

To my present and a few previous patients,

April 6, 2020

Covid 19 has certainly brought concerns to everyone. The fact that there have been two cases in Gillespie County and of course, the projection that over 70% of us will catch this eventually prompts me to write. Though most cases will be mild, the original projections said there could be up to 240,000 deaths in the United States and over 95,000 of these by August. The most recent Institute of Health Metrics and Evaluation model is predicting significantly less and that the deaths will stop sooner. Updated yesterday, only somewhere between 49,420 and 136,400 deaths are likely, ending by June 19th. Though this is good news, and social distancing is likely the main reason, still, that is a lot of people.

Looking back at information on previous pandemics shows that they can last for years. The Spanish Flu, for example, lasted for three full years going from January of 1918 to December of 1920. SARS, another coronavirus, lasted 2 years. The swine flu lasted 18 months. In context, the WHO estimates that seasonal flu claims 250,000 lives yearly. Older people are at greatest risk, particularly those of us with chronic diseases, especially the immune-suppressed among us.

By chronic disease, I mean anything requiring medication. By immune-suppressed, today I am addressing those with mildly underactive immune systems, meaning ones who seem to catch something every year, whose colds seem to linger longer than ten days, or who know one of the following:

- they carry a lower white blood cell count,
- or who know they have a low secretory IgA,
- or know they have with mycotoxins which are known immunosuppressants.
- They know they have “leaky gut.”

So, in hopes we might each of us avoid becoming one of those datapoints, lets look at enhancing our own immune systems. Included are some general thoughts and also some specific recommendations for prevention and early treatment.

What seems to be killing people is the overwhelming cytokine storm that the virus provokes from our own immune system. Cytokines are chemicals made by our immune system which ramp up our body's ability to fight things through the secretion of fluids and inflammatory chemicals. The desired effect is to limit the spread of infecting particles and to recruit other inflammatory cells to help. A general immune response feels, in the beginning, like that flu-like pervasive achiness, fever and brain fog occurring in tandem with the local symptoms of cough, sore throat and runny nose. Initially the virus stays “on top” of the respiratory lining, but eventually, perhaps by day 4, it invades epithelial cells. The sheer numbers of viral particles released after these first few days provoke an overwhelming response. Once getting into the deeper tissues, dangerous cytokine excess begins, leading to that perilous aspect requiring ventilators. The effect is to produce excessive fluid which in the lung means the patients basically drown. Or they oxygenate so badly that organs fail and death ensues. For survivors, the aftermath of this serious aspect will be permanent lung damage to some extent.

What is recommended most for prevention and what may help with early infection? What can limit cytokine storm? The following list begins to answer these questions.

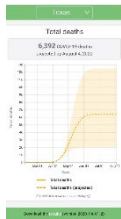
My next communication will answer “What are the most helpful foods? What specifically do I limit? Hint: sugar, for starters.”

**What may help most with prevention and early infection?** Other than hand washing, social distancing and wearing masks, the following can boost/modulate our immune system and help an illness not progress to the severe cytokine storm. The doses listed are a preventive, limiting dose. Early infection, once proven, invites much higher doses of the same substances...find most of these on Amazon, buy good brands with the letters GMP or FDA approved facility on the label, I have a few in stock, but many of them have been hard to get currently from my supplier:

- Vitamin D 5,000 mg daily
- Vitamin A 10,000 to 25,000 units daily
- Vitamin C 500 mg twice daily
- Propolis 2 sprays to posterior pharynx 4x daily
- Hypochlorous acid spray – can be used liberally to sterilize skin, mouth, even eyes, as well as keyboards and doorknobs.
- Anti-viral, immune modulating phytonutrients
  - Quercetin 1000 mg twice daily
  - Resveratrol 100 – 150 mg daily
  - Green tea 5 cups daily
  - NAC 600 mg twice daily
  - Melatonin 5-20 mg daily
  - S. boullardii 1 capsule twice daily
  - Spore forming probiotic such as Megaspore or Corebiotic 1-2 daily
  - Elderberry 500 mg daily (of USP standard of 17% anthocyanosides)
  - Kaempferol found in propolis, honey

A very helpful link of Interest for your further reading: A position paper by the Institute of Functional Medicine: <https://bit.ly/2ULjQTI>

Graphically the original model's estimated death rate in the US by August:



Many of my patients have had testing that helps us know if they have increased risk due to mold, dysbiosis or inadequate detoxification. Those would include organic acid testing, mycotoxin testing liver function tests, GI stool testing and CBCs. I'd refer you to your relevant labs and adjust your supplements with immune modulation in mind. I'd suspend any antibacterial/mold-killing products for now. You need your microbiome intact in whatever state it is in.

Revising your supplements and optimizing the prevention of cytokine storm is a huge emphasis. I am available for online or telephone consultations as you see the need. Just email my staff. [staff@see-wellness.com](mailto:staff@see-wellness.com)

Very truly yours,

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