

Section 1

温中祛寒剂

— Middle-Warming and Cold-Dispelling Formulas

Lǐ Zhōng Wán (Regulate the Middle Pill)

理中丸

Pinyin Name: *Li Zhong Wan***Literal Name:** Regulate the Middle Pill**Alternate Name:** Ginseng and Ginger Combination**Original Source:** *Shang Han Lun* (Discussion of Cold-Induced Disorders) by Zhang Zhong-Jing in the Eastern Han Dynasty**COMPOSITION**

<i>Gan Jiang</i> (Rhizoma Zingiberis)	9g
<i>Ren Shen</i> (Radix et Rhizoma Ginseng)	9g
<i>Bai Zhu</i> (Rhizoma Atractylodis Macrocephalae)	9g
<i>Zhi Gan Cao</i> (Radix et Rhizoma Glycyrrhizae Praeparata cum Melle)	9g

DOSAGE / PREPARATION / ADMINISTRATION

The source text recommends to grind the ingredients into powder and form into pills with honey. The pills should resemble egg yolk in size. Take 1 pill with warm water three times during the day and twice at night. If ingestion of the pills does not create a feeling of warmth in the abdomen, then this formula may also be given as a decoction.

CHINESE THERAPEUTIC ACTIONS

1. Warms the middle *jiao* and dispels cold
2. Tonifies qi and strengthens the Spleen and Stomach

CLINICAL MANIFESTATIONS

1. Deficiency and cold of the middle *jiao*: absence of thirst, vomiting, diarrhea, abdominal pain, lack of appetite, and *huo luan* (sudden turmoil disorder).
2. Bleeding due to yang deficiency: epistaxis, hematochezia, shortness of breath, lassitude, and a fine pulse or a deficient, big pulse with little force.
3. Others: chronic infantile convulsions; and recovery from illness with drooling of saliva or excessive production of foamy saliva.

CLINICAL APPLICATIONS

Acute or chronic gastritis, gastric or duodenal ulcers, epigastric pain, gastroptosis, stomatitis, irritable bowel syndrome, gastroenteritis, enteritis, bacterial dysentery,

colitis, uterine bleeding, nephropathy, male infertility, and excessive salivation.

EXPLANATION

Li Zhong Wan (Regulate the Middle Pill) treats deficiency and cold of the middle *jiao*, where the Spleen and Stomach are located. The Spleen, responsible for transportation and transformation, raises the clear yang. The Stomach, responsible for accepting and digesting food, lowers the turbid yin. If the middle *jiao* is deficient as a result of coldness, the ascending and descending functions of the Spleen and Stomach may be impaired, causing diarrhea and vomiting. Abdominal pain is due to the presence of coldness. Lack of appetite is the result of deficiency of the middle *jiao* and impaired digestive functioning.

To treat this syndrome, use herbs to warm the middle *jiao*, dispel coldness, tonify Spleen qi, and invigorate the digestive function. *Gan Jiang* (Rhizoma Zingiberis), the chief herb, warms the middle *jiao* and dispels interior cold. *Ren Shen* (Radix et Rhizoma Ginseng) nourishes *yuan* (source) qi. *Bai Zhu* (Rhizoma Atractylodis Macrocephalae) strengthens the Spleen and dries dampness. *Zhi Gan Cao* (Radix et Rhizoma Glycyrrhizae Praeparata cum Melle) nourishes qi and harmonizes the middle *jiao*.

Li Zhong Wan can also be used to treat blood loss due to Spleen yang deficiency; a deficient Spleen fails to keep

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Diagnosis	Signs and Symptoms	Treatment	Herbs
Deficiency and cold of the middle <i>jiao</i>	<ul style="list-style-type: none"> Diarrhea and vomiting; deficiency and cold of the middle <i>jiao</i> impairing the normal ascending and descending functions of the Spleen and Stomach Abdominal pain: cold in the middle <i>jiao</i> 	<ul style="list-style-type: none"> Warms the middle <i>jiao</i> and dispels cold Tonifies qi and strengthens the Spleen 	<ul style="list-style-type: none"> <i>Gan Jiang</i> (Rhizoma Zingiberis) warms the middle <i>jiao</i> and dispels interior cold. <i>Ren Shen</i> (Radix et Rhizoma Ginseng) nourishes <i>yuan</i> (source) <i>qi</i>. <i>Bai Zhu</i> (Rhizoma Atractylodis Macrocephalae) strengthens the Spleen and dries dampness. <i>Zhi Gan Cao</i> (Radix et Rhizoma Glycyrrhizae Praeparata cum Melle) nourishes qi and harmonizes the middle <i>jiao</i>.

