

More Than 13 Ways Lemons Benefit Your Health and Home

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✓ Fact Checked

August 07, 2023

STORY AT-A-GLANCE

- › Lemons are packed with vitamins, antioxidants and flavonoids that have a variety of medicinal benefits, including antiviral and anti-inflammatory properties. The nutritional value of lemons is associated with several robust health benefits
- › Lemons are rich in vitamin C, which helps reduce the risk of cardiovascular disease. The flavonoids found in lemons also reduce inflammation, dyslipidemia, endothelial dysfunction and atherosclerosis. A mixture of garlic and lemon juice improved lipid levels and blood pressure, all risk factors for heart disease
- › The antioxidants in lemons may help protect liver health; several studies have shown topical application of vitamin C can slow the early signs of skin aging, prevent photoaging and help treat hyperpigmentation, skin hydration and elasticity by promoting collagen synthesis
- › Lemons can naturally clean and deodorize your home, and can be used as an insect repellent and weed killer. Although generally well-tolerated, some people are allergic to lemon, or develop contact dermatitis with repeated exposure to it. Drinking lemon water through a straw can reduce enamel erosion. Drinking too much can lead to heartburn and nausea

Citrus fruits are among the most widely cultivated crops in the world. A 2018 study¹ sought a better understanding of the origin of citrus trees by examining DNA. The researchers believe a plausible explanation is that modern citrus trees likely descended from natural species found in a triangle formed by northern Myanmar, northwestern Yunnan and northeastern India.

Lemons arrived in the U.S. by way of food explorer David Fairchild, who was hired by the U.S. government to search the world for new crops.² Today, the leading producers of lemons are Arizona, Florida and California.³ The trees can grow up to 20 feet high, live for over 150 years and yield up to 600 pounds of fruit each year.⁴ There are three common types of lemons, including Eureka, Lisbon and Bearss.

An average lemon contains 3 tablespoons of juice, eight seeds and 5% citric acid. Lemons used to be so rare that kings presented them to each other as gifts, while California Gold Rush miners paid large amounts for a single lemon. These bright citrus fruits are high in vitamin C and antioxidants known as flavonoids, which have antioxidant and anti-inflammatory properties that can fight degenerative and brain diseases.⁵

Lemons Pack a Powerful Nutritional Punch

According to the U.S. Department of Agriculture,⁶ 1 fluid ounce of lemon juice from a raw lemon contains 11.8 mg of vitamin C, 1.83 mg of magnesium, 2.44 mg of phosphorus, 31.4 mg of potassium and 6.1 micrograms of folate packed into 6.71 calories. Lemons are versatile and packed with health benefits. They can be used in a variety of ways around your home and your beauty regimen.

There are many ways of using raw lemon peel in cooking. While the nutritional benefits are not as concentrated,⁷ the peel does contain active flavonoids. In one study⁸ of citrus peels, the total content of flavonoids found in lemons was highest across all citrus tested.

Cardiovascular Health Benefits Associated With Lemons

The nutritional value of lemons is associated with several robust health benefits. Research has linked eating fruits and vegetables rich in vitamin C with a reduction in the risk of cardiovascular disease and stroke.⁹ Yet, it's not only the vitamin C that is thought to be good for your heart.¹⁰

For example, the flavonoids found in lemons have biological activities that have proven as efficient therapeutic treatments for cardiovascular disease, with a reduction in inflammation, dyslipidemia, endothelial dysfunction and atherosclerosis according to a study¹¹ in *Oxidative Medicine and Cellular Longevity*.

Another study,¹² concluded a mixture of garlic and lemon juice in people aged 30 to 60 years with moderate hyperlipidemia improved lipid levels, fibrinogen and blood pressure, all risk factors for cardiovascular disease.

While lemons have a reputation for helping with weight loss, a 2015 study of overweight Korean women concluded that the reduced body fat and insulin resistance of a lemon detox diet was achieved simply through calorie restriction.¹³

And, when a lemon coffee diet for weight loss popped up in 2022, Cleveland Clinic debunked it, too: "There is nothing in lemon juice that is going to burn fat or a chemical connection to make that happen. Sorry to say, it's not that easy," Beth Czerwony, registered dietitian at the clinic, said.¹⁴

More Health Benefits Linked to Lemons

As you might expect, the vitamin C content in lemons helps promote a healthy immune system. Vitamin C supports a variety of cellular functions including antioxidant and antimicrobial activity and enhancing phagocytosis.¹⁵ A Cochrane Review¹⁶ in 2013 found vitamin C could be useful to help reduce the duration and severity of the common cold.

Another 2013 study¹⁷ found that asthma exacerbations induced by the common cold could be alleviated by vitamin C. You may have tried drinking hot honey and lemon to help reduce mucus buildup and relieve a cough. Gargling with lemon water may also help soothe a sore throat as the flavonoids have anti-inflammatory and antibacterial properties.

When levels of certain minerals increase in the urine, it can trigger the formation of pebble-like pieces called kidney stones. These can vary in size and shape and vary depending on the mineral involved in formation. According to the National Kidney

Foundation,¹⁸ 1 in 10 people will develop a kidney stone during their lifetime. Lemons have citrate, which is known to help break down certain stones and help prevent the formation of calcium and cystine stones.

The antioxidant properties in lemons may also help protect liver health. A 2017 animal study¹⁹ has suggested that lemon juice could protect the liver from alcohol-induced injury, which may be related to antioxidant properties. After chronic excessive alcohol consumption, the data showed lemon juice inhibited increases in ALT, AST and lipid peroxidation levels, all indications of liver damage.

Lemons have also been promoted to help protect and improve your skin. For example, citric acid can reduce sebum levels and help reduce acne.²⁰ Vitamin C also helps protect against photoaging and may reduce visible signs of aging by boosting collagen production.

