

# LICORICE





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## Licorice: The Great Harmonizer

Licorice (*Glycyrrhiza glabra*) might remind you of the candy you love, but it's so much more than just a sweet treat. This herb has been used for centuries as a powerful natural remedy for a variety of ailments. It's often called the "peacemaker" in the world of herbs because it "works well" with other plants, bringing out their best qualities while softening any "rough edges." This e-booklet delves into the wonderful gifts of licorice!

### Getting to Know Licorice

Licorice is a hardy, perennial herb that thrives in temperate climates and is native to regions of Europe, Asia, and the Mediterranean. It grows in sunny spots with well-drained, loamy soil, and can also be cultivated in other regions with similar growing conditions. If you're thinking about growing licorice in your garden, it's important to know that it prefers a large space or container where its roots can spread freely. The plant itself grows 3 to 5 feet tall and has a bushy, spreading structure, with long, lance-shaped leaves that grow in alternating patterns along the stem.



The flowers of licorice are small and bloom in late summer to early fall. They come in clusters and can range in color from purple to blue to white. While the flowers are lovely, it's the roots of the licorice plant that are normally harvested for medicinal use. They are thick, woody, and fibrous, sometimes growing up to 6 feet long, which helps the plant access water even in dry conditions. When harvested, the roots have a distinct sweet aroma, thanks to a compound called glycyrrhizin, which gives licorice its signature taste. After harvesting, the roots are typically dried and then processed into different forms, such as extracts or teas (discussed later in this e-booklet.)



## Licorice: History of the “Sweet Root”

Licorice has a long history of use, stretching back over 4,000 years, and has been cherished across different cultures for its healing properties. In ancient Egypt, it was known as "sweet root," and the Egyptians used it to soothe various ailments and boost overall vitality. It wasn't just a remedy; it was considered a tonic to promote good health and energy. In fact, licorice was so highly regarded that it even appeared in Egyptian hieroglyphs! Its soothing qualities were valued not only for calming respiratory issues like coughs but also for its potential to restore balance and rejuvenate the body.



In Ayurveda, the traditional system of medicine from India, licorice, known as “Mulethi,” is celebrated as a rasayana, which is a type of herb used to promote longevity, vitality, and overall well-being. It's considered an important herb for rejuvenation, helping to nourish the body and support its natural vitality.

In Traditional Chinese Medicine (TCM), licorice is often included in herbal formulas to bring balance and harmony to the other herbs. It's not just effective on its own; it helps the entire formula work more smoothly. Known



as “Gan Cao” in TCM, licorice acts as a “guide herb” that directs the effects of the other ingredients to the areas of the body where they’re most needed. Its ability to harmonize and enhance the actions of other herbs has made it an indispensable part of many traditional remedies.

The famous Greek physician Hippocrates, often called the “father of medicine,” was another early advocate of licorice. He recommended licorice for its ability to relieve coughs and other respiratory complaints. Fast forward to the Middle Ages, and European monks began growing licorice in monastery gardens, using it to treat throat issues, digestive problems, and even fatigue. It became a key part of medieval herbal medicine, prized for its calming and restorative effects.



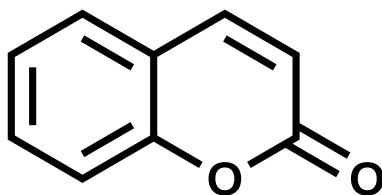
**Wild licorice (*Glycyrrhiza lepidota*)** 3

Indigenous tribes of North America used wild licorice (*Glycyrrhiza lepidota*), a close relative of the European variety, in similar ways. The Lakota and Cheyenne valued wild licorice for its soothing properties. They prepared teas or poultices from the root to treat coughs, sore throats, and digestive issues, and used it externally for skin irritations or wounds. The plant’s sweet flavor also made it a popular ingredient in herbal blends to improve taste and enhance the overall effect of remedies. This mirrors its use as a harmonizing herb in other herbal systems worldwide.

## Energetics and Taste of Licorice

When we talk about the energetics of a plant, we're referring to the plant's effects on our body in terms of warmth, coolness, and moisture. Here is a brief overview of licorice's energetics from the Western herbalism perspective:

- **Sweet:** Licorice has an intensely sweet flavor, which in Western herbalism is associated with its ability to nourish and moisten dry or irritated tissues, such as the throat, lungs, and digestive tract.
- **Cooling:** Despite its sweetness, licorice is considered cooling in nature. It helps soothe inflamed or irritated areas of the body, providing relief for conditions like sore throats or digestive discomfort.
- **Moistening:** Licorice is highly moisturizing, making it ideal for conditions marked by dryness, such as a dry cough, constipation, or dry skin. It helps restore moisture and vitality to tissues in need.



