

## SUPPLEMENTS TO DISCONTINUE DURING THE PREOPERATIVE PERIOD

The "natural products" listed below may be beneficial for a variety of ailments, but THEIR USE AROUND THE TIME OF SURGERY MAY NOT BE DESIRABLE. Therefore, it is advisable to stop taking these products to avoid problems with surgery and anesthesia. If time permits, discontinue the use of these products TWO WEEKS prior to surgery and TWO WEEKS after surgery. Specific nutritional supplements that should be discontinued include:

**Bilberry (*Vaccinium myrtillus*)** - Contain anthocyanosides, flavonoid compounds that improve visual acuity and are important in the treatment of eye disorders. Excellent antioxidant that strengthens capillaries and collagen. Has antiplatelet activity and may inhibit clot formation.

**Cayenne (*Capsicum annuum*)** - Used for GI tract disorders. Overdose may cause severe hypothermia.

**Dong Quai (*Angelica sinensis*)** - The main application is in the relief of menstrual disorders and menstrual cramps. Often used to relieve menopausal symptoms. Active constituent is coumarin derivatives, which may potentiate existing anticoagulant medications.

**Echinacea (*Echinacea augustifolia*)** - Immune system stimulant with anti-inflammatory, antiviral, and antibacterial effects. Used as a prophylaxis for upper respiratory infections. Use of Echinacea may impact the liver when general anesthetic or certain other medications such as anabolic steroids or methotrexate are used.

**Feverfew (*Tanacetum patenium*)** - Used for migraine headache prevention and for arthritis, rheumatic disease, and allergies. May increase bleeding, especially in patients taking certain anticlotting medications.

**Fish Oil Capsules** - Supplies important omega-6 fatty acid, DHA, and EPA used to reduce cholesterol and triglyceride levels. Has blood-thinning properties.

**Garlic (*Allium sativum*)** - Garlic has vasodilatory, hypocholesterolemic effects, and antiplatelet effects. May augment effects of coumadin, warfarin, and NSAIDs, causing abnormal bleeding time.

**Ginger (*Zingiber officinale*)** - Useful as antispasmodic, anti-inflammatory, and anti-nauseant. Prophylactic for motion sickness and used to stimulate appetite. Useful for postoperative emesis. Use of ginger may alter bleeding time. Ginger may interfere with cardiac and anticoagulant medications.

**Ginkgo Biloba** - One of the oldest living tree species which can live up to 1000 years and grow to a height of 120 feet. Used as an antioxidant and circulatory stimulant. Used for treatment of intermittent claudication, tinnitus, vertigo, memory enhancement, and sexual dysfunction. Anticoagulant activity is 3x stronger than vitamin E.

**Ginseng (*Panax ginseng*/*Panax quinquefolium*)** - At least 3 different varieties: Asian, American, and Siberian. Improves physical and cognitive performance, mood, or metabolism. An adaptogen and an antioxidant. Anticoagulant that may interact with cardiac, hypo/hyperintensive medications and hypoglycemic agents.

**Hawthorne (*Crataegus laevigata*)** - The extract is used for its ability to potentiate the action of cardiac glycosides. Used in the treatment of ischemic heart disease, hypertension, angina, and chronic congestive heart disease. Potentiates the actions of digitalis and other cardiac glycosides.

**Kava Kava (*Piper methysticum*)** - Sedative, analgesic, soporific, anticonvulsant, muscle relaxant, anxiolytic. Similar to the effects of benzodiazepines in treatment of anxiety. May potentiate CNS effects of barbiturates, alcohol, antidepressants, antipsychotics, and general anesthetics.

**Licorice Root (*Glycyrrhiza glabra*)** - Used for gastric and duodenal ulcers, gastritis, and cough/bronchitis. Glycyrrhizic acid in licorice may cause high blood pressure, hypokalemia, and edema.

**Ma Huang (*Ephedra sinica*)** - Used in weight loss and energy products; a natural amphetamine with powerful stimulant effects. More than 800 adverse reactions reported with the FDA. Causes hypertension, tachycardia, cardiomyopathy, and cardiac dysrhythmias.

**Melatonin** - A hormone secreted by the pineal gland. Regulates many other hormones that are involved in controlling circadian rhythm. Used for jet lag, insomnia, and SAD (seasonal affective disorder). May potentiate CNS effects of barbiturates and general anesthetics.

**Red Clover (*Trifolium pretense*)** - Used to relieve menopausal symptoms. Active constituent includes coumarin derivatives, which may potentiate existing anticoagulant medications.

**St. John's Wort (*Hypericum perforatum*)** - Herb used as mild antidepressant, sedative, anxiolytic. May have a monoamine oxidase (MOA) inhibitory effect. Can interact with MSO inhibitors and other antidepressants. Many other drug interactions reported.

**Valerian (*Valeriana officinalis*)** - Used as a sedative, hypnotic, and antispasmodic in the GI tract. Relieves anxiety, nervousness, and insomnia. May increase effects of sedative hypnotics.

**Vitamin E** - Important fat-soluble vitamin that acts as an antioxidant and prevents the oxidation of polyunsaturated fatty acids. Used in the prevention and treatment of cardiovascular disease, cancer, age-related degenerative diseases. Anticlotting benefits can prolong bleeding time.

**Yohimbe (*Corynanthe yohimbe*)** - "Natural Viagra" that has MAO effects. The tree grows in the African nations of Cameroon, Gabon, and Zaire. Purported to have both psychological and physical effects. Increases the potency of anesthetics.