



# Improve your Immunity

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# ***Natural Sources***

- ***Immunity Booster Tea - black pepper, clove, tulsa, lemon grass, ginger, mulahati, + lemon and honey as per taste***
- ***Healthy nutritious diet with immun-boosters***
- ***7-8 h sleep***
- ***Yoga and meditation***
- ***Mental Peace***

# ***Role of Vitamin C in Immune System***

- Supports the function of various immune cells and enhances their ability to protect against infection. Removes old cells and replace them with new ones***
- Powerful antioxidant, protecting against damage induced by oxidative stress, which occurs with the accumulation of reactive molecules known as free radicals.***
- Studies with 11,306 people have demonstrated that vitamin C at an average dose of 1–2 grams per day reduced the duration of colds by 8% in adults and 14% in children***
- High dose of intravenous vitamin C treatment has been shown to significantly improve symptoms in people with severe infections, including sepsis and acute respiratory distress syndrome (ARDS) resulting from viral infections***
- The upper limit for vitamin C is 2,000 mg. Supplemental daily doses typically range between 250 and 1,000 mg***

***SUMMARY - vital for immune health. Supplementing with this nutrient may reduce the duration and severity of upper respiratory tract infections, including the common cold.***

## ***Role of Vitamin D in Immune System***

***Enhances pathogen-fighting effects of monocytes and macrophages — white blood cells that are important parts of your immune defense — and decreases inflammation, which helps promote immune response***

***Low vitamin D levels are associated with an increased risk of upper respiratory tract infections, including influenza and allergic asthma***

***Taking this vitamin may protect against respiratory tract infections.***

***Other studies reveals that vitamin D supplements may improve response to antiviral treatments in people with certain infections, including hepatitis C and HIV***

***1,000 and 4,000 IU of supplemental vitamin D per day is sufficient for most people, though those with more serious deficiencies often require much higher doses***

## ***Role of Zinc in Immune System***

***Zinc is a mineral that's commonly added to supplements and other healthcare products like lozenges that are meant to boost your immune system, needed for immune cell development and communication, plays an important role in inflammatory response.***

***Its deficiency affects your immune system resulting in an increased risk of infection including pneumonia***

***What's more, supplementing with zinc may be beneficial for those who are already sick.***

***Taking zinc long term is typically safe for healthy adults, the daily dose is under the set upper limit of 40 mg of elemental zinc***

***Excessive doses may interfere with copper absorption, which could increase your infection risk.***



# **Citrus fruits**

**Vitamin C build up your immune system.**

**Increase the production of white blood cells, which are key to fighting infections.**

**All citrus fruits are high in vitamin C. Popular are :-**

- grapefruit**
- oranges**
- clementines**
- tangerines**
- lemons**
- Limes**

**Because your body doesn't produce or store it, you need daily vitamin C for continued health.**

**Also keep in mind that while vitamin C might help you recover from a cold quicker, there's no evidence yet that it's effective against the new coronavirus, SARS-CoV-2.**



## Vitamin C Rich VEGETABLE & FRUITS

Vitamin C good antioxidant and other properties that protect your cells from substances that damage the body.

A deficiency of vitamin C can lead to delayed wound healing, inability to properly fight infections, and impaired immune response.



## Rich Sources of Vitamin C





# Eat The Rainbow



**Red for Heart**



**White for Immunity**



**Yellow for Skin**



**Green for Cleansing**



**Orange for Inflammation**



**Purple for Antioxidants**



# Spinach

***Rich in vitamin C, also packed with numerous antioxidants and beta carotene, which may both increase the infection-fighting ability of our immune systems.***

***Similar to broccoli, spinach is healthiest when it's cooked as little as possible so that it retains its nutrients. However, light cooking makes it easier to absorb the vitamin A and allows other nutrients to be released from oxalic acid, an anti-nutrient.***



***Kale is a staple for many green juices, but the Kale Mary — Serious Eats' take on a bloody Mary — is truly one of a kind.***

