

Ren Shen (Radix Ginseng)

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Pinyin Name: *Ren Shen*

Literal Name: “man’s plant,” “man root”

Alternate Chinese Names: *Gui Gai, Yi Shan Shen, Chao Xian Shen, Ren Xian*

Original Source: *Shen Nong Ben Cao Jing* (Divine Husbandman’s Classic of the Materia Medica) in the second century

English Name: ginseng, ginseng root

Botanical Name: *Panax ginseng* C. A. Mey. (*Ren Shen*)

Pharmaceutical Name: Radix Ginseng

Properties: sweet, slightly bitter, slightly warm

Channels Entered: Lung, Spleen



CHINESE THERAPEUTIC ACTIONS

1. Greatly Tonifies *Yuan* (Source) *Qi*

Qi deficiency or depletion, fading pulse: *Yuan* (source) *qi* is the basis of all *qi* in the body. *Ren Shen* (Radix Ginseng) is the best herb to strengthen the body and restore vitality. It tonifies deficiency and restores the collapse of *yuan qi*, that may have become depleted after profuse perspiration, after excessive loss of fluids in severe vomiting or diarrhea, with excessive loss of blood, or due to other chronic illnesses. Clinical manifestations of such conditions include shallow respiration, shortness of breath, cold extremities, and feeble or barely palpable pulse. In those conditions, this herb can be used alone to greatly tonify and revitalize the body. Qi deficiency is often accompanied by yang deficiency, and qi collapse is often accompanied by yang collapse. As such, when treating cases of deficiency or collapse, interior-warming or yang-tonic herbs are usually added to *Ren Shen*.

- Collapse of *yuan qi* (source) *qi*: use *Ren Shen* as a single-herb remedy.
- Qi and yang deficiencies with profuse perspiration and cold extremities: use it with *Fu Zi* (Radix Aconiti Lateralis Praeparata). **Exemplar Formula:** *Shen Fu Tang* (Ginseng and Prepared Aconite Decoction).
- Qi and yin deficiencies: combine it with *Mai Men Dong* (Radix Ophiopogonis) and *Wu Wei Zi* (Fructus Schisandrae Chinensis). **Exemplar Formula:** *Sheng Mai San* (Generate the Pulse Powder).
- Qi and blood deficiencies: pair *Ren Shen* with *Shu Di Huang* (Radix Rehmanniae Praeparata).

2. Tonifies the Spleen

Spleen qi deficiency: *Ren Shen* tonifies the Spleen and

enhances its functions of transformation and transportation. With middle *jiao* deficiency, food cannot be transformed into energy, and thus, fatigue, lack of energy, nausea, vomiting, poor appetite, sallow complexion, low voice, listlessness, diarrhea, stomach and rectal prolapse and other conditions characterized by qi deficiency of the Spleen and Stomach will manifest.

- Qi deficiency of the Spleen and Stomach: use *Ren Shen* with *Bai Zhu* (Rhizoma Atractylodis Macrocephalae).
- Qi deficiency of the Spleen and Stomach with dampness: use this herb with *Bai Zhu* (Rhizoma Atractylodis Macrocephalae), *Fu Ling* (Poria) and *Gan Cao* (Radix Glycyrrhizae). **Exemplar Formula:** *Si Jun Zi Tang* (Four-Gentlemen Decoction).
- Qi deficiency of the Spleen and Stomach with loose stools or diarrhea: add *Ren Shen* to *Bai Zhu* (Rhizoma Atractylodis Macrocephalae), *Fu Ling* (Poria), *Shan Yao* (Rhizoma Dioscoreae), *Bian Dou* (Semen Lablab Album), *Sha Ren* (Fructus Amomi) and *Chen Pi* (Pericarpium Citri Reticulatae). **Exemplar Formula:** *Shen Ling Bai Zhu San* (Ginseng, Poria, and Atractylodes Macrocephala Powder).
- Organ prolapse due to qi and yang deficiencies: combine this herb with *Huang Qi* (Radix Astragali), *Bai Zhu* (Rhizoma Atractylodis Macrocephalae), *Sheng Ma* (Rhizoma Cimicifugae) and *Chai Hu* (Radix Bupleuri). **Exemplar Formula:** *Bu Zhong Yi Qi Tang* (Tonify the Middle and Augment the Qi Decoction).

