

7 Solid tips to
**Strengthen immunity
during COVID-19**

A strong immune system beats **COVID-19. But how?**

So how is our immune system able to defend against viral infections, and how does this apply to COVID-19? Just take the virus as a robot, which cannot reproduce and it needs a factory of materials – proteins, lipids and nucleotides – to build more copies of itself. The coat allows the virus to attach itself to the target cell's membrane. The virus then fuses with the cell and releases a shopping list of instructions on how to build and assemble new viruses. The initial job of a virus which enters our bodies is to invade the target cells such that it can comfortably remove its coat and install its RNA.

Once inside, the virus commandeers the cell and borrows cellular instruments to manufacture more viruses before the immune cells detect the intruders and raise the alarm. The infected cells get sacrificed and they invite their own destruction by showing distress signals for T-cells, which are swiftly detected and get killed in the process. It takes many days for antiviral T-cells to expand and generate antibodies. The silver lining is, the memory cells ensure that if we encounter the same virus again, we can react immediately with the pre-existing defences. SARS-CoV-2 is new to the human race, so we don't have protective immunological memory. Vaccines prepared by using the harmless parts of the virus can help us build protective memory.

The power of the virus keeps on spreading. The virus achieves this through "Shedding" from infected patients. SARS-CoV-2 is an expert at hopping from one person to another person. In some people, it achieves a secret existence with mild or no symptoms. Once many copies of the virus are made, it shifts to another host. It hitches a ride on droplets that can be coughed or sneezed to a distance of up to two metres. Droplets can survive on the surfaces for several hours enabling pick-up by a new host, or they can be directly inhaled if another person is in close proximity.

How to build a **Strong immune system?**

Building a strong immune system is your best defence against the infectious disease. Having a strong immune system is more necessary than ever now due to COVID-19 and relaxations around the lockdown. It is quite possible that we might come across someone or something infected with coronavirus and introduce it into our system as we all will start moving out of our homes now. That said, with a strong immune system, it is almost impossible for the virus to cause any sort of damage to our health.

The well-being of your health depends on the lifestyle choices you make every day. By supporting your body's own natural ability to defend itself against pathogens, you will not only have resistance to colds and flu but to other infectious illnesses that come your way.

We have put together some simple lifestyle tips that you can follow to build a stronger immune system.



1

Eat an **organic and wholesome** diet

It is important to give your body healthy nutrition daily to keep your immune system healthy and strong. Nutritional deficiencies make it easier for us to be susceptible to viruses and bacteria. Make sure you have a variety of organic whole-foods including grains, beans, fresh fruits and vegetables, nuts and seeds. It is essential to have a balanced macrobiotic/whole food vegan diet with a variety of ingredients.

Many of us are attracted to eating snacks. Today many foods are highly processed and loaded with sugar such as biscuits, boxed cereals and juices. These additive rich foods will actually weaken the immune system. Snacking can become problematic if you fill up on these '**nutritionally empty foods**' and don't eat delicious healthy meals. Make sure to always have good quality snacks such as vegetable sticks, fresh fruit, rice cakes with spreads, sushi or roasted nuts and seeds. Cold foods, excessive amounts of raw fruits and juices have a weakening effect on the immune system and should be eaten in moderation and only in hot weather, if at all. It is always good to eat the whole fruit.

Add fermented foods such as "**Kombucha**" to your diet. Adding good bacteria to your intestines helps build up your natural defences. A small amount of good-quality pickles (1-2 tablespoons) to each meal is another way of adding good bacteria to your intestinal flora as is adding natto to your diet. The greatest concentration of cells related to our immune system is in our small intestines. The healthy bacteria from fermented foods interact with the cells in our intestines in a way that has been shown to activate our immune system.

Make sure you are getting plenty of sweet-tasting vegetables such as squash, carrots, cabbage and onions. Lightly cooked leafy greens like watercress are also extremely beneficial



2 Avoid unnecessary antibiotics and vaccines

Today, people are prescribed excessive amounts of antibiotics. Antibiotics can seriously weaken the immune system and also build up a resistance to the medicine itself.

So take an antibiotic only when extremely necessary.



3 Get enough sleep

We heal during sleep. One of the ways we do this is to release melatonin from our pineal gland. We do this best while sleeping in a dark room with minimal EMF (Electromagnetic field). Keep the phone and electrical equipment, including radio alarms well away from you, as the body confuses EMF with light, suppressing melatonin secretion. We produce the most melatonin between 11 pm and 3 am.



4 Enjoy nature

Getting out into the fresh air can stimulate the immune system cells in the lungs and help make our immune system more active. Deep breathing helps to bring more oxygen to our blood. Nature is an excellent immune stimulator and being exposed in a happy, healthy way does wonders to all aspects of our lives. Relaxing exercises help in blood and lymph circulation, which makes it easier for our immune system to function properly and get rid of the unwanted viruses or bacteria.



5 T.L.C.

Give yourself lots of T.L.C. (Tender Loving Care). Indulge yourself in a long bath, this is a wonderful way to detox and strengthen the immune system. Block some time daily to learn something new, read a book, savour your cup of coffee, journal your feelings and connect with everything that makes you feel good.



6 Stress less

When we are under constant stress, our immune system reduces the ability to fight against bacteria, viruses and cancerous cells. The stress hormone corticosteroid suppresses the effectiveness of the immune system. To manage your stress, indulge in daily exercise, yoga and meditation. Deep breathing and relaxation techniques also help do the same. Make a habit of reading motivational books and watching inspiring videos. Develop a creative hobby. And if you're already feeling really stressed out taking adrenal support supplements can be helpful.



7 Soak in the sun

Sun has the highest natural healing powers for various health problems. The major role that sunlight plays is in helping produce Vitamin D. Vitamin D is necessary for adequate quantity for calcium absorption by bones and has a direct impact on the immune system. Take a sunbath on an empty stomach and eat half an hour post that. Take a cold water bath after taking a sunbath. Apply coconut, olive oil or sesame oil on exposed skin before taking a sunbath. Also, cover your head and face with a wet towel and sit under direct sun for about 10 minutes. Ideal time is before 8 am and after 5 pm when there are no harsh sun rays.



By

Dr K Praveen

**MBBS, DTRD, FCCP (USA), FERS
Consultant Pulmonologist
OMNI Hospitals, Kukatpally**



OMNITM

Hospitals Kukatpally



040 68252524

**Opp BIG BAZAR, Balaji Nagar, Kukatpally,
Hyderabad, Telangana 500072**

A UNIT OF
incor

TELANGANA: Hyderabad: Chapel Road | Kothapet | Kukatpally | ANDHRA PRADESH: Kurnool | Vizag

www.omnihospitals.in | www.facebook.com/INCORHospitals