

Native American Botanics

American Ginseng - Panacea from the Eastern Woodlands

Scientific Name

Panax quinquefolium

Botanical Family

Araliaceae

Common Names

American Ginseng, White ginseng

Plant Part Used

Roots



Overview

American ginseng (*Panax quinquefolium*) is a botanical relative of *Panax ginseng* (Chinese, Korean, or Japanese ginseng). Both ginseng species are highly valued as adaptogens and antioxidants. Adaptogens are medicinal substances that increase the body's physiological resistance to environmental stressors-- whether viral, bacterial, fungal, toxic chemical, metabolic, or emotional stressors. Adaptogens allow the body to use energy more efficiently. Scientific evidence suggests that adaptogenic herbs can increase overall health and performance. Antioxidants also enhance general health by warding off harmful free radicals that damage cells and pave the way for chronic diseases.

American ginseng, along with Asian ginseng, is a promising natural therapy for many conditions. It has been shown to improve physical and cognitive performance, decrease age-related illness in the elderly, and reduce complications of non-insulin independent diabetes (NIDDM). This botanical may also have health benefits for cancer, cardiovascular disease, non-HIV-related disorders of the immune system, depression, and infertility.

Botanical Description

Panax quinquefolium (American Ginseng) is a small, slow growing perennial herb native to the eastern hardwood forests of North America. Its five-leaved branches (giving the plant its specific name, quinquefolium) rise knee-high above the rich forest soil. A delicate cluster of white flowers hide below the leaves, developing into crimson red berries by fall. The light beige gnarled root lies buried in the soil, forming branches with long stringy hairs that resemble arms and legs. These offshoots give ginseng its classic human-looking shape. The stems can grow to 16 inches in height. The lateral root and root hairs are harvested at 4 to 6 years of age to make the crude drug.

Chemical Constituents

Dried root: ginsenosides (Rb1 as marker); polysaccharide glycans (quinquefolan A, B, and C).

Medicinal Uses/Therapeutic Indications

Traditional Uses: Adaptogen (stress-fighting medicinal agent) to increase energy, stamina, and strength; restorative, alterative, bitter tonic.

Clinical Applications: Stress, fatigue, convalescence or rehabilitation after acute illness, cold or viral illness, diabetes, ulcer, edema, cancer, hypercholesterolemia, infertility.

Pharmacological and Clinical Findings

In an in vivo study, polysaccharide glycans (quinquefolans A, B, and C) in *Panax quinquefolium* produced hypoglycemic activity in mice. Ginsenoside Rb1 markedly decreased concentrations of islet insulin. In clinical studies, *Panax quinquefolium* has been shown to decrease stress and fatigue as well as increase physical and mental stamina. Human trials also reveal that American ginseng decreases liver toxicity, improves cholesterol ratios, enhances psychomotor performance, decreases blood sugar levels, and increases blood alcohol clearance. *Panax quinquefolium* also may be beneficial for controlling asthma, regulating blood pressure, and modulating the activity of adrenocorticotrophic hormones. American ginseng is one of the most widely utilized

herbs in the world because of its long-term traditional use and its scientifically-proven benefits for treating and preventing numerous conditions.

Dosage Ranges

Stress-management in healthy persons: 0.6 to 2 g dried root daily for 15 to 20 days followed by a 14-day break.

For rehabilitation or debilitation in elders: 0.5 g 2 times daily for three months; or, take 0.5 g bid for one month, followed by a two-month break. The cycle may be repeated, if necessary.

Safety

American ginseng is considered safe when used at the recommended daily dose.

Side Effects

Side effects are rare when used as directed in persons who do not have abnormal blood pressure.

Warnings/Contraindications/Precautions

Individuals with acute illness, cardiovascular disease, coronary thrombosis, or hypertension should use caution when taking ginseng. Individuals with diabetes should consult a qualified health care provider before using ginseng. Pregnant women should avoid using ginseng.

Interactions

Ginseng may have adverse interactions with MAOI's, phenelzine, and warfarin. Individuals taking these medications should consult a qualified health care provider before ingesting any ginseng product.

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