

How Can I Protect Myself, My Family, and My Community

There are many potential approaches from proven to experimental to ensure you, your family, and your community remain safe. These fall into two categories. The first is how to not get it in the first place and reduce spread and the second is how to support your immune system so you are more resilient to infection. This pandemic can bring out the best in us or the worst. It is a time for kindness, for calling friends, for FaceTimes with family, or hunkering down with loved ones and family in your home, cooking meals from scratch, and for finding ways to help those who are in need.

How to Avoid Infection with COVID-19

- **Social Distancing.** This is among the most effective way to prevent spread. Don't shake hands. Keep a 6-foot radius from others (unless they are healthy, uninfected people who live in your home). Cancel vacations, business trips. Restaurants, bars, schools, yoga classes, fitness clubs and more are shutting down. Work from home if you can.
- **Practice Good Hygiene.** Wash your hands for 20 to 30 seconds with soap and water. Hand sanitizer is ok but not necessary. If you are out and about, do your best to wash hands frequently and avoid touching your face (hard to do).
- **Stay Home.** Since restaurants, bars, sports events, and gatherings of more than 10 are not recommended, stay home and work on projects you have neglected. Write letters, play games, prepare home-cooked food. If the whole country stayed home for 14 to 21 days we could significantly slow the pandemic. San Francisco has already recommended its citizens stay home.
- **Protect Those At Risk.** The CDC recommends that people over 60 stay home and avoid unnecessary contact. If you have elderly parents find ways to support them with food and supplies. If you have an autoimmune disorder, cancer, or are on transplant medication be especially careful.

How to Support Your Immune System: Remember, Let Food Be Your Medicine!

- **Eat a whole foods, nutrient-dense diet.** Our immune system relies on nutrient-dense whole foods to function well. Death from infections in the developing world is often not due to the infection itself but the body's inability to fight it because of nutrient deficiencies. Since more than 90% of Americans are deficient in one or more nutrients at the minimum dose to prevent deficiency diseases like scurvy and rickets, we all need to focus on improving the quality of our diet. Since diabetics are more likely to die from COVID-19 and one in two Americans is pre-diabetic or diabetic this is a great opportunity to cut sugar and starch which suppress the immune system. For my favorite recipes visit drhyman.com/blog/category/recipes. I know a lot of people are ordering

their food now. If you're looking for great companies with healthy options, check out the following:

- thrivemarket.com
- butcherbox.com
- vitalchoice.com
- mariposaranchmeats.com
- grassrootscoop.com
- **Cut out sugar and refined starches.** Now has never been a better time for a sugar and junk food detox. Studies have shown that refined sugars can suppress your immune system for hours after ingesting. Limiting starch and sugar will help your immune system function better and your overall health improves. To help you detox from sugar and starch and reset your body to a healthy state I have created the 10 Day Reset which is available for free download at www.getfarmacy.com/free
- **Ensure adequate protein intake.** While most Americans eat adequate amounts of protein, some do not such as the elderly and vegan populations. Protein is critical for immune function and protein malnutrition is a big risk factor for death from infections. Eat approximately 1 gram/kg or about half your body weight in grams of protein a day, or about two four-ounce servings of organic, clean animal protein. Plant-based proteins (legumes, nuts/seeds) are adequate if consumed in enough quantity. Try tofu and tempeh from non-GMO soy for the highest protein concentrations.
- **Add garlic, onions, ginger, and lots of spices (oregano, turmeric, rosemary) to your meals!** Add these to your soups and vegetable dishes, as well as bean dips and sauces. Garlic and onions offer wide spectrum antimicrobial properties.
- **Eat multiple servings of colorful fruits and vegetables** high in vitamins C, A, and phytonutrients that support the immune system. Choose more leafy greens, cruciferous vegetables (broccoli, Brussels sprouts, and cauliflower), peppers, sweet potatoes, and squashes. Aim for 2 servings of fruits and 8 or more servings of vegetables! A serving is half a cup.
- **Eat fermented foods to support your microbiome and immunity.** Eat sauerkraut, kimchi, natto, miso, tempeh, unsweetened yogurt, kefir. They also keep well.
- **Alkalize your body.** Sugar and processed foods tend to make your body slightly more acidic and more receptive to the COVID-19 virus. Eating whole plant foods and lots of them, 5 to 8 cups a day, is a good way to alkalinize your body. Try making big vegetable and bone broth soups which can help improve your pH.
- **Drink plenty of fluids, especially warmer fluids.** Consuming adequate fluids supports all your bodies' functions including the immune system. [Make soups and broths](#) (from scratch with fresh vegetables is always best) and have them throughout the week. Drink herbal teas like ginger and turmeric tea. Keep a bottle of filtered water with you at all times. Avoid concentrated fruit juices and sweetened beverages, as the sugar content is harmful for the immune system.
- **Get sufficient sleep!** We all know [sleep](#) restores and heals the body. Without adequate sleep, optimal immune function is next to impossible! Get in a better rhythm and head to bed earlier. Aim for seven to eight hours a night. Incorporating various [relaxation and](#)

[breathing techniques](#) throughout the day to help with stress and allowing the mind to rest is also very helpful!

