

Licorice and Slippery Elm Tea Are Best for a Sore Throat

Analysis by Dr. Joseph Mercola



STORY AT-A-GLANCE

- Hot tea containing licorice root, slippery elm and marshmallow root offered short-term relief from acute pharyngitis (sore throat)
- > While some experts advise you to sip on whatever temperature feels best, one study found that participants reported immediate and sustained relief from a sore throat when drinking hot fluid, which may be from the heat relaxing the throat muscles
- > Slippery elm is also used in the treatment of wounds, burns, boils and ulcers. Licorice root is widely prescribed in Chinese medicine for gastric and peptic ulcers, and is used in combination with spironolactone to treat polycystic ovary syndrome. It also may reduce body fat
- Licorice root has demonstrated an antitumor effect in animal studies and was active against the SARS-CoV-1 virus in 2003. However, excessive amounts may induce hypokalemia and pseudo hyperaldosteronism, triggering high blood pressure, muscle weakness and headaches

Although you can get a cold throughout the year, most people have a higher risk of the common cold in the winter and spring months.¹ One of the most common symptoms is a sore throat. The Guardian characterizes the common cold as having "the twin distinction of being both the world's most widespread infectious disease and one of the most elusive."²

According to data collected from 142,377 participants in the Rochester Epidemiology Project, upper respiratory disease, excluding asthma, was one of the top five reasons this population sought medical care.³

Sore throats, also called pharyngitis,⁴ are often triggered by a viral infection, including flu, the common cold and COVID-19. Since these are viruses, antibiotics are not effective against the infection.⁵ However, there are natural remedies you can use to help shorten the length of a viral infection, as well as alleviate the symptoms of pharyngitis.

Many of the pharmaceutical drugs sold today are the result of isolating plant compounds and replicating them in the lab.⁶ Through many years of fighting illness and disease, people from all over the world have learned to rely on medicinal plants for healing. They have been a part of human history since the beginning of recorded time.

The World Health Organization reports that many nations continue to rely on herbal treatments to provide for health care needs.⁷ In a survey of 133 nations, 110 reported using herbal medicines. Another 2007 survey⁸ in the U.S., found nearly 4 in 10 adults used complementary and alternative medicine therapies, including herbal treatments.

The resurgence of herbal medicine treatments may be driven in part by the significant death rate from all viruses, including influenza⁹ and SARS-CoV-2.¹⁰ Two pleasing ingredients in herbal tea may help soothe your sore throat, making it easier to swallow, stay hydrated and eat.

Should You Drink Your Herbal Remedy Hot or Cold?

While some health experts advise you to drink fluid at a temperature that feels best for you,¹¹ others have studied the effect of a hot drink on the common cold. Ron Eccles, Emeritus Professor at Cardiff University, for example, has spent his professional life analyzing and investigating human diseases of the upper airways.¹²

His research includes a published study on the effects of hot drinks on the symptoms of the common cold and flu. His objective was to obtain subjective and objective measurements on airflow. In his 30 subjects the data showed that while there was no objective change in the measurement of nasal airflow, the participants reported that a hot drink:13

"... provided immediate and sustained relief from symptoms of runny nose, cough, sneezing, sore throat, chilliness and tiredness, whereas the same drink at room temperature only provided relief from symptoms of runny nose, cough and sneezing ... In conclusion the results support the folklore that a hot tasty drink is a beneficial treatment for relief of most symptoms of common cold and flu."

The Mayo Clinic adds that warm liquids may help ease congestion by stimulating mucus flow.¹⁴ ENT and allergy expert Dr. Shawn Nasseri, agrees, telling Well and Good, "Warm teas cause the vessels of the throat and the muscles to open and relax more, thereby soothing the sore throat. Icy drinks can sometimes cause throat spasms which definitely don't feel comforting."¹⁵

This may explain how January 11 became National Hot Toddy Day. 16 According to one source, in the 1700s, Scottish doctors created the drink as a treatment for their patients who suffered from sore throats and congestion.

A traditional hot toddy contains a shot of whiskey, honey, fresh lemon and boiling water. Personal preference dictates whether you add fresh ginger, nutmeg, cinnamon sticks or cloves.¹⁷ While the hot drink is effective, it isn't the alcohol that confers the benefits since it has adverse effects on your immune system.¹⁸ As Eccles explained:

"A hot toddy is equivalent to any sort of hot drink. The more it promotes salivation, the more it promotes mucus secretion, and mucus is our first line of defense against bacteria and viruses. That's why it contains honey and lemon — it stimulates both sweet and sour."

