Boosting Immunity: Functional Medicine Tips on Prevention & Optimizing Immune Function During the COVID-19 (Coronavirus) Outbreak

By the IFM Medical Education Team

With the spread of the COVID-19 coronavirus disease in the news, The Institute for Functional Medicine would like to remind you that there are several steps you can take to reduce your chances of being exposed to respiratory viruses and to boost your immunity in the event of exposure. The following information outlines what you can do to help keep yourself and your family safe.

Please note: Due to the novelty of COVID-19, no peer-reviewed research has been published regarding the effectiveness of dietary or lifestyle interventions for its prevention or treatment.

Prevention Strategies in Alignment With the Centers for Disease Control and Prevention

Behavior

**Hand washing:** The most well-established way to prevent respiratory infections such as influenza and coronavirus is frequent and thorough hand washing with soap and water. Scrub your hands thoroughly with soap and water for at least 20 seconds.

**Hand sanitizer:** Handwashing with soap and water is the best way to reduce germs, but if they are not available, alcohol-based hand sanitizers that contain at least 60% alcohol can help to reduce the spread of infection. Note: avoid any products containing triclosan, a known hormone-disrupting chemical.

**Covering your mouth and nose:** Cover your mouth and nose with a tissue when coughing or sneezing; if your hands are not free or you don’t have a tissue, cough or sneeze into your sleeve, not your bare hands.

**Not touching your face:** Avoid touching your eyes, nose, and mouth with unwashed hands, which can help provide the virus with a route of entry into the body. Since the average individual touches their face an average of 15 times per hour, remain vigilant!

**Keeping surfaces clean:** Clean and disinfect frequently touched surfaces, especially when someone is ill. Surfaces to consider include doorknobs, phones, computer keyboards, remotes, and other surfaces that are frequently touched in rooms such as the bathroom and kitchen.

Lifestyle

**Stress reduction:** Chronic stress can negatively alter immune system responses, making you more likely to get sick. Identify your personal stress reduction strategies and practice them regularly.
**Sleep:** Sleep has a big influence on immune function, so it is essential to get plenty of sleep. Practice good sleep hygiene and maintain consistent sleep hours—turn off screens, ensure the room is cool, quiet, and dark, and set a reminder to help yourself go to bed on time.

**Exercise:** Moderate, regular physical activity helps to boost immune system function by raising levels of infection-fighting white blood cells and antibodies, increasing circulation, and decreasing stress hormones. Establish and follow an exercise program to not only help prevent respiratory infections but also to improve cognitive and physical resilience.

**Nutritious foods/diet:** Research indicates that brightly colored vegetables and fruits boost immunity better than most supplements. Eat plenty of fruits and vegetables—aim for 10 servings per day. Include fermented vegetables or other probiotic-containing foods.

**Natural Means of Boosting Immunity**

Most over-the-counter medications only treat the *symptoms* of viral infections; most don’t actually help the immune system fight the infection. Although there is no research to determine what is effective specifically for coronavirus, the following are some natural modalities you can utilize to both address symptoms as well as boost your immune system if you do come down with an illness:

**Self-care:** When battling upper respiratory infections, top priorities are plentiful hydration and rest. Drink plenty of fluids; homemade vegetable or bone broths are also extremely beneficial. Various herbal teas/hot drinks can help with hydration and reducing symptoms; good choices include peppermint, ginger, eucalyptus, chamomile, and hot water with lemon, honey, and cinnamon.

**Sore throats:** Salt water gargles are excellent for loosening mucus and helping fend off bacterial throat infections. Hot teas and lozenges containing slippery elm are excellent demulcients (to relieve minor pain and inflammation of mucous membranes) for soothing irritated sore throats. Two tablespoons of honey in hot water can also help to soothe and decrease throat inflammation and pain. Chamomile and peppermint teas are also helpful for soothing irritated sore throats, as are teas or infusions made from marshmallow root and licorice root, both of which can act as soothing demulcents.

**Respiratory congestion & sinuses:** For respiratory congestion, use a humidifier, vaporizers, or steam inhalers, or spend time in steamy baths or showers. Vaporizers and inhalers can also be used with decongestants or essential oils such as eucalyptus, menthol, peppermint, or frankincense. Nasal xylitol sprays are very beneficial, as is nasal irrigation using a neti pot or nasal irrigation bottle. Buffered saline is easy to make or can be purchased in packets and eliminates any irritation to delicate, irritated mucous membranes.

**Supplements, nutrients, and foods to support immune function**

There are several nutrients, plant-based botanicals, and supplements that can boost immune function and provide symptom relief during illness and may help to shorten the duration of
illness. For preventing and treating viral upper respiratory infections, consider some of the following:

**Vitamin C:** Vitamin C may help to prevent infections, including those caused by bacteria and viruses. Regularly administered vitamin C has been shown to shorten the duration of colds, and higher doses of vitamin C during an illness can also act as a natural antihistamine and anti-inflammatory.

**Vitamin D:** Vitamin D, known as the “sunshine vitamin,” is one of the most important and powerful nutrients for supporting the immune system. Numerous studies have shown that it helps reduce the risk of colds and flu. Unfortunately, a high percentage of the population is deficient, so daily supplementation (ideally in the form of vitamin D3) offers the best protection.

**Vitamin A:** For short-term use and particularly for those with moderate vitamin A deficiency, supplementation can be extremely helpful in supporting the body’s ability to fight infections, particularly with regard to respiratory infections.

**Zinc:** Zinc plays a significant role in boosting immunity. Often available as lozenges, zinc can help to reduce the frequency of infections as well as the duration and severity of the common cold when taken within 24 hours of onset.

**Selenium:** Selenium, a key nutrient for immune function, is also an antioxidant that helps boosts the body’s defenses against bacteria, viruses, and cancer cells. It may particularly help to protect against certain strains of flu virus. Selenium is easily obtained from foods, with the richest source being Brazil nuts.

**Honey:** Honey, preferably raw, is a good demulcent (it relieves minor pain and inflammation of mucous membranes), has antioxidant properties, and has some antimicrobial effects. It is helpful for coughs and sore throats and can be added to hot tea.

**Garlic:** Garlic contains a variety of compounds that can influence immunity. Some studies have shown that both fresh garlic as well as aged garlic extract and some other garlic supplements may reduce viral upper respiratory infection severity as well as function in the prevention of infection with viruses that can cause colds.

**Probiotics:** Probiotics contain “good bacteria” that not only support the health of the gut but also influence immune system functioning and regulation. Studies have shown that probiotic use can decrease the number of respiratory infections, particularly in children.

*This document is only intended to identify modalities that may boost your immune system. It is not meant to recommend any treatments, nor have any of these modalities been proven effective against coronavirus. Always consult your physician or healthcare provider prior to using any of these modalities. For up-to-date information on COVID-19, please consult the Centers for Disease Control and Prevention at [www.cdc.gov](http://www.cdc.gov).*

**References**


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