blood circulating within the vessels. Clinical manifestations include epistaxis, hematochezia, shortness of breath, lassitude, a pale face, and a fine pulse or a deficient, big pulse with little force. This syndrome of bleeding due to yang deficiency can be treated with *Li Zhong Wan*, with the addition of several other herbs such as *Huang Qi* (Radix Astragali), *Dang Gui* (Radix Angelicae Sinensis), and *E Jiao* (Colla Corii Asini); and the replacement of *Gan Jiang* (Rhizoma Zingiberis) with *Pao Jiang* (Rhizoma Zingiberis Praeparatum).

Li Zhong Wan may be used to treat chronic infantile convulsions if there are symptoms of yang deficiency of the middle *jiao*. Chronic infantile convulsions can be caused by congenital defects, malnutrition, excessive intake of cold food during the time of illness, or weakness after a major illness.

Drizzling of saliva or excessive production of foamy saliva following recovery from illness occurs when Spleen qi deficiency with cold fails to metabolize water. Body fluids thus flow upwards in the form of profuse saliva. *Li Zhong Wan* can be taken at a low dose for a prolonged period of time.

MODIFICATIONS

- If there is severe abdominal pain due to deficiency and cold, add *Fu Zi* (Radix Aconiti Lateralis Praeparata) and *Rou Gui* (Cortex Cinnamomi).
- With abdominal fullness and decreased intake of food, add *Shen Qu* (Massa Fermentata) and *Hou Po* (Cortex Magnoliae Officinalis).
- With abdominal pain, diarrhea, acid regurgitation, and a red tongue body with a white coating, add *Huang Lian* (Rhizoma Coptidis).
- With fullness and distention in the middle *jiao*, add *Wu Zhu Yu* (Fructus Evodiae), *Ding Xiang* (Flos Caryophylli), and *Gao Liang Jiang* (Rhizoma Alpiniae Officinarum).

- With nausea and vomiting due to cold in the Stomach, add *Ding Xiang* (Flos Caryophylli) and *Shi Di* (Calyx Kaki).
- With vomiting due to phlegm accumulation, add *Ban Xia* (Rhizoma Pinelliae) and *Fu Ling* (Poria).
- If there is severe vomiting, remove *Bai Zhu* (Rhizoma Atractylodis Macrocephalae) and add *Sheng Jiang* (Rhizoma Zingiberis Recens) and *Wu Zhu Yu* (Fructus Evodiae).
- With qi stagnation, add *Zhi Shi* (Fructus Aurantii Immaturus) and *Fu Ling* (Poria).
- With deficiency, cold, and qi stagnation, add *Qing Pi* (Pericarpium Citri Reticulatae Viride) and *Chen Pi* (Pericarpium Citri Reticulatae).
- With frequent diarrhea, add *Rou Dou Kou* (Semen Myristicae) and *He Zi* (Fructus Chebulae).
- With severe edema, add *Fu Ling* (Poria), *Ze Xie* (Rhizoma Alismatis), and *Dong Gua Pi* (Exocarpium Benincasae).
- If there is bleeding due to yang deficiency, add *E Jiao* (Colla Corii Asini), *San Qi* (Radix et Rhizoma Notoginseng), and charred *Ce Bai Ye* (Cacumen Platycladi).

CAUTIONS / CONTRAINDICATIONS

- Li Zhong Wan* is contraindicated in patients of exterior wind invasion with fever.
- This formula contains many herbs that are warm and drying, and therefore is contraindicated in conditions characterized by interior heat with yin deficiency.
- This formula must be used with caution during pregnancy, as it contains many herbs that are warm and hot in nature.¹

PHARMACOLOGICAL EFFECTS

- Antiulcer:** *Li Zhong Wan* has been shown to be beneficial in facilitating the healing of stomach ulcers. In one experiment, rats with artificially-induced ulcer were divided into herb and placebo groups. After 10 days of treatment, the herb group had only 3.57 mm² of ulceration, while the placebo group had 11.72 mm² of ulceration.²

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- Adrenocortical:** The preliminary data showed that administration of *Li Zhong Wan* was associated with a regulating effect on the adrenal glands.³
- Effect on kidney function:** Administration of *Li Zhong Wan* was associated with a protective effect on kidney functions. In one study, continuous use of the formula for 1-3 months was effective in gradually reducing the amount of protein, cells, and blood urea nitrogen (BUN) in the urine.⁴