According to Harvard Health,²¹ topical vitamin C can help slow early signs of skin aging and prevent sun damage, also known as photoaging. In addition to prevention, studies have shown that ascorbic acid, also known as vitamin C,²² helps treat pigmentation, skin hydration and elasticity,²³ which are some of the underlying mechanisms involved in wrinkles.

A 2023 study²⁴ demonstrated that vitamin C helps treat wrinkled skin, "but long-term use may be needed to achieve noticeable changes." Other benefits from cutaneous administration include promoting collagen synthesis, lightening hyperpigmentation and improving inflammation.²⁵

Although there is currently little data to suggest that topically applied vitamin C can help reduce the appearance of stretch marks, there is anecdotal evidence. Vitamin C helps boost collagen production, which in turn improves skin elasticity and structure. It appears vitamin C works best to help prevent stretch marks and reduce their appearance in the early stages.²⁶

A homemade natural vitamin C serum can be made using the juice of one lemon and 50 milliliters of aloe vera. The serum should be kept in a dark airtight container and made

frequently since it oxidizes quickly.

How Else Can You Use Lemons?

If you're looking for more ways to use lemons at home, Insider²⁷ compiled 66 ways, including those that help deodorize and clean. Here are just a few you might find useful.

Cleaning

Garbage disposal – Freeze lemon slices and vinegar in ice cube trays. Place a few frozen cubes down your disposal for cleaning and freshening.

Refrigerator – Soak a sponge in lemon juice and let it sit in your fridge for a few hours; it works better than baking soda to remove odors.

Room freshener – Simmer a pot of water and add lemon peels, cloves and cinnamon sticks.

Humidifier – Add lemon juice to the water in your humidifier, then let the machine run for deodorizing.

Fireplace – Dried citrus peels can act as kindling in your fireplace, adding a wonderful smell and acting as a flame starter. Simply let the peels sit out for a few days before using.

Furniture polish – Combine lemon oil, lemon juice and olive or jojoba oil to make homemade furniture polish. Simply buff with a cloth.

Hard water stains – Rub a cut lemon on your faucets and shower fixtures. It will remove hard water stains and leave fixtures shiny.

Cutting boards – Sprinkle coarse salt on your cutting board, then rub with a cut lemon to freshen and remove grease. This trick also works for wooden salad bowls and rolling pins.

Coffee maker — Run a cycle with plain water, then add a mixture of lemon juice and water to the water tank. Let it sit, then run the cycle through. Repeat this process once more, then run another plain water cycle (you'll want to wash the coffee pot and filter afterward to remove any lemon taste).

Dish soap booster — A teaspoon of lemon juice added to dish soap helps cut through grease and increases effectiveness.

Toilet — Adding half a cup of lemon juice to your toilet, then letting it sit before scrubbing, will help remove stains. Add half a cup of borax for stubborn stains.

Drains — To unclog a drain, pour a pot of boiling water down the drain followed by half a box of baking soda and 8-12 ounces of lemon juice. The lemon juice and baking soda will react, creating a foam. Follow this up with another pot of boiling water to flush away the clog.

All-purpose cleaner — Combine water, baking soda, vinegar, lemon, and lemon essential oil for a wonderful kitchen or bathroom cleaner.

Hardwood floors — Combine lemon and vinegar to make a grime-fighting nontoxic floor cleaner.

Laundry

- **Whitener** — Add lemon juice to hot water and soak white linens, then rinse and wash as normal. You can also add one-half cup of lemon juice to your washing cycle instead of bleach.
- **Spot treatment** — Pour lemon juice on fabric stains followed by salt. Rub the stain and rinse. This works well for underarm stains.
- **Grease stains** — Mix lemon juice with vinegar and apply to the stain. Let it sit and then rinse.

Miscellaneous

- **Leather shoe polish** — Combine one part lemon juice with two parts of olive oil, then apply it to leather shoes. Let it sit for 10 to 15 minutes, then buff the shoes with a cloth.
- **Insect repellent** — Mopping floors with lemon juice and water will repel roaches and fleas. Spray concentrated lemon juice on areas where ants are getting in. You can also place lemon peels near entryways to repel insects.
- **Berry stains on hands** — Rub a paste of cornmeal and lemon juice onto your hands, let sit, then rinse off to remove berry stains.
- **Kill weeds** — Spray weeds with lemon juice for a nontoxic weed killer; it kills anything it contacts.
- **Hardened paint brushes** — Bring lemon juice with a splash of water to a boil, then add in hardened paint brushes. Let sit for 15 minutes, then wash with soap and water. The bristles will become soft once they dry.

Take Care With These Possible Side Effects

Although lemons are generally well tolerated, some people have an allergy to citrus fruits²⁸ and repeated use can lead to allergic contact sensitivity.²⁹ It has also long been known that lemon juice can erode the enamel on your teeth,³⁰ and has a greater potential to erode enamel than grapefruit juice and orange juice.³¹ Some dentists suggest ways to help alleviate the stress on your enamel, including:³²

- Dilute the lemon juice in a taller glass of water and use a straw to send the liquid to the back of the mouth, away from your teeth. Consider purchasing stainless steel straws to reduce plastic.
- Immediately after drinking or eating citrus fruit, rinse your mouth with tap water remove the acid fluid and normalize the pH of your saliva. Wait at least an hour before brushing your teeth. Acidic food softens the enamel and brushing immediately afterward can cause damage.

Drinking too much lemon juice can lead to an upset stomach, heartburn and nausea. Citrus fruits are also one trigger food identified that increases the risk of migraine headaches.³³ It may also be wise to get your lemons at home. A 2007 study³⁴ revealed that 69.7% of the lemon slices tested in restaurants produced a total of 25 different microbial species.

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