Section 4

补阴剂 — Yin-Tonifying Formulas

Líù Wèi Dì Huáng Wán (Six-Ingredient Pill with Rehmannia) 六味地黄丸 六味地黄丸

Pinyin Name: Liu Wei Di Huang Wan

Literal Name: Six-Ingredient Pill with Rehmannia

Alternate Names: Liu Wei Ti Huang Wan, Di Huang Wan, Six-Flavour Rehmannia Pill, Rehmannia Bolus with Six Herbs,

Rehmannia Six Pill, Rehmannia Six Formula

Original Source: Xiao Er Yao Zheng Zhi Jue (Craft of Medicinal Treatment for Childhood Disease Patterns) by Qian Yi

in 1119

COMPOSITION

Shu Di Huang (Radix Rehmanniae Praeparata)	240g [24g]
Shan Zhu Yu (Fructus Corni)	120g [12g]
Shan Yao (Rhizoma Dioscoreae)	120g [12g]
Ze Xie (Rhizoma Alismatis)	90g [9g]
Mu Dan Pi (Cortex Moutan)	90g [9g]
Fu Ling (Poria)	90g [9g]

DOSAGE / PREPARATION / ADMINISTRATION

Grind the ingredients into powder and form into small pills with honey. The pills should resemble the size of *Wu Tong Zi* (Semen Firmianae), a small seed approximately 5 mm in diameter. Take the pills on an empty stomach three times daily with warm water. Today, it is usually prepared in pill form by mixing the powdered herbs with honey. Each pill should weigh approximately 15g. Take 1 pill three times daily on an empty stomach with warm, boiled water. This formula may also be prepared and administered in decoction form using the doses suggested in brackets.

CHINESE THERAPEUTIC ACTIONS

Nourishes Liver and Kidney yin

CLINICAL MANIFESTATIONS

 Liver and Kidney yin deficiencies: dizziness, vertigo, tinnitus, deafness, blurred vision, soreness and weakness of the lower back and knees, seminal emissions, night sweats, and delayed closing or unclosed fontanel in infants. 2. Yin-deficient heat: steaming bones sensations, heat sensations in the palm and soles, tidal fever, thirst, toothache, a dry mouth and throat, a red tongue body with a scanty tongue coating, and a fine, rapid pulse. Can also be used for *xiao ke* (wasting and thirsting) syndrome.

CLINICAL APPLICATIONS

Diabetes mellitus, menopause, coronary heart disease, hypertension, hyperthyroidism, hypothyroidism, thyroid adenoma, bronchial asthma, atrophic gastritis, esophagitis, chronic nephritis, nephrotic syndrome, chronic renal failure, periodic paralysis, miscarriage, chronic hepatitis, stroke sequelae, chronic prostatitis, male or female infertility, impotence, frequent urination, galacturia, side effects of chemotherapy, heel pain, lumbago, retarded growth in children, optic neuritis, and central retinitis.

EXPLANATION

The Kidney dominates the bone and produces marrow, and because the brain is considered "the sea of the marrow," Kidney deficiency can affect the brain, causing dizziness

Liu Wei Di Huang Wan (Six-Ingredient Pill with Rehmann	Rehmannia	with	Pill	ix-Ingredient	Wan	Huana	Wei Di	Liu
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Diagnosis	Signs and Symptoms	Treatment	Herbs
Liver and Kidney yin deficiencies	 Soreness and weakness of the lower back and knees, dizziness, vertigo, tinnitus, deafness, and blurred vision: Liver and Kidney yin deficiencies Tidal fever, heat sensations in the palms and soles, thirst, toothache, a dry mouth and throat: yin-deficient fire rising Red tongue body with a scanty tongue coating and a fine, rapid pulse: yin-deficient fire 	Nourishes Liver and Kidney yin	 Shu Di Huang (Radix Rehmanniae Praeparata) tonifies Kidney yin and jing (essence). Shan Zhu Yu (Fructus Corni) nourishes the Liver and Kidney. Shan Yao (Rhizoma Dioscoreae) tonifies the Spleen and Kidney. Ze Xie (Rhizoma Alismatis) sedates the Kidney and causes turbidity to descend. Mu Dan Pi (Cortex Moutan) sedates deficiency fire of the Liver. Fu Ling (Poria) strengthens the Spleen and resolves dampness.

and vertigo. Weakness of the knees and lower back and loose teeth are due to Kidney yin deficiency, since the Kidney resides in the lower back and controls the bones. The ear is the sensory organ that belongs to the Kidney, and tinnitus and deafness may occur as a result of Kidney deficiency. Blurred vision is mainly caused by Liver deficiency, since the Liver opens into the eyes. The Kidney stores jing (essence), and when the Kidney becomes deficient, jing leaks out of the body causing seminal emissions. Deficiency fire resulting from yin deficiency causes symptoms such as tidal fever, night sweating, heat sensations in the palm and soles, thirst, toothache, and a dry mouth and throat. Delayed closing of the fontanel or unclosed fontanel in infants suggests a possible delay in development, which signifies prenatal jing deficiency and inadequate generation of marrow and bones. A red tongue body with a scanty coating suggests yin deficiency with fire. A fine, rapid pulse is typical of deficiency fire.

