

#### **Improving Immunity System Through a Healthy Diet**

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#### **Introduction:**

Instead of being juiced, whole fruits and vegetables are high in fibre and support the growth of the good bacteria in the stomach. To strengthen your immune system, try to consume a variety of colourful fruits and vegetables every day. Variety is also crucial. People should take extra caution with their meals and drinks. According to scientists, the corona virus swiftly turns the old into prey, so it is critical for everyone to incorporate strong antiviral food products in their diet to avoid this. This will help to strengthen their immune system and protect them from viruses. Here is a list of things you can do to boost your immunity.

#### Which foods boost your immune system?

The immune system begins in the gut, and all of the bacteria that dwell there are referred to as the gut micro-biome. When your gut is healthy, it is full of beneficial microorganisms that serve to enhance your immune system. Fruits and vegetables aid in the growth of beneficial bacteria in the gut. Variety is also key, so attempt to eat a variety

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of various coloured fruits and vegetables on a daily basis to strengthen your immune system. Citrus fruits, all leafy green vegetables, seeds and nuts, and so on are examples of foods that can swiftly strengthen your immune system.



#### **Boost your diet:**

Your general health and immunity are significantly influenced by the food you eat. Consuming carbohydrates will help you manage high blood pressure, reduce the progression of diabetes, and control high blood sugar. Ingest foods high in beta carotene, ascorbic acid, and other vital vitamins on a daily basis. To strengthen the body's resistance

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to infections, some foods like mushrooms, tomatoes, bell peppers, and green vegetables like broccoli and spinach are also ideal choices. As an alternative, you can get your daily amount by taking supplements high in omega 3 and 6. Natural immune boosters include turmeric, ginger, and gooseberries. Some of these super foods are widely used as ingredients in Indian dishes and snacks. Several herbs, such as black cumin, basel leaves and garlic can boost the immune system. The following seeds and nuts are excellent sources of protein and vitamin E i.e. melon seeds, flax seeds, pumpkin seeds, and sunflower seeds.

Yogurt, Yakult, and fermented foods are good sources of probiotics that can help restore the balance of gut flora, which is crucial for the body's ability to absorb nutrients. These are also excellent choices for the senior age.

#### Several crucial diets

#### **Low Carb Diet:**

A carbohydrate diet is frequently used to aid weight loss and blood sugar level stabilisation. A low carb diet limits carbs, which are typically found in sweet meals, pasta, and bread. Instead, you consume entire meals such as natural proteins, lipids, and vegetables. You can eat meat, fish, eggs, vegetables grown above ground and natural fats on a low carb diet (like butter). You must

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also avoid sweets and starchy meals (like bread, pasta, rice, beans and potatoes). A typical low carbohydrate diet accounts for less than 26% of total daily calories.

#### **Protein rich Diet:**

A high-protein diet is one where more than 20% of the daily caloric intake is made up of protein. To keep your body working properly, protein is a crucial nutrient. Every cell in your body is made up of proteins, which are also necessary for the maintenance and growth of your skin, hair, nails, and other bodily tissues. The synthesis of hormones and enzymes is aided by protein.

#### Which foods contain protein?

- Meat, poultry, fish, eggs, and tofu are high in protein.
- Legumes, nuts, nut-butter, seeds, yoghurt, cottage cheese, milk, and other dairy products are examples of foods with medium protein content.
- Whole grain breads, rice, pasta, quinoa, and barley are low in protein.

#### **Beta carotene Rich Diet:**

A reddish-orange pigment called beta carotene is present in many of fresh fruits and vegetables. The amount of beta carotene in a fruits or vegetables increases with the intensity of the colour. Beta-carotene is converted into vitamin A by the human body. Vitamin A is a precursor of beta carotene. We require vitamin



A for strong immunity, healthy skin and mucous membranes, clear eyesight and healthy eyes. Apricots, broccoli, carrots, grapefruit, herbs, spices, chilli powder, oregano, paprika, parsley, onion, peas, peppers, plums, pumpkin, spinach, squash, sweet potatoes etc. are examples of foods high in beta carotene.