3. Tonifies the Lung

Lung deficiency: The Lung dominates the qi of the body and controls respiration. The Kidney dominates *yuan qi*, consolidates *jing* (essence) and helps pull qi

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downwards from the Lung. When the Lung and Kidney are deficient, symptoms of shortness of breath, dyspnea, asthma, accelerated or feeble respiration with fatigue, spontaneous sweating and weak pulse, may appear. *Ren Shen* tonifies the Lung and enhances its respiratory effectiveness.

- Chronic cough due to Lung deficiency: use *Ren Shen* with *Kuan Dong Hua* (Flos Farfarae), *Zi Wan* (Radix Asteris), *Bai Bu* (Radix Stemonae) and *Wu Wei Zi* (Fructus Schisandrae Chinensis).
- Wheezing and shortness of breath due to Lung and Kidney deficiency: use this herb with *Ge Jie* (Gecko), *Hu Tao Ren* (Semen Juglandis) and *Wu Wei Zi* (Fructus Schisandrae Chinensis). **Exemplar Formula:** *Ren Shen Ge Jie San* (Ginseng and Gecko Powder).

4. Promotes Generation of Body Fluids and Relieves Thirst

Xiao ke (wasting and thirsting) syndrome, thirst from qi and yin deficiencies: The production, distribution and elimination of body fluids require proper functioning of qi. Yin and qi deficiencies result in the thirst and related symptoms of *xiao ke* syndrome. *Ren Shen* tonifies qi, promotes generation of body fluids and relieves thirst. Should heat also be a factor contributing to thirst, additional symptoms may include heat sensations with thirst that cannot be quenched by water, excessive perspiration, and a big pulse that is revealed upon pressure to be weak.

- *Xiao ke* syndrome with thirst: combine *Ren Shen* with *Tian Hua Fen* (Radix Trichosanthis), *Mai Men Dong* (Radix Ophiopogonis) and *Zhi Mu* (Radix Anemarrhenae).
- Febrile disorders with heat damaging both qi and body fluids: use *Ren Shen* with *Shi Gao* (Gypsum Fibrosum), *Zhi Mu* (Radix Anemarrhenae), *Gan Cao* (Radix Glycyrrhizae), and *Geng Mi* (Semen Oryzae). **Exemplar Formula:** *Bai Hu Jia Ren Shen Tang* (White Tiger plus Ginseng Decoction).

5. Calms the Shen (Spirit), Improves Mental Function

Lack of qi and blood nourishment to the Heart shen: Abundant *yuan* (source) qi nourishes Heart qi, calms the *shen*, and improves mental functions. *Ren Shen* tonifies qi, calms the *shen*, and improves cognitive functions. It is commonly used alone to treat insomnia, disturbed sleep with excessive dreams, fright, confusion and forgetfulness caused by qi deficiency. When taken for a prolonged period of time, this herb treats neurasthenia involving symptoms of fatigue, headache and insomnia.

- Poor cognitive functions due to Heart and Spleen weakness with qi and blood deficiencies, with chief complaints of fatigue, excessive worrying and insomnia: use *Ren Shen* with *Huang Qi* (Radix Astragali), *Long Yan Rou* (Arillus Longan), and *Suan Zao Ren* (Semen Zizyphi

Spinosa). **Exemplar Formula:** *Gui Pi Tang* (Restore the Spleen Decoction).

- Poor cognitive functions due to Heart and Kidney weakness with yin and blood deficiencies: combine this herb with *Sheng Di Huang* (Radix Rehmanniae), *Mai Men Dong* (Radix Ophiopogonis), *Dan Shen* (Radix Salviae Miltiorrhizae), and *Bai Zi Ren* (Semen Platycladi). **Exemplar Formula:** *Tian Wang Bu Xin Dan* (Emperor of Heaven's Special Pill to Tonify the Heart).
- Confusion and forgetfulness: add *Ren Shen* to *Shi Chang Pu* (Rhizoma Acori), *Yuan Zhi* (Radix Polygalae), *Fu Shen* (Poria Paradicis) and *Fu Ling* (Poria).

