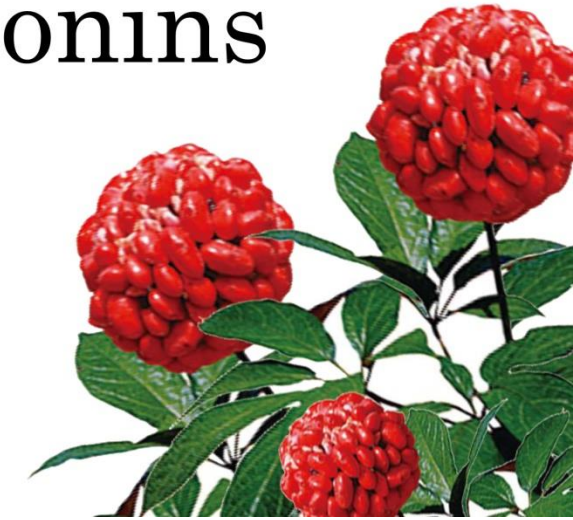
Ginseng Plus®
Notoginseng Total Saponins
(85% Saponins, HPLC)



What is Notoginseng?

- Known in China for over 650 years, Panax Notoginseng is commonly referred to as the "King of Ginseng" because the active substances contained in Notoginseng are superior to other ginseng family members in quantity.
- It is featured in nearly every Patented Herbal treatment in China. Of China's 24 most well-known FDA-recognized health supplements, 19 contain Notoginseng.
- In Bencao Gangmu (Compendium of Materia Medica, 1596 A.D.) it is stated: "Notoginseng can treat all diseases of the blood." It has been primarily used to treat cardiovascular diseases by promoting blood circulation to dispel blood stasis, benefiting qi, and nourishing blood.
- Contains nutrients including saponins, amino acids, polysaccharides, flavonoids, panaxatriol, and β- sitosterol, etc.

What Do We Offer?

- Panax Notoginseng Raw Powder
- Panax Notoginseng Steamed Powder
- Ginseng Plus® Notoginseng Total Saponin

Panax Notoginseng Raw Powder

Contains a variety of nutrients including saponins, panaxytriol, polysaccharides, amino acids, flavonoids, β-sitosterol, fatty acids, etc.

- Promotes Cardiovascular Circulation
- Reduces Pain and Swelling, Stops Bleeding
- Anti-Aging
- Promotes Radiant Skin
- Improves Exercise & Physical Performance

Panax Notoginseng Steamed Powder

Steaming changes the chemical profile as well as its biological activities of notoginseng.

- Nourishes Blood
- Anti-Anemia
- Anti-Fatigue, Promotes Energy
- Boosts Immunity

What is in Ginseng Plus® Notoginseng Total Saponins?

Ginseng Plus® is standardized to contain a minimum 85% of Notoginseng Total Saponin, which includes:

- Notoginsenoside R1: Neuroprotective, Antihypertensive effects, Antidiabetic, Anti-platelet
- Ginsenosides Rb1: Neuroprotective, Anti-inflammatory, Anti-obesity
- Ginsenosides Rg1: Neuroprotective, Pro-angiogenesis, Anti-inflammatory, Hypertensive
- Ginsenosides Rd: Cardioprotective, Neuroprotective, Anti-inflammatory
- Ginsenosides Re: Vasorelaxant, Antioxidant, Antihyperlipidemic, Angiogenic
- Ginsenosides Rb2: Antidiabetic, Lowers cholesterol and triacylglycerol levels

Ginseng Plus® Notoginseng Total Saponins

- **Exclusively Offered by Farlong®**

Sold as dietary supplements in the U.S. for 20 years.

- **Vertically Integrated Supply Chain**

GAP, cGMP, GSP certifications and independently verified quality meet CHP/USP monographs, U.S. and EU standards.

- **High Potency and Purity**

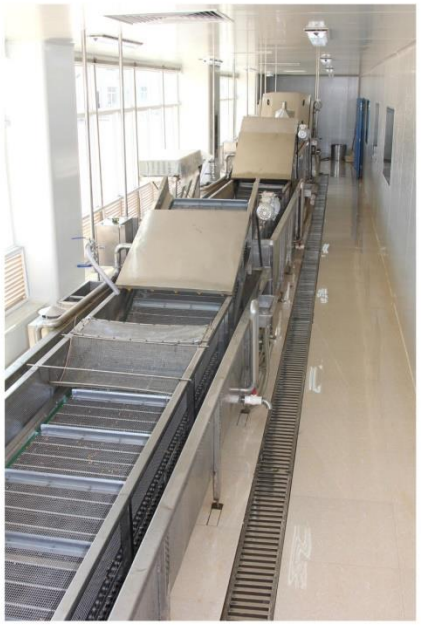
Standardized to contain minimum 85% total saponins as the primary active compound.

