



Common Herb Profiles

Echinacea

Echinacea purpurea (L.) Moench, *E. pallida* (Nutt.) Nutt., *E. angustifolia* DC.
Family: Asteraceae

OVERVIEW

The native American medicinal plant echinacea is one of the most popular herbs in the U.S. marketplace. Preparations made from several plant species and parts of echinacea are used, including the above-ground parts, or the roots, stems or leaves from *Echinacea purpurea*, *E. pallida*, and/or *E. angustifolia*. While all of these species variations can be effective for treating different ailments, the exact chemical compounds responsible for the therapeutic effects are not yet known.

USES

Supportive care to treat colds and chronic infections of the upper respiratory tract.

DOSAGE

Consult your healthcare practitioner if symptoms have not improved within eight weeks.

E. purpurea herb

TINCTURE: 5 ml, 3 times daily.

E. purpurea, *E. pallida*, *E. angustifolia* root

DRIED ROOT: 900 mg, 3 times daily.

FLUID EXTRACT: 0.5–1.0 ml, 3 times daily.

TINCTURE: 30–60 drops, 3 times daily.

Echinacea preparations are also available as teas, capsules, and tablets.

CONTRAINDICATIONS

Consult your healthcare provider before ingesting echinacea preparations in cases of an increased tendency toward allergies to plants in the daisy family (Asteraceae), including arnica, chamomile, chrysanthemum, marigold, ragweed, and yarrow.

PREGNANCY AND LACTATION: There are no known restrictions for use during pregnancy or while breast-feeding.

ADVERSE EFFECTS

Rare cases of allergic reactions to plants in the family Asteraceae are the only known adverse effects of echinacea.

DRUG INTERACTIONS

There are no known drug interactions.

Black Cohosh

Actaea racemosa L. (syn. *Cimicifuga racemosa* [L.] Nutt.)
Family: Ranunculaceae

OVERVIEW

Black cohosh, a plant commonly found in the Eastern U.S. and Canada, was a botanical remedy of Native Americans. It has been used in Europe for over 40 years. Today, black cohosh root is approved by the German government as a treatment for premenstrual discomfort, painful menstruation, and menopausal symptoms.

USES

Menopausal complaints including hot flashes, heart palpitations, nervousness, irritability, sleep disturbances, ringing in the ears (tinnitus), whirling sense or dizziness (vertigo), perspiration, and depression; premenstrual discomfort; painful menstruation.

DOSAGE

The German Commission E monograph recommends taking black cohosh for a period of six months, after which a check-up with your healthcare practitioner is advised before resuming further use.

AVERAGE RECOMMENDED DOSE: 40mg–80mg (or oral dose equivalent) of black cohosh per day (available in tablet and liquid form).

DRIED RHIZOME AND ROOT: 40–200 mg.

DECOCTION: Pour 240 ml boiling water onto 40–200 mg black cohosh root, simmer for 10–15 minutes.

FLUID EXTRACT: 0.3–1.0 ml, 0.3–2.0 ml, 5–30 drops [1:1 (g/ml), 90% alcohol].

TINCTURE: 0.4–2.0 ml, 2–4 ml, 40 drops twice daily [1:10 (g/ml), 40–60% alcohol].

CONTRAINDICATIONS

None known.

PREGNANCY AND LACTATION: Patients who are pregnant and/or lactating should not use black cohosh. It is not recommended during pregnancy because it may promote menstrual flow or stimulate the uterus. Black cohosh is not recommended during breast-feeding.

ADVERSE EFFECTS

Occasional gastrointestinal discomfort has been reported. Overdose may cause vertigo, headache, nausea, vomiting, impaired vision, and impaired circulation.

DRUG INTERACTIONS

None known. Minimal side effects were noted when standardized black cohosh extracts and estrogen-replacement therapy (hormone-replacement therapy, HRT) were taken at the same time.

Cranberry

Vaccinium macrocarpon Aiton
Family: Ericaceae

OVERVIEW

Cranberry is a fruit native to North America, with almost 98% of the world supply cultivated in the northern U.S. and Canada. Both indigenous Americans and colonists valued cranberry for its medicinal and nutritional properties. Cranberries are a high-value crop, ranking 40th in sales of all cash crops monitored by the U.S. Department of Agriculture's National Agricultural Statistical Service. Sales of cranberry dietary supplements ranked 5th in 2005 in total herb sales in U.S. food, drug, and mass-market retail outlets.

