

Herbal Supplements: Drug Interactions and Contraindications Chart

Herbal Supplement	Dosage	Clinical Usage	Cautions, Contraindications and Potential Drug Interactions
Artichoke <i>(Cynara scolymus)</i> Leaf	250mg, 2 times a day, standardized to contain 15% chlorogenic acid, or 2-5% cynarin	<ul style="list-style-type: none"> • Used to stimulate the flow of bile (choleretic)¹ • Useful in eczema and skin disorders; a hepatoprotectant^{2,3} • Adjunctive agent in hyperlipidemia⁴ 	<ul style="list-style-type: none"> • Do not use if allergic to members of the daisy (chrysanthemum) family. • Do not use if bile obstruction is present.⁵
Ashwagandha <i>(Withania somnifera)</i> Root	450-900mg daily, standardized to contain 1.5% withanolides	<ul style="list-style-type: none"> • Used as an adaptogen to enhance mental and physical performance, improve learning ability, and decrease stress and fatigue⁶ • General tonic in stressful situations, especially insomnia, overwork, nervousness, and restlessness⁷ • Chemotherapy and radiation protection and therapeutic enhancement of these agents^{8,9} 	<ul style="list-style-type: none"> • May be an abortifacient. Use with caution in pregnancy and lactation. • Use with caution while taking sedatives such as barbiturates (reported to increase the effects of these drugs). • Use with caution in individuals with hyperthyroidism; ashwagandha has been reported in an animal study to increase T4 activity and subsequently thyroid function.¹⁰ • An animal study reported that constituents contained in ashwagandha root may alter the effects of thyroid medications, possibly altering the effects of these medications and possibly the dose(s) needed for therapy.¹¹

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Astragalus <i>(Astragalus membranaceus)</i> Root	250-500mg, 4 times a day, standardized to a minimum of 0.4% 4'-hydroxy-3'-methoxyisoflavone 7-sug	<ul style="list-style-type: none"> • Used as an adaptogen to increase stamina and energy¹² • Adjunct support for chemotherapy and radiation¹³ • Improves resistance to disease and immune function¹⁴ • Used in oxygen deprivation of tissues¹⁵ 	<ul style="list-style-type: none"> • Use with caution if currently taking immunosuppressive medications.
Bilberry <i>(Vaccinium myrtillus)</i> Berry	80mg, 2-3 times a day, standardized to contain 25% anthocyanosides (calculated as anthocyanidins)	<ul style="list-style-type: none"> • Antioxidant; used in eye disorders including myopia, diminished visual acuity, dark adaptation, day and night blindness, diabetic retinopathy, cataracts¹⁶ • Used in cardiovascular health to help maintain capillary integrity and reduce hyperpermeability¹⁷ 	<ul style="list-style-type: none"> • Use with caution in pregnancy and lactation.¹⁸ • Use with caution in individuals taking anticoagulant/antiplatelet medications.
Bitter Melon <i>(Momordica charantia)</i> Fruit	200mg, 2-3 times a day, standardized to contain 5.1% triterpenes	<ul style="list-style-type: none"> • Hypoglycemic^{19,20} • Used as an antidiabetic agent and for impaired glucose tolerance (IGT); antiviral²¹ 	<ul style="list-style-type: none"> • Do not use in pregnancy (emmenagogue and abortifacient). • May alter insulin and/or oral hypoglycemic needs in diabetic individuals due to pharmacology; monitoring of blood sugar levels is recommended..²²

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Black Cohosh <i>(Cimicifuga racemosa)</i> Root/rhizome	20mg, 2 times a day, standardized to contain 1mg triterpenes (27-deoxyacteine)	<ul style="list-style-type: none"> Phytoestrogenic action; used in menopausal complaints and PMS; rheumatic complaints; mild depression^{23,24,25,26} 	<ul style="list-style-type: none"> Contraindicated in pregnancy and lactation (uterine stimulation reported).^{27,28} Caution if individual is taking hormonal drugs such as estrogen or birth control pills; may alter hormonal therapy. May cause nausea, vomiting, and headache in high doses.
Bladderwrack <i>(Fucus vesiculosus)</i> fronds	600mg, 1-3 times a day	<ul style="list-style-type: none"> Rich source of iodine, potassium, magnesium, calcium and iron; used in hypothyroidism and fibrocystic breast disease²⁹ 	<ul style="list-style-type: none"> Use with caution in individuals taking thyroid agents. Use with caution in hyperthyroidism. Caution for individuals with kidney failure (may alter potassium levels).
Boswellia <i>(Boswellia serrata)</i> Gum resin	200-400mg, 3 times a day, standardized to contain 65-75% organic acids and/or 20-25% boswellic acids	<ul style="list-style-type: none"> Anti-inflammatory^{30,31} Used in arthritis and other inflammatory conditions such as ulcerative colitis^{32,33} 	<ul style="list-style-type: none"> Use with caution in individuals taking anti-inflammatory medications such as NSAIDs.

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Bromelain <i>(Anas comosus)</i> Enzyme	Digestive enzyme: 1 tablet, 3 times a day with meals, standardized to contain at least 2000mcu/gram Other uses: 1 tablet, 3 times a day between meals (either 1 hour before meals or 2 hours after meals)	<ul style="list-style-type: none"> • Proteolytic agent from the pineapple plant; used as an anti-inflammatory agent in arthritis³⁴ • Used as a digestive enzyme³⁵ 	<ul style="list-style-type: none"> • Use with caution if taking anticoagulants.³⁶ • Use with caution in GI ulceration. • Use with caution in individuals with hypertension or other cardiovascular disorders.³⁷
Cat's Claw <i>(Uncaria tomentosa)</i> Root (bark)	250-1000mg, 3 times a day, standardized to contain 3% alkaloids and 15% total phenols; some supplements are standardized to not less than 1.3% pentacyclic oxindole alkaloids and not more than 0.06% tetracyclic oxindole alkaloids. ³⁸	<ul style="list-style-type: none"> • Used to improve immunity³⁹ • Antibacterial, antifungal, and antiviral^{40,41} • Anti-inflammatory⁴² • Antioxidant⁴³ 	<ul style="list-style-type: none"> • Should not be used by organ transplant patients. • Do not use during pregnancy. • Do not use in individuals on the following:⁴⁴ <ul style="list-style-type: none"> - IV hyper-immunoglobulin therapy; - Insulin; - Immunosuppressant therapy. • Use with caution in individuals on the following medications: • Anticoagulant/antiplatelet medications (may increase the chance of bleeding due to PAF inhibition) ; • Nonsteroidal anti-inflammatory drugs (NSAIDs) (may increase the chance of GI bleeding).⁴⁵

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<p>Cayenne (<i>Capsicum annuum</i>) (<i>Capsicum frutescens</i>) Fruit</p>	<p>400mg, 3 times a day, standardized to contain 0.25% or greater capsaicin content; may also be standardized to heat units, with 150,000 being average Topical: Apply topically as directed by manufacturer.</p>	<ul style="list-style-type: none"> • May stimulate digestion⁴⁶ • Circulatory support for cardiovascular system⁴⁷ • Used topically in inflammation and pain^{48,49,50} 	<ul style="list-style-type: none"> • Do not use with GI ulceration. • Use with caution in individuals taking anticoagulant/antiplatelet medications due to platelet aggregating inhibition. • May interfere with monoamine oxidase (MAO) inhibitors and antihypertensive therapies due to increased catecholamine secretion.⁵¹ • An animal study reported that constituents contained in cayenne may increase the effects of the theophylline and possibly the dose needed for treatment.⁵² Increased areas under plasma curves, peak plasma levels and mean residence times for the theophylline product were seen with concurrent use of cayenne.
<p>Chastetree/Vitex (<i>Vitex agnus-castus</i>) Berry</p>	<p>200mg, 2 times a day, either 1 hour before or 2 hours after meals, standardized to at least 0.5% agnuside or 0.6% aucubin</p>	<ul style="list-style-type: none"> • Progesterone-like action with uses in PMS, menopause, corpus luteum insufficiency, and other menstrual irregularities^{53,54} • Insufficient lactation and hyperprolactinemia^{55,56} 	<ul style="list-style-type: none"> • Do not use in pregnancy due to potential uterine stimulation and emmenagogue effects⁵⁷ • May alter hormonal therapy such as birth control and hormone replacement therapy (HRT) (due to potential endocrinologic effect).⁵⁸ • Use with caution with dopamine agonists such as haloperidol, metoclopramide or levodopa due to pharmacology of vitex.

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Coleus <i>(Coleus forskohlii)</i> Root	250mg, 1-3 times a day, standardized to contain 1% forskolin per dose OR 50mg, 1-3 times a day, standardized to contain 18% forskolin	<ul style="list-style-type: none"> Increases intracellular c-AMP; used in asthma, hypertension, congestive heart failure, glaucoma, allergies, eczema^{59,60,61} 	<ul style="list-style-type: none"> Use with caution in hypotension. Avoid in peptic ulcer disease.⁶² Use with caution in individuals taking the following (may increase the effects of these drugs): <ul style="list-style-type: none"> - Antihypertensives; - Decongestants; - Antihistamines. Use with caution in individuals taking anticoagulant/antiplatelet medications (due to platelet aggregating inhibition).⁶³

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Cordyceps <i>(Cordyceps sinensis)</i> Mycelia	1050mg, 2 times a day, standardized to contain 0.14% adenosine and 5% mannitol	<ul style="list-style-type: none"> • Antioxidant⁶⁴ • Supports healthy lung and kidney function⁶⁵ • Adaptogenic/tonic to support wellness, longevity, and general health⁶⁶ • Beneficial for athletes in increasing stamina and endurance⁶⁷ • Increases cellular oxygenation; useful during times of stress; reduces tiredness and fatigue; has immunomodulatory effects⁶⁸ • Adjunct support for chemotherapy and radiation⁶⁹ • Improves sexual vitality⁷⁰ • Hepatoprotective⁷¹ 	<ul style="list-style-type: none"> • Do not take if allergic to fungus. • Use with caution in pregnancy and lactation. • Use with caution in individuals taking anticoagulant and antiplatelet medications (due to platelet aggregating inhibition).⁷² • Use with caution if taking monoamine oxidase (MAO) inhibitors.⁷³
Dandelion <i>(Taraxacum officinale)</i> Root/plant	250-500mg, 3 times a day of whole root, standardized extract OR 5-10ml, 3 times a day, of liquid extract (1:1w/v fresh plant or 1:4w/v dried plant) in water or juice	<ul style="list-style-type: none"> • Used for disorders of bile secretion (choleric); appetite stimulation; dyspeptic complaints⁷⁴ • Diuretic⁷⁵ 	<ul style="list-style-type: none"> • Do not use if biliary obstruction or gallstones are present.⁷⁶ • Use with caution if on diuretics, digoxin due to dandelion's diuretic effects.⁷⁷