Liu Wei Di Huang Wan (Six-Ingredient Pill with Rehmannia) consists of three tonic and three sedative herbs. Shu Di Huang (Radix Rehmanniae Praeparata), the chief herb, tonifies Kidney yin and jing (essence), and fills the marrow. Shan Zhu Yu (Fructus Corni) nourishes the Liver and Kidney and astringes jing. Shan Yao (Rhizoma Dioscoreae) tonifies the Spleen and Kidney and consolidates jing. Together, these three tonic herbs address deficiencies in the Kidney, Liver, and Spleen. Ze Xie (Rhizoma Alismatis) sedates the Kidney, causes turbidity to descend, and controls the stagnating effect of Shu Di Huang (Radix Rehmanniae Praeparata). Mu Dan Pi (Cortex Moutan) sedates deficiency fire of the Liver, as well as balances the astringent property of Shan Zhu Yu (Fructus Corni). Fu Ling (Poria) strengthens the Spleen, resolves dampness, and balances Shan Yao (Rhizoma Dioscoreae).

One significant characteristic of this formula is that it sedates and tonifies at the same time. The purpose of sedation is to eradicate the turbidity and to prevent the stagnant properties of the tonic herbs from harming the body. The overall purpose of this formula, however, is to tonify, not to sedate. Therefore, the dose of the sedating herbs is less than that of the tonic herbs.

MODIFICATIONS

- With yin-deficient fire, add *Zhi Mu* (Rhizoma Anemarrhenae) and *Huang Bo* (Cortex Phellodendri Chinensis).
- With Spleen qi deficiency with qi stagnation, add dry-fried Bai Zhu (Rhizoma Atractylodis Macrocephalae), Sha Ren (Fructus Amomi), and Chen Pi (Pericarpium Citri Reticulatae).
- For *xiao ke* (wasting and thirsting) syndrome, add *Tian Hua Fen* (Radix Trichosanthis).
- For hypertension, add *Sang Ye* (Folium Mori), *Di Long* (Pheretima), and *Niu Xi* (Radix Achyranthis Bidentatae).
- For chronic nephritis, add *Yi Mu Cao* (Herba Leonuri), *Tian Hua Fen* (Radix Trichosanthis), and *Dan Zhu Ye* (Herba Lophatheri).
- For irregular menstruation, add Xiang Fu (Rhizoma Cyperi) and Ai Ye (Folium Artemisiae Argyi).
- With insomnia or neurasthenia, add *Suan Zao Ren* (Semen Ziziphi Spinosae) and *Bai Zi Ren* (Semen Platycladi).
- With weakness and pain of the lower back and knees, add *Niu Xi* (Radix Achyranthis Bidentatae) and *Du Zhong* (Cortex Eucommiae).
- With nocturnal emissions, combine with *Jin Suo Gu Jing Wan* (Metal Lock Pill to Stabilize the Essence).
- For tuberculosis of the kidney, add Bai Ji (Rhizoma Bletillae) and San Qi (Radix et Rhizoma Notoginseng).

CAUTIONS / CONTRAINDICATIONS

- *Liu Wei Di Huang Wan* should be used with caution in humid areas where diseases are predominantly caused by dampness.
- Because this formula is greasy in nature, patients who have Spleen and Stomach deficiencies should use it with caution, as it may cause loose stools.
- This formula is contraindicated in patients of yang deficiency, exterior conditions, high fever, or alternating chills and fever.

PHARMACOLOGICAL EFFECTS

- 1. Reproductive: In laboratory experiments, the use of Liu Wei Di Huang Wan was associated with an increase in the weight of the sex organs, such as the ovaries, uterus, and testicles. There was also an increase in sperm counts in the male subjects. In addition, after ingestion of the herbs for 10 days, there was an increase in sexual activity by up to 40%.1
- 2. Metabolic: In laboratory experiments, the use of Liu Wei Di Huang Wan for 6 weeks lowered plasma cholesterol and triglycerides significantly in rats with elevated levels. In addition, there was an increase of HDL. However, the formula had little effect on plasma cholesterol and triglyceride levels in healthy rats.² It was noted that the three herbs with "sedating effects," namely Ze Xie (Rhizoma Alismatis), Mu Dan Pi (Cortex Moutan), and Fu Ling (Poria), were effective in reducing the cholesterol levels. On the other hand, the three herbs with "tonic effects," namely Shu Di Huang (Radix Rehmanniae Praeparata), Shan Zhu Yu (Fructus Corni), and Shan Yao (Rhizoma Dioscoreae), were not effective in reducing the cholesterol levels.³
- 3. Hypoglycemic: In rats with diabetes, the use of *Liu Wei Di Huang Wan* lowered plasma glucose levels.⁴ In follow-up studies, it was determined that the formula was effective in reducing plasma glucose levels even if the pancreas was surgically removed. Therefore, it was concluded that the hypoglycemic effect of *Liu Wei Di Huang Wan* was not dependant on pancreas function.⁵
- 4. Immunostimulant: Use of Liu Wei Di Huang Wan was associated with an increase in white blood cell count and activity.⁶ Moreover, use of this formula reversed the immune suppression induced by dexamethasone.⁷
- 5. Adaptogenic: Administration of *Liu Wei Di Huang Wan* improved the physical performances of mice. After ingesting the herbs orally for 2 weeks, the mice were able to swim for 14.9 minutes, compared to 11.5 minutes for the placebo group that did not receive herbs.⁸
- **6. Hepatoprotective and nephroprotective**: Administration of *Liu Wei Di Huang Wan* had protective effects on both the liver and kidneys. It has a hepatoprotective effect

- against damages induced by such substances as carbon tetrachloride, thioacetamide, and prednisolone.⁹ It also increased blood perfusion to the kidneys, improved the kidney function, and reduced protein and uric acid in the urine.¹⁰
- 7. **Antiarrhythmic**: In laboratory experiments in rats, an extract of *Liu Wei Di Huang Wan* was found to be effective in treating arrhythmia induced by chloroform, aconitine, ouabain, and adrenalin.¹¹
- 8. Hypotensive: In anesthetized rats, intraduodenal administration of *Liu Wei Di Huang Wan* in decoction was effective in reducing blood pressure within 15 minutes. The mechanism of action was attributed to dilation of the blood vessels and reduction of peripheral resistance. The herbs did not affect the heart rate nor the contractile force of the heart.¹²