#### **Ascorbic acid Rich Diet:**

The body uses ascorbic acid, generally known as vitamin C, for a variety of purposes. It specifically helps the immune system, combat sickness and avoids infections. People must obtain vitamin C daily from their diets since the human body cannot store it. Any excess is eliminated from the body in urine after dissolving in water. Oranges, gooseberries, lemons and any citrus fruit are foods high in vitamin C.

#### **Omega 3 fatty acid Diet:**

Omega-3 fatty acids play a significant role in the membranes that enclose each cell in your body. Additionally, omega-3s offer your body energy through calories and perform a variety of activities in your immune system, endocrine system, heart, blood vessels and lungs (the network of hormone producing glands). Seaweed, flaxseeds, chia seeds, fatty salmon and flaxseed oil were a few of the dietary sources. Because omega-3a is an important fatty acid, humans must consume it in their diet.

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#### Which foods provide omega-3s

- Seafood such as fish.
- Seeds and nuts (such as flaxseed, chia seeds and walnuts).
- Plant lipids (such as flaxseed oil, soyabean oil and canola oil).

#### Vitamin B rich food diet

Essentially, vitamin B complex is made up of eight distinct vitamins that are necessary for preserving excellent health and wellbeing. Thiamine  $(B_1)$ , riboflavin  $(B_2)$ , niacin  $(B_3)$ , pantothenic acid  $(B_5)$ , pyridoxine  $(B_6)$ , biotin  $(B_7)$ , folic acid or folate  $(B_9)$ , and cobalamin make up the group of B vitamins  $(B_{12})$ .

### Some of the benefits of vitamin B complex include:

- It can boost your immune system, lowering or eliminating your chance of illness by avoiding infections.
- It enhances cardiovascular health and increases energy levels.
- Supports healthy nerve and brain function.
- Stimulates the formation of red blood cells.
- Improves digestion, helps maintain muscular tone, and supports hormone and cholesterol synthesis.
- Vitamins B are especially important for pregnant and nursing women since they aid in foetal brain development and reduce the incidence of birth abnormalities. These



supplements may also help men enhance their testosterone levels.

#### Food sources of vitamin B complex:

- Spinach, collards, turnip greens, and lettuce are examples of leafy green vegetables.
- Eggs: Next to liver, eggs are one of the greatest sources of biotin, which is essential for the health of your hair, skin, nails, and hair. One big egg has 33% of the recommended daily intake (RDI) for biotin, which is distributed in the yolk and white.
- Legumes: In addition to folic acid, legumes include trace levels of additional B vitamins such as thiamine, riboflavin, pantothenic acid, and pyridoxine.
- Walnuts: Walnuts include a variety of vitamins, minerals, and antioxidants, including copper, phosphorus, folate, pyridoxine, manganese, and vitamin E.

#### Herbals

Many herbs are antagonistic to pathogens, which mean they actively fight microorganisms like viruses and bacteria while also boosting immune function.

Garlic: The active ingredient in garlic, allicin sativum, has been proposed to have antiviral and antimicrobial effects on the common cold.

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**Tea catechins:** Cell studies have indicated that tea catechins, such as those present in green tea, can inhibit the replication of flu and cold viruses and improve immunological function.

**Ginseng:** it balances the immune system by regulating several types of immune cells, such as T cells, B cells, natural killer cells, and macrophages, which recognise and fight off dangers to the body.

#### **Don't Compromise on Sleep:**

The greatest strategy to help your body build immunity is to get 7-8 hours of quality sleep; less sleep will make you weary and affect how well your brain functions. Lack of sleep prevents the body from sleeping, which affects other biological processes and directly affects your immunity. The flu vaccine's effectiveness is negatively impacted by sleep deprivation.

#### **Stay Hydrated:**

To keep hydrated, sip up to 8 to 10 glasses of water each day. Drinking enough of water helps lessen your risk of getting the flu by helping your body remove toxins. To fight the heat, other options include coconut water and citrus fruit liquids. Your body's wet mucous membranes serve as a barrier; much like your skin does, to keep outside pathogens out.