***Instead of cutting the taste of kale with fruits, this recipe uses tomato and celery juice, adding more than enough vitamin A.***

***The horseradish in this recipe may also provide anti-inflammatory benefits.***

***Blend it up for a drink that'll awaken your senses.***

***Notable nutrients  
vitamins A and C***

***Magnesium, Potassium, Iron, fatty acids***





## ***TOMATO JUICE***

***Make fresh and without added ingredients yourself.***

***No juicer or blender required, although you may like to remove pieces through a sieve.***

***Tomatoes are rich in folate, which help lower your risk of infections***

***Notable nutrients***

***Vitamins A and C***

***Iron***

***Folate***

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# ***Watermelon***

## **Veg Recipes of India in summer**

***It helps your immune system, and relieve muscle soreness. Muscle soreness is a common symptom of the flu, especially in older adults.***

***The heavy water content of this fruit may also make it easier to make juice.***

***You can also include watermelon juice in other plain fruit juices, such as apple or orange, that may not have as much vitamin A.***

## ***Notable nutrients***

- ***Vitamins A and C***
- ***Magnesium***
- ***Zinc***



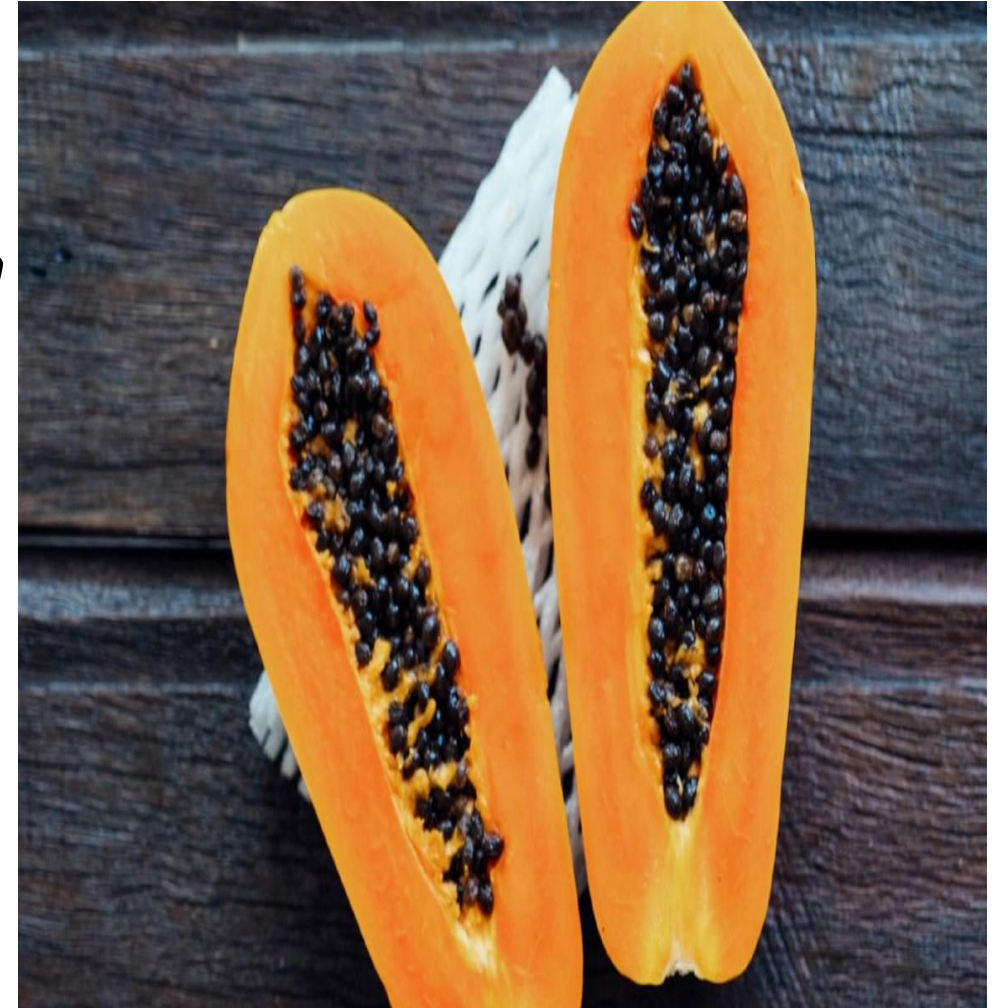
# **Papaya**

**Papaya is another fruit loaded with vitamin C.**

**You can find the daily recommended amount of vitamin C in a single medium fruit.**

**Papayas also have a digestive enzyme called papain that has anti-inflammatory effects.**

**Papayas have decent amounts of potassium, magnesium, and folate, all of which are beneficial to your overall health.**

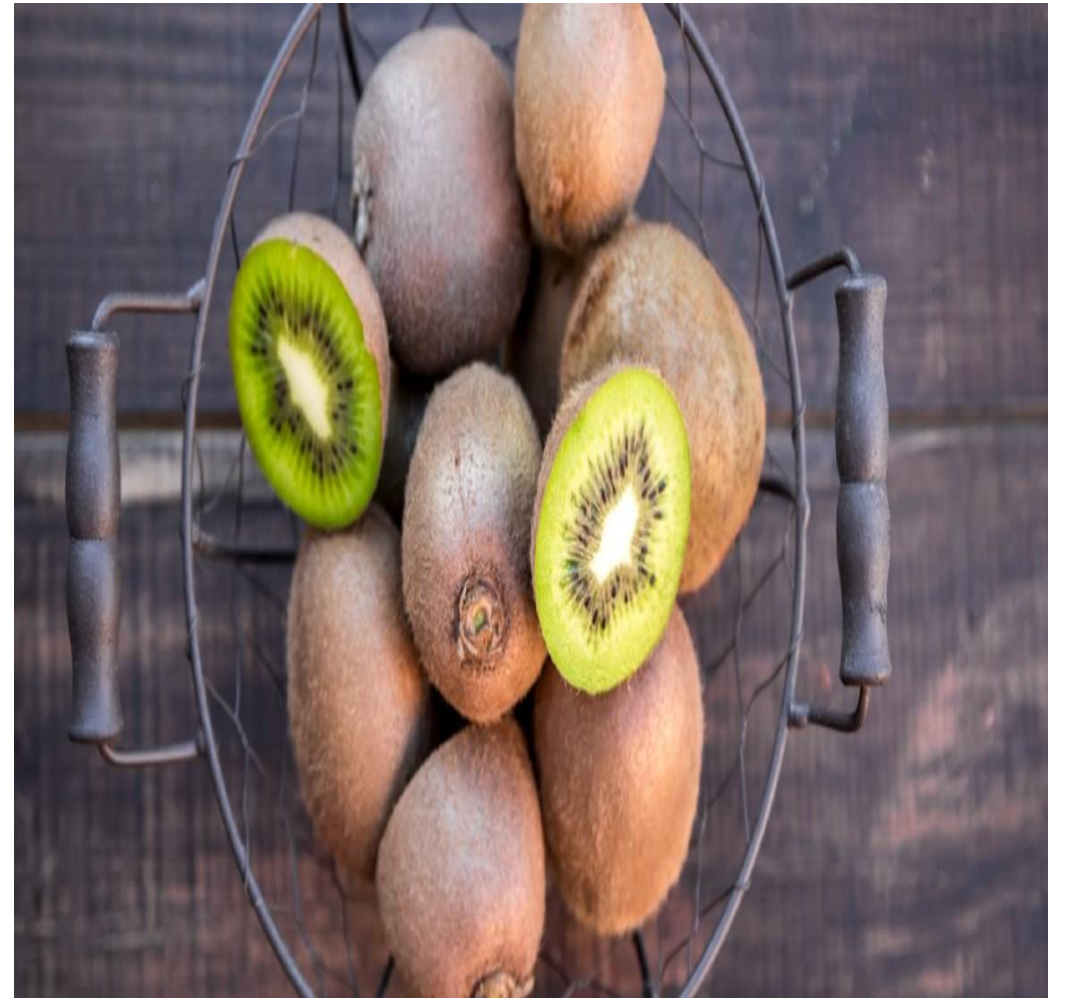




# ***Kiwi***

***Like papayas, kiwis are naturally full of essential nutrients, including folate, potassium, vitamin K, and vitamin C.***