CLINICAL STUDIES AND RESEARCH

1. Diabetes mellitus: Liu Wei Di Huang Wan is one of the most effective formulas for treating diabetes mellitus. One study reported 93.55% effectiveness using modified Liu Wei Di Huang Wan to treat 62 patients with non-insulin dependant diabetes. The herbal treatment was based on Liu Wei Di Huang Wan plus Ge Gen (Radix Puerariae Lobatae) and Li Zhi He (Semen Litchi) as the base formula. Modifications varied depending on the presentation of diabetes and its complications, and were made as follows: for hunger and increased food intake, add Shi Gao (Gypsum Fibrosum) and Yu Zhu (Rhizoma Polygonati Odorati); for thirst and increased water intake, add Sha Shen (Radix Glehniae seu Adenophorae) and Tian Hua Fen (Radix Trichosanthis); for shortness of breath and spontaneous sweating, add Huang Qi (Radix Astragali) and Tai Zi Shen (Radix Pseudostellariae); for clear urine with increased volume, add Sang Piao Xiao (Ootheca Mantidis), Ba Ji Tian (Radix Morindae Officinalis), and Rou Gui (Cortex Cinnamomi); cloudy urine and night sweats, add Zhi Mu (Rhizoma Anemarrhenae) and Huang Bo (Cortex Phellodendri Chinensis); for dizziness and swelling of the head, add Gou Teng (Ramulus Uncariae cum Uncis), Bai Shao (Radix Paeoniae Alba), and Niu Xi (Radix Achyranthis Bidentatae); for chest oppression and palpitations, add Dan Shen (Radix et Rhizoma Salviae Miltiorrhizae), Yu Jin (Radix Curcumae), and Shi Chang Pu (Rhizoma Acori Tatarinowii); for obesity, add Pei Lan (Herba Eupatorii) and He Ye (Folium Nelumbinis); for blurred vision, add Gu Jing Cao (Flos Eriocauli) and Qing Xiang Zi (Semen Celosiae); and for severe blood stagnation, add Tao Ren (Semen Persicae), Hong Hua (Flos Carthami), and Shui Zhi (Hirudo). The patients were given the herbs for 30 days per course of treatment. Of 62 patients, the study reported complete recovery in 17 patients, improvement

in 41 patients, and no benefit in 4 patients.¹³ In another study, 20 patients with adult-onset diabetes were treated with *Liu Wei Di Huang Wan* for 3-6 months with stabilization in 12 patients and improvement in 8 patients.¹⁴ In another study, modified *Liu Wei Di Huang Wan* was used for 20 days to treat 53 patients with diabetes, with marked improvement in 46 patients, improvement in 5 patients, and no benefit in 2 patients.¹⁵ In addition, the use of herbs stabilized blood glucose in conjunction with insulin injection.¹⁶ Lastly, one study reported that use of modified *Liu Wei Di Huang Wan* was associated with 89.2% effectiveness in 65 patients with non-insulin dependant diabetes mellitus.¹⁷

- 2. Menopause: In one clinical study, 23 patients with menopausal symptoms were treated with *Liu Wei Di Huang Wan* and experienced marked improvement in 9 patients (39.1%), and moderate improvement in 14 patients (60.9%). The treatment protocol was to administer this formula in pills, 9 grams twice daily, in the morning and at night, for 3 months. Clinical improvements included relief of hot flashes, tidal fever, perspiration, palpitations, anxiety, restlessness, insomnia, forgetfulness, and others. In addition, after taking the herbs continuously for one year, it was noted that there was a decrease in FSH and an increase of estradiol. The mechanism of action was attributed to the formula's stimulating effect on the endocrine system.¹⁸
- 3. Coronary heart disease: Modified Liu Wei Di Huang Wan was used to treat patients with coronary heart disease characterized by Kidney deficiency with symptoms such as soreness of the lower back, weakness of the knees, and tinnitus. The formula used included the addition of Bai Shao (Radix Paeoniae Alba), He Shou Wu (Radix Polygoni Multiflori), and others. Out of 48 patients, the study reported symptomatic improvement in 24 patients, ECG improvement in 12 patients, and reduction of plasma cholesterol in 12 patients.¹⁹
- 4. Hypertension: Administration of 5-10 packs of *Liu Wei Di Huang Wan* effectively reduced blood pressure in all 31 patients with primary hypertension. In follow-up visits one year later, 23 patients had normal blood pressure, and 8 still had hypertension. ²⁰ In one patient report, a patient with hypertension was treated with modified *Liu Wei Di Huang Wan* for 20 doses with good results. Blood pressure reduced from 160-180/110-120 mmHg to 140/90 mmHg. The patient continued to take the herbs for 6 months. The blood pressure did not elevate in any follow-up appointments up to 3 years later. ²¹
- 5. Hyperthyroidism: Modified Liu Wei Di Huang Wan was used to treat patients with hyperthyroidism. Out of 31 patients, 28 had enlargement of the thyroid gland, 13 had protruding of the eyes, 29 had significant weight loss, and 28 had increased heart rate. After 15-20 doses

