Over 60 million Americans use herbal medications and supplements on a regular basis. People who use herbal remedies tend to be well educated and want to take an active role in promoting their health, preventing and treating disease, and aging gracefully. Over half of the people who have elective surgery have used herbal supplements in their lifetime, and at least one-third use herbal remedies on a regular basis.

Despite the fact that so many people use herbal medications and supplements, studies have found that less than 10% of all herbal supplement users inform their physicians before surgery. Often, people believe that since herbal medications and supplements are promoted as natural, they are safer and less likely to cause side effects than prescription medications. This is not always the case.

The fact is that 30% of all modern, conventional medicines are derived from plants, and herbal supplements often have significant medicinal activity, as well as potential for adverse effects and drug interactions.

Your surgeon needs to know if you have been using herbal medicines or supplements in order to prevent avoidable complications associated with common medications and stress on the body during surgery.
This guide is designed to provide information about some of the most commonly used herbal medications and supplements in the United States and the complications associated with their use during surgery. If you use any herbal medication or supplement it is prudent to follow the general recommendation of the American Society of Anesthesiologists and discontinue their use 2-3 weeks before your scheduled surgical procedure.

**Ginko Biloba**

**Uses:** improve memory, Alzheimer’s dementia, vascular disease  
**Surgical Complications:** increases bleeding especially around brain and spinal cord, prolongs sedation, allergic skin reaction  
**Discontinue 36 hours before surgery**

**Garlic Tablets**

**Uses:** lowers blood pressure and cholesterol levels, protects against heart disease  
**Surgical Complications:** increases bleeding  
**Discontinue one week before surgery**

**Ginger**

**Uses:** nausea, motion sickness, aids digestion  
**Surgical Complications:** increases bleeding, increases blood sugar  
**Discontinue one week before surgery**

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**Herbal Supplements Known To Increase Bleeding**

Many herbal medications and supplements can significantly increase bleeding during and after surgery. This not only adds to the length of the procedure, but also increases the risk of infection, postoperative pain, and scar formation.

- Ginko biloba  
- Garlic  
- Ginger  
- Ginseng  
- Omega-3  
- Vitamin E  
- Chondroitin  
- Dong quai  
- Saw palmetto  
- Feverfew  
- Bromelain
Ginseng
Uses: increases physical or mental energy, enhances performance
Side Effects: insomnia, headaches, nosebleeds
Surgical Complications: increases bleeding, lowers blood sugar
Discontinue one week before surgery

Omega-3, EFA, Flax & Fish Oil
Uses: rheumatoid arthritis, protects against heart disease, some skin disorders
Surgical Complications: increases bleeding
Discontinue 2-3 weeks before surgery

Glucosamine & Chondroitin
Use: osteoarthritis
Surgical Complications: increases bleeding
Discontinue 2-3 weeks before surgery

Saw Palmetto
Use: male urinary complaints related to enlarged prostate
Surgical Complications: increases bleeding
Discontinue 2-3 weeks before surgery

Dong Quai
Uses: menstrual & menopausal complaints
Surgical Complications: increases bleeding
Discontinue 2-3 weeks before surgery

Feverfew
Use: migraines
Side Effects: may cause headaches, insomnia, or joint pain if stopped abruptly
Surgical Complications: increases bleeding
Discontinue one week before surgery

Herbal Medications with Serious Complications or Drug Interactions During Surgery
Ephedra/Ma Huang - seizure, heart attack, stroke
St. John’s Wort - heart failure
Kava - coma
Valerian - heart failure, delerium
Ginko Biloba - bleeding in brain & spinal cord
Licorice - heart attack
Herbal Supplements Which Increase Sedation

Many herbal supplements can prolong sedation during and after surgery, which slows recovery from anesthesia.

- **Ginko Biloba**
- **Echinacea**
- **St. John’s Wort**
- **Valerian**
- **Kava**
- **Goldenseal**

### Ephedra/Ma Huang
**Uses:** increase energy, weight loss, asthma  
**Side Effects:** heart palpitations, chest pain, panic attacks  
**Surgical Complications:** interacts with anesthesia and can cause seizures, heart attack, or stroke  
**Discontinue 24 hours before surgery**

### St John’s Wort
**Uses:** mild depression, anxiety, sleep disorder  
**Side Effects:** sensitivity to sunlight  
**Surgical Complications:** interacts with anesthesia, can cause heart failure, prolongs sedation  
**Discontinue 5 days before surgery**

### Kava
**Uses:** anxiety  
**Side Effects:** “kava dermatopathy” causes red eyes, scaly skin, and yellow discoloration of skin, hair, & nails.  
**Surgical Complications:** interacts with anesthesia, coma, prolonged sedation  
**Discontinue 24 hours before surgery**

### Valerian
**Uses:** sleep aid, mild relaxant  
**Surgical Complications:** delirium, heart failure, prolonged sedation  
**Discontinue 1 week before surgery**

### Licorice
**Uses:** sore throat, stomach ulcers  
**Surgical Complications:** increases bleeding, may cause heart attack  
**Discontinue 2–3 weeks before surgery**
**Vitamin E**

**Uses:** protects the heart  
- especially in diabetics,  
slows skin aging  
**Surgical Complications:**  
increases bleeding,  
impairs wound healing  
- especially tendons  
**Discontinue 2–3 weeks before surgery**

**Echinacea**

**Uses:** stimulates immune system  
**Side Effects:** suppresses immune system with long-term use  
**Surgical Complications:**  
prolongs sedation, poor wound healing, allergic reaction  
**Discontinue 2–3 weeks before surgery**

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**Goldenseal**

**Uses:** gastrointestinal and skin infections  
**Surgical Complications:**  
prolongs sedation, sensitivity to sunlight  
**Discontinue 2–3 weeks before surgery**

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Some Herbal Supplements are known to affect the skin and may cause:  
- Sun Sensitivity  
- Or Allergic Rash

- St John’s Wort  
- Ginko Biloba  
- Kava  
- Echinacea  
- Goldenseal  
- Arnica

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**Resources:**

- Center for Food Safety and Applied Nutrition, Food & Drug Administration:  
  [http://vm.cfsan.fda.gov/~dms/supplmnt.html](http://vm.cfsan.fda.gov/~dms/supplmnt.html)
- National Center for Complementary and Alternative Medicine, National Institutes of Health:  
- Quackwatch:  
  [http://www.quackwatch.com](http://www.quackwatch.com)
- HerbMed:  
  [http://herbmed.org](http://herbmed.org)
- ConsumerLab:  
  [http://www.consumerlab.com](http://www.consumerlab.com)
- American Botanical Council:  
  [http://www.herbalgram.org](http://www.herbalgram.org)
- Office of Dietary Supplements, National Institutes of Health:  
References:


