

Top Foods to Keep in Your Pantry During the Cold and Flu Season

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December 16, 2024

STORY AT-A-GLANCE

- › Garlic contains sulfur compounds like allicin that boost immunity by regulating cytokines and fighting bacteria. When consumed raw and chopped, it's most effective at providing immune-protective benefits
- › Ginger's bioactive compounds (gingerol, shogaol, zingerone and paradol) provide anti-inflammatory and antioxidant properties, helping protect against viral infections and soothing sore throats when consumed as tea
- › Chili peppers contain capsaicin that thins mucus and vitamin C (more than oranges). They help clear congestion, though excessive consumption could cause gastrointestinal discomfort
- › Manuka honey, particularly its methylglyoxal component, proves more effective than standard treatments for upper respiratory infections and helps improve cough symptoms, according to clinical studies
- › Turmeric and green tea offer immune support through curcumin and polyphenols respectively, with research showing they help reduce cold symptoms and modulate immune system function

Flu season is here, and with it comes the usual recommendation from health agencies to get the flu shot. But vaccination is hardly the best way to ward off illness during flu season. You're far better off boosting your immune function by consuming healthy, whole foods loaded with immune-protective nutrients.

Below are some of my top food recommendations (many of which are easily accessible) to keep your immune system in tip-top shape during flu season. Chances are, you already have many of these ingredients in your pantry, but if not, this is your sign to stock up.

Garlic – A Small Bulb with Big Benefits

The culinary and medicinal uses of garlic have been treasured since ancient times, with Chinese, Egyptian, Greek, Indian and Roman medical texts highlighting the many uses of this pungent food.¹ Garlic offers a wide range of benefits due to its anti-inflammatory, anticancer and antimicrobial properties.

Garlic is rich in bioactive compounds like saponins, phenolics and organic sulfides. Its sulfur-containing compounds – allicin, alliin, ajoene and allyl propyl disulfide – also offer many benefits, particularly against colds and the flu. According to a 2024 study published in Food and Function journal:

*"Garlic, in particular its organosulfur compounds, can maintain immune system homeostasis through positive effects on immune cells, especially by regulating cytokine proliferation and expression. This may underlie their usefulness in the treatment of infectious and tumor processes."*²

In a HuffPost article,³ Dr. Tania Elliott, a spokesperson for the American College of Allergy, Asthma and Immunology, says that garlic works by upregulating certain chemicals in the immune system that are responsible for eliminating inflammatory cells and fighting bacteria and viruses.

What's wonderful about garlic is its long shelf life. According to Bon Appetit,⁴ whole, unpeeled head of garlic will last close to six months, as long as it's in a dry, cool and well-ventilated and dark place, close to room temperature. Unpeeled garlic tends to degrade more quickly, so use it right away.

Remember that heat destroys garlic's beneficial compounds, so to fully reap its immune-boosting effects, consume garlic raw and chopped (chopping or crushing⁵ helps

increase its allicin content). If you cannot tolerate its pungent flavor, simply chop the garlic and let it sit for 15 minutes before cooking.

Ginger's Bioactive Compounds Help Bust Inflammation

Just like garlic, ginger is aromatic and adds a unique flavor when added to your favorite meals. You can also enjoy it as a warming, fragrant tea, perfect for cold winter days. In addition to its warming abilities, ginger also has anti-inflammatory, antioxidant and immunomodulatory properties. During the cold weather, sipping on ginger tea will help ward off or soothe a sore throat.⁶

A study in *Frontiers in Nutrition* attributes these benefits to ginger's compounds, mainly gingerol, shogaol, zingerone and paradol. According to the authors:

"Bioactive compounds in ginger inhibit proinflammatory responses, increase levels of anti-inflammatory cytokines, and promote signaling pathways related to inflammation prevention on the anti-inflammatory pathway.

Bioactive compounds in ginger are able to improve oxidative stress tolerance by eliminating ROS and lowering oxidative stress parameters, increasing antioxidant enzymes, and increasing antioxidant capacity," the researchers noted.