- of herbal treatment, the study reported symptomatic improvement in most patients.²²
- **6.** Thyroid adenoma: In one study, 48 patients with a history of thyroid adenoma from 6 months to 8 years were treated with modified Liu Wei Di Huang Wan with good results. The base formula included Shu Di Huang (Radix Rehmanniae Praeparata) 30g, Xuan Shen (Radix Scrophulariae) 30g, Mu Li (Concha Ostreae) 30g pre-decocted, Shan Yao (Rhizoma Dioscoreae) 15g, Fu Ling (Poria) 15g, Shan Zhu Yu (Fructus Corni) 15g, Xia Ku Cao (Spica Prunellae) 15g, Mu Dan Pi (Cortex Moutan) 12g, Ze Xie (Rhizoma Alismatis) 12g, Zhe Bei Mu (Bulbus Fritillariae Thunbergii) 12g, and Jiang Can (Bombyx Batryticatus) 12g. Modifications included the addition of Bie Jia (Carapax Trionycis) for yin-deficient heat, Tai Zi Shen (Radix Pseudostellariae) for qi deficiency, Chai Hu (Radix Bupleuri) for qi stagnation, and He Shou Wu (Radix Polygoni Multiflori) for blood deficiency. The treatment protocol was to administer the herbs in decoction one time daily for 1-2 months. Out of 48 patients, the study reported recovery based on relief of symptoms in 26 patients, improvement in 21 patients, and no benefit in 1 patient. The overall effectiveness rate was 98%.23
- 7. Bronchial asthma: In one report, 64 patients with bronchial asthma characterized by Kidney deficiency were treated with *Liu Wei Di Huang Wan* with good results.²⁴
- **8. Atrophic gastritis:** Patients with a history of chronic atrophic gastritis for 6 months to 2 years were treated with modified *Liu Wei Di Huang Wan* for 6 months to 1 year with a 94% effectiveness rate. Out of 50 patients, the study reported recovery in 35 patients, moderate improvement in 10 patients, slight improvement in 2 patients, and no benefit in 3 patients.²⁵
- 9. Esophagitis: Administration of large doses of *Liu Wei Di Huang Wan* in 98 patients with chronic esophagitis was associated with marked improvement in 86 patients and no benefit in 12 patients. The treatment protocol was to take 30 pills three times daily for 30 days per course of treatment, for 3-4 courses total.²⁶
- 10.Chronic nephritis: Use of *Liu Wei Di Huang Wan* plus *Yu Mi Xu* (Stigma Maydis) was reported in one study to be effective in treating patients with chronic nephritis with hypertension and proteinuria.²⁷ The study found that administration of *Liu Wei Di Huang Wan* plus *Yu Mi Xu* (Stigma Maydis) in decoction daily for 3-24 months in 77 patients with chronic nephritis was associated with complete recovery in 22 patients, near-complete recovery in 36 patients, partial recovery in 13 patients, and no benefit in 6 patients. The study noted that most patients with chronic nephritis had underlying Kidney yin deficiency and damp-heat.²⁸

- **11.Nephrotic syndrome:** Six patients with edema and proteinuria due to nephrotic syndrome were treated with modified *Liu Wei Di Huang Wan* for 50 days with good results. The study reported that edema and proteinuria were resolved in all patients.²⁹
- 12.Chronic renal failure: In one study, 12 patients with chronic renal failure (8 with chronic nephritis, 2 with chronic glomerulonephritis, 1 with renal failure due to systemic lupus erythematosus, and 1 with renal failure due to atypical hemorrhagic fever) were treated with modified *Liu Wei Di Huang Wan* for 30-60 days with complete recovery in 8 patients, marked improvement in 3 patients, and slight improvement in 1 patient. A modification to the original formula used a higher dose of *Shan Zhu Yu* (Fructus Corni).³⁰
- **13.Periodic paralysis**: In one study, 58 patients (54 had hypokalemia) with periodic paralysis were effectively treated using *Liu Wei Di Huang Wan*. Of 58 patients, the study reported complete recovery in 46 patients, improvement in 10 patients, and no benefit in 2 patients. The treatment protocol was to administer the herbs in decoction daily for 15 days per course of treatment.³¹
- 14.Miscarriage: In one study, 55 women with history of miscarriage were treated with modified Liu Wei Di Huang Wan with great success. The formula included Shu Di Huang (Radix Rehmanniae Praeparata) 12g, Shan Yao (Rhizoma Dioscoreae) 15g, Mu Dan Pi (Cortex Moutan) 10g, Shan Zhu Yu (Fructus Corni) 10g, Ze Xie (Rhizoma Alismatis) 10g, and Fu Ling (Poria) 10g. Modifications included the addition of Xian He Cao (Herba Agrimoniae) 15g, E Jiao (Colla Corii Asini) 10g, and charred Ai Ye (Folium Artemisiae Argyi) 30g for bleeding; and Du Zhong (Cortex Eucommiae) 10g, Sang Ji Sheng (Herba Taxilli) 10g, and Xu Duan (Radix Dipsaci) 15g for soreness of the low back. The treatment was to administer the herbs in decoction one time daily for 7 days per course of treatment. The study reported full-term delivery in 53 out of 55 patients (96.4% success rate).32
- 15. Chronic hepatitis: Use of modified Liu Wei Di Huang Wan in 65 patients with chronic hepatitis was associated with significant effect in 12 patients, improvement in 49 patients, and no benefit in 4 patients. The treatment protocol was to use Liu Wei Di Huang Wan plus Dang Gui (Radix Angelicae Sinensis), Bai Shao (Radix Paeoniae Alba), and Chuan Lian Zi (Fructus Toosendan) as the base formula. For hypochondriac pain due to Liver qi stagnation, Yan Hu Suo (Rhizoma Corydalis), Yu Jin (Radix Curcumae), and Chai Hu (Radix Bupleuri) were added. For poor appetite, Ji Nei Jin (Endothelium Corneum Gigeriae Galli), Shan Zha (Fructus Crataegi), and Shen Qu (Massa Fermentata) were added. For a bitter taste in the mouth with a yellow tongue coating, Zhi Zi (Fructus

