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Case Report on Uretero Pelvic Junction Obstruction



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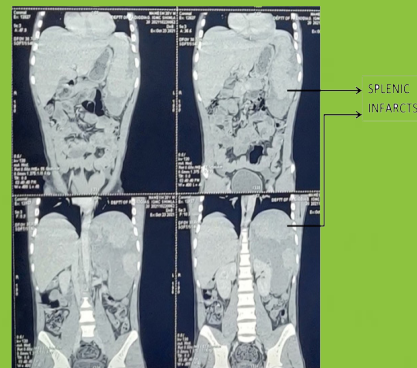
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H3N2 Virus and Precautions

Dietary Supplements to Boost our Immunity

SANJAY AGRAWAL

In today's world, where our immune systems are constantly under attack from pollutants, toxins, and unhealthy lifestyles, supporting our immune systems with proper nutrition and dietary supplements is more important than ever. A robust immune system can help us fight off illnesses, infections, and diseases and can also help us recover faster when we do fall ill. The nutrients we eat provide our bodies with the fuel they need. Carbohydrates, amino acids, lipids, vitamins, minerals, water, and fiber are examples of these nutrients. Our bodies can fight any ailment with a healthy diet and a strong immune system. We need to boost our immunity systems with specific vitamins and foods in our diets, which will help us fight infectious diseases.

Many professionals recommend articles stating that common people acquire supplements or consume foods that strengthen the immune system.^[1] According to the World Health Organization, leading a healthy lifestyle improves immunity and how effectively the body functions. A nutritious diet with plenty of fruits and vegetables is integral to a healthy lifestyle. It is essential to support an immune system that works effectively to help fight off infections and other disorders.^[4] There have been several claims about various complementary medicines or herbs as viable treatments ever since the epidemic. Medical professionals have refuted these assertions that a specific drug or dietary supplement can be

used to treat and prevent Coronavirus infection.^{[11] [12]}

Strong internal immunity increases a person's survival chances over any illness. Because of this, it's critical to consume foods that boost immunity to maintain good health and provide our bodies with the power to defend ourselves against outside threats.^[10] Incorporating dietary supplements that can boost our immune systems into our daily routines, can be a great way to stay healthy and prevent illnesses. Here are some of the best dietary supplements to help boost our immunity:

- Vitamin C is an essential nutrient that is vital to our immune systems. It helps to stimulate the production of white blood cells, critical players in our body's defense against infections and diseases. Vitamin C can be found in many fruits and vegetables and is supplemented.
- Vitamin D is another essential nutrient that plays a crucial role in our immune systems. It helps to regulate the function of our immune cells and can also help to reduce inflammation. Vitamin D can be obtained from exposure to sunlight but can also be taken in supplement form.
- Zinc is an essential mineral that helps to support our immune systems by regulating the function of our immune cells. It can also help to reduce the severity and duration of colds and other infections. Zinc can be found in many foods, including meat, seafood, and legumes, but it can also be taken in supplement form.
- Echinacea is a herbal supplement that has been shown to help boost our immune systems by stimulating the production of white blood cells. It can also help to reduce

the severity and duration of colds and other respiratory infections.

- Probiotics are Produced by beneficial bacteria that live in our digestive tract and help support our immune systems. They can help improve our gut microbiome's balance and reduce inflammation. Probiotics can be found in many fermented foods, such as yogurt, kefir, and sauerkraut, but can also be supplemented.

While dietary supplements can be a great way to support our immune systems, it's important to remember that they should not be relied on as a substitute for a healthy diet and lifestyle. Eating a balanced diet rich in fruits, vegetables, whole grains, and lean proteins, regular exercise, and reducing stress can all help to boost our immune systems and keep us healthy. Incorporating these dietary supplements and healthy habits into our daily routines can support our immune systems and improve our overall health and well-being.

Immunity and the Connection Between Good Health and Gut Bacteria

The immune system is an interconnected system of cells, tissues, and organs that collaborate to protect the body from "external" intruders. Most are microorganisms (germs), including bacteria, viruses, parasites, and fungi. Many bacteria try to enter the human body because it offers a perfect environment for them. The immune system's job is to keep them out or, if that fails, to find and eliminate them.^[12] Many variables can stimulate immunity, which dietary supplements can then maintain. On the other hand, gut flora is crucial for strengthening immunity.^[3]

Many diseases, including IBD, obesity, diabetes, cancer, HIV, and autism, have been linked to gut flora^[14].