***Vitamin C boosts the white blood cells to fight infection, while kiwi's other nutrients keep the rest of your body functioning properly.***





# ***Red bell peppers***

***If you think citrus fruits have the most vitamin C of any fruit or vegetable, think again.***

***Ounce for ounce, red bell peppers contain almost 3 times as much vitamin C as a Florida orange***

***They're also a rich source of beta carotene.***

***Besides boosting your immune system, vitamin C may help you maintain healthy skin.***

***Beta carotene, which your body converts into vitamin A, helps keep your eyes and skin healthy.***



# **Broccoli**

**Broccoli is supercharged with vitamins and minerals.**

**Rich in vitamins A, C, and E, as well as fiber and many other antioxidants,**

**It is one of the healthiest vegetables you can put on your plate.**

**The key to keeping its power intact is to cook it as little as possible — or better yet, not at all.**

**Steaming is the best way to keep more nutrients in the food.**





# Pumpkin seed

## ***Pumpkin seed milk.***

***It's one of the freshest, most natural recipes and works as a great base for fruit smoothies.***

***This milk not only benefit your immune system, it may also help your:***

- bone health***
- menopause symptoms***
- urinary health***
- hair and skin***
- mental health***
- prostate health (for men)***

## ***Notable nutrients***

- Vitamins A, C, and B-6***
- Magnesium***
- Zinc***





# Sunflower seeds

**Sunflower seeds are full of nutrients, including [phosphorous](#), [magnesium](#), and vitamins B-6 and E.**

**Vitamin E is important in regulating and maintaining immune system function.**

**Other foods with high amounts of vitamin E include [avocados](#) and dark [leafy greens](#).**

**Sunflower seeds are also incredibly high in selenium. Just 1 ounce contains [nearly half the selenium that the average adult needs daily](#).**

**A variety of [studies](#), mostly performed on animals, have looked at its potential to combat viral infections such as [swine flu \(H1N1\)](#).**



## ***Strawberry and Mango***

***Strawberry mango mocktail is the healthy way to satisfy your cravings for a bottomless brunch.***

***May use frozen fruits, which have the same nutritional punch as fresh ones.***

***You can also opt for fresh if you have them on hand.***

***The vitamin E from the mangos add extra antioxidant benefits to enhance your immune system, especially in older adults.***