Slippery Elm and Licorice Root Tea Soothe a Sore Throat

Herbal teas may help reduce the pain of pharyngitis as they have a soothing effect on the mucous membranes. In a double-blind, randomized controlled study, 19 researchers

evaluated the effectiveness of herbal tea containing marshmallow root, licorice root and elm inner bark.

They engaged 60 outpatients with acute pharyngitis and randomly selected them to consume herbal tea or placebo tea with the same taste and smell. The participants drank the tea four to six times daily for as long as they had symptoms. The scientists requested the individuals use no other treatment for their sore throat.

Pain relief was rated after one minute and then every five minutes for the first 30 minutes after drinking the tea. Participants then rated their pain at three hours and 24 hours after the initial dose. The data revealed that the herbal tea was more effective than the placebo in short-term relief, but the effect lasted less than 30 minutes.²⁰

Other Health Benefits of Licorice Root and Slippery Elm

The study evaluated the soothing effect the tea may have on acute pharyngitis but did not address other health benefits associated with the herbs. According to Mount Sinai Hospital,²¹ slippery elm has been used in North America for centuries in the treatment of wounds, ulcers, burns and boils. Native Americans took it internally to relieve cough and sore throats.

The herb has antioxidant activities and causes stimulation in the gastrointestinal tract to increase mucus secretion, which may help protect against ulcers and excess acid. It is often suggested in the treatment of sore throat and cough.²²

One of the major active ingredients in licorice root is glycyrrhizin.²³ Much like anything else, excessive intake can result in negative health effects, including primary pseudo hyperaldosteronism,²⁴ triggering high blood pressure, muscle weakness and headaches.

It suppresses plasma renin activity and aldosterone levels through prolonged and excessive consumption of licorice. If you enjoy the taste of licorice, you may be getting it in candy, beverages and extracts. One of the side effects is a significant fall in plasma potassium levels, which one paper suggests may have clinical application in those on chronic dialysis and at risk of hyperkalemia.

Licorice is a widely prescribed herb in Chinese medicine for the treatment of several disorders, including gastric ulcers²⁵ and peptic ulcers. In Japan, physicians administer glycyrrhizin intravenously to patients with chronic hepatitis B to improve liver function and suppress the secretion of hepatitis B surface antigen.²⁶

Licorice has been used in combination with spironolactone to treat polycystic ovary syndrome (PCOS).²⁷ One study has suggested that licorice root can reduce body fat²⁸ and was shown to reduce testosterone in healthy women,²⁹ which may be one way it helps women with PCOS.³⁰

Studies have also demonstrated a dose-dependent action in animal studies on cell and tumor proliferation and apoptosis.³¹ One study³² published in the Lancet found the compound also demonstrates an antiviral effect against SARS-CoV-1 by stopping reproduction of the virus.

Another study³³ showed glycyrrhizin had antiviral activity against coxsackievirus A16 and enterovirus 71 responsible for hand, foot and mouth disease, a contagious childhood viral infection.

More Remedies to Ease a Sore Throat and Shorten a Cold

Although there are several reasons you may experience a sore throat, the most common cause is a cold. Following are some natural remedies to help ease the discomfort of a sore throat. After these are natural strategies that may shorten the length of your cold and subsequently shorten the time you have a sore throat.

- Herbal remedies Herbal teas made with eucalyptus, peppermint or licorice may help relieve cold symptoms and soothe your sore throat.³⁴
- Gargle with salt water Gargling with one-fourth to one-half teaspoon of salt in 8 ounces of warm water may help relieve the pain and discomfort from a sore throat.³⁵
- Steam Adding humidity³⁶ to the air using a cool-mist vaporizer or humidifier may help loosen congestion and reduce post-nasal drip, which irritates your pharyngeal

tissue.

Zinc lozenges — Zinc is an effective natural remedy. As far back as 1984 results from a randomized, double-blind, placebo-controlled trial³⁷ showed that zinc lozenges shortened the common cold and further study demonstrated it could reduce the length of your cold by an average of 33%.³⁸ Zinc lozenges are most effective when started in the first 24 hours you experience symptoms.³⁹

Citric acid, tartaric acid and mannitol/sorbitol sweeteners should not be taken with zinc as they interfere with the release of the nutrient in your body.⁴⁰ More recent research demonstrated that both zinc acetate and zinc gluconate are effective.⁴¹

Hydrogen peroxide — One of my favorite treatments for upper respiratory viruses, including SARS-CoV-2 that causes COVID-19, is nebulized hydrogen peroxide. The treatment is simple and effectively helps kill the virus in your respiratory tract. This video demonstrates how to administer the treatment, which must use food-grade hydrogen peroxide and not the product you purchase in the grocery store.

