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Dr. Tara Desai
Associate Professor, Department
of Home Science, Shri PK
Chaudhari Mahila Arts College
Sector 7 Gandhi Nagar, Gujarat,
India

Increase immunity and fight against corona virus

Dr. Tara Desai

Abstract

This review focused on the use of plant-based foods for enhancing the immunity of all aged groups against COVID-19. In humans, corona viruses are included in the spectrum of viruses that cause the common cold and, recently, severe acute respiratory syndrome (SARS). Emerging infectious diseases, such as SARS present a major threat to public health. The novel corona virus has spread rapidly to multiple countries and has been declared a pandemic by the World Health Organization. COVID-19 is usually caused a virus to which most probably the people with low immunity response are being affected. Plant-based foods increased the intestinal beneficial bacteria which are helpful and make up of 85% of the immune system. By the use of plenty of water, minerals like magnesium and Zinc, micronutrients, herbs, food rich in vitamins C, D and E, and better life style one can promote the health and can overcome this infection. Various studies investigated that a powerful antioxidant glutathione and a bioflavonoid quercetin may prevent various infections including COVID-19. In conclusion, the plant-based foods play a vital role to enhance the immunity of people to control of COVID-19.

Keywords: COVID- 19, immunity, infection, virus

Introduction

Covid-19 attacks people with low immune systems and people especially people of under and over ages. The immune system is built on beneficial live bacteria that lives in the gut which protect the human body from various diseases. When the immune system response is low, weak, or damaged, it becomes an open invitation for infections such as corona virus or other diseases like diabetes, heart disease, or cancer. Plant-based foods increase and help the intestinal beneficial bacteria, and the overall gut micro biome health which makes up to 85% of the body's immune system. On the other hand, excess of animal foods deplete the body from good bacteria, promote inflammation, and are the underlying cause of diabetes, chronic obstructive pulmonary disease cardiovascular diseases, hepatitis B, cancer, and chronic kidney diseases.

Patients of corona virus must have plenty of water, as that will keep their mucous membranes moist which can further lower the chances of cold and flu. If they do not sense thirst that much, then they can prepare soup for them or have coconut water, milk, green tea, and even some homemade fruit juice will be helpful. There is currently no evidence of COVID-19 virus survival in sewage or drinking water.

The COVID-19 virus' morphological characteristics and chemical composition are similar to other human surrogate corona viruses on which data are available to both sustainability in the environment and efficient coagulation measures (WHO, 2020). According to Centre for Disease Control and Preventative, hydration often plays a major role in monitoring your body temperature. However, if you have a fever, if it is a side effect of COVID-19 or some other infection or disorder in the body, drinking plenty of water is really important. Drinking enough water is essential, for a lot of reasons, as shown in a Harvard Health report, and keeping the risk of disease lowered is one of them. Staying hydrated also enables to transmit nutrients to all parts of the body and helps to maintain all body functions and organs working potentially to decrease body infection. Dryness in the bodies can be caused by the drugs we take if we have a virus infection—such as common cold, and flu. As well, when we are sick, we start losing much of the body's water in the form of mucus, and that is the way our body removes the infection-causing pathogens from the body. Until we drink too much water, we remain hydrated, and we can remove more mucus (along with germs) from our bodies.

Corresponding Author:
Dr. Tara Desai
Associate Professor, Department
of Home Science, Shri PK
Chaudhari Mahila Arts College
Sector 7 Gandhi Nagar, Gujarat,
India

Until we get a cure and a novel corona virus vaccine, taking all preventive measures and keeping ourselves healthy and safe is crucial. Although drinking lots of water does not guarantee you would not contract the novel corona virus, it can be effective in reducing your danger to a large extent, and can also help you recover from the illness.

Healthy ways to strengthen Immune system

Your first line of defense is to choose a healthy lifestyle. Following general good-health guidelines is the single best step you can take toward naturally keeping your immune system working properly. Every part of your body, including your immune system, functions better when protected from environmental assaults and bolstered by healthy-living strategies such as these

- Don't smoke.
- Eat a diet high in fruits and vegetables.
- Exercise regularly.
- Maintain a healthy weight.
- If you drink alcohol, drink only in moderation.
- Adequate sleep.
- Take steps to avoid infection, such as washing your hands frequently and cooking meats thoroughly.
- Try to minimize stress.

Keep current with all recommended vaccines. Vaccines prime your immune system to fight off infections before they take hold in your body.