### ***Notable nutrients***

- ***Vitamins A, C, and E***
- ***iron***
- ***folate***





# ***Carrots, Apples, and Orange***

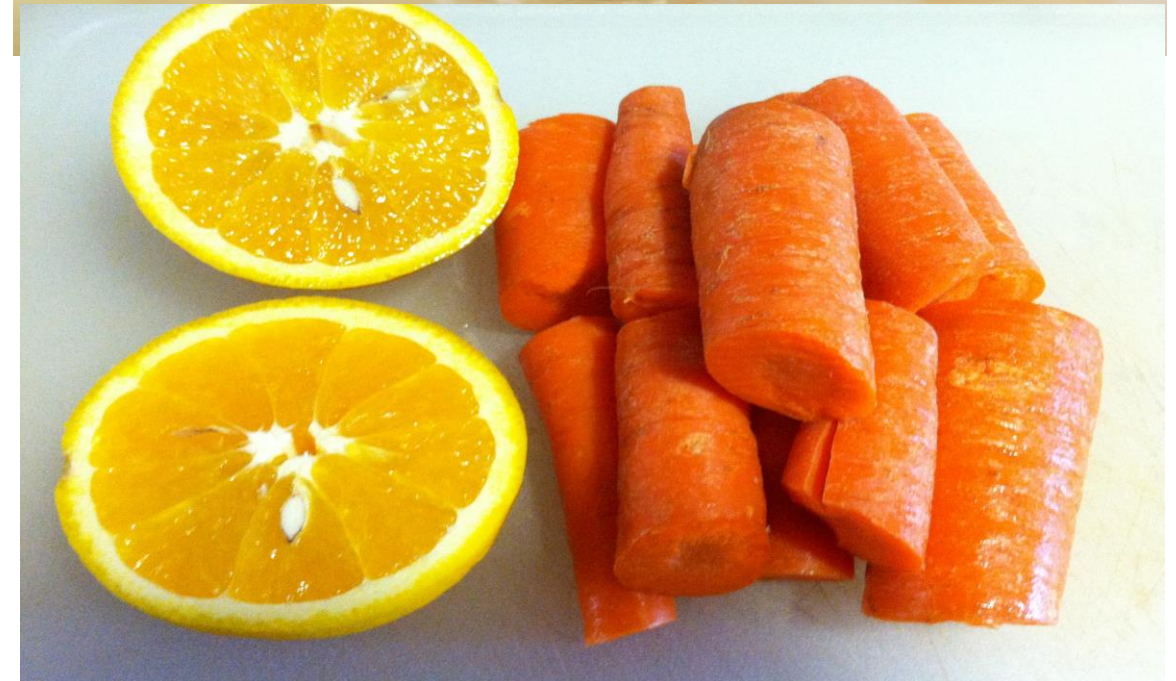
Combination of various antioxidants.

Carrots contain the antioxidant beta carotene which turns into Vitamin A and helps to form and maintain healthy glowing skin.

Vitamin C - stimulates the production of collagen in our skin  
One glass a day enough.

## ***Important Components***

vitamins A, B-6, and C  
potassium  
folic acid





# ***Strawberry-kiwi mint***

***Strawberries and kiwis are other healthy alternatives for a vitamin C-***

***Four cups of strawberries to make one cup of juice, you may blend these fruits into a smoothie rather than a juice.***

***Greek yogurt is a good source of magnesium and probiotics.***

***Probiotics may help cells maintain an antimicrobial barrier.***

## ***Notable nutrients***

- ***Vitamins A, C, and B-6***
- ***Magnesium***
- ***Zinc***





# ***Beetroot, Carrot, Spinach***





# ***Spinach, lettuce, and kale***

***A vegetable-based green juice is a powerhouse of nutrients for a strong immune system.***

***Throw in a handful of parsley for an extra serving of vitamin B-6.***

***This vitamin plays an important role in immune cell proliferation and antibody production.***

## ***Notable nutrients***

- ***Vitamins A, C, and B-6***
- ***Iron***
- ***Calcium***



# Garlic

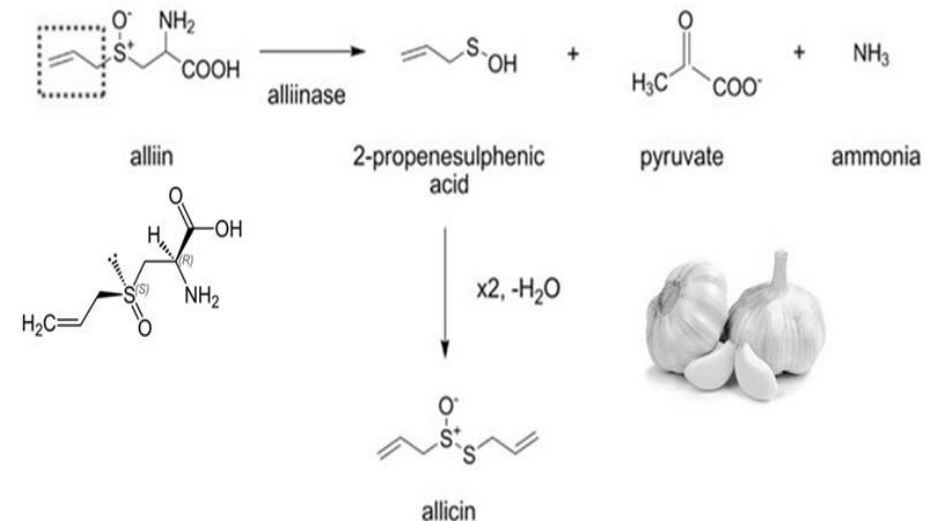
**Garlic almost in every cuisine in the world.**

