

“Boosting” Our Immune System

By Julie Cargill, R.N., A.N.P., G.N.P., Retired

As you know, we are now in our eleventh month with COVID19 in the U.S. It has altered our social and private lives in every way imaginable, and it will be with us at least until this spring. As the coronavirus has spread, we have been hearing about how to reduce exposure and take care of ourselves if we get sick. These are important tips, but we're not hearing much about how we can boost our immunity so that if we *do* get exposed to the virus — or worse, we get sick — our body can effectively fight back.

Our immune systems are designed to fight off all sicknesses, including viruses. In general, the immune system is a line of defense our body has against pathogenic organisms from entering and proliferating in our body. These immune mechanisms also help eliminate abnormal cells of the body that can develop into cancer. Unfortunately, the immune system can get worn down by many things typical of a modern life—for example, stress, toxins, lack of exercise, and unhealthy eating. This prevents our bodies from most effectively fighting off sickness. Following are some tools we can use to cultivate our “resiliency” in response to this virus and against other threats to our health.

1. Have an Exercise Regimen

Working out is a powerful way to boost your immune system. It causes your body's antibodies and white blood cells to circulate more rapidly, which means they may be able to detect and zero in on bugs more quickly. Being active this way also lowers stress hormones, which reduces your chances of getting sick. This can be light aerobic exercise, which is a very individual choice: walking, climbing stairs, or activities such as yoga, Pilates, or many variations which you can find online.

Regardless of your choice of exercise, with each session, your immune system gets a little stronger. The activity of your germ-fighting immune system cells increases — these “natural killer cells” are particularly adept at killing off dangerous invaders. With each workout, our immune systems pump out natural antibodies and anti-inflammatory cytokines to help wipe out attackers.

Over time, these temporary increases can *permanently* pump up our immune system and lower inflammation, so developing a consistent exercise habit is key! I personally recommend a daily regimen. This can be as little as 20 minutes daily, but of course a longer session would be a better “booster”. A general recommendation is 30-60 minutes. If exercise is something you do every day, just like brushing your teeth, you can make it a routine that fits any lifestyle. Keep in mind that a mild to moderate regimen is best. *Overtaxing* yourself with a vigorous workout can reduce your immune system’s response capability.

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2. Follow a Healthy Diet

Your gut is your body's largest immune system component. It is your first line of defense against food toxins, additives, microbes, drugs, etc. It is your “gatekeeper”. Unfortunately, the Standard American Diet has high contents of sugar, processed foods with additives that can promote the growth of unhealthy organisms. I plan to expand this topic in my next article, to include some helpful dietary recommendations to maximize your immune system capability.

3. Manage Your Stress

There's a strong link between your immunity health and your mental health. When you're under chronic stress or anxiety, your body produces stress hormones that suppress your immune system. Studies show that people who are stressed are more susceptible to developing the common cold. Stress produces molecules that trigger inflammation. Also, people who are stressed are less likely to pay attention to other healthy habits like eating right and getting enough sleep. This will also negatively affect immunity.

Unfortunately, you can't avoid stress in your life, so it is your job to figure out strategies to help you manage it better. I find a daily exercise routine gives one a period to extract oneself from life's concerns and maybe re-frame the concerns to a better perspective. Dietary factors might also affect stress: e.g., caffeine and sugar negatively. Talk to people in your support system: sometimes talking is the best therapy. A session with a professional counselor can help give you individualized techniques. Try to limit your exposure to stress-producing factors. These will vary with each individual, of course. Try to manage your daily responsibilities by prioritizing and organizing to avoid pressure-related stress. Interventions such as listening to music may be helpful. The bottom line is to be mindful of the effect of stress in YOUR life.

4. Have a Good Sleep Pattern

When you're sleep-deprived, your body churns out stress hormones, like cortisol, to keep you awake and alert, which can suppress your immune system. Sleep requirements are individual also, but most resources will recommend 7 to 9 hours of sleep nightly.

5. Consider Supplements Wisely

There's no magic herb or vitamin you can pop to automatically prevent a cold, flu or other virus. The Mayo Clinic website is a good resource will show benefits of various supplements (from acidophilus to zinc). To sum it up, if you're a pretty healthy person with a well-balanced diet containing a wide variety of foods — including fruits, vegetables, reduced fat dairy

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products, whole grains, legumes, lean meats and fish — you most likely don't need supplements.

What we realize is that to have survived this far, we must innately have a natural resiliency which is multi-faceted. This involves physical, psychological, social, and spiritual protective factors. Let's continue maximizing this resiliency!!

References: AARP online Healthy Living website; Online Britannica; online British Journal of Sports Medicine; WebMD, “Happy Gut”, by Vincent Pedre; *Healthline* website; Mayo Clinic website -- <https://www.mayoclinic.org/>

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