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Devil's Claw <i>(Harpagophytum procumbens)</i> Tuber	100-200mg, 1-2 times a day, standardized to contain 5% harpagosides	<ul style="list-style-type: none"> • Anti-inflammatory^{78,79} • Used in chronic osteoarthritis, gout, and other inflammatory conditions^{80,81} 	<ul style="list-style-type: none"> • Do not use in pregnancy due to stimulation of the uterine muscle.⁸² • Use with caution in individuals on NSAIDs or other anti-inflammatory medications. • Do not use in GI ulceration.⁸³ • Use with caution if taking antiarrhythmic medications.
Dong Quai <i>(Angelica sinensis)</i> Root	200mg, 2 times a day, standardized to contain 0.8-1.1% ligustilide	<ul style="list-style-type: none"> • Phytoestrogenic⁸⁴ • Used in female disorders including PMS, menopause, and irregular menstruation^{85,86} • Blood pressure regulation; energy (especially in females); anemia and blood building properties⁸⁷ 	<ul style="list-style-type: none"> • Use with caution if currently taking hormonal therapies such as birth control or hormone replacement therapy. • Use with caution if taking anticoagulant/antiplatelet medications.⁸⁸ • Use with caution if sunbathing or using a tanning booth while taking Dong quai; use dong quai with caution when taking prescription drugs that cause sensitivity to sunlight.⁸⁹

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<p>Echinacea (<i>Echinacea purpurea</i>) Flower, whole plant, root, succus (<i>Echinacea angustifolia</i>) Root</p>	<p>500mg, 3 times a day for 1 day, then 250mg, 4 times a day, standardized to contain 4% echinacosides (angustifolia) or 4% sesquiterpene esters (purpurea) per dose Purpurea (freshly expressed plant juice): Use 60 drops, 3 times a day with food for 1 day, then 40 drops, 3 times a day with food for up to 10 days, standardized to contain not less than 2.4% soluble beta-1,2 D-5 fructofuranosides</p>	<ul style="list-style-type: none"> Increases non-specific immunity; used in prevention and treatment of colds, flu, minor infections, tonsillitis, sore throat; used in chronic skin complaints^{90,91} Used as an antiviral agent⁹² Used topically as an antibacterial, wound healing agent⁹³ 	<ul style="list-style-type: none"> Not for use in individuals with chronic immunosuppression.⁹⁴ Use with caution in individuals with kidney disorders.⁹⁵ If used for prophylaxis, cycle 3 weeks on, 1 week off.⁹⁶
<p>Evening Primrose (<i>Oenothera biennis</i>) Seed oil</p>	<p>2-8 grams daily (depending on severity of condition) standardized to contain 8% gamma-linoleic acid</p>	<ul style="list-style-type: none"> Used for omega-6 essential fatty acid supplementation Used in atopic eczema, PMS, menopause, rheumatoid arthritis, diabetic neuropathy, psoriasis^{97,98,99} 	<ul style="list-style-type: none"> Do not use in individuals currently on phenothiazine antipsychotics or diagnosed with schizophrenia; contraindicated in epilepsy.^{100,101,102} Use with caution in individuals on the following: <ul style="list-style-type: none"> Anticoagulants/antiplatelets (may reduce platelet aggregation);¹⁰³ With seizures and/or on seizure medication (may lower seizure threshold).^{104,105}

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Feverfew <i>(Tanacetum parthenium)</i> Leaf	100-250mg daily, standardized to contain 250-600mcg of parthenolide	<ul style="list-style-type: none"> Used in the preventative treatment of migraine headaches¹⁰⁶ 	<ul style="list-style-type: none"> Do not use in pregnancy due to emmenagogue effect.¹⁰⁷ Do not use if the individual is allergic to the daisy (chrysanthemum) family. Use with caution in individuals on anticoagulant/antiplatelet therapy.¹⁰⁸
Garcinia <i>(Garcinia cambogia)</i> Fruit	500-1000mg, 3 times a day on an empty stomach, either ½ hour before meals or 1 hour after eating, standardized to 50% (-)-hydroxy citric acid	<ul style="list-style-type: none"> May be effective in weight reduction protocols^{109,110} May be effective in controlling sugar levels and supporting pancreas function¹¹¹ 	<ul style="list-style-type: none"> Use with caution if taking hypoglycemic medications (may further lower blood sugar levels).
Garlic <i>(Allium sativum)</i> Bulb	400mg, 2-3 times a day, equivalent to 1200mg of fresh garlic or 10mg alliin standardized to provide 4mg of Total Allicin Potential (TAP) per dose OR 600mg of aged extract, 1-3 times a day, standardized to contain 1mg/Gm S-allyl cysteine (SAC)	<ul style="list-style-type: none"> May lower cholesterol and blood fats^{112,113} Mild PAF inhibitor¹¹⁴ Has antibiotic effect, especially against bacteria and fungi^{115,116} Beneficial to the immune system. 	<ul style="list-style-type: none"> May cause GI distress in sensitive individuals. Use with caution in individuals on the following medications as garlic may potentiate their effects: <ul style="list-style-type: none"> - Anticoagulants; - Hypoglycemic agents; - Antihypertensives.

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Ginger <i>(Zingiber officinalis)</i> Root	250mg, 3 times a day with food, standardized to contain 4% volatile oils or 5% total pungent compounds, most prominently 6-gingerol and 6-shogaol	<ul style="list-style-type: none"> • Used as an anti-emetic^{117,118} • GI distress and dyspepsia¹¹⁹ • Anti-inflammatory properties¹²⁰ 	<ul style="list-style-type: none"> • Use with caution in individuals on anticoagulants and/or antiplatelet medications (may increase chances of bleeding due to PAF inhibition).¹²¹
Ginkgo <i>(Ginkgo biloba)</i> Leaf	40-80mg, 3 times a day, standardized to contain 24-27% ginkgo flavone glycosides (heterosides) and 6-7% triterpene lactones	<ul style="list-style-type: none"> • Reported to increase peripheral blood flow; used in cerebral vascular insufficiency, peripheral vascular insufficiency, Alzheimer's Disease, impotence, tinnitus, resistant depression, memory^{122,123} 	<ul style="list-style-type: none"> • Use with caution in individuals on anticoagulants (may increase chances of bleeding due to PAF inhibition).^{124,125, 126} • Use with caution in individuals on monoamine oxidase (MAO) inhibitors as ginkgo may enhance the effects of these medications.¹²⁷ • Do not use ginkgo supplements in individuals with epilepsy; ginkgo may precipitate seizures in these individuals¹²⁸

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Ginseng (Panax) <i>(Panax ginseng)</i> Root	200-600mg daily, standardized to contain a minimum of 5% ginsenosides	<ul style="list-style-type: none"> • Enhances mental and physical performance; increases energy, decreases stress; improves immune function; adjunct support for chemotherapy and radiation^{129,130} 	<ul style="list-style-type: none"> • Do not use in kidney failure. • Do not use in pregnancy or acute infections. • May alter hormonal therapy. • Use with caution in the following:^{131 132, 133} <ul style="list-style-type: none"> - Digoxin therapy; - Anti-hypertension medications; - Anticoagulant/antiplatelet therapy • Use with caution in individuals currently on monoamine oxidase (MAO) inhibitors, primarily phenelzine.¹³⁴ • May cause mastalgia in prolonged and high doses.¹³⁵ • May cause vaginal breakthrough bleeding.¹³⁶ • Ginseng Abuse Syndrome (GAS) may occur in prolonged and high doses (includes diarrhea, hypertension, nervousness, skin eruptions and sleeplessness).¹³⁷

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Ginseng (Siberian), Eleuthero <i>(Eleutherococcus senticosus)</i> Root	200mg, 2 times a day, standardized to contain 0.8% eleutherosides	<ul style="list-style-type: none"> • Adaptogen^{138,139} • Beneficial in athletic performance, decreasing stress and fatigue; reported to increase immune system function¹⁴⁰ 	<ul style="list-style-type: none"> • May alter the effects of: <ul style="list-style-type: none"> - antihypertensive, - anticoagulant/antiplatelet - hypoglycemic medications. • Use with caution with digoxin therapy, although a contaminant in the eleuthero supplement may have been the culprit of the interaction;¹⁴¹ • May increase effects of hexobarbital.¹⁴²
Golden Seal <i>(Hydrastis canadensis)</i> Root/rhizome	250mg, 2-4 times a day, standardized to contain 10% alkaloids or 2.5% berberine and 1.5-5% hydrastine	<ul style="list-style-type: none"> • Mucous membrane tonifying; antibacterial, antifungal; used in inflammation of the mucosal membranes; treatment of gastritis, bronchitis, cystitis, infectious diarrhea¹⁴³ 	<ul style="list-style-type: none"> • Contraindicated in pregnancy. • High doses (2-3gm) may cause hypotension.¹⁴⁴ • May have hypoglycemic effect.
Grape Seed <i>(Vitis vinifera)</i> Seed/skin	25-100mg, 1-3 times a day, standardized to procyanidolic value of not less than 95 and 90% total phenols	<ul style="list-style-type: none"> • Antioxidant • Treatment of allergies, asthma; improves peripheral circulation; decreases platelet aggregation, capillary fragility; improves general circulation; inflammation^{145,146,147} 	<ul style="list-style-type: none"> • Use with caution in individuals on anticoagulant therapy and/or antiplatelet medications due to platelet inhibition.

