Ling Zhi (Ganoderma)

**Pinyin Name:** Ling Zhi  
**Literal Name:** "spiritual mushroom"  
**Alternate Chinese Names:** Mu Ling Zhi, Zi Ling Zhi  
**Original Source:** *Shen Nong Ben Cao Jing* (Divine Husbandman's Classic of the Materia Medica) in the second century  
**English Name:** ganoderma, lucid ganoderma, reishi mushroom  
**Botanical Name:** Ganoderma lucidum (Leyss. Ex. Fr.) Karst. (*Chi Zhi*); Ganoderma japonicum (Fr.) Lloyd. (*Zi Zhi*)  
**Pharmaceutical Name:** Ganoderma

**Properties:** sweet, neutral  
**Channels Entered:** Heart, Liver, Lung

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### CHINESE THERAPEUTIC ACTIONS

1. **Nourishes the Heart and Calms the Shen (Spirit)**  
   **Restless shen:** Ling Zhi (Ganoderma) nourishes the Heart and strengthens qi and blood to treat Heart and Spleen deficiencies that manifest in insomnia, forgetfulness, fatigue, listlessness and poor appetite.
   - Insomnia: combine Ling Zhi with Dang Gui (Radix Angelicae Sinensis), Bai Shao (Radix Paeoniae Alba), Suan Zao Ren (Semen Zizyphi Spinosa) and Long Yan Rou (Arillus Longan).

2. **Stops Coughing and Arrests Wheezing**  
   **Cough and asthma:** Ling Zhi dispels phlegm, stops cough and arrests wheezing. Symptoms include coughing caused by cold, coughing with profuse sputum, accelerated respiration, chronic asthma and difficulty sleeping due to dyspnea.
   - Asthma and coughing: add it to Dang Shen (Radix Codonopsis), Wu Wei Zi (Fructus Schisandrae Chinensis), Gan Jiang (Rhizoma Zingiberis) and Ban Xia (Rhizoma Pinelliae).

3. **Tonifies Qi and Nourishes Blood**  
   **Qi and blood deficiencies, weak digestion:** Ling Zhi has traditionally been used to strengthen the body and tonify qi. It treats qi and blood deficiencies with weak digestion, poor appetite, listlessness, loose stools, fatigue, dizziness and soreness of the lower back.
   - Qi and blood deficiencies: use Ling Zhi alone.

### CHEMICAL COMPOSITION

Ganoderic acid, lucidenic acid, ganoderma acid, ganodosterone oleic acid.

### PHARMACOLOGICAL EFFECTS

- **Antineoplastic:** Ling Zhi has been shown to have antineoplastic activity due to its immune-enhancing properties. The specific effects of Ling Zhi include an increase in monocytes, macrophages and T-lymphocytes. In addition, there is also an increased production of cytokine, interleukin, tumor-necrosis-factor and interferon.
- **Cardiovascular:** Ling Zhi has been shown to increase cardiac contractility, lower blood pressure, and increase resistance to hypoxia in the cardiac muscles.
- **Antibiotic:** Ling Zhi has a broad spectrum of antibacterial activity, and inhibits the growth of *E. coli*, *B. dysenteriae*, *Pseudomonas* spp., pneumococci, streptococci (type A), staphylococci, and others.
- **Others:** Ling Zhi exerts hepatoprotective, antidiabetic, antitussive, expectorant, sedative, analgesic, and antiasthmatic effects.

### CLINICAL STUDIES AND RESEARCH

- **Neurasthenia:** Administration of Ling Zhi (3 grams three times daily for 10 to 60 days) showed 83.5 to 86.3% effectiveness in treating 225 patients with neurasthenia. The therapeutic effects of Ling Zhi include sedation, hypnosis, regulation of the nervous system, and enhancement of the immune system.
- **Hyperlipidemia:** In one study, 120 patients with high cholesterol levels were treated with 4 to 6 ml of Ling Zhi syrup two to three times daily for 1 to 3 months with 86% rate of effectiveness.
Leukopenia: Administration of *Ganoderma japonicum* was associated with a rise in leukocyte counts in 72.57% of 175 patients with leukopenia.6

**Chronic hepatic diseases:** In one study, 367 patients with chronic hepatic diseases, such as chronic hepatitis, and chronic infectious hepatitis, and liver cirrhosis, were treated with *Ling Zhi* extract as tea, with good results. Most patients reported subjective symptomatic improvement. In addition, the study reported a reduction in liver enzymes in 67.7% of patients.7

**Dermatological disorders:** Concurrent administration of *Ling Zhi* via intramuscular injection and oral tablets was 79.1% effective in treating 173 patients with scleroderma, 95% effective in 40 patients with dermatomyositis, 90% effective in 84 patients with lupus erythematosus, and 78.88% effective in 232 patients with alopecia areata.8

**Frostbite:** According to one report, 428 patients with frostbite were treated with *Ling Zhi* topically with a 89.5% rate of effectiveness after 3 or 4 days.9

**AUTHORS’ COMMENTS**

Because wild-crafted *Ling Zhi* is rare and difficult to collect, the cultivated mushroom is generally used commercially. *Ling Zhi* has recently been used to treat angina pectoris, hepatitis, high cholesterol, hypertension and leukopenia.

References
1. *Xian Dai Zhong Yao Yao Li Xue* (Contemporary Pharmacology of Chinese Herbs), 1997; 1079
4. *Xin Yi Xue* (New Medicine), 1976; 3:140