Apple cider vinegar — This has antibacterial properties and is highly acidic, so it can be used to make an inhospitable environment for a virus. Consider gargling with a glass of warm water and 2 tablespoons of salt to help fight a sore throat.⁴² Do not use it full strength as it may damage your esophagus and stomach lining.

Garlic — Although there is mixed evidence,⁴³ the allicin in raw garlic is antimicrobial and may influence the length or severity of your cold. Crush the clove before eating it to release the active properties.

Raw honey — While raw honey has antibacterial and antiviral properties, they aren't strong enough in reasonable amounts to fight your virus. However, raw honey is as effective as cough syrup or cough drops for your cough.⁴⁴ Remember that honey is a natural sugar, so in large amounts of it may adversely impact your immune system and will affect your insulin and leptin levels.

Chicken Soup — Homemade chicken soup is soothing when you're sick, and it contains the amino acid cysteine⁴⁵ that may thin the mucus in your lungs, so it clears more easily.⁴⁶

Vitamin C — Eating foods high in vitamin C may shorten the duration of your cold.⁴⁷ Food high in vitamin C includes red bell peppers, tomatoes, sweet potatoes, broccoli, kiwi and citrus fruits.

Echinacea tea — Echinacea is one of the more popular Native American medicinal plants that may help shorten your cold when you start drinking the tea on the first or second day. Researchers have found it will reduce the recurrence of a viral infection.⁴⁸ Drinking two or three cups of hot tea a day may also help soothe your sore throat.

Propolis — This material is collected from trees by bees to maintain the hive. One study showed a propolis nasal spray improved children's recovery from the common cold.⁴⁹

Sources and References

- ¹ Centers for Disease Control and Prevention, Common Cold
- ² The Guardian, October 6, 2017
- ³ Mayo Clinic Proceedings, 2013;88(1)
- ⁴ John Hopkins Medicine, Pharyngitis
- ⁵ Centers for Disease Control and Prevention, November 12, 2021
- ⁶ Pharmacognosy Review, 2012;6(11)
- ⁷ World Health Organization, WHO Global Report on Traditional and Complementary Medicine 2019
- 8 National Health Statistics Report, 2008;12
- ⁹ Centers for Disease Control and Prevention, Disease Burden of Flu, Table 1
- ¹⁰ Johns Hopkins Coronavirus Resource Center
- ¹¹ Health Essentials, December 9th, 2019, No. 1
- ¹² Cardiff University, Professor Ron Eccles
- ¹³ Rhinology, 2009;46(4)
- ¹⁴ Mayo Clinic, Cold Remedies, Sip Warm Liquids
- ¹⁵ Well and Good, December 20, 2021
- ¹⁶ National Today, January 11

- ¹⁷ The Telegraph, January 2, 2001
- ¹⁸ Alcohol Research, 2015;37(2)
- 19, 20 BMJ, 2003;327(7417)
- ^{21, 22} Mount Sinai, slippery elm
- ²³ Science Direct, Glycyrrhizin
- ^{24, 26, 31} Therapeutic Advances in Endocrinology and Metabolism, 2012;3(4)
- ²⁵ Journal of Research and Medical Science, 2013;18(1)
- ²⁷ European Journal of Obstetrics and Gynecology and Reproductive Biology, 2007;131(1)
- ²⁸ Journal of Endocrinology Investigation, 2003;26(7)
- ²⁹ Steroids, 2004;69(11)
- ³⁰ Contemporary OB/GYN, November 8, 2011
- 32 The Lancet 2003;361:2045 Abstract, page 2046, second to last full para last 3 sentences
- 33 Journal of Ethnopharmacology, 2013;147(1):114
- 34 Mount Sinai, Pharyngitis, Herbs
- 35, 36 Penn Medicine, November 10, 2020
- 37 Antimicrobial Agents and Chemotherapy, 1984;25(1):20
- 38 JRSM Open, 2017;8
- ³⁹ Journal of the American Pharmacists Association, 2004;44:594
- ⁴⁰ Journal of the American Pharmacological Association, 2004;44(5)
- 41 JRSM Open, 2017;8(5)
- ⁴² Doctor NDTV, July 10, 2020
- ⁴³ Cochrane Library, 2014;2014(11)
- 44 Archives of Pediatrics and Adolescent Medicine, 2007;161(12)
- 45 My Food Data, November 10, 2019
- 46 Daily Mail, December 23, 2015
- ⁴⁷ Oregon State University, Vitamin C, Common Cold section
- 48 Advances in Therapy, 2015;32(3)
- ⁴⁹ Journal of Biological Regulators and Homeostatic Agents, 2017;31(4)