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Coronavirus

"Top Off Your Immune System "

IMMUNE OPTIMIZATION GUIDE



LOVING DISCLAIMER

Drawing on my background, training, skills and life experiences, I support my clients spiritually, mentally, emotionally and physically. I am not a medical doctor, dietitian or nutritionist. I do not hold a degree in medicine, dietetics or nutrition. I make no claims to any specialized medical training, nor do I dispense medical advice or prescriptions.

The techniques and advice described in this document represent the opinions of the author based on her training, experience and research. The author expressly disclaims any responsibility for any liability, loss or risk, personal or otherwise, which is incurred as a result of using any of the techniques or recommendations suggested herein. The responsibility for the consequences of your use of any suggestion or procedure described hereafter lies not with the author of this material. This information is not intended as medical or health advice. If in any doubt, or if requiring medical advice, please contact the appropriate health professional. We recommend consulting with a licensed health professional before making diet and lifestyle changes.

ABOUT ME

I am a multi-faceted, purpose driven health and happiness coach and consultant who is passionate about supporting people in transforming their lives.

I assist and guide people who have forgotten, or perhaps have never learned, how to stay healthy and balanced. I help them regain their balance by detoxifying and strengthening their bodies, overcoming negative thoughts and behaviors, and reigniting their passion to set a strong foundation for a life full of health and happiness.

I enjoy working with people who want to have the best health and life possible. I find that most of my clients are drowning in information but starving for wisdom. I help them by separating fact from fiction to develop their own unique blueprint for health and happiness by overcoming misinformation and limiting beliefs that stand between them and where they want to be.

I invite you to visit my [website](#) to learn more about me and my journey, and if you are so moved, set up an appointment for a chat, so I can learn more about you and your journey and how I may be of service to you.

To your health and happiness,

Toni St. Clair

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TOP OFF YOUR IMMUNE SYSTEM

Many people in the United States are overfed but undernourished due to their actual intake of nutrients and/or impaired digestion and absorption. It's critical to determine whether or not nutrients that support a healthy immune system are at a therapeutic (functional) level in your body in order to be able to fight the coronavirus or other invaders.

Equally, if not more important, than nourishing your body is eliminating "food-like" substances and lifestyle activities that strain and deplete your immune system.

It's not a matter of if, but *when* the coronavirus epidemic strikes this country. Those at greatest risk of being susceptible to the virus are those who have a low functioning immune system. The purpose of this immune optimization guide is to provide simple but impactful tools you can use NOW to support your immune system and protect your health.

Top Off Your Immune System in 3 easy steps:

1. [Assess Your Immune System](#)
2. [Feed Your Immune System](#)
3. [Keep Your Immune System Pumping!](#)

ASSESS YOUR IMMUNE SYSTEM

Your immune system, like all systems in the body, require specific nutrients at the proper bio-individual level to function optimally. Inadequate intake of selected nutrients can lead to immune deficiency in particular and less than ideal health in general. To support you in assessing your immune system and creating nutrition strategies, I have provided you with:

- A list of nutrients needed for good health overall, but specifically needed to “top off your immune system.”
- A “quick and dirty” way for you to generally assess any deficiencies you may have with those nutrients.

Immune Supporting Nutrients

1) Vitamin A, C and E

Vitamin A, C and E help to maintain the structure and function of the mucus cells lining the respiratory and digestive tract, acting as a barrier against infections.

2) Vitamin D

Vitamin D works with T cells, the body’s natural killer cells, to fight off infection and disease. There are only a few food sources of vitamin D, so it can be very difficult to get enough through diet alone.

PRO TIP: Determine your current level of Vitamin D. Most people are below therapeutic levels. Take a vitamin D supplement daily in the form of pills or drops. Need guidance? [Contact me](#).

3) Zinc

This mineral is critical for the normal development and functioning of immune cells. Zinc is not stored in the body. Therefore, regular intake is important for maintaining the integrity of the immune system.