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A few infections may occur when the gut bacteria experience some discomfort. The critical ability of gut bacteria in the pathophysiology of many diseases is immunoregulatory activity. Infection defenselessness, such as IBD, diabetes, and obesity, is influenced by diet-induced dysbiosis.^[15] Prebiotics and probiotics have recently become widely employed in treating some diseases and have demonstrated remarkable effects.

In addition to environmental factors, medicine use, and genetics from the family, nutrition significantly impacts the types of bacteria in the colon. Depending on these factors, each person's microbiome is unique. The specific type and quantity of microbiota in the digestive tract are affected by a high-fiber diet.

Catalysts are required to separate and age dietary fiber from the bacteria that inhabit the colon. Because of aging, short-chain unsaturated fats (SCFA) are delivered. This lowers the colon's pH, determining the type of microbiota that may survive in this acidic environment. Certain harmful bacteria, such as *Clostridium difficile*, cannot grow due to the decreased pH. New research on SCFA examines their innumerable effects on health, such as energizing immune cell activity and maintaining regular blood sugar and cholesterol levels.^[16]

Indigestible carbohydrates and fibers such as inulin, resistant starches, gums, pectins, and fructooligosaccharides are food sources that assist in boosting levels of SCFA. It is because they nourish our beneficial microorganisms; these fibers are occasionally called prebiotics. Many nutritious food sources typically contain prebiotics, even though some supplements contain prebiotic fibers. The most significant quantities can be found in crude versions of the following ingredients, garlic, onions, leeks, asparagus, Jerusalem artichokes, dandelion greens, bananas, and seaweed. Prebiotic fibers are abundant in organic foods, vegetables, legumes, and whole grains, including wheat, oats, and millet.^[6]^[8]

Essential Foods to Boost Immunity

To strengthen immunity and protect against virus attacks, it is crucial. The food should contain foods high in vitamin C, such as oranges, sweet lime, lemon, gooseberries, strawberries, and blueberries; foods high in vitamin D, such as salmon, tuna, and sardines for non-vegetarians; and foods high in zinc, such as all red meat, mushrooms, and spinach, as well as nuts like almonds and cashew.^[5]

Other foods that are anti-inflammatory, antibacterial, and antiviral include coconut oil, yogurt, which is a great probiotic and boosts gut immunity; mushrooms, which are high in protein, zinc, calcium, and vitamin D, garlic (which is best consumed raw and thinly sliced) with organic honey, sweet potatoes, which are high in vitamin A, broccoli, which is high in vitamins A, C, and E, and turmeric powder.^[4]

The essential foods to boost immunity list also includes foods like carrots, which contain beta carotenes; ginger and cinnamon, which have antiviral, antibacterial, and antifungal properties; tomato and watermelon, which contain lycopene, which has anti-inflammatory properties; wheat germ, which contains zinc and vitamin E, and chicken soup.

Notable Fruits that build Strong Immunity System

Amaranth is well-known for being an excellent source of antioxidants that are good for our health, including iron, magnesium, phosphorus, manganese, and others. These nutrients boost our immune systems and protect us against infectious diseases, cancer, and heart problems. It is a gluten-free grain that is highly nutrient-dense and high in protein, fiber, micronutrients, and antioxidants.

Figs help to relieve constipation, may lower cholesterol, and may help control blood sugar levels. They are good calcium, potassium, zinc, copper, vitamin B, and fiber sources. They contain high-quality antioxidants, which aid in lowering levels of the body's cell-damaging free

radicals. This fruit aids in developing immunity against the virus because it is a powerhouse of vitamins and minerals and because of its abundance of antioxidants.