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Green Tea <i>(Camellia sinensis)</i> Leaf	500mg daily, standardized to contain 50% catechins (polyphenols), specifically (-)epigallocatechin-3-gallate (EGCG) Caffeine-free products are available.	<ul style="list-style-type: none"> • Used as an antioxidant to aid in cancer prevention, cardiovascular disease^{148,149} • Adjunct support for chemotherapy and radiation¹⁵⁰ • May lower cholesterol¹⁵¹ • Platelet inhibiting action¹⁵² • Anticariogenic activity¹⁵³ 	<ul style="list-style-type: none"> • Use with caution in individuals taking anticoagulant and/or antiplatelet medications due to platelet aggregating inhibition. • Use with caution when taking other stimulants such as caffeine and decongestants, unless a caffeine-free product is used.
Guggul <i>(Commiphora mukul)</i> Resin	500mg, 3 times a day, standardized to contain 5% guggulsterones	<ul style="list-style-type: none"> • Hypercholesterolemic agent; used in lowering blood cholesterol levels^{154,155,156} 	<ul style="list-style-type: none"> • Use with caution in individuals on the following:¹⁵⁷ <ul style="list-style-type: none"> - Hypothyroid medications; - Anticoagulants; - Cholesterol-lowering medications. • Reported to interfere with diltiazem and propranolol metabolism, so caution should be used in calcium channel blocker and beta-blocker medications.¹⁵⁸
Gymnema <i>(Gymnema sylvestre)</i> Leaf	250-500mg, 1-3 times a day, standardized to contain 25% gymnemic acids	<ul style="list-style-type: none"> • Regulation of blood sugar levels¹⁵⁹ 	<ul style="list-style-type: none"> • Use with caution in hyperglycemics or diabetics due of potential to increase the effects of these medications.¹⁶⁰
Hawthorn <i>(Crataegus oxyacantha)</i> Flower/leaf/berry	250mg, 1-3 times a day, standardized to contain at least 2% vitexin-2-O-rhamnoside and/or 20% procyanidins	<ul style="list-style-type: none"> • Treatment of angina, hypotension/hypertension, peripheral vascular diseases, tachycardia; used as a cardio- tonic^{161,162} • Antioxidant effects due to polyphenol content. 	<ul style="list-style-type: none"> • Use with caution in individuals on the following:¹⁶³ <ul style="list-style-type: none"> - Antihypertensives; - Digoxin; - Angiotensin converting enzyme inhibitors (ACE inhibitors).

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Hops <i>(Humulus lupulus)</i> Strobiles	100mg, 2 times a day as needed, standardized to contain 5.2% bitter acids and 4% flavonoids	<ul style="list-style-type: none"> Mild sedative and hypnotic^{164,165} 	<ul style="list-style-type: none"> Use with caution in individuals on the following (action may be potentiated): <ul style="list-style-type: none"> Sedatives; Anti-anxiety medications; Hypnotics; Antipsychotics; Antidepressants; Alcohol. Use caution when driving an automobile or operating heavy machinery. Use with caution while taking sedative medications (reported to increase sleeping time induced by pentobarbital).¹⁶⁶
Horse Chestnut <i>(Aesculus hippocastanum)</i> Seed	300mg, 1-2 times a day, standardized to contain 3-13% escin Topically: Apply 2% escin gel, 1-2 times a day to affected area	<ul style="list-style-type: none"> Varicose veins, hemorrhoids, other venous insufficiencies; deep venous thrombosis^{167,168} Used topically in the same conditions 	<ul style="list-style-type: none"> Use with caution in individuals on anticoagulants and/or antiplatelet medications (may increase chances of bleeding due to PAF inhibition).^{169,170,171}
Horsetail <i>(Equisetum arvense)</i> Shoots	300mg, 3 times a day as needed, standardized to contain 10% silica	<ul style="list-style-type: none"> Diuretic¹⁷² High mineral content (including silicic acid); used as nutritional support in bone and connective tissue strengthening, including osteoporosis¹⁷³ 	<ul style="list-style-type: none"> Diuretic effect may cause electrolyte disturbances and may potentiate certain pharmaceutical drugs with narrow therapeutic windows. May deplete thiamine (vitamin B₁) from the body due to thiaminase activity.¹⁷⁴

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<p>Kava Kava (<i>Piper methysticum</i>) Root</p>	<p>100-250mg, 1-3 times a day as needed, standardized to contain 30% kavalactones Sedation: 250-500mg at bedtime, standardized to contain 30% kavalactones</p>	<ul style="list-style-type: none"> Used in anxiety, sedation; skeletal muscle relaxation; post ischemic episodes^{175,176} 	<ul style="list-style-type: none"> Do not use in liver disease or liver impairment¹⁷⁷ Has been under tough scrutiny and increased regulatory control in European countries due to hepatic effects. Do not use during pregnancy¹⁷⁸ Do not use in Parkinson's Disease (has been reported to cause dopamine antagonism).^{179,180} Use with caution if taking the following: <ul style="list-style-type: none"> - Alprazolam (may increase sedative effects);¹⁸¹ - Ethanol (may increase ethanol toxicity);¹⁸² (conflicting study);¹⁸³ May cause drowsiness or sedation in higher doses.¹⁸⁴ Use caution when driving an automobile or operating heavy machinery. Long-term use of high doses has resulted in rash.¹⁸⁵ Use with caution in individuals on the following (action may be potentiated): <ul style="list-style-type: none"> - Sedatives; - Anti-anxiety medications; - Hypnotics; - Antipsychotics; - Antidepressants.

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<p>Licorice (<i>Glycyrrhiza glabra</i>) Root</p>	<p>250mg, 3 times a day, standardized to contain 20% glycyrrhizinic acid OR 15-30 drops of liquid extract, 3 times a day in juice or other beverage DGL Licorice: 250mg, 3 times a day chewed either 1 hour before or 2 hours after meals and at bedtime, standardized to contain no more than 2% glycyrrhizin</p>	<ul style="list-style-type: none"> • Used in adrenal insufficiency¹⁸⁶ • Licorice extract beneficial as an expectorant and antitussive¹⁸⁷ • Chewable DGL products used in peptic and duodenal ulcers^{188,189} 	<ul style="list-style-type: none"> • Use with caution in individuals on the following (licorice may deplete potassium): <ul style="list-style-type: none"> - Thiazide diuretics; - Potassium-sparing diuretics. • Should recommend potassium supplementation when using licorice. • Do not use in hypertension, hepatic problems, renal problems, or obesity due to possible mineralocorticoid effects of licorice (glycyrrhizin content).^{190,191} Not a problem if using DGL licorice.
<p>Olive Leaf (<i>Olea europaea</i>) Leaf</p>	<p>250-500mg, 1-3 times a day, standardized to contain 15-23% oleuropein</p>	<ul style="list-style-type: none"> • Antibiotic, antifungal, antiviral; also has hypoglycemic and antihypertensive activity^{192,193} 	<ul style="list-style-type: none"> • Do not use in individuals with gallstones due to olive's cholagogue effect.¹⁹⁴ • Use with caution in individuals on hypoglycemic and antihypertensive agents; may alter the need for these medications.

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Passion Flower <i>(Passiflora spp.)</i> Whole plant	Anxiety: 100mg, 2 times a day, standardized to contain 3.5% isovitexin Insomnia: 200mg at bedtime, standardized to contain 3.5% isovitexin	<ul style="list-style-type: none"> • Sedative agent^{195,196} 	<ul style="list-style-type: none"> • Use caution when driving an automobile or operating heavy machinery. • Use with caution in individuals on the following: <ul style="list-style-type: none"> - Sedatives; - Antidepressants; - Hypnotics; - Anti-anxiety agents. • Reported to increase sleeping time induced by hexobarbital.¹⁹⁷

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<p>Peppermint (<i>Mentha piperita</i>) Leaf/oil</p>	<p>1 tablet (enteric coated), 2-3 times a day, containing 0.2ml oil per tablet</p> <p>The oil should contain:</p> <ul style="list-style-type: none"> • not less than 4.5% w/w and not more than 10% w/w of esters calculated as menthyl acetate; • not less than 44% w/w of free alcohols calculated as menthol; and • not less than 15% w/w and not more than 32% w/w ketones calculated as menthone <p>Infants: Use 1tsp of dried leaf per cup of boiling water. Cool before using.</p>	<ul style="list-style-type: none"> • Used for digestive complaints as a carminative and spasmolytic¹⁹⁸ • Oil used in Irritable Bowel Syndrome^{199,200} 	<ul style="list-style-type: none"> • Do not use in individuals presenting biliary tract obstruction, cholecystitis or severe liver damage.²⁰¹

Herbal Supplement	Dosage	Clinical Usage	Cautions, Contraindications and Potential Drug Interactions
Red Clover <i>(Trifolium pratense)</i> Tops	500mg daily, standardized to contain 40mg isoflavones OR 30-60 drops, 2-3 times a day of a liquid extract (1:1w/v) in juice or other beverage	<ul style="list-style-type: none"> Used in the management of menopausal symptoms (contains profile of 4 phytoestrogens)²⁰² 	<ul style="list-style-type: none"> Use with caution in individuals using birth control and hormone replacement therapy (HRT) (may alter hormonal therapy). Use with caution while taking anticoagulants and/or antiplatelet medications.²⁰³
Red Yeast Rice <i>(Monascus purpureus)</i>	1200mg, 2 times a day	<ul style="list-style-type: none"> Hypercholesterolemic agent; may lower triglycerides and raise HDL cholesterol²⁰⁴ 	<ul style="list-style-type: none"> Use with caution in individuals currently on pharmaceutical cholesterol lowering drugs. Contraindicated in individuals who are hypersensitive or allergic to rice or yeast; with a history of liver disease or at risk for liver disease; with active liver disease, serious infections, organ transplantation, or recent major surgery.
Reishi (Ganoderma lucidum) Mushroom	150-300mg, 3-4 times a day, standardized 4% triterpenes and 10% polysaccharides (β -1,3-glucans)	<ul style="list-style-type: none"> Used for immunomodulation, fatigue, chemo- and radioprotection, antihypertensive, anticonvulsive²⁰⁵ 	<ul style="list-style-type: none"> Use with caution if taking anticoagulant medications.²⁰⁶ Reishi may increase the activity of cefazolin (AncefTM).²⁰⁷
Rhodiola, Arctic root (<i>Rhodiola rosea</i>)	50-100mg, 3 times a day standardized to 1% salidroside and/or 40-50% phenylpropanoids	<ul style="list-style-type: none"> Used as an “adaptogen”; used in adrenal stress to decrease cortisol production, also in cardiac stress.^{208,209,210} Used as nutritional support in depression.²¹¹ 	<ul style="list-style-type: none"> Use with caution if taking adrenergic-blocking agents due to adrenergic blocking activity of rhodiola.²¹² Use with caution if taking antiarrhythmic medications due to rhodiola antiarrhythmic activity.²¹³