4) Selenium

Selenium is an antioxidant that helps protect the body. Selenium is also vital in the production of the enzyme glutathione peroxidase, which helps detoxify the body.

5) Copper

Copper is a critical component of the immune system, but the exact mechanism in which copper works is not yet known. Recent scientific studies have shown that copper deficiency results in an increased susceptibility to infection.

6) B Vitamins

B vitamins include thiamin, riboflavin, niacin, folate, vitamin B6, vitamin B12, biotin and pantothenic acid. The B vitamins work collectively and individually in every cell to perform many different jobs. Deficiencies in B vitamins have been linked to impaired immune response.

7) Iron

Sufficient iron is critical to healthy immune functions and a deficiency has been shown to impair the immune system.

8) Manganese

Manganese is an important trace mineral needed for many vital functions including immune system defenses.

9) Essential Fatty Acids

Omega 3 fatty acids are essential in reducing inflammation and having a healthy immune system.

10) Amino Acids

It is widely accepted that sulfur containing amino acids play a key role in regulating the body's immune response. These amino acids support cleansing and detoxification. Sulfur containing amino acids include: Methionine, Cysteine, Homocysteine, Cystathionine and Taurine.

PRO TIPS:

- B vitamins include thiamin, riboflavin, niacin, folate, vitamin B6, vitamin B12, biotin and pantothenic acid. The B vitamins work collectively and individually in every cell to perform many different jobs. Deficiencies in B vitamins have been linked to impaired immune response.
- Vitamin D works with T cells, the body's natural killer cells, to fight off infection and disease. There are only a few food sources of vitamin D, so it can be very difficult to get enough vitamin D through diet alone.
- Protein foods are broken down into parts called amino acids during digestion. You do not need to eat animal products to get all the protein you need in your diet. They are also found in plant sources such as legumes and some grains such as quinoa.

Immune Supporting Nutrients Assessment Chart

Now that you know the specific nutrients required to boost your immune system, use this [nutrients self-assessment chart](#) to give you a general idea of your nutrient deficiencies and insufficiencies.

After doing this foundational step, move forward to the next section: Using [functional nutrition](#) to [Feed Your Immune System](#).

FEED YOUR IMMUNE SYSTEM

There are many ways to feed your immune system. [Functional nutrition](#) fundamentals recognize that “food is medicine.” Fresh (minimally processed), organic, whole food (primarily plant based) is the best way to intake nutrients for optimal digestion and absorption. There are other ways, including herbs and supplements, that can be used along with food to enhance the intake and increase the digestion and absorption of immune boosting nutrients. For excellent and good sources of food for each nutrient listed below, click on NUTRIENT FOOD SOURCE in the table.

SELECT WHOLE FOOD NUTRITION FOR IMMUNE SUPPORT AT-A-GLANCE

NUTRIENT FOOD SOURCE	IMMUNE FUNCTION
Vitamin A, C, E	Help to maintain the structure and function of the mucus cells lining the respiratory and digestive tract, acting as a barrier against infections.
Zinc	Normal development and function of immune cells.
Selenium	An antioxidant that helps protect the body. Selenium is also vital in the production of the enzyme glutathione peroxidase, which helps detoxify the body.
Copper	Recent scientific studies have shown that copper deficiency results in an increased susceptibility to infection.
Iron	Sufficient iron is critical to healthy immune functions and a deficiency has been shown to impair the immune system.
Manganese	An important trace mineral needed for many vital functions including immune-system defenses.
Omega 3 Fatty Acids	Essential in reducing inflammation and having a healthy immune system.