Amla, also known as Indian gooseberry, has a lot of vitamin C, which helps the body's defenses against illness. Its nutritional profile includes a variety of polyphenols that are known to prevent the growth of cancer cells, including flavonoids, garlic, and ellagic acid. It is a great food to help fight the virus since it has antibacterial and anti-inflammatory characteristics that help with throat infections, liver and lung cleansing, and infections.^[17]

Omega-3 fatty acids, monounsaturated fatty acids (MUFA), folate, vitamins B1 and B6, fiber, and plant compounds like lignans are all abundant in flax seeds. They provide numerous health benefits for the gastrointestinal system. Omega fatty acids and magnesium, which improve mood and promote sleep, are abundant in these seeds. This can be included regularly in the usual diet to aid in the fight against the infection.^[18]

The building blocks for immune cells and antibodies include protein, fiber, vitamin E, magnesium, phosphorus, manganese, and selenium, abundant in nuts and dry fruits. Also, when combined with dry fruits, one can have a balanced meal with the ideal ratio of sugar and protein. Eating nuts like almonds, walnuts, pistachios, and groundnuts as a regular part of your diet will help boost your immunity because they are high in protein, omega-3 fatty acids, vitamin E, zinc, calcium, and magnesium. All nuts are full of micronutrients and have an energy-dense diet.^[16]

Apples are a fruit known for boosting immunity and are also rich in fiber, which helps promote the growth of beneficial bacteria in the stomach, essential for a robust immune system. The immune system is boosted, and the soluble fibers reduce inflammation connected to disorders linked to apple fat.^[15]

Your body's nutritional requirements are as particular to you as your appearance. As a result, we require a consistent and well-balanced intake of nutrients that boost immunity, such as proteins, phytochemicals, antioxidants, bioflavonoids, Omega-3 fatty acids, vitamins such as Vitamin C, D, A, E, B12, etc., and minerals such as zinc, iron, magnesium, chromium, and selenium, among others.^{[17] [18]}

Even after COVID-19, the globe still deals with issues like weak immune systems, leading to various medical conditions. Eating a good diet is crucial in this situation, as taking one clove in warm water daily boosts immunity. Ginger combined with turmeric and Tulsi leaves works miraculously. In addition, one can frequently consume hot water and lemon skin.^[7]

Some Dietary Advice To Increase The Power of Resistance

Eating a healthy, balanced diet, adding immunity boosters to our diet, drinking lots of fluids, eating small, frequent meals, choosing the proper foods, using reasonable quantities of salt in cooking, and avoiding sugary foods are some dietary practices that help us strengthen our immunity.^{[5][6]}

It is advised to have a healthy, balanced diet that includes fiber- and antioxidant-rich vegetables and fruits, probiotic-rich curds, protein-rich dhals, pulses, high-biological value proteins like eggs and poultry, and healthy fats like sesame seeds and flax seeds.

- Include immune boosters such as garlic, ginger, lime, yogurt or curd, indian gooseberries (Amla), cinnamon, fresh fruits and vegetables, nuts such as walnuts, almonds, flax seeds, sunflower seeds, dry fruits like black grapes, figs, amaranth, Tulsi leaves, turmeric, black pepper, tomatoes liberally in daily diet.
- Drink plenty of fluids from green tea, buttermilk, lime juice, coconut water and plain water occasionally to replenish and rehydrate the system.

- Eat small but frequent meals, instead of large, heavy meals. Remember that both snacks and meals count towards the balance.
- Eat enough food with reasonable portion control to maintain ideal body weight. Follow mindful eating practices during this period.
- Use moderate amounts of salt in cooking. WHO recommends 5-6 gms of salt daily in the daily diet. Avoid adding salt to food at the table.
- Avoid sugary foods and deep-fried foods, as they contain empty calories and will cause weight gain.
- All foods contain different levels of nutrients, and no single food can correctly provide all the essential nutrients that our body needs. Therefore, eat a balanced diet in the right proportion and quantity.

A person must consume a well-balanced diet that includes pulses and green vegetables. A balanced diet gives the body the nutrition it needs to operate correctly. The most crucial one should be upbeat and confident.

Knowing the fundamentals of holistic nutrition can boost energy levels, enhance bodily performance, fortify the immune system, and assist in preventing disease. To guarantee that our bodies are functioning correctly, it is advised that we consume a well-balanced diet and examine ourselves for both undernutrition and overnutrition. This will help to prevent diseases and help maintain a robust immune system.

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