# Boost Your Immune System to Fight the Coronavirus

Commentary about the coronavirus is endless. Those with <u>anti-China and anti-trade mindsets</u> bash China, those with anti-Trump agendas bash the president's response, and those with a big-government bias are using the crisis to argue for spending more money.

The etiology of the disease is uncertain, with cases showing up in Americans who didn't travel abroad and didn't have contact with an infected person. There is not even an accurate diagnostic test for the virus. Expert opinions may not be reliable.

Some people have begun stockpiling food. This is all well and good, but there is a more critical preparation step that few are taking.

In all the commentary, little is said about taking personal responsibility for boosting one's immune system to fight off the disease. Like the flu, the virus may wane in warmer weather. If so, like the flu, it is a good bet it will return next fall. Acting now to boost your immune system is prudent. Here is how.

#### Drink Less Alcohol

We all know that alcohol can damage the liver. Fewer people are aware of the effects of alcohol on the immune system:

First, it's important to know that the microbes living in your intestines, your gut's microbiome, plays an important role in fighting diseases. ... When you drink a lot of alcohol, it has many negative effects on your digestive system. It damages the epithelial cells in your intestines, making it harder to absorb many nutrients. It also severely disturbs your gut's microbiome, significantly altering the balance of

healthy and unhealthy bacteria. ...

Excessive drinking may impair the function of immune cells in the lungs and upper respiratory system, leading to increased risk for pneumonia, tuberculosis, and acute respiratory distress syndrome, or ARDS. Because the immunity of the mucus is impaired in both the lungs and digestive tract, any disease can become more severe. ...

Excessive drinking reduces the number and function of three important kinds of cells in your immune system—macrophages, T and C cells. Macrophages are the first line of defense against disease.

Perhaps you are just an occasional binge social drinker. Knocking down your immune system in a crowded public place is a terrible idea.

### Eat Less Sugar and Processed Food

<u>WebMD puts it this way</u>: "Eating or drinking too much sugar curbs immune system cells that attack bacteria. This effect lasts for at least a few hours after downing a couple of sugary drinks."

A sugary cup of coffee and a pastry in the morning compromises your immune system. At lunch, when you have a bottle of soda with your sandwich, your body's ability to resist illnesses going around the office is compromised. Eat enough sugar, and you "can reduce the ability of white blood cells to kill germs by 40 percent."

In the morning, consider eating an orange instead of drinking sugary orange juice. Throughout the day, look for opportunities to incorporate more immune-boosting vegetables in your diet. The Brassica family — broccoli, kale, bok choy, Brussel sprouts, etc. — are <u>especially noteworthy immune boosters</u>.

## **Exercise Regularly**

An essay by <u>Harvard Health Publishing puts it this way</u>:

Regular exercise is one of the pillars of healthy living. It improves cardiovascular health, lowers blood pressure, helps control body weight, and protects against a variety of diseases. But does it help to boost your immune system naturally and keep it healthy? Just like a healthy diet, exercise can contribute to general good health and therefore to a healthy immune system. It may contribute even more directly by promoting good circulation, which allows the cells and substances of the immune system to move through the body freely and do their job efficiently.

Even if you don't have a regular exercise regime, you can spend less time on social media, get up from watching CNN or Fox News, and get outdoors for a walk. "Moderate activity is all you need" to boost your immune system.

# Have a Sense of Purpose

The science behind how one's state of mind and illness are linked is controversial, but allowing our thinking to control us is never a good idea.

Researchers have questioned individuals about "how often in the past week they had felt happy or satisfied, and how often they felt that their life had a sense of meaning." They were looking to distinguish those who felt happy due to "hedonic well-being (characterized by material or bodily pleasures such as eating well or having sex)" and those who experienced "eudaimonic well-being (deeper satisfaction from activities with a greater meaning or purpose, such as intellectual pursuits, social relationships or charity work)."

Their results are eye-opening. They found "people with a meaning-based or purpose-based outlook had favorable gene-expression profiles, whereas hedonic well-being, when it occurred on its own, was associated with profiles similar to

those seen in individuals facing adversity."

Research findings support the idea that "eudaimonic well-being benefits immune function directly." In contrast, stress increases when we believe we must change our circumstances to achieve happiness. Stress is known to reduce the capacity of your immune system to fight viruses.

There are no guarantees. Despite our best efforts, disease may yet visit us. However this is no excuse to not work at tipping the odds in our favor.

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