6. Tonifies Qi and Blood

Blood deficiency: *Ren Shen* tonifies qi and enhances the production of blood. It is commonly used to treat patients with sallow complexion revealing both qi and blood deficiencies.

- Qi and blood deficiencies: use *Ren Shen* with *Shu Di Huang* (Radix Rehmanniae Preparata), *Bai Shao* (Radix Paeoniae Alba), *Bai Zhu* (Rhizoma Atractylodis Macrocephalae), and *Fu Ling* (Poria). **Exemplar Formula:** *Ba Zhen Tang* (Eight-Treasure Decoction).

7. Treats Impotence

This herb tonifies qi and yang and is commonly used with Kidney yang- tonic herbs to treat impotence. *Ren Shen* may be used singly as herbal tincture, or in combination with other herbs in an herbal formula.

- Impotence: use *Ren Shen* with *Lu Rong* (Cornu Cervi Pantotrichum), *Shu Di Huang* (Radix Rehmanniae Preparata), *Fu Zi* (Radix Aconiti Lateralis Praeparata), and *Bu Gu Zhi* (Fructus Psoraleae).

8. Tonifies Qi in Deficiency Patients with Exterior Conditions

Exterior disorder with interior deficiency: *Ren Shen* treats deficiency patients who have contracted external pathogenic factors. It boosts *wei* (defensive) qi to fight against external pathogenic factors.

- Exterior condition with interior deficiency: combine *Ren Shen* with *Qiang Huo* (Rhizoma et Radix Notopterygii), *Chai Hu* (Radix Bupleuri) and *Du Huo* (Radix Angelicae Pubescentis). **Exemplar Formula:** *Ren Shen Bai Du San* (Ginseng Powder to Overcome Pathogenic Influences).

DOSAGE

5 to 10 grams in decoction, 0.5 to 1.0 gram in powder. The dosage of *Ren Shen* may be increased to 15 to 30 grams to treat collapse of *yuan* (source) qi. The decoction should be taken in multiple small doses (instead of one large dose) when treating collapse. Due to the high

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cost of the herb, *Ren Shen* is usually decocted separately at relatively low temperatures to ensure complete extraction of active constituents.

CAUTIONS / CONTRAINDICATIONS

- Sweet and warm in nature, *Ren Shen* is contraindicated in cases of excess conditions, such as bleeding caused by heat in the blood, red eyes and dizziness due to Liver yang rising, wheezing and cough because of Lung heat, or phlegm accumulation, constipation, parasites, internal accumulation, heat or fire conditions.
- According to classic texts, *Ren Shen* is incompatible with *Li Lu* (Radix et Rhizoma Veratri), antagonized by *Zao Jiao* (Fructus Gleditsiae), and counteracted by *Wu Ling Zhi* (Excrementum Trogopteri seu Pteromi) and *Lai Fu Zi* (Semen Raphani Sativi).
- The effectiveness of *Ren Shen* may be reduced by concurrent consumption of turnips, daikon radishes, and tea.

OVERDOSAGE

Mild overdose of *Ren Shen* may lead to side effects such as dry mouth and lips, excitation, fidgeting, irritability, tremor, palpitations, blurred vision, headache, insomnia, increased body temperature, increased blood pressure, edema, decreased appetite, increased sexual desire, dizziness, itching, eczema, early morning diarrhea, bleeding, and fatigue. Such patients are advised to discontinue the herb and seek symptomatic treatment if necessary. Gross overdose may lead to such adverse reactions as nausea, vomiting, irritability, restlessness, urinary and bowel incontinence, fever, increased blood pressure, increased respiration, decreased sensitivity and reaction to light, decreased heart rate, cyanotic facial complexion, red face, seizures, convulsions, and delirium. Though the toxicity of this herb is mild, intake of large dosages may cause toxic side effects of pityriasis rosea, itching, headache, dizziness, sudden rise in temperature, or bleeding. Bleeding is characteristic of acute overdose of *Ren Shen*.¹

Allergic reactions to *Ren Shen* are characterized by burning sensations of the extremities, itching, excitation, insomnia, dizziness, chest congestion and discomfort, nausea, vomiting, pale face, perspiration, cold extremities, low voice, a deep and thready pulse, and urinary and bowel incontinence.