- Gardeniae) and *Huang Qin* (Radix Scutellariae) were added. For a red tongue body with a dry mouth, *Xuan Shen* (Radix Scrophulariae) and *Shi Hu* (Caulis Dendrobii) were added. For soreness and weakness of the lower back and knees, *Gou Qi Zi* (Fructus Lycii) and *Du Zhong* (Cortex Eucommiae) were added. For enlargement of the Liver and/or Spleen, *Tao Ren* (Semen Persicae), *Hong Hua* (Flos Carthami), and *Bie Jia* (Carapax Trionycis) were added. Lastly, for accumulation of water in the abdomen, *Shu Di Huang* (Radix Rehmanniae Praeparata) was removed, and *Bai Mao Gen* (Rhizoma Imperatae) and *Da Fu Pi* (Pericarpium Arecae) were added.³³
- 16.Stroke sequelae: Modified Liu Wei Di Huang Wan showed success in treating post-stroke patients in one study. The treatment protocol used this formula as the base, and added Dang Gui Wei (Extremitas Radix Angelicae Sinensis), Huang Qi (Radix Astragali), and Di Long (Pheretima) for qi deficiency and hemiplegia; Du Zhong (Cortex Eucommiae), Sang Ji Sheng (Herba Taxilli), and Mai Dong (Radix Ophiopogonis) for Liver and Kidney deficiencies; and Tian Ma (Rhizoma Gastrodiae), Gou Teng (Ramulus Uncariae cum Uncis), and Shi Chang Pu (Rhizoma Acori Tatarinowii) for wind-phlegm obstruction. Out of 20 patients, the study reported complete recovery in 6 patients, improvement in 12 patients, and no benefit in 2 patients. The overall rate of effectiveness was 90%.³⁴
- 17.Infertility: Modified *Liu Wei Di Huang Wan* was used to treat infertility in 42 patients (16 males and 26 females between the ages of 22 to 37). The duration of marriage of the patients ranged from 1-14 years. The treatment included the addition of *Rou Cong Rong* (Herba Cistanches), *Dan Shen* (Radix et Rhizoma Salviae Miltiorrhizae), *Tu Si Zi* (Semen Cuscutae), *Fen Bi Xie* (Rhizoma Dioscoreae Hypoglaucae), and others as deemed necessary. After 3-6 months of herbal treatment, the study reported marked results in 31 patients, moderate results in 9 patients, and no benefit in 2 patients. (Note: Criteria for evaluation was not given.)³⁵
- 18.Male infertility: One study reported 83.3% effectiveness using modified Liu Wei Di Huang Wan to treat 30 male patients with infertility. The herbal treatment included Liu Wei Di Huang Wan plus Dang Gui (Radix Angelicae Sinensis), Tu Si Zi (Semen Cuscutae), Gou Qi Zi (Fructus Lycii), and others as the base formula. Bie Jia (Carapax Trionycis), He Shou Wu (Radix Polygoni Multiflori), and a larger dose of Shu Di Huang (Radix Rehmanniae Praeparata) were used for severe Kidney deficiency; Xian Mao (Rhizoma Curculiginis), Yin Yang Huo (Herba Epimedii), and Ba Ji Tian (Radix Morindae Officinalis) were added for Kidney yang deficiency; Hai Ma (Hippocampus) and Lu Jiao (Cornu Cervi) were added for low sperm count; and Huang Bo (Cortex Phellodendri Chinensis), Tao Ren

(Semen Persicae), and *Ji Xue Teng* (Caulis Spatholobi) were added for semen that liquefied slowly. Other modifications were made if deemed necessary. The treatment protocol was to administer the herbs in decoction for 20 days per course of treatment, followed by 1 week of rest, and continuation of treatment if necessary. Of 30 patients, 19 had complete recovery (4 with 1 course of treatment, 6 after 2 courses, 9 after 3 courses), 6 had improvement, and 1 had no benefit. The overall rate of effectiveness was 83.3%.³⁶

- 19.Impotence: One study of 18 impotent patients reported complete recovery in 12 patients, improvement in 4 patients, and no benefit in 2 patients using modified Liu Wei Di Huang Wan. The treatment protocol was to administer the herbs twice daily with 6g of salt in warm water. The duration of treatment ranged from 15-37 packs of herbs. The herbal treatment contained Liu Wei Di Huang Wan plus Zhi Mu (Rhizoma Anemarrhenae), Rou Gui (Cortex Cinnamomi), Du Zhong (Cortex Eucommiae), and He Shou Wu (Radix Polygoni Multiflori) as the base formula. In addition, a small amount of Fu Zi (Radix Aconiti Lateralis Praeparata) was added for cold extremities with frequent urination at night; Qian Shi (Semen Euryales) and Jin Ying Zi (Fructus Rosae Laevigatae) were added for spermatorrhea or nocturnal emissions; Huang Qi (Radix Astragali) and Gou Qi Zi (Fructus Lycii) were added for severe dizziness; Long Gu (Os Draconis) and Mu Li (Concha Ostreae) were added for palpitations and insomnia; and Gui Ban (Plastrum Testudinis) and Huang Bo (Cortex Phellodendri Chinensis) were added for tidal fever and red cheeks.37
- 20.Chronic prostatitis: In one study, 153 patients with chronic non-bacterial prostatitis were treated with modified Liu Wei Di Huang Wan with good results. In addition to this base formula, modifications were made as follows: for Kidney qi and jing (essence) deficiencies, Rou Cong Rong (Herba Cistanches), Jin Ying Zi (Fructus Rosae Laevigatae), and Wu Wei Zi (Fructus Schisandrae Chinensis) were added; for burning sensations and pain during urination, Zhi Mu (Rhizoma Anemarrhenae), Che Qian Zi (Semen Plantaginis), and Bai Hua She She Cao (Herba Hedyotis) were added; for burning sensations and pain during urination with seminal emissions and premature ejaculation, Huang Bo (Cortex Phellodendri Chinensis) and Che Qian Zi (Semen Plantaginis) were added; and for low back pain with dark tongue body and purple spots, Wang Bu Liu Xing (Semen Vaccariae), Tao Ren (Semen Persicae), and Wu Gong (Scolopendra) were added. The patients were given the herbs for 20 days per course of treatment. Out of 153 patients, the study reported complete recovery in 141 patients, improvement in 10 patients, and

