



TOPIC SUMMARY for Healthcare Professionals

Licorice

Overview

Licorice is the common name for root extracts from *Glycyrrhiza glabra*.

Uses: Licorice is used for treating ulcers (both gastric and duodenal), sore throat, bronchitis, dyspepsia, colic, cough, hepatitis C, and with ginseng and other herbs, it is used for “adrenal fatigue” since it inhibits the breakdown of cortisol, leading to more cortisol activity. It is used in India to help prevent tooth decay. Increasing cortisol activity can lead to fluid and salt retention and potassium loss. Prolonged, high intake of licorice should be avoided in patients with high blood pressure, heart failure, and those taking steroid medications. A combination product containing licorice, peppermint leaves, chamomile, caraway, lemon balm, celandine, milk thistle and other herbs (Iberogast™) has been used successfully to treat acid reflux, epigastric pain, cramping, irritable bowel syndrome, and nausea.

How it works: Licorice contains glycyrrhetic acid which inhibits 11-beta-hydroxysteroid dehydrogenase. This means that it helps prevent the breakdown of corticosteroids.

Intake Recommendations

Licorice doses vary. *Iberogast* doses are typically 1 mL three times daily. Many people drink 1-2 cups of licorice tea daily. Excessive intake can lead to side effects like those of aldosterone (sodium retention and potassium wasting).

Duration: Licorice has been consumed daily by thousands of people worldwide. In studies, it is typically given for 4 weeks or less.

Sources of Licorice

Licorice is consumed as part of the normal diet traditionally as a tea and as a flavoring agent in candy, and health and beauty products including shampoo, toothpaste and oral rinses.

Safety

Licorice is generally recognized as safe in the US. As with any product taken by mouth, licorice can cause an upset stomach. Allergies to any herbal substance are possible. Licorice has abortifacient, estrogenic, and corticosteroid-agonist effects and can cause uterine stimulation. Ingesting more than 500 milligrams of glycyrrhizic acid (250 grams of licorice) weekly can increase the risk of premature delivery. Excessive intake (even in the form of licorice candy or licorice flavored chewing tobacco) can be hazardous for patients with hypertension, cardiac arrhythmias, or heart failure. This is because it can cause salt and water retention and potassium loss. Patients taking diuretics should not take licorice due to the risk of severe reductions in potassium level.

False licorice: Many products marketed as ‘licorice’ actually contain anise flavoring rather than true licorice. These products do not have the same medicinal effects or toxic side effects as true licorice.

Product Information

No government agency routinely tests herbal products. Dietary supplements like licorice are regulated more like food than like drugs. There is variability in the quality of licorice products, and you cannot always tell what is in a product from reading the label, even the fine print. We recommend using brands that have the USP stamp of approval. **ConsumerLab has not evaluated licorice products.**

Disclaimer: The *Herbs and Dietary Supplements Across the Lifespan Program* does not endorse products or the efficacy or safety of mentioned products.

For more information see: [Natural Medicines Comprehensive Database](#) and [Natural Standard](#) both have monographs on licorice which may be useful for clinicians with more information on its biochemistry and potential adverse effects and interactions. The US [National Center for Complementary and Alternative Medicine](#) has a patient handout about licorice. The US National Library of Medicine's [MedLine Plus](#) also has a patient handout.