TREATMENT OF OVERDOSAGE

An herbal decoction of 120 grams of *Gan Cao* (Radix Glycyrrhizae) treats general overdose of *Ren Shen*. Specific symptomatic treatments are also available. *Lai Fu Zi* (Semen Raphani Sativi) treats feelings of distention, dyspnea, or oppression associated with overdose of *Ren Shen*. *Tian Men Dong* (Radix Asparagi) and *Sheng Di*

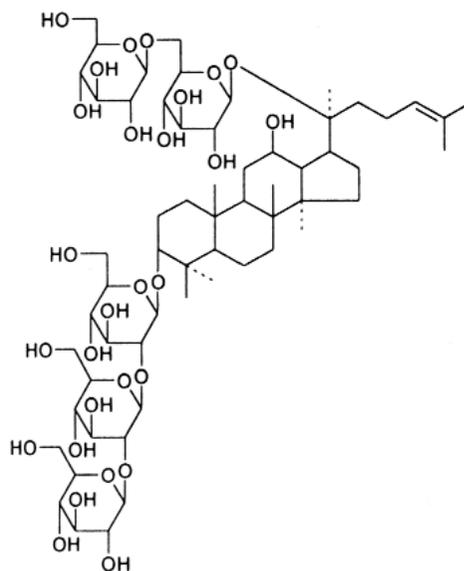
Huang (Radix Rehmanniae) treat increased heat in the body associated with overdose of *Ren Shen*. *Chen Pi* (Pericarpium Citri Reticulatae), *Sha Ren* (Fructus Amomi) and *Shan Zha* (Fructus Crataegi) treat bloating, which sometimes occurs with use of *Ren Shen*.²

Acute cases of overdose can be treated by emetic methods. Ingestion of 1.2 to 1.5 grams of *Li Lu* (Radix et Rhizoma Veratri) with warm water will usually induce vomiting of the ingested *Ren Shen* within a few minutes. Chronic cases of overdose can be relieved by ingestion of daikon radish. The treatment is to either ingest 500 to 1,000 grams of fresh daikon radish, or to cook 250 to 500 grams of dried daikon radish and administer via decoction.³

Severe cases of overdose characterized by epistaxis with bright red blood, red tongue and rapid pulse should be treated with herbs that clear heat, cool blood and stop bleeding. Herbal treatment includes 6 grams of powdered *Da Huang* (Radix et Rhizoma Rhei), 3 grams of *San Qi* (Radix Notoginseng), 3 grams of *Xi Jiao* (Cornu Rhinoceri), and 400 ml of juice squeezed from fresh daikon radish. [Note: *Shui Niu Jiao* (Cornu Bubali) is used as a substitute because of the protected status of *Xi Jiao* (Cornu Rhinoceri).]

CHEMICAL COMPOSITION

Triterpene saponins, aglycone (20S)-protopanaxadiol (ginsenoside Ra0, Ra1, Ra2, Ra3, Rb1, Rb2, Rb3; notoginsenoside R4, Rs1, Rs2, Rs3, Rs4; malonylginsenoside Rb1, Rc, Rd), aglycone (20S)-protopanaxatriol (ginsenoside Re, Rf, Rg1, notoginsenoside R1), aglycone oleanolic acid (ginsenoside Ro, chikusetsusaponin-V Rb1, Rb2, Rc, Rd, Re, Rg1), water-soluble polysaccharides (panaxane A to U), polyynes (falcarinol, falcarintriol).^{4,5}