CLINICAL STUDIES AND RESEARCH

- Epigastric pain:** Use of modified *Li Zhong Wan* was associated with marked results in treating 30 patients with epigastric pain characterized by deficiency and cold. The herbal treatment contained this formula plus *Huang Qi* (Radix Astragali), *Fu Ling* (Poria), *Chen Pi* (Pericarpium Citri Reticulatae), and *Cao Dou Kou* (Semen Alpiniae Katsumadai). Additional modifications were made as follows: double the dose of *Huang Qi* (Radix Astragali) for qi deficiency; *Rou Gui* (Cortex Cinnamomi) and *Fu Zi* (Radix Aconiti Lateralis Praeparata) for presence of cold; *Cang Zhu* (Rhizoma Atractylodis) and *Bai Bian Dou* (Semen Lablab Album) for dampness; *Dan Shen* (Radix et Rhizoma Salviae Miltiorrhizae), *Yan Hu Suo* (Rhizoma Corydalis), and *Chuan Lian Zi* (Fructus Toosendan) for stagnation; and *Bei Sha Shen* (Radix Glehniae), *Bai Shao* (Radix Paeoniae Alba), and *Shan Yao* (Rhizoma Dioscoreae) for yin deficiency. Of 30 patients, the study reported complete recovery in 5 patients within one month, and complete recovery in 20 patients and improvement in 5 patients within three months.⁵
- Gastritis:** Thirty patients with various types of gastritis (atrophic gastritis, superficial gastritis, gastritis with ulcer) were treated with *Li Zhong Wan*. The study reported complete relief of pain in 25 patients and partial relief of pain in 5 patients. Seventeen showed improvement based on endoscopy, and 13 showed no significant changes.⁶
- Bacterial dysentery:** Eighteen patients with chronic bacterial dysentery were treated with modification of *Li Zhong Wan* with complete recovery in 16 and improvement in 2 patients. The average duration of treatment was 12 days. The modification included addition of *Huang Lian* (Rhizoma Coptidis) and *Fu Ling* (Poria).⁷
- Enteritis:** Thirty patients with acute or chronic enteritis with diarrhea were treated with *Li Zhong Wan* for 3-10 days with significant improvement in 18 patients, moderate improvement in 8 patients, and no effect in 4 patients. The study reported an overall effectiveness rate of 86.6%.⁸
- Renal insufficiency:** Herbs were used to treat 15 patients (6 males and 9 females) with compromised kidney function, which included 12 patients of glomerulonephritis, polycystic kidney, kidney tuberculosis, and diabetic nephropathy. The herbal treatment included in extract 1.7 grams of *Li Zhong Wan* and 2.5 grams *Da Huang Gan Cao Tang* (Rhubarb and Licorice Decoction), given three times daily 30 minutes before meals for 3 months. The study reported an effectiveness rate of 66.7% after the first month, which was subsequently dropped to 40%. No significant side effects were reported.⁹ Note: *Da Huang Gan Cao Tang* (Rhubarb and Licorice Decoction) is not a commonly used formula, and is not discussed in detail in this text. The original source of this formula is *Shang Han Lun* (Discussion of Cold-Induced Disorders), with the following composition: *Da Huang* (Radix et Rhizoma Rhei) 12g and *Gan Cao* (Radix et Rhizoma Glycyrrhizae) 3g.
- Male infertility:** In one study, *Li Zhong Wan* and *Ba Wei Di Huang Wan* (Eight-Ingredient Pill with Rehmannia) were combined together to treat 10 patients with male infertility. The study reported an increased production of seminal fluid (from 2.73 mL to 3.28 mL), in sperm count (from 1170/mL to 2185/mL), and in sperm motility (from 29.0% to 35.5%).¹⁰
- Excessive salivation:** Forty-two children (38 males and 4 females) with excessive salivation (20 days to 3 years history of illness) due to Spleen yang deficiency were treated with satisfactory results using modified *Li Zhong Wan*. The average age was 5.8 years (ranges from 3-9 years), and the average length of treatment was 4.6 packs of herbs in decoction. The herbs included *Dang Shen* (Radix Codonopsis) 10-18g, *Yi Zhi* (Fructus Alpiniae Oxyphyllae) 5-10g, *Gan Jiang* (Rhizoma Zingiberis) 5-8g, *Gan Cao* (Radix et Rhizoma Glycyrrhizae) 4-6g, and *Bai Zhu* (Rhizoma Atractylodis Macrocephalae) 8-10g. Modifications were made by adding *Sha Ren* (Fructus Amomi) 4-6g and *Ji Nei Jin* (Endothelium Corneum Gigeriae Galli) 5-8g for poor appetite and loose stools accompanied by long-term excessive salivation; and the addition of *Wu Mei* (Fructus Mume) 10-18g, *Shi Jun Zi* (Fructus Quisqualis) 7-10g, and *Hua Jiao* (Pericarpium Zanthoxyli) 4-6g, and removal of *Gan Cao* (Radix et Rhizoma Glycyrrhizae), for intestinal parasites with abdominal pain. After the treatment, 40 out of 42 patients showed complete recovery without any recurrence within 3 months.¹¹
- Stomatitis:** One study reported effectiveness using modified *Li Zhong Wan* to treat recurrent stomatitis in 106 patients (47 males and 59 females, between 1-72 years of age, with 3 months to 24 years history of illness). In addition to this formula, modifications were made as follows: replacing *Ren Shen* (Radix et Rhizoma Ginseng) with *Dang Shen* (Radix Codonopsis) for severe Spleen deficiency; addition of *Rou Gui* (Cortex Cinnamomi) for cold; and addition of *Huang Lian* (Rhizoma Coptidis) for heat. The study reported complete recovery in all 106 patients after 2-17 days of treatment.¹²

