronutrients, immunology and inflammation, The impact of obesity on the immune response to infection, Proc Nutr Soc., 2012 May; 71(2): 298-306