Ginsenoside Ra0

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PHARMACOLOGICAL EFFECTS

- **Effects on the central nervous system:** Many laboratory and clinical studies have shown that administration of *Ren Shen* has a significant impact on the central nervous system. It has a stimulating effect in low doses, but an inhibiting effect in large doses. It was found that intraperitoneal injection at the dosage of 50 mg/kg for 5 days has a stimulating effect, as it increases the amounts of dopamine and norepinephrine in the brain stem. On the other hand, oral ingestion of a 40% *Ren Shen* solution has a sedative effect as it greatly decreases the physical activities of rats. Because of its dual functions of stimulation and inhibition, *Ren Shen* provides an adaptogenic effect for the body under various environmental stress.^{6,7}
- **Cognitive:** Administration of *Ren Shen* has demonstrated a marked effect in improving memory and learning ability. Using the herbal extract at the dosage of 20 mg/kg/day (equivalent to 100 mg/kg/day of dried herb) for 3 days, there was a significant increase in cognitive capacity in rats as the time necessary to exit a maze was substantially reduced compared to the control group that did not receive any herbs. However, when the dosage of the herbal extract was increased to 100 mg/kg/day (equivalent to 500 mg/kg/day of dried herb), there was an opposite effect, with impairment of memory and learning capacity.⁸
- **Endocrinological:** Administration of *Ren Shen* has a marked influence on the endocrine system. In animal studies, it stimulates the pituitary gland to increase the secretion of ACTH, which in turn stimulates the adrenal glands and their activities. This finding was confirmed in subsequent studies in which *Ren Shen* did not increase activities of the adrenal glands in subjects whose pituitary glands had been surgically removed.⁹ In another study, mice that were given *Ren Shen* had an increase in ACH and ACTH, and subsequently better physical performance. Mice that were given one dose of the herb had a 132% increase in swimming time, and mice that were given the herb for 7 days had a 179% increase. Interestingly, overdose of the herb had an opposite effect as it decreased swimming time.¹⁰
- **Immunostimulant:** *Ren Shen* has immune-enhancing effects. It increases the function of the reticuloendothelial system and increases the total count of IgM.¹¹
- **Cardiovascular:** Administration of *Ren Shen* has a positive inotropic effect on the hearts of dogs, rabbits, cats and other animals. It increases the contractility of the heart, slightly increases blood pressure, and constricts blood vessels. It has shown beneficial effects in treatment of shock, arrhythmia and burns. At larger doses, however, it has an opposite effect as it causes an inhibitory influence on the cardiovascular system leading to decreased contractility of the heart, dilation of blood

vessels, and a decreased heart rate.¹²

- **Hypoglycemic:** Administration of *Ren Shen* was effective in lowering blood glucose in dogs with hyperglycemia.¹³
- **Antihyperlipidemic:** The saponins in *Ren Shen* lower blood cholesterol levels and reduce the risk of atherosclerosis.¹⁴
- **Hepatoprotective:** *Ren Shen* has a protective effect in treating various liver disorders. The extract of the herb effectively lowered the elevated levels of liver enzymes in mice induced by acute or chronic consumption of ethanol.¹⁵
- **Reproductive:** *Ren Shen* has a stimulating effect on the pituitary gland to increase the secretion of gonadotropin. In young mice, it speeds up the development of the reproductive organs. In adult mice, it stimulates the production of sperm in males, and lengthens the estrus period in females. However, it has not demonstrated any direct effect on the sex hormones.¹⁶

CLINICAL STUDIES AND RESEARCH

- **Shock:** Ten patients in shock due to profuse bleeding were treated with a decoction of 30 grams of *Ren Shen* along with electro-acupuncture on *Baihui* (GV 20) with satisfactory results. All patients were treated in remote areas of China where hospitalization was not available.¹⁷
- **Cardiac ischemia:** Intravenous or intramuscular injection of an herbal preparation containing *Ren Shen*, *Mai Men Dong* (Radix Ophiopogonis) and *Wu Wei Zi* (Fructus Schisandrae Chinensis) was beneficial in treatment of cardiac ischemia and cardiogenic shock.¹⁸
- **Leukopenia:** *Ren Shen* demonstrated immune-enhancing effects in treatment of 52 cancer patients with leukopenia caused by chemotherapy. Administration of *Ren Shen* enabled the patients to complete the entire course of chemotherapy treatment.¹⁹ According to another report, 38 patients with leukopenia were treated with 50 to 100 ml of a *Ren Shen* preparation given two to three times daily, with an 87% rate of effectiveness.²⁰
- **Sexual dysfunction:** In one study, 27 patients with impotence were treated with 500 mg/day of *Ren Shen* extract with marked success. Out of 27 patients, 15 regained normal function, 9 had moderate improvement, and 3 showed no response. In another study, 24 patients with low sperm count were treated with a preparation of *Ren Shen* with an increase in sperm count noted in 70% of the patients, and an increase in sperm motility in 67% of the patients.²¹
- **Diabetes mellitus:** Administration of *Ren Shen* liquid extract at the dosage of 0.5 ml twice daily was beneficial for patients with diabetes mellitus. The average reduction of blood glucose was 40 to 50 mg/dL, and the therapeutic effect lasted for up to 2 weeks after discontinuation of herbal treatment. Patients with mild diabetes showed a