Here's what you need to know about fighting off COVID-19: Nothing but your immune system can beat this disease. And to have a stronger immune response to the invaders (virus particles that enter your lungs, blood cells, and organs and wreak havoc and cause inflammation) you need to eat a diet high in plant-based foods. Doctors have begun recommending to patients that they switch to a mostly plant-based diet, especially those in the highest risk groups: Overweight, diabetic, over 60, and male. One doctor urges his patients to eat mostly fruit and vegetables and stay away from inflammation-causing meat, dairy, and processed food, in light of COVID-19.

Talking to doctors and nutritionists about COVID-19 and how to best have the healthiest outcome that allows you to suffer the least symptoms or side effects: Your immune system's response is the only thing that can fight the disease. All other therapies (such as those that President Trump is getting) are in support of your immune system. If your system is weak or overtaxed with other existing conditions, including obesity or diabetes, it can over-react, creating the "cytokine storm" of inflammation that leads to a cascade of complications that make it harder for your body to self-regulate as it attempts to create antibodies to the virus (essentially molecules that recognize the virus invaders and deploy through the bloodstream to neutralize them)

Immunity is built when your body has to fight off everything from everyday aging to infections. And the building blocks of your immunity are helped by the micronutrients in your food, such as antioxidants and vitamins and minerals, and nothing delivers those better than fruits and vegetables, legumes and nuts and seeds. The flip side is also true, that studies show a diet high in red meat and processed foods can cause inflammation, and in the case of COVID-19, inflammation is the enemy. Patients who do the worst when confronted with this virus are those who are overweight, have chronic inflammation, high blood pressure or are otherwise immune-compromised. Doctors treating President Trump should have

him switch from his usual fare to a mostly plant-based diet today, consisting of fruits and vegetables high in compounds that have been scientifically proven to build immunity, to help his natural defenses mount their counter-attack on the viral invaders.

Here are the foods that are shown to fight inflammation and boost immunity. Eat them now for a stronger immune system, whether you are dealing with COVID-19 or another potential disease that requires your body to be healthier now and later. That includes almost every disease known to man. To be healthier, meaning to build cells that are able to function without bombardment from toxins, oxidization, infection, and internal destruction, plant-based foods are your best bet.

Immune-Boosting Foods to Eat On Repeat

These foods are known to supercharge your immune system, which is your body's defense against infection and illness. It works by recognizing cells that make up your body and will fight off anything unfamiliar. It destroys germs (bacteria and viruses) and parasites.

1. Citrus for Your Cells and Healing

Your body does not produce vitamin C, which means you need to get it daily to have enough to create healthy collagen (the building blocks for your skin and healing). Also known as ascorbic acid, vitamin C is a water-soluble nutrient found in leafy greens and citrus, especially grapefruit, oranges, tangerines, lemons, limes, and clementines. It acts as an antioxidant, protecting cells from damage caused by free radicals.

How much do you need a day: The recommended daily amount to shoot for is 65 to 90 milligrams a day, which is the equivalent of one small glass of orange juice or eating a whole grapefruit? Almost all citrus fruits are high in vitamin C. With such a variety to choose from, it's easy to get your fill.

2. Red peppers to pump up skin and boost immunity with twice the amount of vitamin c as an orange has

Want even more vitamin C, add red bell peppers to your salad or pasta sauce. One medium-sized red bell pepper contains 152 milligrams of vitamin C, or enough to fulfill your RDA.

Peppers are also a great source of beta carotene, a precursor of vitamin A (retinol). Vitamin A is important for healthy skin, your mucous membranes and your immune system. Beta carotene helps keep your eyes and skin healthy, as well. One cooked pepper has 19 percent of your daily recommended amount of beta carotene.

How much beta carotene do you need a day: You should try to get 75 to 180 micrograms a day which is the equivalent of one medium bell pepper a day. But a red pepper has more than two and a half times you're RDA for vitamin C so eat them all winter long.

3. Broccoli, but eat it nearly raw, to get the most nutrients out of it!

Broccoli may be the most super of super foods on the planet. It's rich in vitamins A and C as well as E. The phytochemicals in it are great for arming and strengthening your immune system Broccoli is a good source of lutein, a powerful antioxidant, and sulforaphane, another potent antioxidant. It contains additional nutrients, including some magnesium, phosphorus, zinc, and iron. The key to keeping its powerful nutrients intact and ready for helping the body's immune response is to cook it as little as possible — or even

eat it raw.

Lutein is one of 600 known naturally occurring carotenoids and is found in high quantities in green leafy veggies such as spinach and kale.