***It adds a little zing to food and it's a must-have for your health.***

***Early civilizations recognized its value in fighting infections.***

***Garlic may also slow down hardening of the arteries, and there's weak evidence that it helps lower blood pressure.***

***Garlic's immune-boosting properties seem to come from a heavy concentration of sulfur-containing compounds, such as allicin.***





# **Ginger**

**Ginger is another ingredient many turn to after getting sick.**

**Ginger may help decrease inflammation, which can help reduce a sore throat and inflammatory illnesses.**

**Ginger may help with nausea as well.**

**While it's used in many sweet desserts, ginger packs some heat in the form of gingerol, a relative of capsaicin.**

**Ginger may also decrease chronic pain and might even possess cholesterol-lowering properties**



## **Phytochemicals**

- **Volatile oils – Camphene, Zingiberene, Zingiberol**
- **Phenols - Gingeol, Zingerone**
- **Oleoresin - Gingerol, Shogaol**
- **Proteolytic enzyme – Zingibain**
- **Nutrients and Vitamins – Ca, Mg, P, Na, Fe Vitamin A, B Complex & C**

# Turmeric

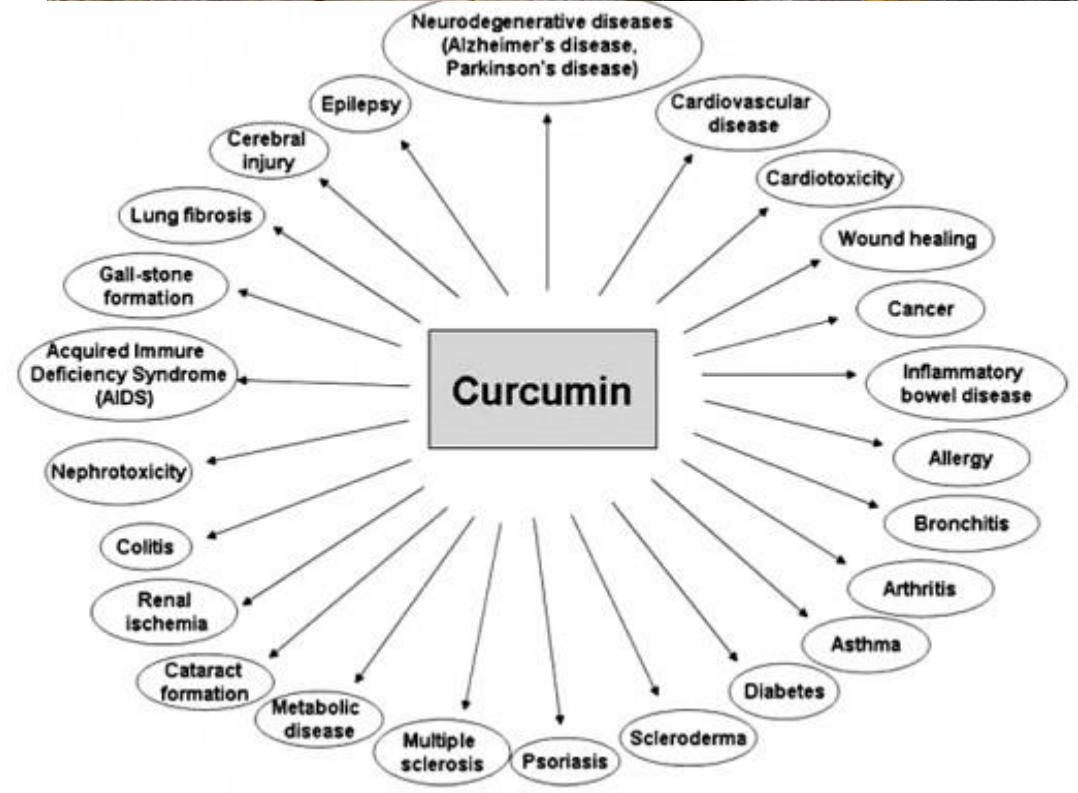
**Key ingredient in many curries.**

**This bright yellow, bitter spice has also been used for years as an anti-inflammatory in treating both osteoarthritis and rheumatoid arthritis.**

**High concentrations of curcumin, which gives turmeric its distinctive color, can help decrease exercise-induced muscle damage.**

**Curcumin has promise as an immune booster (based on findings from animal studies) and an antiviral.**

**Turmeric milk at night helps to fight flue, gives peaceful sleep and kill harmful microbes, improves immunity**





# Yogurt

**Look for yogurts that have the phrase “live and active cultures” printed on the label, like Greek yogurt.**

**These cultures may stimulate your immune system to help fight diseases.**

**Try to get plain yogurts rather than the kind that are flavored and loaded with sugar.  
You can sweeten plain yogurt yourself with healthy fruits and a drizzle of honey instead.**

**Yogurt can also be a great source of vitamin D, so try to select brands fortified with this vitamin.  
Vitamin D helps regulate the immune system and is thought to boost our body’s natural defenses against diseases.**