- no benefit in 2 patients.³⁸ In another study, administration of *Liu Wei Di Huang Wan* in 30 patients with chronic prostatitis was associated with complete recovery in 9 patients, marked improvement in 12 patients, slight improvement in 7 patients, and no benefit in 2 patients. The treatment protocol was to administer the herbs in decoction daily for 1 month per course of treatment, for 1-3 courses total. In addition, patients were instructed to sit in hot water for 15-20 minutes, twice daily, during the entire treatment period.³⁹
- 21.Frequent urination: One study reported effectiveness in treating 46 of 47 children with frequent urination using modified *Liu Wei Di Huang Wan* as decoction one time daily. The duration of treatment ranged from 3-6 days. 40
- 22.Galacturia: One study reported marked success using modified Liu Wei Di Huang Wan to treat 20 patients with galacturia. In addition to Liu Wei Di Huang Wan, Dang Shen (Radix Codonopsis), Huang Qi (Radix Astragali) and Bai Zhu (Rhizoma Atractylodis Macrocephalae) were added for Spleen deficiency; Du Zhong (Cortex Eucommiae) and Niu Xi (Radix Achyranthis Bidentatae) were added for soreness and pain of the lower back and knees; Zhi Mu (Rhizoma Anemarrhenae) and Huang Bo (Cortex Phellodendri Chinensis) for yin-deficient fire; Mo Han Lian (Herba Ecliptae) and Xiao Ji (Herba Cirsii) for hematuria; Huang Bo (Cortex Phellodendri Chinensis), Bian Xu (Herba Polygoni Avicularis), and Qu Mai (Herba Dianthi) for damp-heat in the lower jiao; Shi Chang Pu (Rhizoma Acori Tatarinowii) and Ci Shi (Magnetitum) for tinnitus, deafness, and vertigo; Tu Si Zi (Semen Cuscutae), Yin Yang Huo (Herba Epimedii), and Ba Ji Tian (Radix Morindae Officinalis) for Kidney yang deficiency; and the addition of Yi Zhi (Fructus Alpiniae Oxyphyllae) and Sang Piao Xiao (Ootheca Mantidis), and removal of Ze Xie (Rhizoma Alismatis), for frequent urination.41
- 23.Heel pain: One study reported 88.5% effectiveness using modified Liu Wei Di Huang Wan to treat 185 patients with heel pain. In addition to Liu Wei Di Huang Wan, modifications were made as follows: for Liver and Kidney deficiencies, Gou Qi Zi (Fructus Lycii) and Gu Sui Bu (Rhizoma Drynariae) were added; for qi and blood stagnation, Tao Ren (Semen Persicae), Dan Shen (Radix et Rhizoma Salviae Miltiorrhizae), and Di Long (Pheretima) were added; for obstruction of wind-cold, Zhi Chuan Wu (Radix Aconiti Praeparata) and Wei Ling Xian (Radix et Rhizoma Clematidis) were added; and for obstruction of damp-heat, Huang Bo (Cortex Phellodendri Chinensis), Cang Zhu (Rhizoma Atractylodis), and Zhi Zi (Fructus Gardeniae) were added. The duration of treatment ranged from 38 to 120 packs of herbs, with an average of 60 packs.42

HERB-DRUG INTERACTION

Chemotherapy-induced toxicities: One study reported marked improvement in patients treated with *Liu Wei Di Huang Wan* as an adjunct to chemotherapy. Clinical benefits included relief of nausea and vomiting, a decrease of hair loss and stomatitis, an improvement in appetite, and an increase in white blood cells, red blood cells, platelets, T-lymphocytes, and natural killer (NK) cells.⁴³

TOXICOLOGY

According to one study, no abnormalities were noted in pregnant mice that received *Liu Wei Di Huang Wan* continuously throughout the third trimester.⁴⁴

RELATED FORMULAS

Ěr Lóng Zuŏ Cí Wán

(Pill for Deafness that Is Kind to the Left [Kidney])

耳擊左慈丸 耳聋左慈丸

Pinyin Name: Er Long Zuo Ci Wan

Literal Name: Pill for Deafness that Is Kind to the Left

[Kidney]

Original Source: *Guang Wen Yi Lun* (Discussion of Widespread Warm Epidemics) by Dai Tian-Zhang in 1722

Shu Di Huang (Radix Rehmanniae Praeparata)	240g
Shan Zhu Yu (Fructus Corni)	120g
Shan Yao (Rhizoma Dioscoreae)	120g
Fu Ling (Poria)	90g
Mu Dan Pi (Cortex Moutan)	90g
Ze Xie (Rhizoma Alismatis)	90g
Ci Shi (Magnetitum), duan (calcined)	60g
Shi Chang Pu (Rhizoma Acori Tatarinowii)	45g
Wu Wei Zi (Fructus Schisandrae Chinensis)	15g

Grind the herbs into a fine powder, and mix with honey to make pills. Take 9g of pills with lightly-salted water.