Gingerol is the most prominent bioactive compound in ginger, and studies note its ability to protect against viral and bacterial infections. A 2020 study published in the *International Journal of Health Sciences* notes:⁷

"Specifically, [ginger] was found to be highly effective against the oral bacteria associated with the gingivitis and periodontitis and effective against the respiratory syncytial viral infection."

To use ginger, peel the skin (use a spoon instead of a peeler or knife⁸) and then slice or grate it. Add to smoothies, soups and broth. To make a fragrant tea, steep ginger slices in hot water. The key to keeping ginger fresh is not to peel the tough skin until you're ready

to use it. At room temperature, a whole, unpeeled ginger root can stay fresh for up to three weeks, and in the fridge, it can last for up to a month.⁹

Spicy Chili Peppers Help Clear Congestion

When you eat spicy foods like chili peppers, do you notice that your nose becomes runny? This is because of capsaicin, a bioactive compound that gives these foods their spiciness. This effect, however, is beneficial if you're coming down with a cold or flu — according to Elliot, capsaicin causes your mucus to thin out, making it less habitable for viruses and bacteria.¹⁰

But this is just one of the many advantages of chili peppers — in fact, they have higher amounts of vitamin C compared to oranges, providing valuable support to your immune system. According to Eating Well:

*"A 4-ounce serving (about 3/4 of a large pepper) of raw green bell pepper has 80 mg of vitamin C, while the same amount of yellow bell pepper has 184 mg, red bell pepper has 142 mg, and orange bell pepper provides 158 mg of vitamin C."*¹¹

Serrano, jalapeno and poblano are some examples of chili peppers for you to try. Chili peppers can stay fresh for up to a year when stored in the fridge, although freezing them prolongs their life for up to a year.¹² Chili peppers are versatile and add a delicious mild spicy flavor when added to a wide array of dishes.

However, as with many other things, too much of something is not always better. In the case of peppers, consuming too much capsaicin could lead to unpleasant side effects like diarrhea, nausea, vomiting and a burning sensation in your gastrointestinal tract.

Raw Manuka Honey — More Effective Than Antibiotics Against Respiratory Tract Infections

Manuka honey, made from the flower nectar of manuka plants (*Leptospermum*) native to Australia and New Zealand, is widely known for its medicinal uses, such as wound healing. This rare and special honey is noted for its antimicrobial properties, thanks to dihydroxyacetone, which acts as a precursor to methylglyoxal (MGO). MGO is responsible for most of manuka honey's medicinal benefits, including fighting antibiotic-resistant respiratory infections.

A systematic review and meta-analysis published in *BMJ Evidence-Based Medicine*¹³ found that manuka honey works better than the standard of treatment used for upper respiratory tract infections (URTIs), otherwise known as the common cold. The researchers found that honey helped improve symptoms, including the severity and frequency of cough.

*"Honey was superior to usual care for the improvement of symptoms of upper respiratory tract infections. It provides a widely available and cheap alternative to antibiotics. Honey could help efforts to slow the spread of antimicrobial resistance, but further high-quality, placebo-controlled trials are needed." They concluded.*¹⁴

However, remember that manuka honey only works for your health if it's free of contaminants. You can read more about choosing high-quality manuka honey in my article, "[Manuka Honey Helps Combat Antibiotic Resistant Lung Infection](#)." Manuka honey and other real, unadulterated honey, when stored properly, does not go bad, and will stay safe to eat for many years.¹⁵

Remember, though, that these benefits do not extend to the processed honey you find on grocery store shelves – most of these are adulterated with corn syrup and will do nothing for your health.

Sip on Turmeric or Green Tea for an Immunity Boost

Staying hydrated is essential to a well-functioning immune system, and there are a number of refreshing and healthy beverages for you to sip on. Two of my top choices are

turmeric tea and green tea. In fact, they're perfect for the cold season, as they will warm you up while providing you with antioxidants.

