

Sports Nutrition from the desk of Dr. Stephen Green MS DC

Regulation of Herbs

In the United States, herbs are regulated by the U.S. Food and Drug Administration (FDA) as dietary supplements as part of the 1994 Dietary Supplement Health and Education Act (DSHEA). Herbs are not required to be standardized, and there are different interpretations of what standards should be followed so there is little consistency among different batches of products from different manufacturers. In other words, it is often impossible to know what is contained in a given package containing herbs. Athletes should be wary of ingesting herbs with unproven ingredients that have unproven effects on health and performance and may cause harmful side effects.

Specific Herbs, Potential Benefits, and Examples of Safety Concerns

Table S1 highlights many of the herbs athletes may be interested in using with the goal of enhancing sports performance, managing a health concern, or maintaining optimal immune status and overall health. Because herbs often contain potent natural chemicals, there is the potential for interaction with other herbs, foods, and medications. If athletes incorporate herbs into their overall nutrition and performance plan, working with a health care team to monitor potential side effects and interactions between herbs and other herbs or herbs and medications is strongly recommended. Athletes in finding reputable research and resources to support or refute the claims for herbs. Other key elements include ensuring that an herb is safe, confirming that it contains the recommended amounts of active ingredients, and determining the appropriate dosage. The resources listed below provide sound information to help answer these key questions about herbs for athletes.

HERB	ADDITIONAL NAMES FOR THE HERB	CLAIMED TO BENEFIT	EXAMPLES OF SAFETY CONCERNS
Arnica	Mountain tobacco, leopard's bane, wundkraut	Muscle pain, stiffness, osteoarthritis	May increase effects of anticoagulants <i>only useful in homeopathic form</i>
Asparagus	Huang chi, huang qi, milk vetch	Weak immune system, fatigue	May interact with immunosuppressant drugs
Cayenne	Capiscum, red pepper, African chilies	Musculoskeletal pain, osteo- arthritis, digestive problems	Digestive disorders, skin irritation
Cordyceps	Caterpillar fungus, dong chon xai cao, semitake	Weak immune system, poor endurance performance	May reduce blood sugar levels
Devil's Claw	Grapple plant, harpagophytum, wood spider	Muscle pain, digestive problems, fever	May interfere with antidiabetes drugs
Echinacea	Purple coneflower, black Sampson, Indian head	Weak immune system, colds, infections	May interfere with immunosuppressants
Elderberry	Elderberry syrup, American elder	Colds, flu, fever, weak immune system, excess body water	May interact with diuretics or laxatives
Ginger	Zingiberis rhizoma, ginger root, Jamaica ginger	Nausea, vomiting, motion sickness, osteoarthritis	May interact with anticoagulants and antidiabetes drugs <i>may be useful as ginger tea in inflammation</i>
Ginseng	Chinese ginseng, ciwujia, Russian root	Poor endurance performance, low energy, weak immune system	May interfere with anticoagulants
Gotu Kola	Indian pennywort, hydrocotyle, kaki kuda	Varicose veins, edema	May interfere with hypoglycemic medications
Guarana	Guarana gum, zoom cocoa, Brazilian cocoa	Excess body fat, lethargy	Contains caffeine
Rhodiola	Golden root, Arctic root	Lethargy, fatigue, poor endurance	May interact with other herbs
Valerian	Mexican valerian, garden heliotrope, tagara	Insomnia, anxiety, depression	May interact with other sedatives
Willow Bark	White willow, purple osier, bay willow	Fever, muscle pain, osteoarthritis	May interact with anticoagulants <i>may be useful as Tea inflammation</i>