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marked reduction of blood glucose levels and an improvement in overall symptoms. Patients with moderate diabetes showed no significant change of blood glucose, but did show some improvement in signs and symptoms.²²

- **Addison's disease:** In one study, 18 patients with Addison's disease were treated with a 20% ginseng preparation (made from leaves and branches) for an average of 121 days with good results. The initial dosage was 20 to 30 ml, taken three times daily, with a gradual increase to a daily dose of 150 to 300 ml. The study reported weight gain, increased blood pressure, increased grip strength, increased blood glucose levels, increased sodium content in the plasma, and increased levels of ACTH.²³
- **Spleen deficiency:** Ten children diagnosed with Spleen deficiency according to traditional Chinese medicine were treated with decoction of *Ren Shen* twice daily for 7 to 14 days per course of treatment. Children under 3 years of age received 3 grams of *Ren Shen* cooked in 30 ml of water, and children over three years of age received 5 grams in 60 ml of water. After the herbal treatment, the children showed an increase in appetite, cessation of spontaneous perspiration, increase in body weight, and improvement in facial complexion.²⁴
- **Hypertension and atherosclerosis:** Oral administration of 20 drops of a 20% *Ren Shen* preparation twice daily was beneficial in patients with hypertension, atherosclerosis, and chest pain. After herbal treatment, the patients reported overall symptomatic improvement, such as decreased chest pain, little or no headache, normal sleep, and relief of dyspnea. The improvement lasted for 6 to 9 months after discontinuation of the herbs.²⁵
- **Hypercholesterolemia:** *Ren Shen* has a moderate effect in lowering blood cholesterol levels, but a significant effect in lowering triglycerides. Administration of *Ren Shen* in a group of elderly patients showed improvement in memory in 80%, improvement in sleep in 54%, relief of depression in 40%, and relief of headache in 75%.²⁶
- **Coronary artery disease:** In one study, 31 patients with coronary artery disease were treated with intravenous infusion of *Ren Shen* once or twice daily with relief of pain in 93.54%, and improvement based on ECG evaluation in 76.66% of the patients. The *Ren Shen* injection was prepared by mixing 6 to 10 ml of herbal solution with 40 ml of D10W.²⁷
- **Acute hepatitis:** Oral administration of *Ren Shen* was found to have beneficial effects in treatment of infectious hepatitis by reducing the duration of icteric jaundice and facilitating the recovery of liver functions.²⁸

HERB-DRUG INTERACTION

- **Antidepressants:** It has been suggested, but not been documented, that induction of mania may occur in depressed

patients who mix antidepressants and *Ren Shen*. In rare cases, the concurrent use of *Ren Shen* and phenelzine has led to manic-like symptoms.^{29,30} [Note: Examples of similar antidepressants are as follows: monoamine oxidase inhibitors (MAOI) such as phenelzine (Nardil), tranylcypromine (Parnate), and isocarboxazid (Marplan).]