Er Long Zuo Ci Wan (Pill for Deafness that Is Kind to the Left [Kidney]) tonifies Liver and Kidney yin, and opens the sensory orifices (ear). It is based on Liu Wei Di Huang Wan with the addition of Ci Shi (Magnetitum), Shi Chang Pu (Rhizoma Acori Tatarinowii), and Wu Wei Zi (Fructus Schisandrae Chinensis). Ci Shi (Magnetitum) is commonly used to improve hearing. Shi Chang Pu (Rhizoma Acori Tatarinowii) opens the orifices and dispels phlegm that may be blocking the senses. Wu Wei Zi (Fructus Schisandrae Chinensis) prevents the leakage of jing (essence). Clinically, this formula treats tinnitus, impaired or diminished hearing, and deafness arising from Kidney deficiency. It also treats dizziness, red eyes, blurred vision, and a dry mouth and throat.

Míng Mù Dì Huáng Wán

(Improve Vision Pill with Rehmannia)

明目地黄丸明目地黄丸

Pinyin Name: Ming Mu Di Huang Wan

Literal Name: Improve Vision Pill with Rehmannia **Alternate Name**: Rehmannia Vision Formula

Original Source: Shen Shi Yao Han (Scrutiny of the

Priceless Jade Patient) by Fu Ren-Yu in 1644

Shu Di Huang (Radix Rehmanniae Praeparata)	120g
Di Huang (Radix Rehmanniae),	
xi (washed) with liquor	60g
Shan Yao (Rhizoma Dioscoreae)	60g
Ze Xie (Rhizoma Alismatis)	60g
Shan Zhu Yu (Fructus Corni), xi (washed) with liquor	60g
Mu Dan Pi (Cortex Moutan), xi (washed) with liquor	60g
Chai Hu (Radix Bupleuri)	60g
Fu Shen (Poria Paradicis), zheng (steamed) with milk	60g
Dang Gui (Radix Angelicae Sinensis),	
xi (washed) with liquor	60g
Wu Wei Zi (Fructus Schisandrae Chinensis)	60g

Grind the herbs into a fine powder, and mix with honey to make pills. The pills should resemble the size of *Wu Tong Zi* (Semen Firmianae), a small seed approximately 5 mm in diameter. Take 9g of pills per dose on an empty stomach with lightly-salted water.

Ming Mu Di Huang Wan (Improve Vision Pill with Rehmannia) tonifies the Liver and Kidney and brightens vision. Clinically, it is used for blurred or diminished vision. This formula is based on Liu Wei Di Huang Wan with the addition of Di Huang (Radix Rehmanniae), Chai Hu (Radix Bupleuri), Dang Gui (Radix Angelicae Sinensis), Fu Shen (Poria Paradicis), and Wu Wei Zi (Fructus Schisandrae Chinensis). Di Huang (Radix Rehmanniae) clears deficiency heat caused by yin deficiency. Chai Hu (Radix Bupleuri) acts as a channel-guiding herb to the Liver, which opens to the eyes. Dang Gui (Radix Angelicae Sinensis) nourishes Liver blood to treat visual disorders. Fu Shen (Poria Paradicis) and Wu Wei Zi (Fructus Schisandrae Chinensis) calm the shen (spirit).

Míng Mù Dì Huáng Wán

(Improve Vision Pill with Rehmannia)

明目地黄丸明目地黄丸

Pinyin Name: Ming Mu Di Huang Wan

Literal Name: Improve Vision Pill with Rehmannia Alternate Name: Rehmannia Vision Formula

Original Source: Zhong Hua Ren Min Gong He Guo Yao Dian (Pharmacopoeia of People's Republic of China) in 2005

Shu Di Huang (Radix Rehmanniae Praeparata)	160g
Mu Dan Pi (Cortex Moutan)	60g
Fu Ling (Poria)	60g
Gou Qi Zi (Fructus Lycii)	60g
Dang Gui (Radix Angelicae Sinensis)	60g
Ji Li (Fructus Tribuli)	60g
Shan Zhu Yu (Fructus Corni), zhi (fried with liquid) 80g
Shan Yao (Rhizoma Dioscoreae)	80g
Ze Xie (Rhizoma Alismatis)	60g
Ju Hua (Flos Chrysanthemi)	60g
Bai Shao (Radix Paeoniae Alba)	60g
Shi Jue Ming (Concha Haliotidis), duan (calcined)	80g

Grind the herbs into a fine powder, and mix with 35-50g of honey per 100g of powdered herbs to make pills. This is the contemporary version of *Ming Mu Di Huang Wan* (Improve Vision Pill with Rehmannia). It has functions to tonify Liver and Kidney yin, clear Liver heat, and brighten the eyes. It is generally used to treat blurred vision, photophobia, and excessive tearing with exposure to wind.

These two formulas have identical names, but are derived from different sources and have slightly different functions:

- Ming Mu Di Huang Wan from Shen Shi Yao Han (Scrutiny of the Priceless Jade Patient) by Fu Ren-Yu improves vision by tonifying Liver and Kidney yin.
- Ming Mu Di Huang Wan from Zhong Hua Ren Min Gong He Guo Yao Dian (Pharmacopoeia of People's Republic of China) improves vision by tonifying Liver and Kidney yin, and has added function to clear Liver heat.

AUTHORS' COMMENTS

Liu Wei Di Huang Wan is the representative formula to tonify Liver and Kidney yin, and is one of the most frequently prescribed formulas. Many herbal formulas that tonify Kidney yin are based on Liu Wei Di Huang Wan. Below are the key similarities and differences among these yin tonic formulas:

- *Liu Wei Di Huang Wan* is the most basic Kidney and Liver yin tonic formula.
- Zhi Bai Di Huang Wan (Anemarrhena, Phellodendron, and Rehmannia Pill) contains Zhi Mu (Rhizoma Anemarrhenae) and Huang Bo (Cortex Phellodendri Chinensis) to nourish yin and clear deficiency fire.
- Mai Wei Di Huang Wan (Ophiopogonis, Schisandra and Rehmannia Pill) is formulated with the addition of Mai

Dong (Radix Ophiopogonis) and Wu Wei Zi (Fructus Schisandrae Chinensis). It nourishes yin, astringes the Lung, redirects the reversed flow of Lung qi, and arrests wheezing.