USES

Urinary tract infections (UTIs), including prevention, treatment, and decreasing occurrence; kidney stones.

DOSAGE

Internal

NOTE: The following juice doses are based on sweetened preparations unless otherwise noted. Although some authors suggest that sweeteners in the juice should be avoided or minimized, clinical studies strongly suggest that these types of products are safe and effective. Additionally, patients should drink plenty of fluids (at least 2 liters daily) throughout the day. Authors recommending unsweetened juice generally suggest using capsules as unsweetened juice can be unpleasant tasting.

Juice

TREATMENT OF UTI: 16–32 fl. oz. daily or



at least 17 fl. oz. of unsweetened juice daily.

PREVENTION OF UTI: 4–32 fl. oz. daily.

KIDNEY STONES: 8 fl. oz., 4 times daily for several days, then 8 fl. oz., twice daily for treatment and prevention of kidney stones that dissolve better in acid solutions.

Concentrated Juice Extract

PREVENTION AND TREATMENT OF UTI: 300–400 mg, 2–3 times daily.

CONTRAINDICATIONS

Consult a healthcare provider in cases of kidney insufficiency or tendency to develop uric acid or calcium oxalate stones.

PREGNANCY AND LACTATION: No known restrictions during pregnancy or lactation.

ADVERSE EFFECTS

No adverse effects occur at recommended dosages. High dosages (more than 3–4 liters or approximately 2.5–3.5 qt. daily) may cause diarrhea or mild gastrointestinal upset.

Caution: If no improvement in acute infection of the urinary tract occurs within the first 24 hours of herbal treatment, seek conventional medical treatment.

DRUG INTERACTIONS

No known interactions with antibiotics or other drugs.

Garlic

Allium sativum L.

Family: Alliaceae

OVERVIEW

In the U.S. and Western Europe, garlic is one of the most popular substances used to reduce various risks associated with heart disease. Most of garlic's popularity is based on the herb's well-known folk uses and scientific research on the benefits of garlic for heart health. These health-promoting benefits may be experienced by using garlic as both a food ingredient and a dietary supplement.

USES

For slightly reducing elevated levels of cholesterol in the blood; prevention of hardening of the arteries; improvement of blood flow; mild hypertension (high blood pressure); possible prevention of

stomach and colon cancer; supportive therapy for peripheral arterial occlusive disease (PAOD, poor circulation to the legs causing tightness and pain in the calves when walking).

DOSAGE

Long-term treatment is generally advised in the prevention of atherosclerosis and in the prevention and treatment of peripheral arterial vascular diseases. Epidemiological findings (population studies) support long-term, consistent use for the possible prevention of stomach and intestinal cancers.

FRESH, MINCED GARLIC: 1 clove daily.

INFUSION: 1 clove in 150 ml of hot water.

GARLIC POWDER (standardized): 200–300 mg, 3 times daily (in pill or tablet form).

AGE™ AGED GARLIC EXTRACT (standardized): 300–800 mg, 3 times daily or 1–5 ml daily (in capsules).

CONTRAINDICATIONS

None known according to the German Commission E and other leading scientific bodies. According to the World Health Organization, patients with a known allergy to garlic and those taking anticoagulant drugs like warfarin (Coumadin®) should be cautious about ingesting garlic. Garlic should not be taken prior to surgery (at least one week) as it may interfere with blood clotting.

PREGNANCY AND LACTATION: There are no known restrictions during pregnancy or lactation. However, some of garlic's properties are transmitted to human milk, leading to improved drinking habits in infants.

ADVERSE EFFECTS

Being a commonly used food, garlic is relatively safe. Adverse effects are rare, but there may be gastrointestinal symptoms and changes to the intestinal flora (beneficial bacteria that aid in digestion). Allergic reactions have been reported for garlic and various generic preparations, but no adverse effects were reported for AGE according to toxicological and clinical studies. According to one report, garlic was associated with unusual bleeding after an operation. Garlic preparations can increase clotting time, which is sometimes beneficial, but in some cases can contribute to an adverse event. Also, garlic may produce a

characteristic odor on the breath or skin.

