BE HARD TO KILL

Top Ten Tips to Reduce Your Risk of Succumbing to any Respiratory Virus

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The current COVID-19 pandemic is teaching us all some very valuable lessons - not the least of which is the importance of preparedness. And being prepared to face the newest strain of a virus has nothing to do with stockpiling toilet paper. Even when this COVID-19 outbreak is in the rear-view mirror, it’s not a matter of IF but WHEN the next pandemic will occur. Influenza, Coronavirus (SARS), Parainfluenza, RSV, etc. are all very real threats in this modern world of global travel and population density. And yet, no pandemic in history – not even the famed Spanish Flu of 1918 – has killed 100% of those it infected. So why is it that not everyone who is directly exposed to a respiratory virus gets sick? And for those who do get sick, why is it that complications and deaths only occur in a small minority of infected patients? Thankfully these questions have all been answered and there is a lot you can do to prepare yourself.

The “germ theory” of disease states that diseases arise from microorganisms outside the body. Today the “germ theory” dominates our medical practices – which is why disinfecting wipes, hand sanitizer, bleach, and hydrogen peroxide are sold out everywhere right now. The “terrain theory” states that diseases cannot occur in a healthy host – which is much more consistent with the naturopathic medical perspective on infectious diseases. Dr. Rudolph Virchow (1821-19020 – a German physician known as “The Father of Modern Pathology” summarized his career in medicine as follows “If I could live my life over again, I would devote it to proving that germs seek their natural habitat – diseased tissues – rather than being the cause of disease.”

As we’ve seen in statistical reports from around the world – the COVID-19 virus is only causing severe illness and/or death in the sickest, the weakest, the oldest, and the most immunocompromised among us – a finding consistent with Virchow’s observations on the germ theory. Healthy, young, well nourished individuals are virtually unaffected by coronavirus – or they only develop mild symptoms of the common cold. But not every young person is healthy and not all elderly patients are at high risk. There have been plenty of 80-90 year old coronavirus patients that have survived and recovered while others that were 30-40 years younger did not survive. So, while your age is predictive of your risk of dying of an infectious disease, being “young” is not enough of a guarantee that you can afford to do nothing to prepare. Indeed, in our practice, we have some octogenarian patients that are healthier than most teenagers today.

Regardless of how many candles were on your last birthday cake, there are so many things you can do NOW to reduce your susceptibility to any infectious disease - including coronavirus. And the older you are, the smaller your error window gets for poor lifestyle choices. Just think, if more of us took such accountability for our health and for our lifestyle choices - we would not all have to freeze in a state of panic at the next pandemic. You really can “boost” your immune system. So, what are the TOP TEN most important things you can do NOW to be hard to kill?

1. Nutrition. Of course, it all starts with what you eat (and, perhaps more importantly, what you don’t eat)
2. Sleep.
3. Exercise.
4. Hygiene.
5. Hydration.
6. Turn up the heat.
7. Stress reduction.
8. Nourishing and fortifying your microbiome.
9. Taking the right vitamins.
10. Avoiding toxins wherever you can.
1. **Eat Healthy** – “Eat FOOD, Mostly Plants, Not too Much” (Michael Pollan – *The Omnivore’s Dilemma*)

   a. **Fruits and Vegetables**
      
      i. Minimum 10 servings per day (5 cups) – as many bright colors as possible. Taste the Rainbow!
      
      ii. Choose Organic whenever possible
         
         1. (visit [www.ewg.org](http://www.ewg.org) for an updated list of the “Clean Fifteen” and the “Dirty Dozen”)
         
         iii. Consider eating Low FODMAP if you are prone to IBS/IBD, gas or bloating – Minimize consumption of fruits and vegetables that are higher in FODMAPS, which are carbohydrates that can promote the overgrowth of yeast and bacteria in the gut (i.e. SIBO).
   
   b. **Fermented Foods** (caution if you are histamine intolerant) Naturally rich in probiotics
      
      i. Kombucha – fermented fizzy tea
      
      ii. Kimchi – fermented cabbage or radishes, popular Korean side dish
      
      iii. Sauerkraut – shredded cabbage fermented by lactobacillus bacteria
      
      iv. Miso, Natto, and Tempeh – fermented soybeans
      
      v. Kefir – a tangy cultured dairy product with a much higher amount of probiotic cultures than yogurt
   
   c. **Bone Broth** – clinically proven to help clear congested nasal passages and reduce inflammation. Also improves gut health and most of your immune system resides in your intestinal lining.
   