- **Ethanol:** In an *in vitro* study, an herbal preparation of *Ren Shen*, *Yuan Zhi* (Radix Polygalae), *Shi Chang Pu* (Rhizoma Acori) and *Fu Ling* (Poria) was found to reduce the ethanol-induced impairment of memory registration. It also ameliorated scopolamine-induced memory registration deficit. These results suggest that this herbal preparation ameliorates the impairment effect of ethanol on learning and memory processes.³¹
- **Antidiabetics:** The use of *Ren Shen* has been associated with reduction of fasting blood glucose levels. Therefore, it has been suggested that hypoglycemia may occur when *Ren Shen* is combined with drugs for treatment of diabetes mellitus.³² [Note: Examples of antidiabetic drugs include insulin, tolbutamide (Orinase), glipizide (Glucotrol), and glyburide (DiaBeta/Micronase).]

TOXICOLOGY

In animal toxicology studies, no significant side effects were reported in mice who received continuous oral ingestion of *Ren Shen* for one month at dosages of 100, 250 and 500 mg/kg. The LD₅₀ for oral ingestion of the herb in mice is 5 g/kg. The LD₅₀ for subcutaneous injection of the herbal extract in mice is 16.5 ml/kg.³³

In human toxicology reports, oral ingestion of 100 ml of a 3% tincture may lead to mild discomfort. Oral ingestion of 200 ml of a 3% tincture may lead to rashes, itching, headaches, dizziness, increase in body temperature, and bleeding.³⁴

SUPPLEMENT

- **人參葉/人參叶 *Ren Shen Ye* (Folium Ginseng),** first cited in the *Ben Cao Cong Xin* (Thoroughly Revised Materia Medica) by Wu Yi-Luo in 1751, is derived from the leaf of the same plant as *Ren Shen*. *Ren Shen Ye* is bitter, slightly sweet and cold. It relieves summer-heat, generates body fluids and clears deficiency heat. Suitable conditions for use of *Ren Shen Ye* include thirst, febrile disorders with body fluid loss, Stomach yin deficiency, and toothache due to deficiency fire. Recommended dosage of *Ren Shen Ye* is 5 to 10 grams.

According to the *Ben Cao Gang Mu* (Materia Medica) by Li Shi-Zhen in 1578, the leaf has no function and is extremely bitter and cold, and can damage qi and blood. However, according to *Ben Cao Shi Yi* (Omissions from the [Classic of the] Materia Medica) by Chen Cang-Qi in 741 A.D., the leaf can tonify the body, generate body flu-

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ids, clear summer-heat, clear deficiency heat, benefit the head and extremities and help patients regain sobriety after alcohol intake. Modern research has shown that the stem, leaves, flower and fruit of this plant all contain higher percentages of ginsenosides than the root. The stem has been shown to have similar functions to those of the root and ginsenoside has been used clinically to treat coronary heart disorders, high cholesterol, diabetes and tumors.

- 三七葉/三七叶 *San Qi Ye* (Folium Notoginseng) has tastes and actions similar to those of *Ren Shen Ye*, and is commonly used as a substitute.

AUTHORS' COMMENTS

According to Dr. Liu Zhi-Tong, in cases of difficult labor, *Ren Shen* greatly tonifies the *yuan* (source) qi, replenishes fluids, and dilates the cervix to facilitate delivery.

Wild-crafted *Ren Shen* has the strongest function and is reserved for the most severe cases of qi deficiency or collapse. Wild-crafted *Ren Shen* is generally not used because it is extremely expensive. Cultivated *Ren Shen* is also potent, and is the most common form of the herb sold commercially. In most cases, cultivated *Ren Shen* is very effective and affordable. The root of cultivated *Ren Shen* should be at least three years old before harvesting, to obtain therapeutic potency.

Different types of ginseng have slightly different functions:

- *Sheng Sai Shen*, sun-dried ginseng, is more suitable for qi and yin deficiencies.
- *Hong Shen*, red or steamed ginseng, is warmer and is mostly used for qi and yang deficiencies.
- The “tails” of *Ren Shen* are believed to have a weaker tonic effect.
- The “head” of *Ren Shen* is believed to have some effect to induce vomiting.

[Note: It has been found that the “head” and the “body” of *Ren Shen* have essentially the same constituents. Furthermore, in a study of 1500 volunteers who ingested various amounts of ginseng “head,” there were no reports of nausea and vomiting. Therefore, it is now accepted that ginseng “head” does not cause nausea and vomiting.³⁵]

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