Herbal Supplement	Dosage	Clinical Usage	Cautions, Contraindications and Potential Drug Interactions
Saw Palmetto <i>(Serenoa repens)</i> Berry	160mg, 2 times a day, standardized to contain at least 80-90% fatty acids and sterols	<ul style="list-style-type: none"> • Used in the treatment of benign prostatic hypertrophy (BPH)^{214,215,216} 	<ul style="list-style-type: none"> • Use with caution in individuals on alpha-adrenergic blocking agents; saw palmetto has some alpha-adrenergic activity.²¹⁷
Schisandra <i>(Schizandra chinensis)</i> Berry	100mg, 2 times a day with food, standardized to contain at least 9% schisandrins	<ul style="list-style-type: none"> • Adaptogen/health tonic; hepatic protection and detoxification^{218,219} • Adjunct support for chemotherapy and radiation²²⁰ • Increases endurance, stamina, work performance 	<ul style="list-style-type: none"> • Use with caution in individuals with liver damage. • Based on pharmacology, use with caution in individuals taking calcium channel blockers, corticosteroids and reserpine. • Do not use in pregnancy due to uterine stimulation.²²¹

Herbal Supplement	Dosage	Clinical Usage	Cautions, Contraindications and Potential Drug Interactions
<p>St. John's Wort (<i>Hypericum perforatum</i>) Flowering buds</p>	<p>300mg, 3 times a day, standardized to contain 0.3-0.5% hypericin Topical: Apply as needed to affected area</p>	<ul style="list-style-type: none"> • Used in mild to moderate depression, melancholia, anxiety^{222,223,224} • Anti-viral activity in increased doses²²⁵ • Antibacterial, anti-inflammatory; used topically for minor wounds and infections²²⁶ • May be used topically for bruises, muscle soreness, and sprains²²⁷ 	<ul style="list-style-type: none"> • Use with extreme caution if taking medications metabolized by the cytochrome P450 system, including:^{228,229,230,231} <ul style="list-style-type: none"> - Indinavir and other protease inhibitors - Theophylline - Digoxin - Cyclosporin - Reserpine - Oral contraceptives - Warfarin - Amitriptylline • Do not use in pregnancy.²³² • May alter the actions of monoamine oxidase (MAO) inhibitors and select serotonin reuptake inhibitors (SSRIs).^{233,234} • Use with caution in individuals currently on antidepressant therapy; may cause “Serotonin Syndrome”. • Not for use in severe depression. • Avoid tyramine –containing foods. • May elevate reversible liver enzyme function in high doses.²³⁵ • May cause photosensitivity in susceptible individuals.²³⁶

Herbal Supplement	Dosage	Clinical Usage	Cautions, Contraindications and Potential Drug Interactions
Turmeric <i>(Curcuma longa)</i> Root	300mg, 3 times a day with meals, standardized to contain 95% curcuminoids	<ul style="list-style-type: none"> • Antioxidant; anti-inflammatory²³⁷ • Anti-rheumatic; used in arthritic problems; may lower blood lipid levels²³⁸ 	<ul style="list-style-type: none"> • Some individuals may experience GI distress or irritation when beginning use. • Use with caution if peptic ulceration is present. • Use with caution if currently taking anticoagulant medications.²³⁹ • Do not use if biliary obstruction is present.²⁴⁰

Herbal Supplement	Dosage	Clinical Usage	Cautions, Contraindications and Potential Drug Interactions
Valerian <i>(Valeriana officinalis)</i> Root	200mg, 1-4 times a day, standardized to contain 0.8-1% valerenic acids	<ul style="list-style-type: none"> Used as a sedative or hypnotic; used in nervous tension during PMS, menopause; used in restless motor syndromes^{241,242} 	<ul style="list-style-type: none"> May cause drowsiness or sedation. Use with caution when driving a car or operating heavy machinery.²⁴³ Use with caution in individuals taking the following: <ul style="list-style-type: none"> Sedatives; Antidepressants; Hypnotics; Anti-anxiety agents. Reported to increase sleeping time induced by pentobarbital.²⁴⁴
White Willow <i>(Salix alba)</i> Bark	500mg, up to 3 times a day, standardized to contain 7-9% salicin	<ul style="list-style-type: none"> Antipyretic; anti-inflammatory; used in reducing fever and in arthritic complaints²⁴⁵ 	<ul style="list-style-type: none"> Do not use in children due to potential for Reye's Syndrome. Use with caution in individuals taking the following:²⁴⁶ <ul style="list-style-type: none"> Aspirin Anticoagulants Methotrexate Metoclopramide Phenytoin Probenecid Spironolactone Valproic acid

1 R. Kirchoff, et al., "Increase in Cholerisis by Means of Artichoke Extract," *Pytomedicine* 1 (1994) : 107-15.

2 I. Khadzhai, et al., "Effect of Artichoke Extracts on the Liver," *Farmakol Toksikol* 34(6) (Nov 1971) : 685-87.

3 T. Maros, et al., "Effect of Cynara Scolymus-Extracts On The Regeneration of Rat Liver. 2," *Arzneimittelforschung* 18(7) (Jul1968) : 884-86.

4 R. Kirchoff, et al., "Increase in Cholerisis by Means of Artichoke Extract," *Pytomedicine* 1 (1994) : 107-15.

-
- 5 P. DeSmet, et al., Adverse Effects of Herbal Drugs 2 (Berlin, Springer-Verlag, 1993), p. 45.
- 6 A. Grandhi, et al., "A Comparative Pharmacological Investigation of Ashwagandha and Ginseng," J Ethnopharmacol 44(3) (Dec1994) : 131-35.
- 7 M. Ziauddin, et al., "Studies on the Immunomodulatory Effects of Ashwagandha," J Ethnopharmacol 50(2) (Feb1996) : 69-76.
- 8 G. Kuttan, "Use of Withania Somnifera Dunal as an Adjuvant During Radiation Therapy," Indian J Exp Biol 34(9) (Sept1996) : 854-56.
- 9 P. U. Devi, et al., "Withaferin A: A New Radiosensitizer From the Indian Medicinal Plant Withania Somnifera," Int J Radiat Biol 69(2) (Feb1996) : 193-97.
- ¹⁰ Panda S, Kar A. Withania somnifera and Bauhinia purpurea in the Regulation of Circulating Thyroid Hormone Concentrations in Female Mice. J Ethnopharmacol. Nov 1999;67(2): 233-9.
- ¹¹ ¹¹ Panda S, Kar A. Withania somnifera and Bauhinia purpurea in the Regulation of Circulating Thyroid Hormone Concentrations in Female Mice. J Ethnopharmacol. Nov 1999;67(2): 233-9.
- 12 H. Chang, et al., Pharmacology and Application of Chinese Materia Medica (Singapore: Chinese University of Hong Kong, World Scientific, 1987) 4.
- 13 K. S. Zhao, et al., "Enhancement of the Immune Response in Mice by Astragalus membranaceus Extracts," Immunopharmacology 20(3) (1990) : 225-33.
- 14 C. S. Geng, et al., "Advances in Immuno-pharmacological Studies on Astragalus membranaceus," Chung Hsi I Chieh Ho Tsa Chih 6(1) (1986) : 62-64.
- 15 I. V. Griga, "Effect of a Summary Preparation of Astragalus cicer on the Blood Pressure of Rats with Renal Hypertension and on the Oxygen Consumption by the Tissues," Farm Zh 6 (1977) : 64-66.
- ¹⁶ P. Morazonni, et al., "Vaccinium myrtillus," Fitoterapia vol. LXVII, no. 1 (1996) : 3-29.
- ¹⁷ D. Bottecchia, et al., "Vaccinium myrtillus," Fitoterapia 48 (1977) : 3-8.
- ¹⁸ P. Morazzoni, et al., "Vaccinium myrtillus Anthocyanosides Pharmacokinetics in Rats," Arzneim-Forsch/Drug Res 41(2) (1991) : 128-31.
- ¹⁹ B.A. Leatherdale, et al., "Improvement in Glucose Tolerance Due to Momordica Charantia (Karela)," Br Med J (Clin Res Ed) 282(6279) (Jun 1981) : 1823-24.
- ²⁰ J. Welihinda, et al., "Effect of Momordica Charantia on the Glucose Tolerance in Maturity Onset Diabetes," J Ethnopharmacol 17(3) (Sept 1986) : 277-82.
- ²¹ S. Lee-Huang, et al., "Inhibition of the Integrase of Human Immunodeficiency Virus (HIV) Type 1 by Anti-HIV Plant Proteins MAP30 and GAP31," Proc Natl Acad Sci U S A 92(19) (Sept1995) : 8818-22.
- 22 S. Sarkar, et al., "Demonstration of the Hypoglycemic Action of Momordica charantia in a Validated Animal Model of Diabetes," Pharmacol Res 33(1) (Jan1996) : 1-4.