DRUG INTERACTIONS

Taking garlic with antiplatelet agents, like aspirin, and anticoagulants, like warfarin, may increase the potential for prolonged bleeding.

Ginkgo

Ginkgo biloba L.

Family: Ginkgoaceae

OVERVIEW

Ginkgo, the oldest living species of tree on earth, is more than 225 million years old. A standardized extract of ginkgo leaf is presently one of the most frequently used plant-based medicines in Europe. In the U.S., it has been one of the 10 best-selling herbs for more than seven years. In Germany, ginkgo is also an approved therapy for the treatment of memory loss in conditions such as Alzheimer's, ringing in the ears, dizziness, and poor circulation in the lower legs resulting in pain during walking (intermittent claudication).

USES

Poor memory, poor concentration, depression, and headache occurring with dementia diagnosed by a healthcare practitioner; attention and memory loss in Alzheimer's; ringing in ears (tinnitus); dizziness or whirling sensation (vertigo); peripheral vascular disease including poor circulation to the lower legs (intermittent claudication).

OTHER POTENTIAL USES

Sexual dysfunction associated with use of SSRI drugs (selective serotonin reuptake inhibitors); control of acute symptoms of altitude sickness and vascular reactivity to cold exposure; protective action in hypoxia (insufficient oxygen in the body); acute deafness related to the cochlea (part of the inner ear).

DOSAGE

DRY EXTRACT (STANDARDIZED): a total of 120–240 mg per day, taken in dosage forms (e.g., tablets or capsules) of 40–60 mg each, 2 or 3 times daily to treat dementia; or a daily total of 120–160 mg, taken in 40–60 mg doses, 2 or 3 times daily to treat intermittent



claudication, vertigo, and ringing in the ears (tinnitus).

CONTRAINDICATIONS

Ginkgo should not be used before elective surgery or in persons who are allergic to ginkgo or have a bleeding disorder. The 120 mg dosage should not be used in children under 12 years.

PREGNANCY AND LACTATION: No known restrictions.

ADVERSE EFFECTS

Stomach or intestinal upsets, headaches, or allergic skin reactions occur rarely. Dizziness and pounding heartbeat may also occur. Isolated cases of bleeding (subdural hematoma, subarachnoid hemorrhage, intracerebral hemorrhage, anterior chamber bleeding in the eye [hyphema]) have been reported, but these reactions are extremely rare.

DRUG INTERACTIONS

Ginkgo extract may possibly increase the effects of monoamine oxidase inhibiting (MAOI) drugs. Ginkgo preparations may increase the effect of blood-thinning drugs such as aspirin and warfarin. Ginkgo may also enhance the effect of thiazide diuretics.

Ginseng, Asian

Panax ginseng C.A. Meyer (syn. *P. schinseng* T. Nees)
Family: Araliaceae

OVERVIEW

Asian ginseng is one of the most economically important medicinal herbs in world trade; in the U.S., ginseng ranks second in total sales in food, drug, and mass market retail stores with sales in 2000 totaling \$62.5 million. Ginseng root is indigenous to northern mountainous regions of China, Korea, and parts of the Russian Federation. In Asia, the medical use of ginseng dates back thousands of years, and it has remained an important drug in the health care systems of China, Japan, and Korea.

PRIMARY USES

May increase athletic performance and endurance; immunomodulating effects; fatigue.

OTHER POTENTIAL USES

Non-insulin dependent diabetes

mellitus; menopausal symptoms; erectile or fertility problems; improves cognitive function and mental performance; possibly reduces risk of gastric, lung, ovarian, larynx, esophagus, and pancreas cancers; improves lung function; increases antibiotic effect for respiratory tract infection.

DOSAGE

Ginseng can generally be used for up to three months followed by a repeated course of treatment.

DRIED ROOT, POWDERED: 1–2 g daily for up to three months.

DECOCTION: Simmer 3–9 g dried root in 720–960 ml water for approximately 45 minutes.