 Qi Ju Di Huang Wan (Lycium Fruit, Chrysanthemum, and Rehmannia Pill) has Gou Qi Zi (Fructus Lycii) and Ju Hua (Flos Chrysanthemi); it nourishes Kidney and Liver yin and benefits the eyes to brighten vision.⁴⁵

There are many herbal formulas that tonify Liver and Kidney yin. Their similarities and differences are as follows:

- Liu Wei Di Huang Wan is the most representative formula for tonifying yin. It nourishes and tonifies the Liver, Kidney, and Spleen.
- Zuo Gui Wan (Restore the Left [Kidney] Pill) replenishes Kidney jing (essence) and treats depleted jing and marrow. It is a pure yin tonic formula without any sedating herbs to offset the heavy tonic effects. It has a stronger yin-tonifying effect than Liu Wei Di Huang Wan. However, because of its stagnating nature, it is usually not taken for a prolonged period of time.
- Da Bu Yin Wan (Great Tonify the Yin Pill) nourishes yin, sedates fire, anchors yang, and is best for Kidney water depletion with deficiency heat flaring that manifests in steaming bones sensation, tidal fever, cough with blood, and vomiting of blood.
- *Hu Qian Wan* (Hidden Tiger Pill) nourishes yin, sedates fire, and strengthens the bones and tendons. It is best for atrophy or degeneration of the bones and tendons caused by Kidney yin deficiency with heat.
- Er Zhi Wan (Two-Ultimate Pill) is a balanced yin tonic formula, not too warm or too cold, that mainly treats Kidney yin deficiency with dizziness and blurred vision.
- Yi Guan Jian (Linking Decoction) nourishes the middle jiao and smoothes Liver qi. It treats Liver and Kidney deficiencies with Liver qi stagnation causing chest and hypochondriac pain, acid regurgitation, a bitter taste in the mouth, and a dry mouth and throat.
- Shi Hu Ye Guang Wan (Dendrobium Pill for Night Vision)
 causes Liver yang and wind to descend, nourishes yin, and
 brightens the eyes. It is best for visual disorders caused by
 Liver and Kidney yin deficiencies with blood deficiency.
- *Gui Lu Er Xian Jiao* (Tortoise Shell and Deer Antler Syrup) tonifies Kidney yin and yang, *jing* (essence), and blood of the *du* (governing) and *ren* (conception) channels.
- Qi Bao Mei Ran Dan (Seven-Treasure Special Pill for Beautiful Whiskers) nourishes Kidney yin, tonifies Liver blood, and mainly treats hair disorders, such as hair loss, premature gray hair, and dry or brittle hair.⁴⁶

Function	Composition	Liu Wei Di Huang Wan	Zhi Bai Di Huang Wan	Du Qi Wan	Mai Wei Di Huang Wan	Qi Ju Di Huang Wan	Jin Gui Shen Qi Wan	Ba Wei Di Huang Wan
Tonifies Liver and Kidney yin	Shu Di Huang (Radix Rehmanniae Praeparata), Shan Zhu Yu (Fructus Corni) and Shan Yao (Rhizoma Dioscoreae)	✓	✓	~	✓	✓	√ *	✓
Lowers turbidity and resolves dampness	Ze Xie (Rhizoma Alismatis), Mu Dan Pi (Cortex Moutan) and Fu Ling (Poria)	>	~	~	~	~	~	~
Clears deficiency fire	Zhi Mu (Rhizoma Anemarrhenae) and Huang Bo (Cortex Phellodendri Chinensis)		~					
Astringes qi	Wu Wei Zi (Fructus Schisandrae Chinensis)			~				
Tonifies and astringes Lung yin	Wu Wei Zi (Fructus Schisandrae Chinensis) and Mai Dong (Radix Ophiopogonis)				~			
Nourishes and benefits the eyes	Gou Qi Zi (Fructus Lycii) and Ju Hua (Flos Chrysanthemi)					~		
Warms Kidney yang	Gui Zhi (Ramulus Cinnamomi) and Fu Zi (Radix Aconiti Lateralis Praeparata)						~	
Strongly warms Kidney yang	Rou Gui (Cortex Cinnamomi) and Fu Zi (Radix Aconiti Lateralis Praeparata)							~

^{*} Di Huang (Radix Rehmanniae) is used in place of Shu Di Huang (Radix Rehmanniae Praeparata).

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Zhī Băi Dì Huáng Wán

(Anemarrhena, Phellodendron, and Rehmannía Píll)

知柏地黄丸

Pinyin Name: Zhi Bai Di Huang Wan

Literal Name: Anemarrhena, Phellodendron, and Rehmannia Pill

Alternate Names: *Zhi Bo Di Huang Wan*, *Zi Bo Di Huang Wan*, *Zhi Bai Ba Wei Wan*, *Chih Po Ti Huang Wan*, Eight-Ingredient Pill with Anemarrhena and Phellodendron, Anemarrhena, Phellodendron and Rehmannia Formula

Original Source: Yi Zong Jin Jian (Golden Mirror of the Medical Tradition) by Wu Qian in 1742

COMPOSITION

)g [24g]
g [12g]
g [12g]
00g [9g]
00g [9g]
00g [9g]
60g [6g]
60g [6g]