## Licorice: Constituents and Herbal Actions

Now for a little chemistry! Let's take a closer look at some of licorice's key constituents and their herbal actions:

### Glycyrrhizin

Glycyrrhizin is responsible for licorice's signature sweet taste—it's actually about 50 times sweeter than sugar! But glycyrrhizin isn't just about sweetness; it has some amazing health benefits too. It's known for its anti-inflammatory properties, helping to calm inflammation in the body. It also has antiviral effects, which means it can support your immune system by helping the body fight off infections. Plus, glycyrrhizin plays a key role in regulating cortisol, the hormone involved in managing stress, which makes licorice a popular herb for supporting adrenal health and managing the effects of chronic stress.



## **Flavonoids**

Flavonoids are antioxidants that protect your body's cells from damage caused by free radicals. Flavonoids also help to reduce inflammation and support brain health by calming neuroinflammation. One specific flavonoid, called glabridin, has oral health benefits and has been shown to fight the bacteria that cause cavities – making licorice a potential ally for your dental hygiene.

## **Saponins**

Saponins are known for their ability to support the immune system and fight off infections. These saponins help boost immune function by supporting the activity of immune cells, making licorice a great herb for overall immune health. Additionally, saponins are also known for their ability to help loosen mucus, which is why licorice is often used in teas for coughs and colds to help clear the airways.

## **Polysaccharides**

Polysaccharides act as prebiotics, feeding the good bacteria in your gut and promoting a healthy digestive system. Polysaccharides also help support the immune system, strengthening the body's defenses.

## **Coumarins and Chalcones**

Coumarins are compounds that support circulation by mildly thinning the blood, which can be helpful for overall cardiovascular health. Chalcones, particularly a type called isoliquiritigenin, have shown promising anti-inflammatory and even anticancer properties. These compounds can help protect the skin from inflammation and even brighten areas of hyperpigmentation, which is why licorice extract is a common ingredient in skincare products.



## Licorice: A Treasure Trove of Benefits Backed by Science

Here's a deeper dive into the many ways licorice can support your health, with scientific research backing up its ancient uses:

### 1. Digestive Health: A Friend for Your Stomach

Licorice has been used for centuries to support digestion. It can help soothe your stomach and ease digestive discomfort, especially if you struggle with issues like acid reflux, heartburn, or even more serious conditions like ulcers.

- **Soothing the Stomach:** Licorice is known for its ability to calm inflammation in the digestive tract. This makes it a great natural remedy for gastritis (inflammation of the stomach lining) or ulcers, where the lining becomes irritated. Studies show that licorice helps protect the stomach lining by forming a protective coating, which helps it heal (Graziani et al., 2015).
- **Relieving Acid Reflux:** If you experience heartburn or acid reflux, licorice can help calm things down. It works as a mucilage, which is a soothing gel-like substance that coats the esophagus and prevents acid from irritating it (Mousavi et al., 2003). Some research even suggests that licorice extract can provide significant relief from acid reflux symptoms (Alhaj et al., 2020).
- **Improving Digestion:** Licorice also supports your body's ability to break down food. It stimulates the production of digestive enzymes and bile, which helps digest fats and absorb nutrients. This can reduce bloating and discomfort after meals.



## 2. Stress and Adrenal Support: A Natural Stress Buster

In today's fast-paced world, stress can take a toll on our bodies. Licorice is an adaptogen, which means it helps your body adapt to stress, making it easier for you to cope.

- **Supporting Your Adrenals:** Your adrenal glands are responsible for producing cortisol, the hormone that helps your body respond to stress. Licorice can help balance cortisol levels, reducing the negative effects of stress, such as fatigue, irritability, and sleeplessness. Research has shown that licorice can improve adrenal function, which makes it a great herb for those who feel drained by constant stress (Rao et al., 2010).
- **Balancing Stress Hormones:** One study found that licorice could reduce fatigue and improve your body's ability to handle stress by balancing cortisol levels (Phytomedicine, 2015). But be cautious—if you have high blood pressure, licorice might not be the best choice for you, as it can cause your body to retain more sodium.

## 3. Immune-Boosting Power: Fighting Off the Cold and Flu

Licorice has long been used to boost the immune system, and modern research backs up this ancient use. It has antiviral properties and can help your body fight off infections.

- **Fighting Viruses:** Licorice contains powerful compounds like glycyrrhizin and flavonoids that have shown antiviral activity in studies. It's been shown to help fight viruses like the common cold, flu, and even hepatitis C (Stojanović et al., 2014).
- **Supporting Your Body's Defense:** Licorice helps boost the production of interferons, which are proteins that help your body fight infections. By increasing interferon levels, licorice supports your immune system in defending against illness (Zhao et al., 2013).