-
- ²³ H. Jarry, et al., "The Endocrine Effects of Constituents of *Cimicifuga racemosa*. 2. In Vitro Binding of Constituents to Estrogen Receptors," Planta Med 4 (Aug1985) : 316-19.
- ²⁴ S. Lieberman, "A Review of the Effectiveness of *Cimicifuga racemosa* (black cohosh) for the Symptoms of Menopause," J Womens Health 7(5) (Jun1998) : 525-29.
- ²⁵ M. Shibata, et al., "Pharmacological Studies on the Chinese Crude Drug "Shoma". III. Central Depressant and Antispasmodic Actions of *Cimicifuga rhizoma*, *Cimicifuga simplex* Wormsk," Yakugaku Zasshi 100(11) (Nov1980) : 1143-50.
- ²⁶ C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) : 80-81.
- ²⁷ E. M. Duker, et al., "Effects of Extracts from *Cimicifuga racemosa* on Gonadotropin Release in Menopausal Women and Ovariectomized Rats," Planta Med 57(5) (Oct1991) : 420-24.
- ²⁸ E. M. Duker, et al., "Effects of Extracts from *Cimicifuga racemosa* on Gonadotropin Release in Menopausal Women and Ovariectomized Rats," Planta Med 57(5) (Oct1991) : 420-24.
- ²⁹ P. R. Bradley, ed., British Herbal Compendium, vol. 1 (Bournemouth: British Herbal Medicine Association, 1992) 37-39.
- ³⁰ H. P. Ammon, "Salai Guggal - *Boswellia serrata*: From an Herbal Medicine to a Non-redox Inhibitor of Leukotriene Biosynthesis," Eur J Med Res 1(8) (May 1996) : 369-70.
- ³¹ H. P. Ammon, et al., "Inhibition of Leukotriene B4 Formation in Rat Peritoneal Neutrophils by an Ethanol Extract of the Gum Resin Exudate of *Boswellia serrata*," Planta Med 57(3) (Jun 1991) : 203-07.
- ³² [No Authors], at pp. 306-307.
- ³³ [No authors listed], "Boswellia serrata," Altern Med Rev 3(4) (Aug 1998) : 306E-307.
- ³⁴ S. I. Taussig, "The Mechanism of the Physiological Action of Bromelain," Med Hypoth 6 (1980) : 99-104.
- ³⁵ F. Barbarine, et al., J Nucl Med 26 (1982) 2, 97.
- ³⁶ R. Heinicke, et al., "Effect of Bromelain (Anase) on Human Platelet Aggregation," 28 (1972) : 844-45.
- ³⁷ A. E. Gutfreund, et al., "Effect of Oral Bromelain on Blood Pressure and Heart Rate of Hypertensive Patients," Hawaii Med J 37(1978) : 143-46.
- ³⁸ Reinhard KH. *Uncaria tomentosa* (Willd.) D.C.: cat's claw, una de gato, or saventaro. J Altern Complement Med. Apr1999;5(2):143-51.
- ³⁹ H. Wagner, et al., "The Alkaloids of *Uncaria tomentosa* and Their Phagocytosis-stimulating Action," Planta Med 5 (1995) : 419-23.
- ⁴⁰ R. Aquino, et al., "Plant Metabolites. Structure and in Vitro Antiviral Activity of Quinovic Acid Glycosides from *Uncaria tomentosa* and *Guettarda platypoda*. J Nat Prod 52(4) (1989) : 679-85.

-
- ⁴¹ A. Senatore, et al., "Phytochemical and Biological study of *Uncaria tomentosa*," Boll Soc Ital Biol Sper 65(6) (1989) : 517-20.
- ⁴² R. Aquino, et al., "Plant Metabolites. New Compounds and Anti-inflammatory Activity of *Uncaria tomentosa*," J Nat Prod 54(2) (1981) : 453-59.
- ⁴³ R. Aquino, et al., "New Polyhydroxylated Triterpenes from *Uncaria tomentosa*," J Nat Prod 53(3) (1990) : 559-64.
- ⁴⁴ R. Aquino, et al., "New Polyhydroxylated Triterpenes from *Uncaria tomentosa*," J Nat Prod 53(3) (1990) : 559-64.
- ⁴⁵ J. Haginiwa, et al., "Studies of Plants Containing Indole Alkaloids. 2. On the Alkaloids of *Uncaria rhynchophylla* Miq," Yakugaku Zasshi 93(4) (1973) : 448-52.
- ⁴⁶ C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 28-30.
- ⁴⁷ J. I. Nagy, et al., "Fluoride-resistant Acid Phosphatase-containing Neurones in Dorsal Root Ganglia are Separate from Those Containing Substance P or Somatostatin," Neuroscience 7(1) (Jan 1982) : 89-97.
- ⁴⁸ B. M. Magnusson, "Effects of Topical Application of Capsaicin to Human Skin: A Comparison of Effects Evaluated by Visual Assessment, Sensation Registration, Skin Blood Flow and Cutaneous Impedance Measurements," Acta Derm Venereol 76(2) (Mar 1996) : 129-132.
- ⁴⁹ C. Rains, et al., "Topical Capsaicin. A Review of Its Pharmacological Properties and Therapeutic Potential in Post-herpetic Neuralgia, Diabetic Neuropathy and Osteoarthritis," Drugs Aging 7(4) (Oct 1995) : 317-328.
- ⁵⁰ R. Tandan, et al., "Topical Capsaicin in Painful Diabetic Neuropathy. Controlled Study With Long-term Follow-up," Diabetes Care 15(1) (Jan 1992) : 8-14.
- ⁵¹ C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 60-61.
- ⁵² Bouraoui A, Toumi A, Ben Mustapha H, et al. Effects of Capsicum Fruit on Theophylline Absorption and Bioavailability in Rabbits. Drug Nutr Interact. 1988;5(4): 345-50.
- ⁵³ J. M. Snow, "Vitex Agnus-castus L. (Verbenaceae)," Protocol Journal of Botanical Medicine 1(4) (1996) : 20-23.
- ⁵⁴ W. Amann, "Premenstrual Water Retention. Favorable Effect of Agnus castus (Agnolyt) on Premenstrual Water Retention," ZFA (Stuttgart) 55(1) (1979) : 48-51.
- ⁵⁵ A. Milewicz, et al., "Vitex Agnus castus Extract in the Treatment of Luteal Phase Defects Due to Latent Hyperprolactinemia. Results of a Randomized Placebo-controlled Double-blind Study. Arzneim Forsch/Drug Res 43(7) (1993) : 752-56.
- ⁵⁶ G. Sliutz, et al., "Agnus castus Extracts Inhibit Prolactin Secretion of Rat Pituitary Cells," Hormone and Metabolic Research 25 (1993) : 253-55.
- ⁵⁷ C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 19-20.
- ⁵⁸ C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 19-20.

-
- 59 G. Baumann, et al., "Cardiovascular Effects of Forskolin (HL 362) in Patients with Idiopathic Congestive Cardiomyopathy -- A Comparative Study with Dobutamine and Sodium Nitroprusside." Cardiovasc Pharmacol 16(1) (1990) : 93-100.
- 60 R. W. Kreutner, "Bronchodilator and Anti-allergy Activity of Forskolin," European Journal of Pharmacology 111 (1985) : 1-8.
- 61 H. P. Ammon, et al., "Forskolin: From an Ayurvedic Remedy to a Modern Agent," Planta Medica 51 (1985) : 473-77.
- 62 E. Lindner, et al., "Positive Inotropic and Blood Pressure Lowering Activity of a Diterpene Derivative Isolated from *Coleus forskohlii*: Forskolin," Arzneim-Forsch/Drug Res 28 (1978) : 284-89.
- 63 J. T. Christenson, et al., "The Effect of Forskolin on Blood Flow, Platelet Metabolism, Aggregation and ATP Release," Vasa 24(1) (1995) : 56-61.
- 64 J. Zhu, et al., "CordyMax Cs-4: A Scientific Product Review," Pharmanex Phytoscience Review Series, 1997.
- 65 J. Lei, et al., "Pharmacological Study on *Cordyceps sinensis* (Berk.) Sacc. and *ze-e Cordyceps*," Chung Kuo Chung Yao Tsa Chih 17(6) (Jun1992) : 364-66.
- 66 T. T. Bao, et al., "Pharmacological actions of *Cordyceps sinensis*," Chung Hsi I Chieh Ho Tsa Chih 8(6) (Jun1988) : 352-54.
- 67 Y. H. Sun, "Cordyceps *sinensis* and Cultured Mycelia," Chung Yao Tung Pao 10(12) (Dec1985) : 3-5.
- 68 Y. P. Chen, "Studies on Immunological Actions of *Cordyceps sinensis*. I. Effect on Cellular Immunity," Chung Yao Tung Pao 8(5) (Sept1983) : 33-35.
- 69 R. H. Xu, et al., "Effects of *Cordyceps sinensis* on Natural killer Cell Activity and Colony Formaiton of B16 Melanoma," Chinese Medical Journal 105 (1992) : 97-101.
- 70 F. Wan, et al., "Sex Hormone-like Effects of JinShiuBao Capsule: Pharmacology and Clinical Studies," Chinese Traditional Patent Medicine 9 (1988) : 29-31.
- 71 L. T. Zhou, et al., "Short-term Curative Effect of Cultured *Cordyceps sinensis* Mycelia in Chronic Hepatitis B," China Journal of Chinese Materia Medica 115 (1990) : 53-55.
- 72 D. E. Hammerschmidt, "Szechwan purpura," New England Journal of Medicine 302 (1980) : 1191-93.
- 73 W. Z. Xu, et al., "Effects of *Cordyceps* Mycelia on Monoamine Oxidase and immunity," Shanghai Journal of Traditional Chinese Medicine 1 (1988) : 48-49.
- 74 C.A. Newall, et al., at pp. 96-97.
- 75 E. Racz-Kotilla, G. Racz, and A. Solomon, "The Action of *Taraxacum officinale* Extracts on Body Weight and Diuresis of Laboratory Animals," Planta Med 26(1974) : 212-17.
- 76 M. McGuffin, et al., Botanical Safety Handbook (Boca Raton: CRC Press, 1997) 114.
- 77 E. Racz-Kotilla, G. Racz, and A. Solomon, "The Action of *Taraxacum officinale* Extracts on Body Weight and Diuresis of Laboratory Animals," Planta Med 26(1974) : 212-17.

-
- ⁷⁸A. Erdos, et al., "Contribution to the Pharmacology and Toxicology of Different Extracts as Well as the Harpagoside from Harpagophytum procumbens DC," Planta Medica 34 (1978) : 97.
- ⁷⁹M. C. Lanhers, et al., "Anti-inflammatory and Analgesic Effects of an Aqueous Extract of Harpagophytum procumbens," Planta Medica 58(2) (1992) : 117-23.
- ⁸⁰R. Grahame, et al., "Devil's Claw (Harpagophytum procumbens): Pharmacological and Clinical Studies," Ann Rheum Dis 40(6) (1981) : 632.
- ⁸¹M. C. Lanhers, et al., "Anti-inflammatory and Analgesic Effects of an Aqueous Extract of Harpagophytum procumbens," Planta Medica 58(2) (1992) : 117-23.
- ⁸²C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 98-100.
- 83 P. De Smet, et al., Adverse Effects of Herbal Drugs 2 Springer-Verlag, Berlin, 1993.
- 84 M. Lin, et al., "Chemical Studies of Angelica sinensis," Yao Hsueh Hsueh Pao 14(()) (1979) : 529-34.
- 85 J. D. Hirata, et al., "Does Dong quai Have Estrogenic Effects in Postmenopausal Women? A Double-blind, Placebo-controlled Trial," Fertil Steril 68(6) (1977) : 981-86.
- 86 L. N. Xu, et al., "The Effect of Dang-gui (Angelica sinensis) and Its Constituent Ferulic Acid on Phagocytosis in Mice," Yao Hsueh Hsueh Pao 16(6) (1981) : 411-14.
- 87 D. P. Zhu, "Dong Quai," American Journal of Chinese Medicine 15(1987) : 117-125.
- 88 A. C. T. Lo, et al., "Danggui (angelica sinensis) Affects the Pharmacodynamics But Not the Pharmacokinetics of Warfarin in Rabbits," Eu J Drug Metab and Pharmacokin 20(1) (1995) : 55-60.
- 89 A. Leung, et al., Encyclopedia of Common Natural Ingredients Used in Foods, Drugs, and Cosmetics (New York: Wiley-Interscience Publication, 1996) 32-33.
- 90 R. Bauer, "Echinacea Drugs--Effects and Active Ingredients," Z Arztl Fortbild (Jena) 90(2) (1996) : 111-15.
- 91 B. Luettig, et al., "Macrophage Activation by the Polysaccharide Arabinogalactan Isolated from Plant Cell Cultures of Echinacea purpurea," Journal of the American Cancer Institute 81(9) (1989) : 669-75.
- 92 D. Orinda, et al., "Antiviral Activity of Components of Echinacea purpurea," Arzneimittelforschung 23(8) (Aug1973) : 1119-120.
- 93 A. Leung, et al., Encyclopedia of Common Natural Ingredients Used in Foods, Drugs, and Cosmetics (New York: Wiley-Interscience Publication, 1996) 216-20.
- 94P. R. Bradley, ed., British Herbal Compendium, vol. 1 (Bournemouth: British Herbal Medicine Association, 1992) 81-83.
- 95 M. T. Murray, "Echinacea: Pharmacology and Clinical Applications," American Journal of Natural Medicine 2 (1995) : 18-24.

