



April 28, 2020

Can a Poor Diet Increase Risk of Contracting Coronavirus?

Integrative medicine specialist discusses if a healthy lifestyle can boost immune system.

A healthy diet and moderate exercise are known to prevent diseases, but can they boost your immune system to help ward off the coronavirus? Farshad Fani Marvasti, MD, MPH, answers questions about the novel coronavirus (Covid-19) and offers ways to boost your immune system. Dr. Marvasti is director of the Public Health, Prevention and Population Health theme at the University of Arizona College of Medicine – Phoenix.

Does food play a role in your immune system?

Food plays a huge role in your immune system. Plant-based foods have protective phytochemicals, nutrients and antioxidants that keep us healthy and boost our immune system. All plants have unique phytonutrients that help our body repair itself and strengthen its resistance to disease. For example, all plant foods have fiber. Fiber is a major source of food for our microbiome, which is a key component of a healthy immune system. We consist of 90 percent bacteria and 10 percent human cells. These ‘good’ bacterial colonies require fiber to stay healthy. Eating plant-based food sustains the microbiome, eating fermented foods such as miso, kim chi, kefir milk, yogurt or sauerkraut also contribute to the strength and diversity of our microbiome as a whole. Not having adequate intake of plant foods and eating excessive processed foods can be detrimental to our immune system. The Standard American Diet is unfortunately high in processed foods and low in plant foods, which makes us more susceptible to both acute infections and chronic diseases. Adding a serving of vegetables and fruits can make a huge difference.



How can you boost your immune system naturally?

One extremely simple way to boost your immune system is to drink enough water. Most of us do not drink enough water. Those who do not have certain medical conditions or medications that effect their water intake should drink two to three liters per day. Whenever you feel like you are getting sick, drink some water. Drinking enough water can prevent you from getting sick and having to get IV support due to poor hydration.

Two other ways to boost your immune system naturally are getting enough sleep and exercising. Practicing what we call good sleep hygiene and getting enough sleep maintains adequate melatonin levels that are protective against coronavirus. This is one of the hypotheses regarding why children seem to be less prone to this infection, namely that they have higher melatonin levels. Also, sleep is regenerative. Just like we need to charge our smartphones and devices, we also need to charge ourselves.

Additionally, exercise naturally boosts our immune system. It improves circulation, which helps our bodies recognize potential pathogens like viruses and fights them off before they get a foothold in our body. Exercise also enhances our mood.

What are unhealthy habits that worsen your immune system?

Unhealthy habits that worsen your immune system include not getting enough water, drinking too much caffeine and excess alcohol and eating processed foods. Drinking alcohol depresses your immune system for several hours after you drink. Caffeine depletes your body of water to fight off infection. Processed foods deprive you of vital nutrients needed to repair and defend against infections and chronic diseases. Also, being happy and laughing boosts your immunity, while getting angry can actually depress the immune system for several hours after an episode of anger. So paying attention to your mental and emotional health is important when thinking about immunity.

Being stuck inside all day can make people pick up some unhealthy habits. As a physician, what do you recommend to those who must stay indoors?

I recommend that people take time for walks outside while maintaining distance from others. Part of staying healthy is following a rhythm of activity, eating nourishing meals, maintaining healthy relationships and getting adequate rest and relaxation. Making a schedule that includes time to eat real food, connect with loved ones and friends, exercising and resting are key to thriving during quarantine.

As a physician, do you have any tips for going to the grocery store during a pandemic?

With any public outing, I highly recommend you wear a mask and potentially a face shield, depending on how crowded the place you are going is. Avoid crowds and avoid standing closer than six feet apart from others. Avoid touching your face and wash your hands as soon as you get home.