   d. **Avoid Immune Kryptonite** – these “foods” weaken all of us
      
      i. *Sugars* – Corn Syrup, Rice Syrup, High Fructose Corn Syrup, Agave Nectar, Turbinado Sugar, Evaporated Cane Juice – It doesn’t matter what you call it, it’s going to weaken you.
      
      ii. *Refined Grains* – enriched wheat flour, corn meal, white bread, white rice, most pastas.
      
      iii. *Alcohol* – alcohol of any kind can lower your immunity. Many people have immune reactions to brewers yeast making fermented alcohol (beer, wine, and some liquors) especially disruptive
      
      iv. *Hydrogenated/Trans Fats and Seed Oils* – Vegetable Oil, Canola Oil, Corn Oil, Sunflower, Safflower, Grapeseed, Soybean Oil. All oxidized and highly inflammatory
      
      v. *Food Additives* – artificial sweeteners, food dyes, artificial flavors, preservatives.
   
   e. **Food Sensitivities** – a growing number of us are developing immunological reactions to foods that can result in inflammation, fatigue, and a weakened immune system. Your Naturopathic or Integrative Medicine doctor can order diagnostic testing to determine exactly which foods you might need to avoid.
      
      By far, the most common food sensitivities are:
      
      i. Gluten
      
      ii. Dairy
      
      iii. Other possibilities include eggs, soy, nuts, legumes, lectins, etc.
   
   f. **Intermittent Fasting** –
      
      i. Fasting helps to improve insulin sensitivity and regulate blood sugar, thereby lowering the production of Advanced Glycation End Products (AGE’s). AGE’s are known to cause inflammation and interfere with the immune system.
      
      ii. 16:8 – aka Time Restricted Eating. 8hr window if eating everyday, 16hrs fasting
      
      iii. >24hrs fasting. Induces Apoptosis – aka “taking out the garbage” of cellular repair.
      
      iv. Under medical supervision, fasting for 3 Days has been shown to reset the gut, drop inflammation, and boost immunity.
2. **SLEEP** – Minimum 7 hours per night!
   a. Clinical studies have proven those who average **less than five hours** of sleep per night have significantly increased risk of acquiring a respiratory virus than those who slept greater than seven hours per night.

3. **EXERCISE** – Minimum 150 minutes per week
   a. Muscle is Medicine – Sarcopenia (loss of muscle mass) is predictive of increased risk of infection and increased mortality from pneumonia in older adults.
   b. Immunosenescence
      i. Age related decline in immune function
      ii. Decreased response to vaccinations
      iii. More inflammation and tissue damage associated with infections
   c. Hormesis – excessive exercise can weaken the immune system.
      i. Regular bouts of moderate intensity exercise up to 45 minutes benefits host innate immunity
      ii. High performance athletes lose almost as many training days due to illness as they do due to injury.
      iii. Sport related stressors can increase risk of infection in team sport athletes. Monitor sIgA to assess risk.

4. **LIMIT STRESS**
   a. Meditation – 5 minutes of silence can change your entire day.
   b. Breathing Exercises – box breathing. 4-7-8 breathing. Nasal breathing.
   c. Gratitude Practice – train your mind to look for the positive in any situation.
   d. Psychosocial stress is consistently linked with increased risk of respiratory infections.

5. **KEEP CLEAN** – wash your hands and don’t touch your face!
   a. Hand Soap vs Hand Sanitizer
   b. Disinfectant – contact time is key.
   c. Colloidal Silver
   d. Survival on viruses varies with temperature, humidity, and surface type
   e. Masks can reduce contagion, but they don’t prevent infection.

6. **HYDRATION**
   a. Effects of Dehydration on the Immune System – your lymphatic system is 99% water
   b. Water Filtration – Reverse Osmosis
   c. Trace Minerals – Quinton Tonic (structured water)
   d. Electrolytes