-
- 96 D. Brown, "Echinacea Root Fails to Prevent Upper Respiratory Tract Infections," HealthNotes Review of Complementary and Alternative Medicine 6(1) (Spring1999) : 6-7.
- 97 A. Li Wan Po, "Evening Primrose Oil," Pharm J 246 (1991) : 670-76.
- 98 S. K. Khoo, et al., "Evening Primrose Oil and Treatment of Premenstrual Syndrome," Med J Aust 153(4) (1990) : 189-92.
- 99 D. F. Horrobin, et al., "Nutritional and Medical Importance of Gamma-linoleic Acid," Progress in Lipid Research 31 (1992) : 163-194.
- 100 L. G. Miller, "Herbal Medicinals: Selected Clinical Considerations Focusing on Known or Potential Drug-herb Interactions," Arch Intern Med 158(20) (Nov1998) : 2200-11.
- 101 K. S. Vaddadi, "The Use of Gamma-linolenic Acid and Linoleic Acid to Differentiate Between Temporal Lobe Epilepsy and Schizophrenia," Prostaglandins Med 6(4) (Apr 1981) : 375-79.
- 102 K. C. Dines, et al., "Nerve Function in Galactosaemic Rats: Effects of Evening Primrose Oil and Doxazosin," Eur J Pharmacol 281(3) (1995): 303-09.
- 103 J. P. De La Cruz, et al., "Effect of Evening Primrose Oil on Platelet Aggregation in Rabbits Fed An Atherogenic Diet," Thromb Res 87(1) (Jul1997) : 1414-19.
- 104 L. G. Miller, "Herbal Medicinals: Selected Clinical Considerations Focusing on Known or Potential Drug-Herb Interactions," Arch Intern Med 158(20) (Nov1998) : 2200-11.
- 105 K. S. Vaddadi, "The Use of Gamma-linolenic Acid and Linoleic Acid to Differentiate Between Temporal Lobe Epilepsy and Schizophrenia," Prostaglandins Med 6(4) (Apr 1981) : 375-79.
- 106 E. S. Johnson, et al., "Efficacy of Feverfew as Prophylactic Treatment of Migraine," British Medical Journal 291 (1985) : 569-73.
- 107 C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 119-21.
- 108 A. N. Makheja, et al., "A Platelet Phospholipase Inhibitor From the Medicinal Herb Feverfew (Tanacetum parthenium)," Prostaglandins Leukot Med 8(6) (Jun1982) : 653-60.
- 109 W. Wergio, "A Natural Food, the Malabar Tamarind, May Be Effective in the Treatment of Obesity," Med Hypotheses 27(1) (1988) : 39-40.
- 110 A. C. Sullivan, et al., "Metabolic Regulation as a Control for Lipid Disorders. I. Influence of (--)hydroxycitrate on Experimentally Induced Obesity in the Rodent," American Journal of Clinical Nutrition 30 (1977) : 767-76.
- 111 M. F. McCarty, et al., "Inhibition of Citrate Lyase May Aid Aerobic Endurance," Med Hypotheses 45(3) (1995) : 247-54.
- 112 K. C. Agarwal, "Therapeutic Actions of Garlic Constituents," Med Res Rev 16(1) (1996) : 111-24
- 113 M. Steiner, et al., "A Double-blind Crossover Study in Moderately Hypercholesterolemic Men that Compared the Effect of Aged Garlic Extract and Placebo Administration on Blood Lipids," Am J Clin Nutr 64(6) (1996) : 866-70.

-
- 114 A. Bordia, et al., "Effect of Garlic (*Allium sativum*) on Blood Lipids, Blood Sugar, Fibrinogen and Fibrinolytic Activity in Patients With Coronary Artery Disease," Prostaglandins Leukot Essent Fatty Acids 58(4) (Apr1998) : 257-63.
- ¹¹⁵ M. Adetumbi, et al., "*Allium sativum* (Garlic)--A Natural Antibiotic," Med Hypoth 12 (1983) : 227-37.
- ¹¹⁶ S. T. Pai, et al., "Antifungal Effects of *Allium sativum* (Garlic) Extract Against the *Aspergillus* Species Involved in Otomycosis," Lett Appl Microbiol 20(1) (1995) : 14-18.
- 117 A. Grontved, et al., "Ginger Root Against Seasickness. A Controlled Trial on the Open Sea," Acta Otolaryngol (Stockh) 105(1-2) (1998) : 45-9.
- 118 M. E. Bone, et al., "Ginger Root—A New Antiemetic. The Effect of Ginger Root on Postoperative Nausea and Vomiting After Major Gynaecological Surgery," Anaesthesia 45(8) (1990) : 669-71.
- 119 C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 135-37.
- 120 K. C. Srivastava, et al., "Ginger (*Zingiber officinale*) in Rheumatism and Musculoskeletal Disorders," Med Hypotheses 39(4) (Dec1992) : 342-48.
- 121 J. H. Guh, et al., "Antiplatelet Effect of Gingerol Isolated from *Zingiber officinale*," J Pharm Pharmacol 47(4) (Apr1995) : 329-32.
- ¹²² P. L. Le Bars, et al., "A Placebo-Controlled, Double-blind, Randomized Trial of an Extract of *Ginkgo biloba* for Dementia, North American EGb Study Group," JAMA 278(16) (Oct1997) : 1327-32.
- ¹²³ J. Kleijnen, et al., "*Ginkgo biloba*," Lancet 340(8828) (1992) : 1136-39.
- 124 M. Odawara, et al., "*Ginkgo biloba*," Neurology 48(3) (Mar1997) : 789-90.
- 125 M. Skogh, "Extracts of *Ginkgo biloba* and Bleeding or Haemorrhage," Lancet 352(9134) (Oct1998) : 1145-46.
- 126 S. Vale, "Subarachnoid Haemorrhage Associated With *Ginkgo biloba*," Lancet 352(9121) (July1998) : 36.
- 127 H. L. White, et al., "Extracts of *Ginkgo biloba* Leaves Inhibit Monoamine Oxidase," Life Sci 58(16) (1966) : 1315-21.
- ¹²⁸ A.S. Granger. *Ginkgo biloba* precipitating epileptic seizures. Age Ageing 30(6) (2001) :523-5.
- ¹²⁹ S. K. Chong, et al., "Ginseng--Is There a Use in Clinical Medicine?," Postgrad Med J 64(757) (Nov1988) : 841-46.
- ¹³⁰ J. Y. Kim, et al., "*Panax ginseng* as a Potential Immunomodulator: Studies in Mice," Immunopharmacol Immunotoxicol 12(2) (1990) : 257-76.
- 131 R. K. Siegel, "Ginseng and High Blood Pressure," JAMA 243(1) (Jan1980) : 32.
- 132 C. M. Teng, et al., "Antiplatelet Actions of *Panaxynol* and *Ginsenosides* Isolated from Ginseng," Biochim Biophys Acta 990(3) (Mar1989) : 315-20.
- 133 K. Janetzky, et al., "Probable Interaction Between Warfarin and Ginseng," Am J Health Syst Pharm 54(6) (Mar1997) : 692-93.
- 134 B. D. Jones, et al., "Interaction of Ginseng With Phenelzine," J Clin Psychopharmacol 7(3) (Jun1987) : 201-02.