There's another thing you need to know about broccoli, and why it's important to not overcook it. Broccoli contains sulforaphane, a gas that is a killer to a bug in the garden—and in the body. Sulforaphane is a sulfur-rich compound found in several cruciferous vegetables like bok choy, cabbage, and kale, but broccoli delivers the most. When a bug bites into the stalk, leaf, or flowering bud of the plant it releases this sulfuric gas that kills the invaders, thereby protecting the plant. This is the same agent that gives broccoli that sulfuric smell when you cook it, so don't overcook it since you'd rather all of that end up in your body than in the kitchen air. Cook it too much and the gas escapes into your kitchen, so if you want to keep it in the plant, and delivered to your body, lightly steam the green and add it to your meal barely cooked through.

How much lutein should you eat in a day: There is no RDA for lutein, but experts say get at least 6 milligrams.

4. Garlic, eaten by the clove:—Garlic isn't just a great flavor-enhancer, it's essential for your health. Ancient humans valued garlic as an infection fighter, which is why so much of our traditional diets include it as a first ingredient (making pasta sauce for instance). Value it and use it liberally for fighting infections. Garlic's immune-boosting properties are tied to its sulfur-containing compounds, such as allicin. Allicin is thought to improve your immune cells' ability to fight off colds and flu, and viruses of all kinds. (Smelling more garlic on the subway? It could be smart corona virus management.) Garlic also has anti-microbial and anti-viral properties thought to fight off infections.

How much should you eat in a day: The optimal amount of garlic to eat is more than most of us can fathom: Two to three cloves a day. While that may not be doable, realistically, some people take garlic supplements to get 300-mg dried garlic in a powdered tablet.

5. Ginger is a power player for immunity and digestion

Ginger is another ingredient that has super properties when it comes to fighting off illness. It has been shown to decrease inflammation, which can help if you get swollen glands or a sore throat or any inflammatory ailment.

Gingerroot, the main bioactive compound in ginger, is a relative of capsaicin, can be used in sweet or spicy dishes. It has been found to alleviate pain and fight nausea, which is the reason ginger ale was given for upset stomachs, back when it contained actual ginger. Now few store-bought formulations do. Make your own ginger tea. Gingerol is responsible for much of its medicinal properties. It has powerful anti-inflammatory and antioxidant benefits.

How much should you eat a day: Most recommendations land on 3–4 grams of ginger extract a day, or up to four cups of ginger tea, but no more than 1 gram a day if you are pregnant? Some studies have linked high dosages to an increased risk of miscarriage.

6. Spinach, wilted, not steamed (also kale and dark leafy greens of all kinds)

Spinach is not only packed with vitamin C but also antioxidants and beta carotene, both of which give your immune system the healthy boost it needs to fight off invaders.

Don't overcook your spinach, since the more it's cooked the less active the antioxidants will be. If you eat it raw or lightly steamed you'll keep more of the nutrients intact.

How much should you eat a day: Aim for 1 cup fresh spinach or 1/2 cup cooked per day, but this is the right moment to try the raw or slightly wilted approach? Order warm or wilted spinach salad when you go out, or make it yourself with olive oil, pine nuts, and vegan parm.

7. Almonds for the win, pop them like candy

Vitamin E in almonds will help ward off colds and flu and is key to your immune system humming along. It's a fat-soluble molecule, meaning it requires the presence of fat to be absorbed, so nuts are the perfect package for E to make it into your system.

How much should you eat in a day: A half-cup serving, or 46 whole, shelled almonds, provides almost 100 percent of your RDA of vitamin E. Almonds are great for you but they don't come with a "free" pass, since 1/4 cup is a serving and has 162 calories, so double that for your RDA and you're eating about 325 calories.

8. Turmeric to fight inflammation, put it in your tea or smoothie

If you ever feel healthier for eating curry, it is probably because of the Turmeric, which is an ingredient that gives it its burnt orange color. But this highly pigmented spice is known for its anti-inflammatory qualities. The ingredient curcumin has been found to decrease muscle soreness after a hard workout. How it helps immunity? Decrease exercise-induced muscle damage.

Turmeric bolsters the immune system by stimulating antibody formation and people with auto-immune diseases are told by their doctors to take 500 mg of curcumin daily to reduce inflammation and stave off soreness.

How much should you eat in a day: Try adding extra Turmeric to your diet during periods of stress or during flu season? Or take 500-2,000 mg of curcumin to help fight inflammation and power up your immune system.

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