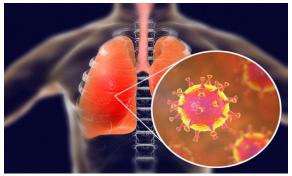
During this epidemic of Covid-19, there are a lot of things we can do individually and as a community in order to prevent infection or interrupt the spread of the virus, as well as weaken or destroy the virus if we get infected. This will greatly improve our chances of having mild symptoms and recovering without damage to our organs.



Our understanding of Covid-19 is still evolving; it appears that the incubation period of the virus in the body, once a person gets infected with it, can take up to 14 days (in some cases it can be longer), but usually around 3-9 days. It can cause upper respiratory illness, with fever, dry cough and fatigue most common symptoms, but some people experience more digestive symptoms. Shortness of breath is a symptom which warrants testing even without fatigue or fever.

The period before any symptoms start is the window of time when we can most effectively take steps to get our immune system in the best shape and prevent viral spread. Do not wait to develop symptoms. If we encounter the virus, which is quite possible even with the best prophylaxis measures, our goal is to successfully beat it and prevent the development of the late stage of the disease. The outcome greatly depends on how well we are prepared to deal with it NOW. Do not wait to be tested and have the infection confirmed

As prophylaxis, keep your immune system in the best fighting shape. Now is the best time to act, whether we help ourselves to stay healthy and avoid getting sick, or prevent spread of the virus in the community. Avoid or minimize exposure: practice all the preventative protective methods: wash hands with soap, avoid touching face, clean all surfaces thoroughly and frequently, wear a mask, wash clothes, keep social distance or practice quarantine.

If symptoms develop, additional measures must be taken to stop the infection from developing the dangerous phase and getting in the lower respiratory tract and other organs, where it does the most damage.





### Basic daily immune protocol for prophylaxis:

- 1. Vitamin C 3000-5000 mg daily, taken in 500-1000 mg doses, with water.
- 2. Vitamin D3 4000-5000 iu, taken with food that has some fat in it, as it is fat-soluble
- 3. Vitamin A (not beta-carotene) 10,000-25,000 iu, with fat-containing foods.
- 4. Black Elderberry (Gaia is a good brand), 1 tsp 1-2x daily.

**Note:** A question that comes up a lot is whether elderberry can cause an excessive immune reaction that will trigger "cytokine storm" – a dangerous out-of-control inflammatory state with severe systemic distress. This rumor seems to stem from a 2001 study where part of the plant elderberry was studied in a test tube and elevation of immune pro-inflammatory chemicals. There is no mention of it causing cytokine storm and advice against it in the study. Furthermore, there has not been a single case of cytokine storm known before or since this study. The whole plant, not an isolated constituent, has a balancing overall effect and on multiple biochemical pathways in the body. This valuable medicinal plant has centuries of safe clinical use in humans, not a test tube. And hundreds of studies confirming this. NEVERTHELESS, in people with autoimmune conditions, extreme care should be taken when dealing with immune stimulating substances in any situation.

- 5. Agarikon by Host Defense 1 cap daily, with or without food. This is a native American medicinal mushroom, from the Haida native medicinal tradition. It is an immune modulator, antiviral and a gentle tonic; it helped save the nation during smallpox epidemic.
- 6. Zinc 15-30 mg (not to exceed 30 mg daily), with food. Zinc help's stop viral replication in the body, Quercetin and EGCG facilitate it's entry into the cells.
- 7. Quercetin (250 mg 2-3x daily) opens the channels for zinc to enter our cells and block viral replication. It is also cardioprotective, an antioxidant, immune modulator and a antihistamine.
- 8. Green tea, 3-5 cups daily: its constituents **EGCG** also help Zinc get into the cells and turn on our cellular defense mechanisms.
- 9. Astragalus tincture 1 tsp 1-2x daily an herb that strengthens the lungs (as well as liver and kidneys) and helps gently boost immune system without sending into an overdrive. It can also be taken in capsule form.



10. Fresh garlic 1-3 cloves daily, chopped, with hot water. Add cinnamon to food (apples)



If symptoms such as shortness of breath, cough, fever, fatigue, redness around the eyes, loss of senses of smell and taste (but also digestive upset, muscle aches), develop – 1) contact your doctor and get tested, 2) double the doses of Vit C, Vit D, Vit A, resveratrol for 5-7 days. 3) Add andrographis (can also add coptis) 1 dropper 2-4x daily in water, it is strongly antiviral. 4) Continue Zinc and Quercetin.



- 11. Drinking hot liquids water, tea- at 133 F or slightly higher. Boiling water is 212 F, so this is considerably lower.
- 12. Stinging nettles, greens and root tea, in green smoothies, in soups or sautées. Nettles help cleanse and enrich the blood, produce immune cells and block the virus. The root is protective against the virus. Nettles are already out and are at their best this time of year, to be used fresh in smoothies or cooked.
- 13. Herbal tea with antiviral effect, also benefiting digestion the nervous system: 1 t each herb, dried or 3 T fresh herbs: ginger, licorice, lemon balm, mint, chamomile, nettle. Bring 3 cups of water to boil, simmer ginger and licorice, covered, for 10 min, add the rest of the herbs, simmer 3-5 min, turn the heat off and step for another 5 min. Strain and drink through the day.
- 14. We know now that certain groups of people are at a greater risk of developing a severe disease from this virus, with highest mortality. Some of those are the elderly, people with weakened immune systems, people w chronic cardiovascular and respiratory conditions, smokers, people with poor antioxidant status, and those who had a massive viral exposure versus mild exposure. Still, there are cases of people in these groups who have recovered from this disease. Many functions in our body, including healthy immune response, depend on our antioxidant level. Nourish yourself with antioxidant-rich foods and take antioxidant supplements, such as resveratrol, quercetin, Vit D, melatonin, NAC, all protective against Covid-19.

Our immune system is our best protection. This virus has been around in our state for many weeks at this point, and many people have already encountered it and overcome it without getting sick, or with mild symptoms. To be able to ramp up



our immune defenses and defeat the virus, we need certain nutrients. These come from whole, unprocessed foods, including antioxidant-rich foods, foods high in fiber, protein and healthy fats, i.e. variety of colorful vegetables (leafy greens, carrots, beets, broccoli, kale, radishes, watercress, Brussels sprouts, lettuce, cucumbers, spinach, blueberries, raspberries, squashes, celery, green beans, avocados, fresh herbs), wild fish, chicken, organic eggs, some grains (buckwheat, wild rice, millet, barley), ghee, olive oil.

On the other hand, certain foods weaken our immune defenses (sugar, processed foods, flour goods, gluten) or can feed the virus due to their high arginine content (coffee, chocolate, potatoes, nuts), so avoid minimize those for the time being.

- 15. Get plenty of sleep. Your body heals and recovers when you sleep
- 16. Keeping in mind physical distancing, get outside in nature, be in the sun, get fresh air, move!
- 17. Practice deep relaxed breathing: Deep calm breath helps cleanse and ventilate the lungs and expel stale toxic air from the respiratory system, provide oxygen for cellular energy, calm nervous system that may be in a state of heightened stress these days.

Stay healthy and stay connected with your community. We are physically distancing but staying socially and spiritually connected.

This document is not intended to be a complete guide during this epidemic. It will hopefully help you be proactive and stay safe and take care of yourself and each other for best outcome. Feel free to reach out with any questions.

Love and blessings to all.

Dr. Nina Walsh



