HERBS & ANESTHESIA

An excerpt from an article published in the Journal of Forensic Science entitled:
A Review of the Potential Forensic Significance of Traditional Herbal Medicines

The American Society of Anesthesiologists has recommended the discontinuation of herbal medicines at least 2 weeks prior to surgery because of the potential for herb-drug interactions. Although only eight herbs were identified as being potentially dangerous in the pre-operative period, those eight are among the most popular herbs, accounting for 50% of all single herb preparations of the 1500-1800 herbal medicines sold in the United States. The authors reported the following specific problems:

Garlic: increased risk of **hemorrhage** due to inhibition of platelet aggregation and increased fibrinolysis – the destruction of the fibrin threads that help form blood clots

Ginkgo: increased risk of **hemorrhage** due to inhibition of platelet activating factor. The side effects of both of the above may be worsened if drugs that inhibit platelet aggregation are also being used

Ephedra: increased risk of myocardial and cerebral ischemic events (**heart attacks and strokes**); potentially lethal interaction with monoamine oxidase inhibitors (MAOIs); intra-operative hemodynamic instability (**low heart rate and blood pressure**) due to reduction of endogenous catecholamines; ventricular arrhythmias (**irregular heart rhythm**) when used along with halothane gas anesthesia.

Ginseng: hypoglycemia (**low blood sugar level**); reduction of anticoagulation properties of warfarin; increased risk of **hemorrhage** due to inhibition of platelet aggregation

Echinacea: **allergic reactions**, immunosuppression (**increased risk for post-operative infections**), reduced efficacy of immunosuppressant medication such as prednisone or cyclosporine

Kava: possible exacerbation of sedative effects of anesthetic agents (**deeper anesthesia, slower recovery**)

Valerian: possible exacerbation of sedative effects of anesthetic agents (**deeper anesthesia, slower recovery**)

St John's Wort: effects the cytochrome P450 system, the enzyme system in the liver that breaks down and eliminates many medications, so other medications may become toxic when used along with it. It may also produce abnormal laboratory results by directly interfering with immunoassays, by increasing or decreasing concentrations of prescribed drugs, or by direct toxicity to the liver.

Since many of our patients are taking herbal supplements (with or without veterinary supervision), it is important to understand the impact these medicines may have on the health of your pets. We do not recommend the use of any herbal products without our OK, as many herbs have side effects on pets, are prepared improperly or may even be toxic.