7. **HEAT IS YOUR FRIEND** – many viruses cannot survive long on surfaces when temperatures rise above 20°C (68°F) which is why more people get colds/flus during the winter months. Heat Shock Proteins (HSP) are induced when body temperature exceeds 38°F(100.5°F) and are proven to boost immune response.
   a. Infrared Sauna
   b. Sunlight – 20mins per day of direct sun exposure
   c. Don’t Fear the Fever! Minimize the use of antipyretics like Tylenol or Advil.
   d. Exercise can also raise core temperature and boost immunity.
   e. Hot Baths (with Epsom salts!)
8. **Take Immune Boosting Vitamins and Supplements** – nutrient depleted food and increased environmental threats has rendered supplements a NECESSITY today if you want to enjoy good health. Quality is KEY!
   a. **Vitamin C** – minimum 2000mg (2g) per day. Liposomal is ideal. Increase dose “to bowel tolerance” Leading theory why humans/primates are more affected by coronavirus than any other species.
      i. Carotenoids are not equivocal to Retinoids. Beta Carotene is NOT Vit. A
      ii. Dosing is based on age/body weight – always ask your doctor.
      iii. Most adults can take 200,000-250,000i.u. per day for up to 3 days (72hrs) as an acute anti-viral dose.
   b. **Vitamin A** – powerful first-line antiviral, a deficiency of Vitamin A is COMMON and the W.H.O. calls it “the most deadly deficiency in the world”
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   c. **Vitamin D3** – minimum 2000i.u. per day (ideally in combination with Vit. K2). Most adults need at least 50,000i.u. per week to maintain optimal blood levels.
      i. Check your blood levels at least once per year and aim for 50-80ng/dL
   d. **Zinc** – lozenges, nasal sprays reduce respiratory infections.
      i. Important to maintain copper ratio (Zn/Cu)
   e. **Cysteine** (AcetylCysteine/NAC) – sulfur based amino acid that dissolves mucus, reduces inflammation, and improves respiratory function. Can be taken orally or nebulized/inhaled. Precursor for the synthesis of the powerful antioxidant glutathione.
   f. **Mushrooms** – Cordyceps, Reishi, Shitake, Maitake
   g. **Colostrum** – mother’s milk, usually bovine derived, rich in immunoglobulins. Reduces risk of infections both gastrointestinal and respiratory.
   h. **Herbal Antivirals** – Astragalus, Oregano, Elderberry, Licorice Root, Skullcap
      i. The myth of the “cytokine storm”
      ii. Consider micronutrient blood tests to accurately assess your own nutritional needs
9. **Mind your Microbiome** – 100 Trillion Friends to call your own!
   a. **Probiotics** – potency, viability, and diversity is key.
      i. Consider incorporating fermented foods.
      ii. Spore Form
      iii. Oral/E.N.T. Probiotics – chewable Strep. Salivarius reduces risk of respiratory virus adherence to the mouth/throat even when directly exposed.
   b. Significantly Increased Risk of getting a respiratory virus after Antibiotics
   c. **Humic Acid** – soil based mineral compound.
   d. Fiber is a “prebiotic” – a minimum 35g of fiber per day is needed to nourish your microbiome. Taking probiotics and not eating enough fiber is like throwing a bunch of fish into a lake and never feeding them. Soon you’ll have a rotten mess.
   e. Consider stool microbiome testing – CDSA, “Gut Zoomer”, Thrive, VIOME, etc.
10. **Environmental Health**
   a. Indoor Air Quality
      i. Mold Exposure – consider ERMI tested or certified home inspectors.
      ii. Air Filters – Austin Air, IQ Air
      iii. Plants that improve indoor air quality
      iv. Humidifiers – COVID-19 does not survive long in 50% humidity
      v. Diffusers with pure essential oils.
   b. EMF Exposure – TIME, DISTANCE, SHIELDING
      i. Air Travel – most commercial flights travel above the atmosphere, exposing everyone onboard to some degree of cosmic radiation. Higher flight altitudes, longer flights, and flights nearer to the north or south pole increase radiation exposure.
      ii. Cell Phones – 18-24” is an exponential difference from direct contact with the body. Use shielding devices whenever possible. Limit talk time – use text. Consider Dr. Mercola’s latest book “EMF’D” for more on this important health topic.
      iii. Grounding – let your bare skin touch the earth.
   c. Pesticide Residue –
      i. hire “green” pest control companies
      ii. use organic pest control products around your home or office
      iii. choose organic foods whenever possible.
      iv. Pesticides destroy your microbiome and deplete you of nutrients
   d. Reduce Your Everyday Toxin Exposure
      i. Plastics – use glass, stainless steel, and reusable containers/bags whenever possible.
      ii. Personal Care Products – your skin is your largest organ and more than 1,000 chemicals that are banned in products elsewhere are legal and common here in the U.S.
         1. Visit the “Skin Deep” database on www.ewg.org
      iii. Fragrances – disrupt hormones and known to increase cancer risk. Consider naturally derived essential oils. Avoid Parfums, Fragrances, Scented Lotions, Candles, etc.
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