- **Get regular exercise.** Mild to moderate exercise (for approximately 30-45 minutes) helps boost the immune system. Avoid overexertion such as training for endurance events when you are feeling run down. This will lower your immune defenses. If you are able to exercise outside in less populated areas, great. If not find workouts and yoga classes online. [Try the 7-minute workout app.](#)
- **Practice meditation and yoga.** The data are clear. Increased levels of stress increase susceptibility to viral infections. In one study volunteers had cold viruses injected into their nasal passages. Only the ones who scored high on the stress questionnaire succumbed. Now is the time to [learn meditation](#), double down on your practice, do yoga, take hot baths, do deep breathing, practice home massage with your loved ones.
- **Start a garden.** If you live in an area with a lawn or some access to land, grow some of your own food. During WWII, victory gardens produced 40 percent of the food in America.

How to Supplement for Immune Function

There is an increasing number of health claims and the promotion of supplements has also increased in the coronavirus frenzy. There is a lot we don't know and a lot we do. It's important not to go overboard and be sensible.

Let's start with an overview of the vitamins, minerals, and herbs you need and why they are important.

- **Multivitamin/Mineral:** This is the foundation for any health support regimen. It's a good way to cover the basic vitamins and minerals your body needs for day-to-day functions. If you aren't on a good multivitamin you should get and stay on one. Look for a high-quality, broad-spectrum multivitamin and mineral.
- **Vitamin D3:** Adequate vitamin D status is critical for optimal immune function and this cannot be achieved without supplementation during the winter months. Studies have shown that people with vitamin D deficiency are 11 times more likely to get a cold or flu, while supplementing with vitamin D can reduce colds and flu by 42%. It is best to get your levels of 25-OH vitamin D checked for accurate dosing. Blood levels should be above 30 ng/dl, however, optimal levels are probably closer to 50ng/dl for most. Many need 5,000 IU or more of vitamin D3 a day in the winter. Start with 2,000 IU for adults, 1,000 IU for children.
- **Buffered Vitamin C:** The role of vitamin C in supporting the immune system has long been known. Take 500-1,000mg throughout the day with meals and snacks.
- **Zinc citrate:** You can take an additional supplement or consume more foods high in this powerful immune-supporting nutrient. Seafood—especially oysters—red meat, and pumpkin seeds are the best food sources. Take 30 mg per day.

- **Probiotics:** A healthy gut flora supports a healthy gut, a major barrier against pathogens and integral to the immune system. Look for brands that offer several species of good bacteria and contain at least 5-10 billion organisms per capsule. Lactobacillus plantarum and spore forms of Bacillus are the best for immunity.
- **Fish Oil (Arctic Cod Liver Oil):** This old-time remedy for good health and robust immunity still stands true! In addition to the good fats, this cod liver oil contains additional vitamins A and D for added immune protection.
- **1-3, 1-6 Beta Glucans:** Research has shown that these compounds up-regulate the function of the innate immune system. This part of your immune system is the first line of defense against viruses and bacteria. It helps your white blood cells bind to and kill viruses and bacteria.
 - **Note:** Patients with autoimmune diseases should not take this.
- **Natural anti-viral herbs:** Many herbs have broad-spectrum antimicrobial effects or immune-enhancing effects. Formulas contain different immune boosters such as astragalus, green tea extract, andrographis, and monolaurin.
- **Mushroom Extracts such as reishi, maitake, shiitake, turkey tail, and cordyceps:** These provide immune-supporting properties. Cooking with medicinal mushrooms like shiitake is also helpful.
- **Theoretically beneficial supplements.** The ways in which these products work may provide some benefit for prevention and treatment. Potentially beneficial ingredients include quercetin, resveratrol, curcumin, rosemary, Asian ginseng, alpha-lipoic acid.

It is not necessary to take all of these. Just starting with a multivitamin, vitamin D3, vitamin C, zinc and fish oil is a great start.

If we all stay calm, avoid the pandemic of fear, follow our common sense, and take care of ourselves and our families we can weather this and dramatically reduce sickness and death. But we have to come together (at least 6 feet apart!) as humans, and as a society to combat this pandemic.