PRO TIPS:

- **Vitamin D** - There are only a few food sources of vitamin D, so it can be very difficult to get enough of it through diet alone. If you are below therapeutic levels based on a [blood serum test](#), [supplementation](#) is highly recommended and encouraged.
- **Vitamin C** - The therapeutic level for vitamin C, like all nutrients is bio-individual. [A vitamin C flush](#) is a safe and easy way to determine how much of this important vitamin your individual body needs. A vitamin C flush gives your system very, very high doses of vitamin C to the point where it totally saturates the system – and in the process, brings the immune system up and supports rapid healing. [Liposomal vitamin C](#) is highly recommended.
- **Amino Acids** - Protein foods are broken down into parts called amino acids during digestion. You do not need to eat animal products to get all the protein you need in your diet. They are also found in plant sources such as beans, legumes, pumpkin seeds, and greens, such as collards and broccoli.
- **Foods for General Immune Support** - Include more fresh fruits and vegetables, turmeric, ginger and garlic. Add them to soups, salads, sauces and smoothies. Also add more fermented foods.
- **Digestion** - Digestive dysfunction will impact your ability to digest and absorb nutrients. I recommend that you do smoothies, soups or juices if you know or suspect your digestive health is less than ideal. Not sure? A [digestive health assessment and consultation](#) may be needed. [Let's chat about it!](#)

HERBAL SUPPORT

There are MANY herbs to support and defend the immune system. This guide is limited to antiviral herbal support to top off your immune system.

HERBS FOR IMMUNE SUPPORT AT-A-GLANCE

HERBAL SOURCE	IMMUNE FUNCTION
Andrographis Sometimes called “Indian Echinacea”	Stimulate immune function and halts viral growth.
Elderberry	Fights infections including influenza, herpes, viral infections and bacterial infections.
Echinacea	Inhibits bacteria and viruses from penetrating healthy cells.
Calendula	This antiviral herb fights viruses, inflammation and bacteria.
Garlic	It has antiviral properties.
Astragalus Root	A powerful antiviral herb that boosts the immune system.
Cat’s Claw	Has antiviral properties. Engulfs and destroys pathogens.

PRO TIPS:

Herbs should be taken with caution as they react differently based on your bio-individual makeup and any contraindications. It’s recommended to “go slow and low.” Take herbs in the smallest dosage recommended initially. If in doubt, contact your health care practitioner or schedule a [chat](#) with me for more information.

Herbal support can be taken as tea, tinctures, [capsules](#), [powders](#), [extracts](#), or [elixirs](#).

IMPORTANT: If you choose to use supplemental support, it’s important to purchase [high quality](#) and safe products.

KEEP YOUR IMMUNE SYSTEM PUMPED UP!

Despite the fact that our bodies are constantly challenged with fighting infectious microorganisms, most of the time, we can rise to the challenge and maintain reasonable health. Thank your immune system! While it's important to boost and defend your immune system with nutrient dense, bio-individual foods and herbs to top off your immune system, to keep your immune system pumping and functionally optimally it's also important to stop depleting your immune system with "food-like" substances and lifestyle activities that strain it.

Support Your Internal and External Environments

Internal Environment - Digestive System

A strong digestive system will create an environment for optimal digestion and absorption of immune boosting nutrients and elimination of harmful invaders, including the coronavirus. Reduce or eliminate the top three inflammatory and acid-forming food and "food-like" substances that damage your digestive system and deplete your immune function:

1. Gluten, Dairy, Meat, and Known Food Allergens
2. Processed Sugar
3. Packaged and Processed "Food"

Internal Environment - Water

Water regulates every function in the body, including the immune system. Without proper hydration, the immune system can be compromised in at least three ways:

1. Toxins accumulate in the colon increasing harmful microorganisms and weakening the immune system.
2. Water provides fluidity to the blood and lymph so that immune boosting nutrients can get in the cells and toxins can be effectively removed.

3. When we drink enough water on a regular basis, the water moistens the areas of the body where bacteria and viruses invade most frequently, such as the bronchi and gastrointestinal mucosa. The moist environment keeps the immune system activated, making them less vulnerable to microbes.