GAP (Good Agricultural Practices) Certified Farm



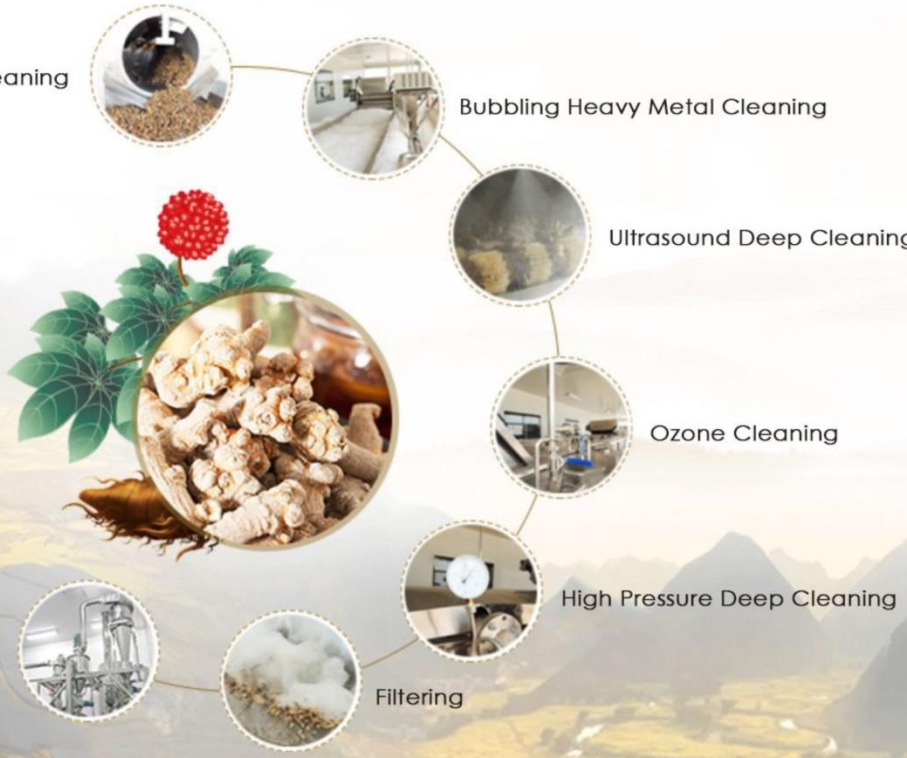



GMP Certified Facilities



Deep Cleaning System

- Class 100,000 clean room and patented deep cleaning system guarantee the safety, purity, and potency of our Notoginseng products.



Health Benefits of Notoginseng Extract

- Protects Cardio- and Cerebrovascular System
- Supports Healthy Blood Pressure, Sugar, and Cholesterol Levels
- Promotes Healthy Energy and Reduces Fatigue
- Anti-Inflammatory
- Antioxidant, Anti-Aging, Skincare
- Promotes Physical Performance
- Anti-Cancer

Studies on Notoginseng Saponins

- 30 patients with essential hypertension (EH) were enrolled in the study. Results shown that the total saponins of Panax Notoginseng (TSPNS) could improve myocardial relaxation function due to enhancing calcium pump activity and inhibiting intracellular calcium overload and lightening left ventricular muscle mass.
- Several lines of evidence have proved that PNS appears to be a promising natural cardioprotective agent. The actions included including antiplatelet, anticoagulant, antithrombotic, antiatherosclerosis, lipid-lowering, vasodilative, anti-inflammation, anti-ischemia, anti-arrhythmia, anti-hyperplasia, and promoting angiogenesis effects.
- Rats in the experimental groups were administered PNS (100 mg/kg, i.p., once daily). The results indicated that PNS exerted its therapeutic effects on atherosclerosis through an anti-inflammatory action and regulation of the blood lipid profile and that an NF-κB signaling pathway is involved.