Turmeric, a close relative of ginger, offers immune-boosting benefits primarily from curcumin, its active compound. Curcumin's anti-inflammatory and antioxidant properties have long been established, and recent studies have also highlighted its immunomodulatory effects.¹⁶

In one Japanese study,¹⁷ researchers found that taking 150 milligrams of curcumin a day for 12 weeks helped shorten the duration of cold symptoms in healthy adults.

*"[O]ur data revealed that consumption of 150 mg/day curcumin equivalent of TS-P1 or CR-033P reduces common cold symptoms. In particular, consumption of 150 mg/day curcumin equivalent of TS-P1 shortens sneezing for approximately 10 days, nasal discharge for approximately 14 days, blocked nose for approximately 11 days, and cough for approximately 6 days," the researchers concluded.*¹⁸

On the other hand, green tea, made from the leaves of the *Camellia sinensis* plant, offers a wealth of beneficial polyphenols, including catechins epigallocatechin gallate (EGCG), epicatechin gallate, epigallocatechin and epicatechin.¹⁹ These polyphenols are widely appreciated not only for their antioxidant and anti-inflammatory effects, but also for their effects on multiple physiological processes,²⁰ including your immune system function.

According to a comprehensive review published in the *Food Science and Human Wellness* journal,²¹ green tea helps modulate the innate, adaptive and intestinal immune systems. The researcher explained:

*"In green tea, various compounds act on different immune cells or even the same type of cell, causing diverse effects on the immune system. According to the current research results, we speculate that green tea showed greater immunomodulatory potential due to the synergistic effects on innate immunity and adaptive immunity of different compounds."*²²

Adding a squirt of lemon juice to your green tea will boost its benefits, as research has demonstrated that vitamin C significantly increases the amount of catechins available for your body to absorb.²³ It's also a good idea to choose loose-leaf tea over tea bags, as most tea bags are contaminated with toxins and microplastics.

Other Healthy Foods to Have on Hand During Cold and Flu Season

When it comes to immune-boosting foods, your options are bountiful; while the five listed above are specially mentioned for their unique protective actions, I encourage including many other varieties into your meals, starting with these:

- **Citrus fruits (orange, tangerine, lemon and lime)** – These tangy fruits are loaded with vitamin C and folate, which are both essential in maintaining the integrity of immunological barriers, as well as supporting the function of immune cells, including phagocytes, natural killer cells, T-cells and B-cells.²⁴
- **Pumpkin** – Pumpkin is the ultimate fall food, although it's actually popular all year round. Rich in vitamins A, C and B vitamins, it's widely recognized for its antioxidant, anti-inflammatory, antiviral and antidiabetic effects.²⁵ Remember that fresh pumpkin is the best choice; don't expect pumpkin-flavored processed snacks to have any benefits.
- **Apples** – Aside from being high in fiber and vitamin C, apples also contain antioxidants like anthocyanins, and vitamin E. One study notes, "Regular consumption of apples helps reduce the risk of atherosclerosis, coronary artery disease, heart attacks, and diabetes, and also provides anti-asthmatic and anti-allergic effects."²⁶
- **Berries (raspberries, blueberries, blackcurrants and blackberries)** – These fruits offer phenolic compounds, including anthocyanins, flavonols and phenolic acids that provide antioxidant, antimicrobial, anti-inflammatory and immunomodulatory effects.²⁷

Lastly, Elliot recommends having coarse sea salt on hand to use as a gargle whenever you're feeling under the weather.²⁸

"Gargling with warm salt water when you are sick, especially sea salt, can have an anti-inflammatory effect. It works by helping to wash away viruses, bacteria, allergens and mucus in your throat. The rougher the salt, the better," she said.

Most sea salts on the market, however, are loaded with plastic microparticles, which is why my personal choice is Himalayan salt. Since it's mined from salt beds created long before plastic and other toxic chemicals were manufactured, it's the best option to reduce your toxic load.

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