



Licorice Root

Stock #420-6 (100 capsules)
ATC Concentrated - Stock #424-5 (50 capsules)
Stock #1780-9 (2 fl. oz.)

Licorice has been used since ancient times for colds, coughs and sore throats. Several ancient cultures believed licorice would increase endurance, strength and sexual energy. According to folk medicine in North America, licorice was used as a cough suppressant, expectorant and laxative, and as a treatment for different cancers. Licorice was commonly used to hide the taste of bitter medicines.

In India, licorice is used as a sweetener, since its primary ingredient, glycyrrhizic acid, is 50 times sweeter than sugar. Licorice is also employed to balance menstrual flow and increase milk production and sexual activity. In China, licorice is known as "The Great Detoxifier," and has been used primarily for the kidneys, liver, spleen and stomach. Chinese doctors use licorice for treating a variety of ailments including bronchial asthma, contact dermatitis, diabetes insipidus, gastric and duodenal ulcers, infectious hepatitis, and malaria.

Licorice is a powerful anti-inflammatory and anti-arthritis, due to the presence of triterpene saponins, especially glycyrrhizin. Research confirms glycyrrhizin provides similar action as hydrocortisone and other corticosteroid hormones. Glycyrrhizin stimulates adrenal hormone production and minimizes steroid metabolism by the kidneys and liver. Furthermore, Japanese researchers have confirmed glycyrrhizin is an effective treatment for chronic hepatitis B and liver cirrhosis, by preventing viral multiplication in chronic hepatitis and protecting the liver from being damaged by toxic chemicals. This protective action is actually the indirect result of glycyrrhizin's ability to decrease the body's conversion of cortisol—a natural anti-inflammatory steroid hormone, also known as hydrocortisone—into cortisone, which is inactive until converted to cortisol. In other words, glycyrrhizin stimulates the body's production of natural anti-inflammatory compounds, thus reducing or completely avoiding the need for pharmaceutical drugs which have toxic side effects.

In studying licorice root's effect on hepatitis, researchers have found the herb activates the production of Interferon, a vital chemical component of the immune system which may be the answer to preventing and treating many immune deficiency diseases. Interferon has also been successfully used for treating hepatitis patients. Research also confirms the use of licorice root for treating liver disorders associated with corticosteroid metabolism. A study conducted at the Shanxi Medical College in China found licorice root reduced triglyceride accumulation in the liver, increased glycogen levels, inhibited the development of cirrhosis, and prevented the growth of experimentally-induced lesions in the liver.

As a whole, licorice increases the production of digestive fluids and bile, soothes mucus membranes (especially in the stomach), relieves pain and inflammation, relaxes muscle spasms, enables the body to expel phlegm, strengthens the adrenal glands, stimulates the adrenal cortex, lowers cholesterol, and acts as a mild laxative. Licorice root provides soothing, healing qualities found helpful in the treatment of asthma, bronchitis, colds, coughs, laryngitis, respiratory congestion, and sore throat. Licorice is also particularly beneficial for gastrointestinal problems such as gastritis, peptic ulceration, and excessive stomach acid.

According to research published in the *Journal of Natural Products*, licorice contains flavonoids which provide antimicrobial activity. Licorice flavonoids also provide antibacterial, antifungal and anti-ulcer properties. Studies have been done using licorice to treat gastric and duodenal ulcers, and have shown the size of the ulcer can be diminished by 70-90% after one month. The most impressive results were achieved in study participants who were not bedridden and who continued to work during treatment. Licorice does increase fluid and sodium retention, so edema and hypokalemia—abnormal heartbeat, general weakness, and muscular limpness—can occur.

Licorice contains compounds which increase fluid and sodium retention, making it useful in desert areas for inhibiting excessive thirst due to minimal water consumption. However, these same compounds increase potassium loss which can lead to elevated blood pressure. Therefore, individuals with heart problems and hypertension should restrict their intake of licorice.

Various studies have demonstrated licorice's antiviral activity in vitro against cytomegalovirus (CMV) and Epstein-Barr virus (EBV), as well as varicella-zoster virus (VZV), responsible for chickenpox and shingles. Researchers indicate such activity may prove beneficial against HIV. Additional research has confirmed licorice's antimicrobial activity against *Staphylococcus aureus*, which can cause pneumonia. Furthermore, Japanese scientists found licorice to be effective even against a penicillin- and streptomycin-resistant strain of staph, as documented in the *Japanese Journal of Bacteriology*.

Licorice has been shown in numerous studies to be quite effective in treating hypoglycemia, especially due to adrenal stress. As an adrenal stimulant, licorice is also helpful for Addison's disease—a life-threatening condition caused by partial or complete failure of adrenocortical (adrenal cortex) function.

Russian researchers have discovered licorice root inhibits the growth of some tumorous cells, primarily sarcoma-45 and Ehrlich ascites cells. Licorice's anticarcinogenic activity has also been addressed in the *Journal of Pharmaceutical Sciences*.

According to the *Journal of the American Pharmaceutical Association*, licorice contains isoflavones and phytosterols which have been found to exhibit estrogenic activity. Asian researchers conducted a study which demonstrated an extract of licorice root promoted normal ovulation in women unable to ovulate.

Licorice is rich in magnesium, silicon, and sodium and contains high amounts of chromium, cobalt, iron, potassium, and niacin (B3). Licorice's high mucilage content contributes to the herb's effective soothing, anti-inflammatory qualities.

Licorice Root Extract is in a distilled water and grain alcohol base.