Studies on Notoginseng Saponins

- Twenty (20) of the 24 identified randomized controlled trials matched the inclusive criteria including 984 ICH patients with PNS injection and 907 ICH patients with current treatment (CT). Compared to the CT groups, PNS-treated patients showed better outcomes in the effectiveness rate (ER), neurological deficit score, intracranial hematoma volume, intracerebral edema volume, Barthel index, the number of patients died, and incidence of adverse events.
- 640 patients who onset acute CI within 24 hours were enrolled in the study. The result showed that PNS significantly reduced the whole blood reduced-viscosity of high shear stress and low shear stress, plasmatic viscosity and packed cell volume post the therapy.
- 519 cases with intracerebral hemorrhage which were in hospital from 1998 to 2002, were enrolled in the study. The result showed that PNS has a satisfactory role in microcirculation ameliorating. It can facilitate the absorption of hematoma, relieve the level of edema, and significantly shorten the recovery time of absorbing edema. It plays an important role in perihematomal ischemia region and has some effects in acute intracerebral hemorrhage.

Studies on Notoginseng Saponins

- Eighty-four patients with rheumatoid arthritis (RA) were enrolled in this clinical study. The result found that PNS can significantly improve the condition of patients, enhance the therapeutic effect in treating RA, through regulating the disordered immunity and improving the effect of anti-inflammatory and analgesia.
- KK-Ay mice received daily intraperitoneal injections of PNS 200 mg/kg or vehicle for 30 days while ginsenoside Re 14 mg/kg, Rd 15 mg/kg, Rg1 40 mg/kg, Rb1 60 mg/kg and notoginsenoside R1 6 mg/kg for 12 days. The result showed that PNS possess anti-hyperglycemic and anti-obese activities by improving insulin- and leptin sensitivity, and Rb1 is responsible for the anti-hyperglycemic effect among the five saponins in KK-Ay mice.

Animal Studies

- In this study investigating the anti-aging actions of Panax Notoginseng saponins (PNS) on rats with Alzheimer's Disease (AD), 90 rats were randomized into four groups: model control, high-dose PNS (200mg·kg-1·d-1), low-dose PNS (100 mg·kg-1·d-1) and huperzine A (0.3 mg·kg-1·d-1). It was found that the anti-aging actions of PNS may be related to the counteraction of production of free radicals and to the decrease of serum cholesterol level.
- This study is aimed at determining the therapeutic effects of panax notoginseng saponins (PNS) on hypertrophic scarring in a rabbit ear model. The result indicated that PNS could inhibit the accumulation of collagen and then inhibit hypertrophic scarring through reducing CTGF expression and increasing MMP1 expression.
- It was found that nano TiO2, broad-spectrum sunscreens and panax notoginseng saponin are good materials which can be improved the anti-sunburn effect when they are mixed by an appropriate ratio.

Animal Studies

- Total saponins of Radix notoginseng (20, 40 and 80 mg/kg body weight/day, respectively for 28 days) extended exhaustive swimming time of mice, effectively delayed the increase of lactate in the blood, as well as increased the tissue glycogen contents.
- One-time exhaustive swimming can cause special high expression of GFAP in cerebral cortex immediately which indicates that it has relation with occurrence of central fatigue. Panax notoginseng saponins can control the high expression of GFAP after exhaustive swimming, which indicates that panax notoginseng saponins can postpone the occurrence of central fatigue and release the central fatigue.

Animal Studies

- PNS treatment exhibited a dose-dependent effect on impairing 4T1 cell viability in vitro. However, when examined at a lower dose that did not affect cell viability, the migration and invasion of 4T1 cell was remarkably inhibited in vitro. Meanwhile, PNS treatment led to upregulated expression of genes known to inhibit metastasis and downregulated expression of genes promoting metastasis in cultured 4T1 cells. These results suggested a selective effect of PNS on 4T1 migration and invasion. This hypothesis was further addressed in 4T1 metastasis models in vivo. The results showed that the lung metastasis was significantly inhibited by PNS treatment in both spontaneous and experimental metastasis models.

Applications

Light yellow fine powder, Odorless, Neutral Taste

- **Beverages, such as sports drin**
- **Functional Foods, such as nutritional bar, yogurt, smoothie**
- **Dietary Supplements**

  Capsules, Softgels, Tablets, Powder