

Nutrition & Exercise For Strong Immunity

By Tara Ostrowe, MS, RD, New York Giants Team Nutritionist

As the days grow longer and the weather becomes warmer, many people are looking forward to finally say goodbye to winter and its troubles: severe cold, lots of snow, and a particularly strong flu strain. With the worst of it over, you may be tempted to relax your immune boosting dietary practices. However, keeping your immune system as strong as possible each day and throughout the year can help ward off that annoying summer cold and more serious illnesses. A core component of strong immunity is maintaining a healthy diet that will aid your body's defenses. In fact, malnutrition is the most common cause of immunodeficiency worldwide. First and foremost, having a balanced diet and getting the appropriate amount of nutrients to run your body efficiently, will allow your immune system to function properly. However, some specific nutrients, foods, and herbs go that extra mile at enhancing immunity. Incorporating some of these natural immune boosting nutrition sources into your diet each day can help strengthen your body's defenses so that you can enjoy these warmer months with ease.

TOP NUTRITION SOURCES TO STRENGTHEN YOUR IMMUNE SYSTEM:

VITAMIN C

Vitamin C is the most well known vitamin and antioxidant for boosting the immune system and fighting against pathogens. Besides from oranges, grapefruits, tomatoes, bell peppers, blueber-



ries, strawberries, papaya, kiwi, cranberries, and broccoli are all excellent sources of Vitamin C to include in your diet to strengthen your immune system.

VITAMIN E

Give your immune system a strong boost by including rich sources of Vitamin E such as avocado, almonds, sunflower seeds, and spinach at your meals. Vitamin E is not only a powerful antioxidant that helps prevent

cell damage, but some studies have even shown it to increase your body's antibody response. High food intakes of Vitamin E may help prevent and treat many health conditions.

BETA CAROTENE

Beta carotene has been known to enhance immunity by supporting the body's mucus membrane in the respiratory and intestinal tracts, making it difficult for bacteria to enter the bloodstream and cause infection. It is also a strong antioxidant that helps prevent oxidative stress. To enhance your immune system, include foods rich in beta carotene such as carrots, sweet potatoes, and butternut squash.

BERRIES

Berries contain the powerful antioxidants, anthocyanin. Research studies have found berries to contain some of the highest ORAC scores of any fruit. An ORAC value gives a quantifiable measure of antioxidant capacity of a food or supplement. Therefore, given the high ORAC score of blueberries, chokeberries, and blackberries, including those berries in your diet may improve immunity by neutralizing free radicals and reducing your risk of illness.

GREEN TEA

Green tea contains powerful antioxidants including EGCG, polyphenols, and flavonoids. Each of those compounds helps your im-

mune system in the battle against free radicals. Therefore, you can help your body fight infections and diseases by having a cup or two of green tea each day.



ZINC

Zinc is a mineral that keeps the immune system functioning optimally, by fighting infections and through wound healing. Research has shown zinc lozenges to even help reduce the duration of the common cold. To give your immune system a boost, try including more sources of Zinc in your diet. Pumpkin seeds, oats, scallops, beef, lamb, venison, sesame seeds, shrimp, green peas, are all rich sources of Zinc.

SELENIUM

Selenium is a vital nutrient for the immune system. It has strong antioxidant properties, and thereby prevents free radical damage and keeps your body healthy. Some research has shown that Selenium may help curtail viral infections, prevent certain cancers, and improve autoimmune problems. Therefore, having a regular food intake of brazil nuts, sunflower seeds, shellfish, grains, mushrooms, and onions, all excellent sources of selenium, may strengthen your immune system.

LYCOPENE

It is a natural antioxidant that gives tomatoes, watermelon, and pink grapefruit its red color. Being that it has even greater powerful antioxidant activity than both Vit E and beta carotene, studies have shown that high intakes of lycopene containing fruits and vegetables is inversely associated with the incidence of certain cancers. Therefore, adding tomatoes to your sandwich and salads and having watermelon for snack can greatly strengthen your immune system.



CINNAMON

Adding a spoonful of cinnamon to your coffee, tea, or oatmeal in the morning will give your body an immune system boost. Cinnamon has been shown to have antiviral, antifungal, and antibacterial properties along with helping to regulate blood sugar levels.

YOGURT

Yogurt is not only vitamin and protein rich all needed for strong immunity, but it contains lactobacillus, a probiotic that has been shown to enhance the im-



mune system. Probiotics aid your immune system by helping to keep your gastrointestinal tract healthy. A strong gastrointestinal track prevents bacteria and other pathogens from entering the bloodstream and making you ill. Add a cup of yogurt with live culture at meals and snacks to help enhance your immune system.

GLUTAMINE

Glutamine is an amino acid that helps your body produce the antioxidant glutathione, promotes an ideal acid-base balance of the body, maintains muscle mass, and helps maintain the integrity of the gastrointestinal tract, your first line of defense against foreign bodies. Including glutamine in your diet may help prevent the common cold as well as more serious health conditions. Food sources of glutamine to include in your diet are cabbage, beets, beans, dairy products, eggs, parsley, spinach, chicken, beef, and fish.

OATS

Oats contain rich sources of beta glucans. Beta glucans are sugars found in oats that stimulate

the immune system by increasing chemicals that help prevent infections. Get a good dose of beta glucans and give your immune system a lift first thing in the morning by starting the day with oatmeal for breakfast.

VITAMIN D

Besides from its more well known role in bone health, Vitamin D is an essential vitamin required by the body for cell growth, neuromuscular function, mitigation of inflammation, and proper immune function. Research has shown vitamin D deficiency to be correlated with a higher susceptibility to infections due to impaired immunity. To help strengthen your immune system, incorporate Vitamin D rich sources, such as fortified dairy, eggs, cod liver oil, and fish such as tuna, salmon, and herring, into your diet.

APPLES

The ol' saying, "An apple a day keeps the doctor away" in fact, has much truth. Apples have an unusually high polyphenol content and an array of other phytonutrients. Apples have been found to have anti-cancer, anti-asthma, and anti-cardiovascular disease capabilities and also help keep blood sugar levels in check. Therefore, have an apple a day to give your immune system a vigorous boost.



EXERCISE TO STRENGTHEN YOUR IMMUNE SYSTEM

EXERCISE

Lastly, pairing moderate exercise with a healthy immune boosting diet, will give your body an extra weapon to fight disease. Exercise helps your body combat bacteria and viral infection. Physical activity boosts immune system by a few different mechanisms. One way is that it helps flush bacteria and other foreign bodies out from the lungs and via sweat. Exercise also sends the body's natural soldiers, antibodies and white blood cells, through the body at a quicker rate to fight illness. Additionally, during exercise body temperature rises and blood circulation is enhanced, which help prevent bacterial growth. However, be prudent of overtraining; too much high intensity exercise can actually negatively impact the immune system.