#### 4. Respiratory Health: Clear Airways, Clear Breathing

Licorice has long been a go-to for soothing respiratory discomfort. Whether you're dealing with a dry cough or something more chronic, licorice can help soothe your throat, clear your airways, and make breathing easier.

- **Expectorant Action:** Licorice is an expectorant, meaning it helps loosen mucus in your lungs and makes it easier to expel. This makes it a helpful herb for people with chronic bronchitis or other respiratory conditions. It can help clear mucus and ease the discomfort of coughing (Chen et al., 2011).
- **Sore Throat Relief:** If you've ever had a sore throat, you know it can be incredibly painful. Licorice's soothing properties can calm inflammation and reduce irritation in your throat. Research has shown that gargling with licorice can help reduce pain and inflammation in the throat, especially for conditions like laryngitis (Kurokawa et al., 1995).

#### 5. Skin Health: A Natural Healer

Licorice isn't just great for your insides—it can help your skin, too. With its anti-inflammatory, antimicrobial, and brightening properties, it's often found in skincare products.

- **Calming Skin Inflammation:** Licorice is known for its ability to calm inflamed skin. Whether you're dealing with conditions like eczema, psoriasis, or rosacea, licorice can help soothe flare-ups. One study found that applying licorice extract to the skin helped reduce inflammation and improve symptoms of eczema (Kwon et al., 2011).
- **Brightening the Skin:** Licorice is also used in skincare because it helps fade dark spots and even out skin tone. This is thanks to an active compound in licorice called glabridin, which helps inhibit melanin production, making it useful for tackling age spots, sun damage, or acne scars (Zhao et al., 2017).



## 6. Anti-Inflammatory and Antioxidant Effects: Protecting Your Body from Damage

Licorice contains compounds that act as powerful anti-inflammatory agents and antioxidants. These properties can help protect your body from damage caused by inflammation and free radicals, which can lead to chronic disease and aging.

- **Fighting Inflammation:** Chronic inflammation is a contributing factor for many chronic health issues, including heart disease and arthritis. Licorice can help reduce inflammation by inhibiting certain molecules in the body that promote inflammation (Yu et al., 2015). This makes it a useful herb for conditions like arthritis or other inflammatory diseases.
- **Antioxidant Power:** Licorice is rich in antioxidants, which help protect your cells from damage caused by free radicals. Free radicals are unstable molecules that can cause damage to your body's cells, leading to aging and disease. By neutralizing these harmful molecules, licorice helps protect your body and support overall health.

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## Safety Precautions

While licorice is generally considered safe, there are a few important considerations to keep in mind. Because of its high glycyrrhizin content, licorice can cause side effects like elevated blood pressure or water retention if used in large amounts or for long periods. For people who are sensitive to these effects, deglycyrrhized licorice (DGL) is a safer alternative, as it contains little to no glycyrrhizin.

Licorice should be used with caution in pregnant individuals and those with heart or kidney conditions. If you're unsure whether licorice is right for you, it's always best to consult a healthcare provider before incorporating it into your routine.





## Licorice: Simple Preparations

### The Harmonizer of Herbal Formulas



Licorice is often called a "harmonizer" in herbal medicine, and for good reason! It has a unique ability to blend seamlessly with other herbs, enhancing their effects while softening any rough edges. Imagine a choir, where each voice brings something special to the table, but together they create a beautiful, harmonious melody—this is how licorice works with other herbs. It balances the effects of stronger herbs, like ginger or cayenne, and reduces potential side effects, such as stomach irritation. At the same time, it amplifies the healing properties of gentler herbs, making them more effective.

Here are some herbal pairings (and trios) with licorice, plus ways that you can prepare them:

### Marshmallow Root

- **Why they pair well:** Both of these herbs are known for their soothing, moistening qualities, which help protect and coat the digestive tract and respiratory system.
- **Use for:** Conditions like acid reflux, ulcers, gastritis, or a dry, irritated cough.
- **How to prepare:** Make a tea by simmering  $\frac{1}{4}$  cup of marshmallow root with 1 tablespoon of licorice root (per quart) for 10–15 minutes to reduce the water in half. Sip slowly for soothing relief.



## Ginger



- **Why they pair well:** Ginger's warming, stimulating nature helps get the digestive system moving, while licorice's cooling, calming effects balance it out, soothing irritation.
- **Use for:** Easing nausea, boosting digestion, or combating cold symptoms.
- **How to prepare:** Combine 1 teaspoon of ginger root (fresh or dried) with ½ teaspoon of licorice root (per cup) to make a tea. Add a bit of honey for extra soothing properties.