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RELATED FORMULAS

Rén Shēn Tāng (Ginseng Decoction)

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人參湯

Pinyin Name: *Ren Shen Tang*

Literal Name: Ginseng Decoction

Alternate Name: *Li Zhong Tang* (Regulate the Middle Decoction)

Original Source: *Jin Gui Yao Lue* (Essentials from the Golden Cabinet) by Zhang Zhong-Jing in the Eastern Han Dynasty

Ren Shen (Radix et Rhizoma Ginseng) 9g

Gan Cao (Radix et Rhizoma Glycyrrhizae) 9g

Gan Jiang (Rhizoma Zingiberis) 9g

Bai Zhu (Rhizoma Atractylodis Macrocephalae) 9g

The source text states to cook the ingredients in 8 cups [1,600 mL] of water and reduce it to 3 cups [600 mL]. Take 1 cup [200 mL] of the warm, strained decoction three times daily. The source text also recommends taking 1 cup of hot porridge and keeping the body covered with a blanket to induce a feeling of warmth.

Li Zhong Wan and *Ren Shen Tang* (Ginseng Decoction) have essentially the same ingredients at the same dosages.

- *Li Zhong Wan* is administered in pill form, which is absorbed slowly over a longer period of time to warm the middle *jiao*, dispel cold, and tonify Spleen and Stomach qi.
- *Ren Shen Tang* (Ginseng Decoction) is administered in decoction form, which is absorbed immediately to provide a faster onset of action. This formula is primarily used to treat a more urgent condition, such as *xiong bi* (painful obstruction of the chest) with symptoms such as cold extremities, fatigue, low energy, and feeble voice.

Lǐ Zhōng Huà Tán Wán

(Regulate the Middle and Transform Phlegm Pill)

理中化痰丸

Pinyin Name: *Li Zhong Hua Tan Wan*

Literal Name: Regulate the Middle and Transform Phlegm Pill

Original Source: *Ming Yi Za Zhu* (Miscellaneous Books of Ming Medicine) by Wang Lun in 1549 A.D.

Ren Shen (Radix et Rhizoma Ginseng)

Bai Zhu (Rhizoma Atractylodis Macrocephalae),
chao (dry-fried)

Gan Jiang (Rhizoma Zingiberis)

Zhi Gan Cao (Radix et Rhizoma Glycyrrhizae
Praeparata cum Melle)

Fu Ling (Poria)

Ban Xia (Rhizoma Pinelliae), *zhu* (boiled) with ginger

The source text states to grind the ingredients into a fine powder and form into small pills with water. Take 40-50 pills with warm, boiled water. Note: Herb doses are unavailable from the source text.

Li Zhong Hua Tan Wan (Regulate the Middle and Transform Phlegm Pill) is composed of *Li Zhong Wan* plus *Fu Ling* (Poria) and *Ban Xia* (Rhizoma Pinelliae), which are used in this formula to enhance the action of tonifying Spleen qi and dissolving phlegm. Clinically, the patient may show deficiency and cold of the Spleen and Stomach with stagnation of phlegm. The symptoms include nausea, vomiting, lack of appetite, loose stools, poor digestion, coughing with sputum, and drooling of saliva.