-
- 135 M. N. Dukes, "Ginseng and Mastalgia," Br Med J 1(6127) (Jun1978) : 1621.
- 136 M. P. Hopkins, et al., "Ginseng Face Cream and Unexplained Vaginal Bleeding," Am J Obstet Gynecol 59(5) (Nov1988) : 1121-22.
- 137 K. J. Chen, "The Effect and Abuse Syndrome of Ginseng," J Tradit Chin Med 1(1) (Sept1981) : 69-72.
- ¹³⁸ I. I. Brekhman, et al., "Eleutherococcus--a Means of Increasing the Nonspecific Resistance of the Organism," Izv Akad Nauk SSSR [Biol] 5 (1965) : 762-65.
- ¹³⁹ I. I. Brekhman, et al., "Effect of Eleutherococcus on Alarm-phase of Stress," Life Sci 8(3) (1969) : 113-21.
- ¹⁴⁰ H. Hikino, et al., "Isolation and Hypoglycemic Activity of Eleutherans A, B, C, D, E, F and G: Glycans of Eleutherococcus senticosus Roots," J Nat Prod 49(2) (1986) : 293-97.
- 141 S. McRae, "Elevated Serum Digoxin Levels in a Patient Taking Digoxin and Siberian Ginseng," CMAJ 155(3) (Aug1996) : 293-95.
- 142 P. J. Medon, et al., "Effects of Eleutherococcus senticosus Extracts on Hexobarbital Metabolism In Vivo and In Vitro," J Ethnopharmacol 10(2) (Apr1984) : 235-41.
- ¹⁴³ C. A. Newall, et al. Herbal Medicines: A Guide for Health Care Professionals. (London, England; The Pharmaceutical Press, 1996) 151-52.
- 144 M. Sabir, et al., "Study of Some Pharmacological Actions of Berberine," Indian J Physiol Pharmacol 15(3) (1971) : 111-32.
- 145 R. Maffei Facino, et al., "Regeneration of Endogenous Antioxidants, Ascorbic Acid, Alpha Tocopherol, by the Oligomeric Procyanide Fraction of Vitis vinifera L:ESR Study. Boll Chim Farm 136(4) (1997) : 340-44.
- 146 M. Jonadet, et al., "Anthocyanosides Extracted from Vitis vinifera, Vaccinium myrtillus and Pinus maritimus. I. Elastase-inhibiting Activities in Vitro. II. Compared Angioprotective Activities in Vivo," J Pharm Belg 38(1) (1983) : 41-46.
- 147 E. N. Frankel, et al., "Inhibition of Oxidation of Human Low-density Lipoprotein by Phenolic Substances in Red Wine," Lancet 341(8843) (1993) : 454-57.
- 148 T. Yokozawa, et al., "Influence of Green tea and Its Three Major Components Upon Low-density Lipoprotein Oxidation," Exp Toxicol Pathol 49(5) (Dec1997) : 329-35.
- 149 G. D. Stoner, et al., "Polyphenols as Cancer Chemopreventive Agents," J Cell Biochem Suppl 22 (1995) : 169-80.
- 150 L. A. Mitscher, et al., "Chemoprotection: A Review of the Potential Therapeutic Antioxidant Properties of Green tea (Camellia sinensis) and Certain of Its Constituents," Med Res Rev 17(4) (Jul1997) : 327-65.
- 151 T. T. Yang, et al., "Hypocholesterolemic Effects of Chinese Tea," Pharmacol Res 35(6) (Jun1997) : 505-12.
- 152 Y. Sagesaka-Mitane, et al., "Platelet Aggregation Inhibitors in Hot Water Extract of Green Tea," Chem Pharm Bull (Tokyo) 38(3) (Mar1990) : 790-93.
- 153 J. Snow, "Camellia sinensis (L.) Kuntze (Theaceae)," Protocol Journal of Botanical Medicine (Autumn1995) : 47-51.

-
- 154 R. B. Singh, et al., "Hypolipidemic and Antioxidant Effects of Commiphora Mukul as an Adjunct to Dietary Therapy in Patients with Hypercholesterolemia," Cardiovasc Drugs Ther 8(4) (1994) : 659-664.
- 155 S. Nityanand, et al., Clinical Trials With Gugulipid. A new Hypolipidaemic Agent," J Assoc Physicians India 37(5) (1989) : 323-328.
- 156 R. C. Agarwal, et al., "Clinical Trial of Gugulipid--a New Hypolipidemic Agent of Plant Origin in Primary Hyperlipidemia," Indian J Med Res 84 (1986) : 626-634.
- 157 G. V. Satyavati, et al., "Guggulipid: A Promising Hypolipidemic Agent from Gum Guggul (Commiphora Wightii)," Econ Med Plant Res 5 (1991) : 48-82.
- 158 S. S. Dalvi, et al., "Effects of Gugulipid on Bioavailability of Diltiazem and Propranolol," J Assoc Physicians India 42(6) (1994) : 454-55.
- 159 K. Baskaran, et al., "Antidiabetic Effect of a Leaf Extract From Gymnema Sylvestre in Non-Insulin-Dependent Diabetes Mellitus Patients," J Ethnopharmacol 30(3) (Oct1990) : 295-300.
- 160 K. Baskaran, B. K. Ahmath, K. R. Shanmugasundaram, E. R. B. Shanmugasundaram," Antidiabetic Effect of a Leaf Extract from Gymnema sylvestre in Non-insulin-dependent Diabetes Mellitus Patients," J Ethnopharmacol 30 (1990) : 295-305.
- 161 M. Schussler, et al., "Myocardial Effects of Flavonoids from Crataegus species," Arzneimittelforschung 45(8) (Aug1995) : 842-45.
- 162 T. Weihmayr, et al., "Therapeutic Effectiveness of Crataegus," Fortschr Med 114(1-2) (Jan1996) : 27-29.
- 163 M. McGuffin, et al., Botanical Safety Handbook (Boca Raton: CRC Press, 1997) 37.
- 164 R. Wohlfart, et al., "Detection of Sedative-Hypnotic Active Ingredients in Hops. 5. Degradation of Bitter Acids to 2-methyl-3-buten-2-ol, a Hop Constituent With Sedative-Hypnotic Activity]," Arch Pharm (Weinheim) 316(2) (1983) : 132-7.
- 165 R. Hansel, et al., "Sedative-Hypnotic Compounds in the Exhalation of Hops, II," Z Naturforsch [C]. 35(11-12) (Dec 1980) : 1096-7.
- 166 K. M. Lee, et al., "Effects of Humulus lupulus Extract on the Central Nervous System in Mice," Planta Medica 59 (supp.) (1993) : A691.
- 167 M. H. Pittler, et al., "Horse-chestnut Seed Extract for Chronic Venous Insufficiency. A Criteria-based Systematic Review," Arch Dermatol 134(11) (Nov1998) : 1356-60.
- 168 B. Simini, "Horse-chestnut Seed Extract for Chronic Venous Insufficiency," Lancet 347(9009) (Apr1996) : 1182-83.
- 169 M. Skogh, "Extracts of Ginkgo biloba and Bleeding or Haemorrhage," Lancet 352(9134) (Oct1998) : 1145-46.
- 170 S. Vale, "Subarachnoid Haemorrhage Associated With Ginkgo biloba," Lancet 352(9121) (July1998) : 36.
- 171 K. G. Urbaniuk, et al., "The Anticoagulant Action of Horse Chestnut and Eskuzan," Klin Med (Mosk) 45(2) (Feb1967) : 129-33.
- 172 O. L. Tiktinskii, et al., "Therapeutic Action of Java Tea and Field Horsetail in Uric Acid Diathesis," Urol Nefrol (Mosk) (1) (1993) : 47-50.
- 173 N. W. Harmon, et al., "Equisetum arvense," Can Pharm Journal 399 (Setp1992) : 413-15.

-
- 174 P. Meyer, "Thiaminase Activities and Thiamine Content of *Pteridium aquilinum*, *Equisetum ramosissimum*, *Malva parviflora*, *Pennisetum clandestinum* and *Medicago sativa*," Onderstepoort J Vet Res 56(2) (Jun1989) : 145-46.
- 175 Y. N. Singh, "Kava: An Overview," J Ethnopharmacol 37(1) (1992) : 13-45.
- 176 L. P. Davies, "Kava Pyrones and Resin: Studies on GABA_A, GABA_B and Benzodiazepine Binding Sites in Rodent Brain," Pharmacol Toxicol 71(2) (1992) : 120-26.
- ¹⁷⁷ Escher M, Desmeules J, Giostra E, et al. Hepatitis Associated with Kava, a Herbal Remedy for Anxiety. BMJ. 322(7279) (Jan 2001) : 139.
- 178 J. J. Meyer, "Pharmacology of Kava," in D. H. Efron, et al., "Ethnopharmacologic Search for Psychoactive Drugs," U. S. Department of Health, Education and Welfare, Pub. No. 1645 (Government Printing Office, Washington, D. C.) 133-40.
- 179 L. Schelosky, et al., "Kava and Dopamine Antagonism," J Neurol Neurosurg Psychiatry 58(5) (May1995) : 639-40.
- 180 L. Schelosky, et al., "Kava and Dopamine Antagonism," J Neurol Neurosurg Psychiatry 58(5) (1995) : 639-40.
- 181 J. C. Almeida, et al., "Coma From the Health Food Store: Interaction Between Kava and Alprazolam," Ann Intern Med 125(11) (Dec1996) : 940-41.
- 182 D. D. Jamieson, et al., "Positive Interaction of Ethanol and Kava Resin in Mice," Clin Exp Pharmacol Physiol 17(7) (Jul1990) : 509-14.
- 183 K. W. Herberg, "Effect of Kava-Special Extract WS 1490 Combined With Ethyl Alcohol on Safety-Relevant Performance Parameters," Blutalkohol 30(2) (Mar1993) : 96-105.
- 184 K. W. Herberg, "The Influence of Kava-special extract WS 1490 on Safety-relevant Performance Alone Combined with Ethylalcohol," Blutalkohol 30 (1993) : 96-105.
- 185 Y. N. Singh, "Kava: An Overview," J Ethno Pharmacol 37(1) (1992) : 13-45.
- ¹⁸⁶ E. A. Davis, et al., "Medicinal Uses of Licorice Through the Millennia: The Good and Plenty of It," Mol Cell Endocrinol 78(1-2) (Jun1991) : 1-6.
- ¹⁸⁷ C. A. Newall, et al. Herbal Medicines: A Guide for Health Care Professionals. (London, England: The Pharmaceutical Press, 1996) 183-86.
- ¹⁸⁸ A. R. Dehpour, et al., "The Protective Effect of Liquorice Components and Their Derivatives Against Gastric Ulcer Induced by Aspirin in Rats," J Pharm Pharmacol 46(2) (Feb1994) : 148-49.
- ¹⁸⁹ V. Balakrishnan, et al., "Deglycyrrhizinated Liquorice in the Treatment of Chronic Duodenal Ulcer," J Assoc Physicians India 26(9) (Sep1978) : 811-4.
- 190 G. J. de Klerk, et al., "Hypokalaemia and Hypertension Associated With Use of Liquorice Flavoured Chewing Gum," BMJ 314(7082) (Mar1997) : 731-32.
- 191 F. C. Stormer, et al., "Glycyrrhizic Acid in Liquorice--Evaluation of Health Hazard," Food Chem Toxicol 31(4) (Apr1993) : 303-12.
- ¹⁹² M. Gonzalez, et al., "Hypoglycemic Activity of Olive Leaf," Planta Med 58(6) (Dec 1992) : 513-5.