It's also critical to consume clean (filtered) water from a source you trust that is free of heavy metals and microbes:

- BPA free [bottled water](#) - **Good**
- Reverse Osmosis filtered water (UV Light) from health food stores - **Better**
- [Home filtration](#) system - **Best**

PRO TIPS

- Hydration Strategy - To provide your body all the water you need for optimal functioning, you need to:
 - Drink at least 1/2 your body weight in fluid ounces of water every day. Add to that 8 ounces for every 15 minutes of vigorous exercise or perspiration. Note: Soft drinks, juice, coffee, tea and other beverages do not count towards hydration. In fact, alcohol and caffeinated beverages actually trigger mechanisms that cause you to lose water and thus are dehydrating beverages.
- Immune Boosting Drink - To boost immunity and digestion, start the day with lemon water. Squeeze the juice of ½ lemon into 16 ounces of lukewarm water. Drink it on an empty stomach. Wait 30 minutes before eating.

Support Your Internal and External Environments

External Environment - Indoor Air

The coronavirus is airborne. Consider using an air purifier if you're living in a shared house or are working in a closed environment with lots of people. According to experts, air purifiers that contain HEPA filters or even lower grade filters can capture virtually all sizes of solid particles, including *0.1 microns in diameter - or the same size as the coronavirus. Turning on an air purifier could help reduce the spread of the coronavirus.

For those in places with central air (HVAC) system, make sure the systems contain filters and are well maintained. If your HVAC contains no filters, installing air purifiers in each room could still help reduce the spread of viruses.

***Reference:** Robertson, P. (2020, Feb. 6). Can Air Purifiers Filter Out The Coronavirus?
<https://smartairfilters.com/en/blog/can-air-purifiers-filter-out-the-coronavirus/>

Sleep More and Stress Less To Inhibit Immune Suppression

Sleep

If you need another reason to get a good night's sleep, this might be it....sleep helps the immune system. According to the [CDC](#), 7-9 hours of sleep are needed to strengthen your immune response to viral infections. Unfortunately, only 60% of us are actually getting that amount of sleep, so that leaves 40% of us sleep deprived, compromising our immune systems, and ultimately increasing the chance of getting sick in general, but specifically susceptible to the coronavirus. Get your sleep on to keep your immune system operating optimally.

Stress

We all experience stress. It's the long term, chronic stress (physical, emotional, mental, spiritual) that suppresses the immune system. When you are chronically stressed in "fight or flight" mode, your body produces more of the stress hormone, cortisol. Cortisol works to prepare your body to run away from the real or perceived threat. To do this, the immune system is compromised and suppressed. Managing your stress will keep your immune system pumped up.

PRO TIPS:

- You can reduce stress, decrease insomnia and infuse your body with a potent health promoting mineral (magnesium) by taking epsom salt baths.
- Blue light exposure (e.g., television, cell phone, laptop) delays the release of melatonin (a hormone that helps with sleep) and throws off circadian rhythms. Consider decreasing exposure to blue light a minimum of one hour before bed.
- Sleep more to decrease immune suppressing hormones. Track your sleep to make sure you are getting the minimum recommended hours (7-9).
- Stress less to keep your adrenals strong.

TOP OFF YOUR IMMUNE SYSTEM ACTION PLAN CHECKLIST

Assess your immune system

- TSTH Self Assessment

Feed your immune system

- Customize your nutrition

Keep your immune system pumped up

- Support your internal and external environments
- Sleep more and stress less

PRO TIP:

Pump It Up! - You could see a shift in your immune system in as little as two weeks. It is recommended that you do a follow-up TSTH Self-Assessment to determine how well your body is responding to your action plan.

Create Habits - It's not all or nothing when it comes to improving your immune system. Commit to the most ridiculously easy thing you can do RIGHT NOW! Hydration is always a good place to start. For accountability, ask a friend, family member or co-worker to work with you with the common goal of topping off your immune system. Your action steps don't have to be the same as your accountability partner, but they do have to be consistent.

I sincerely hope you found this guide useful. Remember, doing the basic things to support your immune system will create a foundation for good health, not only to defend against the coronavirus, but any invader.

You've got this!

Toni