## Peppermint or Fennel

- **Why they pair well:** Peppermint cools and relaxes the muscles in the digestive tract, while fennel helps with digestion and relieving bloating. Licorice amplifies these effects by soothing and healing the gut lining.
- **Use for:** Indigestion, bloating, and digestive discomfort.
- **How to prepare:** Create a digestive tea by steeping 1 teaspoon of peppermint and/or ½ teaspoon fennel with ½ teaspoon of licorice root (per cup) in hot water for 10 minutes. This blend will help relax your digestive muscles and relieve bloating.





## Thyme and Mullein



- **Why they pair well:** Thyme and mullein are expectorants, helping to clear mucus from the lungs. Thyme is warming and drying while mullein is cooling and moistening. Licorice soothes irritated airways and calms a dry throat, making it a great trio for respiratory health.
- **Use for:** Respiratory issues like coughs, bronchitis, or a sore throat.
- **How to prepare:** Make a respiratory tea by combining 1 teaspoon of thyme and mullein with ½ teaspoon of licorice root (per cup.) Drink this soothing tea to help clear the airways and calm inflammation in the throat.

## Eleuthero (Siberian Ginseng)

- **Why they pair well:** Eleuthero is another adaptogen known for supporting energy and stamina. When combined with licorice, both herbs work to balance cortisol levels and improve resilience to stress.
- **Use for:** Managing stress, boosting energy, and improving overall vitality.
- **How to prepare:** Create an energy-boosting tea by combining 1 ½ teaspoons of eleuthero root and ½ teaspoon of licorice root (per cup.) Steep for 10 minutes and enjoy this revitalizing blend for a natural pick-me-up.





## Licorice-Infused Oil

Licorice has anti-inflammatory, skin-brightening qualities, and anti-viral actions (including against HSV.) You can make an infused oil with licorice alone (increase to ½ cup) or combine it with calendula and/or St. John's Wort for eczema, rashes, or sensitive skin. Calendula is known for its gentle healing and anti-microbial and anti-inflammatory properties, while St. John's Wort excels at calming redness and irritation (and is also anti-viral.) The hypericin in St. John's Wort will turn the oil a beautiful red color!

If you need your skin-soothing infused oil quickly, the alcohol-intermediate method is an excellent choice. It allows the beneficial compounds of licorice and other herbs to extract into the oil faster, perfect for when you're short on time!

### Ingredients:

- 1/4 cup dried licorice root, powdered
- 1/4 cup dried calendula flowers, powdered (optional)
- 1/4 cup dried St. John's Wort leaves and flowers, powdered (optional)
- 2 cups carrier oil (such as sweet almond, olive, sunflower, or coconut oil)
- high-proof alcohol (at least 100 proof); enough to wet the herbs
- Double-boiler (or slow cooker)
- A clean, dry glass jar with a lid



### Instructions:

#### 1. Prepare the Alcohol and Herbs:

Combine the powdered herb(s) with the alcohol in a clean glass jar. Stir well to ensure the herbs are wetted (just enough to stick together.) Let the mixture sit for 1-2 hours. The alcohol helps extract water-soluble compounds from the herbs, making the oil infusion more potent.

## 2. Add the Carrier Oil:

After the alcohol has saturated the herbs (the herbs will swell,) add the carrier oil directly to the jar. Stir well to mix everything together.

## 3. Heat the Mixture:

Transfer the herb, alcohol, and oil mixture to the top of a double boiler or a slow cooker. Heat on low for 2–4 hours, allowing the alcohol to evaporate off and the herbs to infuse into the oil. Keep the temperature below 140°F (60°C) to preserve the beneficial properties of the herbs. Stir occasionally to ensure even infusion.

## 4. Strain the Oil:

Once the infusion is complete, allow the mixture to cool slightly. Strain it through a fine mesh sieve or cheesecloth (or a nut milk bag) into a clean jar. Squeeze the cloth to extract every bit of the oil.

## 5. Store the Infused Oil:

Transfer the strained oil into a clean, airtight container. Label it with the date and ingredients, and store it in a cool, dark place. The oil will keep for 6–12 months.

**How to Use:** Apply to irritated or inflamed skin for soothing relief. The alcohol-intermediate method ensures a rich, effective oil by extracting both alcohol- and oil-soluble compounds, making it an excellent choice for creating a potent skin-soothing remedy.





### **Conclusion: Why Licorice Belongs in Your Herbal Toolkit**

Licorice is more than just a sweet treat—it's a powerful and versatile herb that offers a wide range of health benefits. Whether you're seeking digestive support, stress relief, immune boosting, or respiratory health, licorice can play an essential role in your wellness routine. Its ability to harmonize with other herbs makes it an invaluable addition to many herbal formulas. So, next time you're looking for a natural remedy, consider reaching for licorice—it may be the perfect herb to support your health and well-being.