In comparison to *Li Zhong Wan*, *Li Zhong Hua Tan Wan* (Regulate the Middle and Transform Phlegm Pill) has a stronger action to dry dampness, strengthen the Spleen, and relieve nausea. Therefore, it is often used for patients who have deficiency and cold of the Spleen and Stomach, complicated by coughing with sputum and drooling of saliva.

AUTHORS' COMMENTS

Li Zhong Wan is one of the main formulas for treating deficiency and cold of the Spleen and Stomach. This formula was originally designed to be given as pills, which usually have a slower onset of action. When necessary in acute or severe cases, this formula may first be given in decoction form, and then followed by pills when the condition stabilizes.

Li Zhong Wan and *Si Jun Zi Tang* (Four-Gentlemen Decoction) both treat Spleen qi deficiency with poor appetite, diarrhea, and other signs and symptoms. Both formulas contain qi-tonifying herbs such as *Ren Shen* (Radix et Rhizoma Ginseng), *Bai Zhu* (Rhizoma Atractylodis Macrocephalae), and *Zhi Gan Cao* (Radix et Rhizoma Glycyrrhizae Praeparata cum Melle). Despite these similarities, the differences are as follows:

- *Li Zhong Wan* is for deficiency with cold of the middle *jiao* (Spleen and Stomach), characterized by abdominal pain, vomiting, diarrhea, polyuria, cold limbs, intolerance to cold, and a deep, fine pulse.
- *Si Jun Zi Tang* is for Spleen qi deficiency, characterized by a sallow complexion, poor appetite, decreased dietary intake, fatigue, a pale tongue body, and a fine, moderate pulse.¹³

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Fù Zǐ Lǐ Zhōng Wán (Prepared Aconite Pill to Regulate the Middle)

附子理中丸

Pinyin Name: *Fu Zi Li Zhong Wan*

Literal Name: Prepared Aconite Pill to Regulate the Middle

Alternate Names: *Fu Tzu Li Chung Tang* (Wan), *Fu Zi Li Zhong Tang* (Wan), Aconite, Ginseng and Ginger Decoction (Pill); Aconite Middle-Regulating Decoction (Pill); Aconite Ginseng and Ginger Combination

Original Source: *Tai Ping Hui Min He Ji Ju Fang* (Imperial Grace Formulary of the Tai Ping Era) by the Imperial Medical Department in 1078-85

COMPOSITION

<i>Fu Zi</i> (Radix Aconiti Lateralis Praeparata), <i>pao</i> (blast-fried)	90g [9g]
<i>Gan Jiang</i> (Rhizoma Zingiberis), <i>pao</i> (blast-fried)	90g [9g]
<i>Ren Shen</i> (Radix et Rhizoma Ginseng)	90g [9g]
<i>Bai Zhu</i> (Rhizoma Atractylodis Macrocephalae), <i>cuo</i> (grated)	90g [9g]
<i>Zhi Gan Cao</i> (Radix et Rhizoma Glycyrrhizae Praeparata cum Melle)	90g [9g]

DOSAGE / PREPARATION / ADMINISTRATION

The source text states to grind the ingredients into a fine powder and form into pills with honey. Each pill should weigh 3 grams. Place and disintegrate 1 pill in one bowl of water, then cook it until 70% of the liquid remains. Take the warm decoction before meals on an empty stomach. For children, divide the decoction into two to three separate doses. This formula may also be prepared as a decoction with the doses suggested in brackets.

CHINESE THERAPEUTIC ACTIONS

1. Warms yang and dispels cold
2. Tonifies qi and strengthens the Spleen

CLINICAL MANIFESTATIONS

Deficiency and cold of the Spleen and Stomach: extreme coldness of the body and the extremities, mild perspiration, indigestion, borborygmus, severe epigastric and

abdominal fullness and pain, nausea, vomiting, diarrhea, and sudden turmoil disorder with muscle spasms.

CLINICAL APPLICATIONS

Gastroenteritis, gastritis, peptic ulcer disease, gastrotonia, prolapse of the stomach, ulcerative colitis, and infantile diarrhea.

EXPLANATION

Fu Zi Li Zhong Wan (Prepared Aconite Pill to Regulate the Middle) combines *Fu Zi* (Radix Aconiti Lateralis Praeparata) and *Li Zhong Wan* (Regulate the Middle Pill). It warms yang, dispels cold, benefits qi, and strengthens the Spleen. It is used for deficiency and cold secondary to yang deficiency of the Spleen and Stomach. Clinically, patients may show vomiting, diarrhea, muscle spasms, muscle stiffness in the extremities, and a white tongue coating.