-
- ¹⁹³ B. Fehri, et al., "Hypotension, Hypoglycemia and Hypouricemia Recorded After Repeated Administration of Aqueous Leaf Extract of *Olea Europaea* L.," J Pharm Belg 49(2) (Mar-April 1994) : 101-8.
- 194 F. Brinker, Herb Contraindications and Drug Interactions (Sandy, OR: Eclectic Institute, 1997) 70.
- ¹⁹⁵ C. Wolfman, et al., "Possible Anxiolytic Effects of Chrysin, A Central Benzodiazepine Receptor Ligand Isolated from *Passiflora coerulea*," Pharmacol Biochem Behav 47(1) (Jan 1994) : 1-4.
- ¹⁹⁶ E. Spreoni, et al., "Neuropharmacological Activity of Extracts from *Passiflora incarnata*," Planta Med 54(6) (Dec1988) : 488-91.
- 197 N. Aoyagi, et al., "Studies on *Passiflora incarnata* Dry Extract, Isolation of Maltol and Pharmacological Action of Maltol and Ethyl Maltol," Chem Pharm Bull (Tokyo) 22(5) (May1974) : 1008-13.
- 198 V. Shulz, et al., Rational Phytotherapy: A Physicians' Guide to Herbal Medicine (New York: Springer-Verlag, 1996) 187-190.
- 199 M. H. Pittler, "Peppermint Oil for Irritable Bowel Syndrome: A Critical Review and Meta-analysis," Am J Gastroenterol 93(7) (Jul 1998): 1131-1135.b
- 200 J. H. Liu, et al., "Enteric-coated Peppermint-oil Capsules in the Treatment of Irritable Bowel Syndrome: A Prospective, Randomized Trial," J Gastroenterol 32(6) (Dec 1997) : 765-768.
- 201 V. Shulz, et al., Rational Phytotherapy: A Physicians' Guide to Herbal Medicine (New York: Springer-Verlag, 1996) 187-190..
- 202 C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 227.
- 203 P. R. Bradley (ed.), The British Herbal Compendium, Volume 1 (London: British Herbal Medicine Association, 1992) 183-84.
- 204 A. Endo, et al., "Monacolin M, A New Inhibitor of Cholesterol Biosynthesis," J Antibiot (Tokyo) 39(12) (1986) : 1670-73.
- 205 S. C. Jong, et al., "Medicinal benefits of the Mushroom *Ganoderma*," Adv Appl Microbiol 37 (1992) : 101-34.
- 206 J. Tao, et al., "Experimental and Clinical Studies on Inhibitory Effect of *Ganoderma lucidum* on Platelet Aggregation," J Tongji Med Unive 10(4) (1990) : 240-43.
- ²⁰⁷ S.Y. Yoon, et al. "Antimicrobial Activity of *Ganoderma lucidum* Extract Alone and in Combination with Some Antibiotics," Arch Pharm Res 17(6) (1994) : 438-42.
- ²⁰⁸ Darbinyan V, Kteyan A, Panossian A, et al. *Rhodiola rosea* in Stress Induced Fatigue--A Double Blind Coss-over Study of a Standardized Extract SHR-5 with a Repeated Low-dose Regimen on the Mental Performance of Healthy Physicians During Night Duty. Phytomedicine. Oct 2000;7(5): 365-71.
- ²⁰⁹ L. V. Maslova, et al., "[The Cardioprotective and Antiadrenergic Activity of An Extract of *Rhodiola rosea* In Stress]," Eksp Klin Farmakol 57(6) (Nov-Dec1994) : 61-63.

-
- ²¹⁰ Spasov AA, Wikman GK, Mandrikov VB, Mironova IA, Neumoin VV. A double-blind, placebo-controlled pilot study of the stimulating and adaptogenic effect of *Rhodiola rosea* SHR extract on the fatigue of students caused by stress during an examination period with a repeated low-dose regimen. *Phytomedicine*. 2000 Apr; 7(2):85-9.
- ²¹¹ A. S. Saratikov, et al., "Rhodiola rosea Is a Valuable Medicinal Plant," Tomsk State Medicinal University, Russian Academy of Medicinal Sciences (Russia) (1987) :
- ²¹² L. A. Maimeskulova, et al., "[The Participation of the Mu-, Delta- and Kappa-opioid Receptors in the Realization of the Anti-arrhythmia Effect of *Rhodiola rosea*]," Eksp Klin Farmakol 60(1) (Jan-Feb1997) : 38-39.
- ²¹³ Iu. B. Lishmanov, et al., "[Contribution of The Opioid System to Realization of Inotropic Effects of *Rhodiola rosea* Extracts In Ischemic and Reperfusion Heart Damage In Vitro]," Eksp Klin Farmakol 60(3) (May-Jun1997) : 34-36.
- 214 G. L. Plosker, et al., "*Serenoa repens* (Permixon). A Review of Its Pharmacology and Therapeutic Efficacy in Benign Prostatic Hyperplasia," Drugs Aging 9(5) (196) : 379-95.
- 215 G. Strauch, et al., "Comparison of Finasteride (Proscar) and *Serenoa repens* (Permixon) in the Inhibition of 5-alpha Reductase in Healthy Male Volunteers," European Urology 26 (1994) : 247-52.
- 216 J. Braeckman, "The Extract of *Serenoa repens* in the Treatment of Benign Prostatic Hyperplasia: A Multicenter Open Study," Curr Ther Res 55(7) (1994) : 76-84.
- 217 M. Goepel, et al., "Saw Palmetto Extracts Potently and Non-competitively Inhibit Human Alpha 1-Adrenoceptors in Vitro," Prostate 38(3) (Feb1999) : 208-15.
- 218 S. Yamada, et al. "Preventive Effect of Gomisins A, a Lignan Component of *Schizandra* Fruits, on Acetaminophen-induced Hepatotoxicity in Rats," Biochem Pharmacol 46(6) (Sept1993) : 1081-85.
- 219 G. T. Liu, "Pharmacological Actions and Clinical Use of *Fructus Schizandrae*," Chin Med J (Engl) 102(10) (Oct1989) : 740-49.
- 220 T. J. Lin, "Antioxidation Mechanism of Schizandrin and Tanshinonolonic Acid A and Their Effects on the Protection of Cardiotoxic Action of Adriamycin," Sheng Li Ko Hsueh Chin Chan 22(4) (Oct1991) : 342-45.
- ²⁷⁷ G. T. Liu, "Pharmacological Actions and Clinical Use of *Fructus Schizandrae*," Chin Med J (Engl) 102(10) (Oct1989) : 740-49.
- 222 J. M. Cott, et al., "Is *St. John's wort* (*Hypericum perforatum*) an Effective Antidepressant?," J Nerv Ment Dis 186(8) (Aug1998) : 500-01.
- 223 H. Hippius, "St John's Wort (*Hypericum perforatum*)—An Herbal Antidepressant," Curr Med Res Opin 14(3) (1998) : 171-84.
- 224 H. P. Volz, "Controlled Clinical Trials of *Hypericum* Extracts in Depressed Patients--An Overview," Pharmacopsychiatry 30 Suppl 2 (1997) : 72-76.
- 225 A. L. Miller, "St. John's Wort (*Hypericum perforatum*): Clinical Effects on Depression and Other Conditions," Altern Med Rev 3(1) (Feb1998) : 18-26.

-
- 226 C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals. (London, England: The Pharmaceutical Press, 1996) 250-52.
- 227 C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals. (London, England: The Pharmaceutical Press, 1996) 250-52.
- ²²⁸ J. M. Rey, et al., "Hypericum perforatum (St John's Wort) in Depression: Pest or Blessing?" Med J Aust 169(11-12) (Dec1998) : 583-86.
- ²²⁹ S. C. Piscitelli, et al., "Indinavir Concentrations and St. John's Wort," Lancet 355 (9203) (Feb2000) : 547-48.
- ²³⁰ A. Nebel, et al., "Potential Metabolic Interaction Between St. John's Wort and Theophylline," Ann Pharmacother 33(4) (Apr1999) : 502.
- ²³¹ A. Johne, et al., "Pharmacokinetic Interaction of Digoxin With an Herbal Extract from St John's Wort (Hypericum perforatum)," Clin Pharmacol Ther 66(4) (Oct1999) : 338-45.
- 232 L. R. Grush, et al., "St. John's Wort During Pregnancy," JAMA (280(18) (Nov11, 1998) : 1566.
- 233 S. S. Chatterjee, et al., "Hyperforin As a Possible Antidepressant Component of Hypericum Extracts," Life Sci 63(6) (1998) : 499-510.
- 234 D. A. Bennett Jr, et al., "Neuropharmacology of St. John's Wort," Ann Pharmacother 32(11) (Nov1998) : 1201-08.
- 235 J. Brockmoller, et al., "Hypericin and Pseudohypericin: Pharmacokinetics and Effects of Photosensitivity in Humans," Pharmacopsychiatry 30 (Supp 2) (1990) : 94-101.
- 236 J. Brockmoller, et al., "Hypericin and Pseudohypericin: Pharmacokinetics and Effects on Photosensitivity in Humans," Pharmacopsychiatry 30 Suppl 2 (Sept1997) : 94-101.
- 237 H. P. Ammon, et al., "Mechanism of Anti-inflammatory Actions of Curcumin and Boswellic Acids," J. Ethnopharmacol 38 (1993) : 113.
- 238 H. P. Ammon, et al., "Pharmacology of Curcuma longa," Planta Med 57(1) (Feb1991) : 1-7.
- 239 K. C. Srivastava, et al., "Curcumin, A Major Component of Food Spice Turmeric (Curcuma longa) Inhibits Aggregation and Alters Eicosanoid Metabolism In Human Blood Platelets," Prostaglandins Leukot Essent Fatty Acids 52(4) (Apr1995) : 223-27.
- 240 J. M. Snow., "Curcuma Longa L. (Zingiberaceae)," Protocol Journal of Botanical Medicine 1(2) (Autumn1995) : 43-46.
- 241 P. J. Houghton, "The Biological Activity of Valerian and Related Plants," J Ethnopharmacol 22(2) (1988) : 121-42.
- 242 G. Balderer, et al., "Effect of Valerian on Human Sleep," Psychopharmacology 87 (1985) : 406-09.
- 243 "Valerianae radix," German Commission E Monograph, May 15, 1985, Bundesanzeiger, no. 90.
- 244 H. Hendriks, et al., "Central Nervous Depressant Activity of Valerenic Acid in the Mouse," Planta Med (1) (Feb1985) : 28-31.
- 245 P. R. Bradley (ed.), The British Herbal Compendium, Volume 1 (London: British Herbal Medicine Association, 1992) 224-26.
- 246 C. A. Newall, et al., Herbal Medicines: A Guide for Health Care Professionals (London: The Pharmaceutical Press, 1996) 268-69.