**Clinical trials are even in the works to study its possible effects on COVID-19.**



# **Almonds**

**When it comes to preventing and fighting off colds, vitamin E tends to take a backseat to vitamin C.**

**However, this powerful antioxidant is key to a healthy immune system.**

**It's a fat-soluble vitamin, which means it requires the presence of fat to be absorbed properly.**

**Nuts, such as almonds, are packed with the vitamin and also have healthy fats.**

**Adults only need about 15 mg of vitamin E each day.**

**A half-cup serving of almonds, which is about 46 whole, shelled almonds, provides around 100 percent of the recommended daily amount.**





# **Green tea**

**Both green and black teas are packed with flavonoids, a type of antioxidant.**

**Where green tea really excels is in its levels of epigallocatechin gallate (EGCG), another powerful antioxidant which enhance immune function.**

**The fermentation process of black tea destroys a lot of the EGCG.**

**Green tea, on the other hand, is steamed and not fermented, so the EGCG is preserved.**

**Green tea is also a good source of the amino acid L-theanine which aid in the production of germ-fighting compounds in your T cells.**



# **Poultry**

**Chicken soup, it's more than just the placebo effect that makes you feel better.**

**The soup may help lower inflammation, which could improve symptoms of a cold.**

**Poultry, such as chicken and turkey, is high in [vitamin B-6](#).**

**About 3 ounces of light turkey or chicken meat contains [nearly one-third](#) of your daily recommended amount of B-6.**

**Vitamin B-6 is vital for the formation of new and healthy [red blood cells](#).**

**[Stock or broth](#) made by boiling chicken bones contains gelatin, chondroitin, and other nutrients helpful for gut healing and immunity.**





# **Shellfish**

***packed with zinc which is required for our immune cells to function well.***

***Varieties of shellfish include:***

- ***oysters***
- ***crab***
- ***lobster***
- ***Mussels***

***daily recommended amount of zinc in your diet:***

- ***11 mg for adult men***
- ***8 mg for most adult women***

***Too much zinc can actually inhibit immune system function.***



## ***Common Mushrooms:-***

***Lentinus edodus , Agaricus subrufescens ,  
Agaricus blazei, Tricholoma matsutake, Suillus  
granulates , Agaricus camphorate, Agaricus  
subrufescens, Ganoderma lucidum Amauroderma  
rude, Antrodia camphorate, Phellinus linteus,  
Coriolus versicolor, Inonotus obliquus, Coprinus  
comatus, Boletus edulis, Boletus regius,***



# Medicinal plants

Thanks

