

NUTRITIONAL SUPPLEMENTS TO DISCONTINUE PRIOR TO SURGERY

While generally beneficial and safe, some nutritional supplements may increase the risk of complications following surgery. To minimize this risk, please discontinue the following nutritional supplements from two weeks prior to surgery to two weeks after surgery:

Cayenne (*Capsicum frutescens*) - Also known as red pepper, cayenne lowers levels of cholesterol in the blood, which can help to lower blood pressure. Cayenne may affect platelets and an overdose can cause a significant drop in body temperature.

Dong Quai (*Angelica sinensis*) - An all-purpose women's herb used to provide energy and regulate female hormones. An active constituent in Dong quai is a coumarin-like compound, which may increase existing anticoagulant (blood-thinning) medications.

Echinacea (*Echinacea augustifolia*) - Used to boost the immune system and for infections of the respiratory tract. Echinacea may negatively affect the liver when general anesthetics or certain other medications are used.

Fish Oil - The Omega-3 essential fatty acids found in fish oil are beneficial for lowering blood pressure, cholesterol and triglyceride levels and reducing the risk of heart disease. Fish Oil has blood-thinning properties which can be problematic during surgery.

Garlic (*Allium sativum*) - Used therapeutically to prevent and treat atherosclerosis (hardening of the arteries) and elevated cholesterol. Garlic may augment the effects of blood-thinners like Coumadin® (wafarin) and non-steroidal anti-inflammatory drugs (NSAIDs) causing abnormal bleeding time.

Ginger (*Zingiber officinale*) - Stimulates the digestive system and helps relieve motion sickness, nausea and vomiting. Use of ginger may alter bleeding time and interfere with cardiac and anticoagulant medications.

Ginkgo Biloba (*Ginkgo biloba*) - One of the oldest living tree species and one of the best researched herbal medicines. Ginkgo biloba improves blood circulation by strengthening the vascular system and inhibiting platelet aggregation. Ginkgo is also used to help prevent mental deterioration in the elderly. Ginkgo has significant blood-thinning activity which is three times stronger than Vitamin E.

Ginseng (*Panax quinquefolium/Panax ginseng*) - Ginseng is a so-called adaptogen (increases physiological resistance to stress) and an antioxidant. Commonly taken to enhance physical and cognitive performance. Ginseng acts as an anticoagulant and may interact with cardiac, high-blood pressure medications and blood-glucose lowering medications.

Licorice Root (*Glycyrrhiza glabra*) - Traditionally used for coughs and as a soothing remedy for the skin. Glycyrrhizic acid in real licorice may cause high blood pressure, lower potassium levels in the blood and enhance tissue swelling (edema).

Melatonin - A hormone that is secreted by the pineal gland located in the brain. Since melatonin controls the body's sleep-wake cycle, it is often used to counteract sleeplessness and jet lag. Melatonin may potentiate the central nervous system effects of barbiturate drugs (produce relaxation and sleep) and general anesthetics.

St. John's Wort (*Hypericum perforatum*) - An herbal medicine used to treat mild to moderate depression and seasonal affective disorder (SAD). Since St. John's Wort works like the antidepressants called monoamine oxidase (MAO) inhibitors, it may interact with these drugs. In addition, many other drug interactions have been reported with St. John's Wort.

Vitamin E - Vitamin E is fat-soluble vitamin that is a strong antioxidant and may protect cells from free-radical damage. This nutrient may play a role in the prevention and treatment of cardiovascular disease and other aging-related degenerative disorders. Vitamin E also has anti-clotting activity can prolong bleeding time during surgery.

Yohimbe (*Corynanthe yohimbe*) - As a natural "Viagra®", yohimbe is touted as a sexual stimulant and as a potential treatment for male impotence. Yohimbe can raise the heart rate and blood pressure, and increase the potency of anesthetics.