



# Saint Luke's Regional Laboratories Clinical Laboratory Letter



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## Harmful Effects of Herbs

Recent surveys indicate that more than 50% of the population use some form of complementary and alternative medicine. In the United States, the sale of herbal medicines now exceeds \$4 billion per year. Marketing campaigns often imply that any natural product is safe. However, herbal medicines are classified as dietary supplements and do not have to be proven safe before being released into the marketplace. Many herbs have been associated with adverse effects due to assay interference, herb-therapeutic drug interaction, or organ toxicity. The following list was compiled to provide a quick reference.

Common Name	Other Names	Intended Use	Adverse Effects
Aristolochic Acid	Snakeroot, birthroot, snakeweed, sangree root, serpentry, wild ginger	traditional Chinese herbs	nephrotoxicity, carcinogenic
Bitter Orange	Citrus aurantium, zhi xhi, zhi oiao, zhiqiao, kijitsu, neroli oil, Shangzhou,	weight loss, stimulant, athletic performance	tachycardia, vasoconstriction, hypertension, stroke
Borage oil	Borago officinalis, bee plant, bee bread, ox's tongue, starflower oil	rheumatoid arthritis, hypertension	hepatotoxicity, lower seizure threshold, increase warfarin effect
Cat's Claw	Uncaria tomentosus, Una de gato, hawks claw	anti-viral, prevent colds & flu, chronic fatigue syndrome	hypotension, diarrhea, increase warfarin effect, inhibit CYP3A4
Chan Su	Chinese toad auricular glands	tonsillitis, sore throat, palpitations, heart tonic	vasoconstriction, hypertension, arrhythmia, digoxin immunoreactivity
Chaparral	Larrea tridentata, creosote bush, jarilla, greasewood, hediondilla	anti-neoplastic, anti-oxidant, arthritis remedy, cleansing tonic	cholestatic hepatotoxicity, nephrotoxicity, carcinogenic
Comfrey	Symphytum officinale, knitbone, nipbone, black root, bruisewort, consolidae radix	inflamed joints, wounds, gout, fractures, thrombophlebitis	hepatic veno-occlusive disease
Dan Shen	Salvia miltiorrhiza	angina pectoris, cardiovascular diseases	digoxin immunoreactivity, increase warfarin effect, platelet inhibition, fibrinolysis
Dong quai	Angelica senensis	menopause & menstruation	increase warfarin effect
Echinacea	Purple cone flower	colds, flu, URI, UTI, immune stimulant	allergic reactions, nausea, myalgia, hepatitis
Ephedra	Ma huang	weight loss, stimulant, athletic performance	arrhythmia, hypertension, stroke
Evening Primrose	Oenothera biennis, primrose oil	breast tenderness, PMS	lower seizure threshold
Feverfew	Tanacetum parthenium, Chrysanthemum	headaches, migraines, menstrual cramps, arthritis	increase warfarin effect
Garlic	Allium sativum	lower blood pressure & cholesterol	increase warfarin effect, platelet inhibition
Germander	Teucrium chamaedrys	weight loss, general tonic	cholestatic hepatotoxicity
Ginger		motion & morning sickness	increase warfarin effect
Ginkgo biloba	Maiden hair tree	forgetfulness, mental focus, tinnitus, claudication	increase warfarin effect, platelet inhibition, hypertension, seizures

Ginseng	Eleutherococcus senticosus (Siberian), Panax ginseng (Asian)	stress, endurance	decrease warfarin effect, digoxin immunoreactivity, hypoglycemia, Stevens Johnson, schizophrenia
Green tea	Camellia sinensis	cancer prevention, heart tonic, nausea & vomiting	decrease warfarin effect
Kava kava	Piper methysticum, kawa, ava, awa, gea ,gi, kao, kew, malohu, yagona, sakau	anxiety, insomnia	hepatotoxicity, parkinsonism, GABA receptor blockade, calcium & sodium channel blockade
Kelp		anti-inflammatory, thyroid tonic, metabolic tonic	hyperthyroidism
Licorice root		anti-inflammatory, peptic ulcers	aldosteronism, hypokalemic myopathy, hypertension, increase warfarin effect
Lobelia	Lobelia inflata, Pokeweed, Indian tobacco, cardinal flower, asthma weed	anti-viral, anti-neoplastic	arrhythmia, respiratory failure
Lu Shen Wan		heart tonic	falsely elevated digoxin levels
Mistletoe		digestive aid, sedative, heart tonic	hepatotoxicity
Moonflower	Datura inoxia	hallucinogen	seizures, hallucinations, coma
Oleandrin	Nerium oleander, dogbane, Thevetia peruviana, rose laurel	cancer, HIV, hepatitis, psoriasis, rheumatoid arthritis	arrhythmia, contact dermatitis, digoxin immunoreactivity, N&V, diarrhea, salivation, altered mentation
Passion flower	Passiflora incarnata	insomnia, anxiety	arrhythmia, drowsiness
Pennyroyal	Mentha puleguim, Hedeoma pulegoides, squawmint, mosquito plant, tickweed	induce menstruation, abortifacient, gout, fleas	hepatotoxicity, nephrotoxicity, seizures
Pentagyn	Gynostemma pentaphyllum, Jiaogulan, miracle grass, Xianxio, Southern Ginseng	lower BP & cholesterol	increase warfarin effect, nausea, diarrhea
St. John's Wort	Hypericum perforatum, goat weed	mood disorders, depression	induces CYP3A4 & P-glycoprotein drug transporter, increased drug clearance, lower therapeutic drug levels
Saw Palmetto	Serenoa serrulata, Sabal serrulata, saw tooth palm	BPH, polycystic ovary syndrome, hirsutism	5-alpha reductase inhibition, testosterone metabolism inhibition
Skullcap	Scutellaria laterifolia, pimpernel, hoodwort, monkey flower, mad-dog weed, quaker bonnet	insomnia, irritability, nervousness, snakebites, rabies	hepatotoxic, giddiness, stupor, confusion, seizures
Valerian root	Valeriana officinalis, capon's tail	Insomnia, anxiety	neurotransmitter inhibition by enhancing GABA, tachycardia, hypotension, headache, delirium
Yohimbe	Corynanthe yohimbe, Pausinystalia yohimbine, yohimbehe, johimbe	aphrodesiac, impotence	Tachycardia, hypertension, urinary retention