



## Supporting the Immune System Through Diet and Lifestyle

### Food

This is a great time to fully implement what we always recommend for optimal health, including optimal gut health.

#### Include:

- Maximal colorful vegetables and whole fruit (if possible organic and local). During this time, I recommend aiming for vegetables with every meal. Important players are onions, garlic, mushrooms, cruciferous vegetables, carrot family (carrot, celery, parsley, cilantro), blueberries, purple grapes, apples, and citrus.
- Adequate protein: I recommend some concentrated protein—vegetarian or animal—with every meal.
- High-quality fats (extra virgin olive oil or avocado oil), and nuts. If you already using fish oil, keep using it.
- Adequate whole, high-quality starchy carbohydrates, especially at dinner to lower your cortisol and help you sleep.
- Green tea in moderation.
- Stay fully hydrated with abundant filtered water or water with lemon juice added.

#### Avoid or keep to a bare minimum:

- Avoid known or suspected reactive foods (gluten, dairy, corn, etc.). Dairy, specifically casein, is a trigger of inflammation in many people, regardless of allergenicity.
- Avoid toxic triggers of inflammation by purchasing organically grown.
- Avoid/reduce refined, processed, packaged foods.
- Avoid/reduce refined sugar, which reduces the innate immune response (vital in responding to novel viruses, for which none of us have antibodies). This includes cane sugar, beet sugar, corn syrup, maple syrup, agave, and fruit juice. If you use these things, please do so with a balanced meal, which blunts their effects. Small amounts of honey can help immune function, but don't use if you are overweight or have blood sugar imbalances.
- Avoid overuse of caffeine and other stimulants (which increase “fight or flight” activity). If you use these, have them with or after food, which blunts their negative effects.

- Keep alcohol, which taxes your antioxidant reserves, to a bare minimum. If you drink, make it red wine, which supplies beneficial resveratrol, and enjoy it with or after food.

Take care of your digestive health and your gut, which has an outsized effect on your immune vitality! See food recommendations above and let Dr. Fenske know if you are having GI problems so that she may help you.

## **Sleep**

If possible, get even more sleep than you usually do: 7 to 9 hours for most of us. If you are struggling with sleep, this is important to correct now. See our sleep hygiene handout. If your sleep issues persist, I invite you to consult me about this.

Increase your melatonin. The naturally high melatonin levels in children may be part of the explanation as to why they are not getting sick with COVID-19. To enhance your production, keep lighting low after sunset, sleep in total darkness, go to bed early, turn off your WIFI as much as possible and certainly at night. If you must view screens or be in brightly-lit rooms at night, use orange blue-blocking goggles or glasses (Amazon). Get outside in bright light as early as possible in the morning. Middle-aged and older people may need to use supplemental melatonin between sunset and bedtime (we use Melatonin SR).

## **Exercise**

Walk, run, or bike outside. We know that people who are more aerobically fit simply do better with immune—specifically respiratory—challenges than people who are not. And physical movement enhances circulation of blood and lymph. If you cannot exercise outside, there are abundant opportunities for at-home exercise, including online yoga, Zumba, aerobics classes. Use of a large exercise ball is great for posture and circulation.

## **Stress Response**

Stay calm, peaceful, and joyful if you can. If you've been wanting to start a meditation practice, now is the perfect time. Dr. Fenske likes the app from Center for Healthy Minds at UW called Healthy Minds Program. If you already have a prayer practice, you don't need my advice. Stay informed by reliable sources; but avoid information overload. It's simply not helpful. To function normally, the immune system needs us to stay out of "fight or flight" as much as possible. Find something that makes you laugh or be inspired. Sing! Dr. Fenske recommends learning to play the ukulele!