INFUSION: Pour 150–250 ml boiling water over 1–2 g finely cut or powdered root, steep covered for 10 minutes, then strain.

FLUID EXTRACT: 1–6 ml daily [1:2 (g/ml)].

DRY EXTRACT: Take 2, 100 mg capsules daily with liquid at breakfast; or 1 capsule with breakfast and 1 capsule with lunch [standardized to 4% ginsenosides].

CONTRAINDICATIONS

Consult with a healthcare provider before using Asian ginseng in cases of acute illnesses, high blood pressure (hypertension), and when using large amounts of stimulants like caffeine-containing beverages.

PREGNANCY AND LACTATION: No known restrictions although some authorities say that ginseng root should not be used during pregnancy. In Traditional Chinese Medicine, ginseng root is used during pregnancy, labor, and postpartum, in combinations containing other herbs.

ADVERSE EFFECTS

None known.

DRUG INTERACTIONS

Patients taking phenelzine (an MAO inhibitor), warfarin (an anticoagulating drug), or zidovudin (an HIV drug) should consult with a healthcare provider before using ginseng. Diabetic patients may need to adjust their insulin dosages because ginseng may lower blood glucose levels. Use with caution when taking with significant amounts of stimulants such as coffee, sugar, and caffeine-containing teas.

Milk Thistle

Silybum marianum (L.) Gaertn.
Family: Asteraceae

OVERVIEW

Milk thistle preparations have been used in European medicine for over 2,000 years for the treatment of liver diseases. In the U.S. in 2000, milk thistle ranked 11th in sales of all herbal products sold in food, drug, and mass market outlets, reaching about \$9 million in retail sales. With numerous clinical studies involving over 2,400 patients, it is perhaps the best documented therapy available for treating liver intoxication.

USES

Alcoholic liver disease; alcoholic liver cirrhosis; infectious hepatitis; drug-induced hepatitis.

DOSAGE

For chronic conditions, milk thistle must be taken over an extended period for efficacy. For acute conditions that last longer than a week or recur periodically, patients are encouraged to seek a healthcare provider's advice.

DRY EXTRACT (STANDARDIZED): 40–70:1 (w/w), 70–80% silymarin, daily equivalent to 200–400 mg of silymarin, calculated as silibinin in divided doses. Many clinical trials have used a daily dose equal to 420 mg of silymarin divided into three doses. The dose of 140 mg should be swallowed with sufficient amounts of fluid.

CONTRAINDICATIONS

No known contraindications.

PREGNANCY AND LACTATION: No known restrictions.

ADVERSE EFFECTS

The standardized preparation has occasionally caused a mild laxative effect.

DRUG INTERACTIONS

None known. Ingesting silymarin at the same time as psychopharmaceutical drugs, butyrophenones, or phenothiazines has produced the benefit of decreased lipid peroxidation damage of the liver.

St. John's wort

Hypericum perforatum
Family: Clusiaceae

OVERVIEW

St. John's wort (SJW) rose from virtual obscurity in the U.S. to become the fifth best-selling dietary supplement in mainstream retail stores. Its rise to fame came after the national media reported clinical research showing that SJW is safe and effective for treating mild to moderate depression. The Greek physician Hippocrates (ca. 460-377 B.C.E.) was one of the first to speak of the health benefits of SJW. Preparations include teas, alcoholic tinctures, and tablets using either the plant in its crude form or standardized preparation. SJW is typically standardized to contain a consistent level of hypericin (0.3%), or hyperforin (3-5%), two naturally occurring chemicals found in the plant.

USES

Internal
Depression (mild to moderate).

External
Wound healing; first-degree burns; muscle pain (myalgia).

OTHER POTENTIAL USES

Seasonal Affective Disorder (SAD: mental depression related to certain seasons, especially winter); obsessive-compulsive disorder (OCD); menopause; fatigue; pediatric nocturnal incontinence; premenstrual syndrome (PMS).

DOSAGE

FLUID EXTRACT: 1:1 (g/ml), 2 ml, twice daily.

DRY EXTRACT: 5-7:1, 300 mg, 3 times daily.

