

November 2008

**ANISE-FLAVORED HERBS
(Anise, Anise Hyssop, Fennel and Florence Fennel,
Chervil, French Tarragon, Sweet Cicely, Licorice)**

While all the above herbs are considered anise flavored, I wish to focus on licorice. Licorice flavor in candy is actually anise oil, and licorice root itself is used as a sweetener. It is an herb that crosses the lines among fragrance, flavor and medicinal herb, and is a member of the pea family. Most of the licorice imported to the United States (as much as 90%) is used in tobacco products. You will find it also favoring chewing gum, soft drinks, liqueurs, ice cream and baked goods. Licorice has been valued medicinally for about 3000 years—it is mentioned on Assyrian tablets and Egyptian papyri.

There is European licorice, *Glycyrrhiza glabra*, the most familiar licorice. Medicinal markets include Chinese *Glycyrrhiza uralensis*, which is used frequently in American markets. These are both grown in China as well as another Chinese native, *Glycyrrhiza inflata*. The genus *Glycyrrhiza* includes about twenty species native to Europe, Asia, North and South America, and Australia. Only one species is native to the United States—*Glycyrrhiza lepidota*. Traditional folk medicines used it as a poultice, for toothaches, and for treating fevers in children, but it has been little studied.

European licorice, however, has a rich historical tradition and is naturalized in almost all countries throughout Europe except Scandinavia. Edward I of England placed a tax on licorice imports in 1305 to finance the repair of London Bridge. The 1st century Roman naturalist Pliny mentioned that it is native to Sicily,

Licorice stick is the sweet, earth-flavored underground stem of the plant, which may travel up to twenty feet from the main root. It is chewed to impart a sweet flavor. Supposedly that is why Napoleon's teeth were black.

Western medicine's use for over 3000 years includes as a demulcent (soothing irritated membranes), as an expectorant (loosening and helping expel congestion in the upper respiratory tract), and to stimulate mucous secretions of the trachea. Also well documented are its use against inflammation, allergies, and as a protection against toxic substances in the liver.

Studies have shown that *Glycyrrhizin* stimulates the excretion of hormones by the adrenal cortex. In the future, it may improve the function of hormone drugs. It shows estrogenic activity in laboratory animals. It heals ulcers by prolonging the life span of surface cells in the stomach and has an antipepsin effect. Iranian researchers used aspirin coated with licorice and found it helped protect against ulcers induced by aspirin.

However, the effects of prolonged use can include hypertension, water retention, sodium retention, and loss of potassium. If you use it in therapeutic doses, include a diet rich in potassium (such as bananas and dried apricots). The potassium loss can produce interactions with other drugs. It can actually increase the effect of the digitalis glycoside drugs by up to 50%. According to the New Zealand Medical Journal, it may be possible to treat chronic fatigue syndrome with licorice root because of the glucocorticoid hormone action of licorice.

Steven Foster reports on how licorice is used in Chinese medicine:

Unlike European medicine, in which herbs are often used alone, in traditional Chinese medicine most herbs are used in prescriptions with 3 or more herbs, sometimes 10 herbs, or even 50 or 100 herbs in a single prescription. According to the theories of traditional Chinese medicine, the prescriptions are separated into the monarch or main drug, minister drugs, assistant drugs, and guide drugs. The monarch drug is the “king” of the prescription and has the primary effect on the health condition. Many “assistant” drugs cooperate with a major ingredient in a prescription to produce a better effect on one particular organ or condition. The minister drug helps to synergistically increase the effect of the monarch drug. The “guide drug” is added to enhance to effectiveness of other ingredients, reduce toxicity or improve taste. Licorice is used in many Chinese herbal prescriptions as a guide drug to enhance the activity of their ingredients, reduce toxicity, as well as improve flavor. It is said that licorice is used in as many as half of all traditional Chinese medicine prescriptions.

One final note: Wood Licorice, or *Polypodium vulgare*, is not actually licorice, but is a licorice-flavored rhizome or underground stem of the fern family.

Thanks to Marcia Eischen for this report on anise-flavored herbs.