EXTRACT (STANDARDIZED): standardized to 0.3% hypericin or 2-4.5% hyperforin; 900 mg daily in 3 divided doses.

CONTRAINDICATIONS

No known contraindications.

PREGNANCY AND LACTATION: No known restrictions.

ADVERSE EFFECTS

Photosensitization (redness of the skin caused by exposure to sunlight or other ultraviolet radiation), especially in fair-skinned individuals, may occur with excessive dosages (1,800 mg/day), but this reaction is relatively rare.

DRUG INTERACTIONS

SJW should not be taken in

combination with any pharmaceutical antidepressants unless under professional guidance. SJW may interact with oral contraceptives, anticoagulant drugs like warfarin, the asthma drug theophylline, the anti-HIV drug Indinavir, the immunosuppressant drug cyclosporine, and the cardiac medication digoxin. Abruptly stopping SJW after prolonged use may increase the concentration of drugs like carbamazepine (Tegretol®). Patients with depression should avoid alcohol. Because SJW has been shown to potentially act with these and possibly other drugs, consumers and patients are advised to consult with a properly qualified healthcare professional before using SJW with any other over-the-counter or prescription medications.

Tea, Black/Green

Camellia sinensis (L.) Kuntze (syn. *C. sinensis* L.)

Family: Theaceae

OVERVIEW

The use of tea as a beverage in China dates back to 2700 B.C.E. Currently, it is widely used in the traditional medical systems of China, Hong Kong, Japan, and Korea. Next to water, tea is the most widely consumed beverage in the world today. Green and black tea, though from the same plant, are processed differently and contain varying strengths of chemical compounds.

USES

To reduce risk of atherosclerosis, cardiovascular disease, and myocardial infarction; in cases of elevated cholesterol (to help lower); possible prevention of certain cancers (breast, pancreatic, colon, lung, and esophageal); mild stimulant; possible aid in weight loss; diuretic action; possible reduced risk of osteoporosis.

DOSAGE

GREEN TEA INFUSION (TEA): Pour 150-250 ml boiling water over 1.0-2.5 g finely cut dried leaf, steep 3-5 minutes for use as a stimulant. Steep 15-20 minutes and drink several times daily for diarrhea. Drink at least 1 cup daily for antioxidant effect.

GREEN TEA POWDER: 8 capsules (250 mg

each) daily with meals to help treat obesity.

BLACK TEA INFUSION (TEA): Pour 150-250 ml boiling water over 2.5 g finely cut dried leaf, steep 2-5 minutes for use as a stimulant (alkaloids extract rapidly). Steep at least 10 minutes for use in treatment of diarrhea (catechins take longer to extract), 2-3 times daily. Drink 3-4 times daily for protection against atherosclerosis, 1 or more times daily to reduce risk of myocardial infarction (heart attack).

DRY ALCOHOLIC GREEN TEA EXTRACT: 2 capsules (250 mg each), 3 times daily with meals for weight control [standardized to 25% catechins].

CONTRAINDICATIONS

Use with caution in weakened cardiovascular systems, kidney diseases, thyroid hyperfunction (hyperthyroid), increased susceptibility to muscle spasm, and panicky states of anxiety.

PREGNANCY AND LACTATION: Pregnant women should not ingest more than 5 cups daily (300 mg caffeine daily). Drinking tea while nursing may cause sleep disorders in infants.

ADVERSE EFFECTS

Nervousness, anxiety, heart irregularities, headaches, tremors, hypertension, restlessness, insomnia, daytime irritability, irritation of the stomach lining, and increased urination are possible adverse effects that can occur with use/overuse of central nervous system stimulants like the caffeine found in tea. However, these effects rarely occur with use of normal amounts.

DRUG INTERACTIONS

Compounds in black tea may reduce the effects of coronary vasodilator drugs, such as dipyridamole, if taken simultaneously. Green tea has possible synergistic effects when combined with sulindac and/or tamoxifen and may reduce their adverse effects. Green tea may also interact with drugs such as the blood-thinning drug warfarin (reducing its effects), and large amounts of caffeine may increase activity and side effects of the asthma drug theophylline. Tannins in tea can also interfere with intestinal absorption of nutrients and vitamins, and may lead to microcytic