Chapter 13 Tonifying Herbs

Dr. Li, Dongcheng
Office: 954-763-9840
E-mail: dcljdl@yahoo.com

Concept

• Concept
  – Tonifying herbs are those that strengthen or supplement an area or process of the body that is insufficient or weakened.
  – They also strengthen the body’s defenses against disease. Clinically, they are used in combination with herbs that expel external pathogenic influences for disorders in which the pathogenic influence is strong and the normal Qi is weak.
  – These herbs assist in the recovery of patients who have been ill with chronic or degenerative disorders by strengthening the various physiologic processes of the body and supplementing insufficient substances.
• Classification:
  – 1. Tonifying Qi herbs
  – 2. Tonifying blood herbs
  – 3. Tonifying yin herbs
  – 4. Tonifying yang herbs

• Although for purposes of discussion the tonifying herbs are organized here in accordance with which of these four aspects they tonify, it is important to remember that in the clinic, depending on the patient’s presentation, these herbs are often combined.
  – Patients with yang deficiency also usually suffer from Qi deficiency, and the same process may also involve Yin deficiency. Similarly, patterns of Qi deficiency may evolve into Yang deficiency.

cautions

• Cautions:
  – 1. Tonifying herbs should not be prescribed in cases there are still signs of an exterior disorder unless they are combined with herbs that release the exterior.
  – 2. Tonifying herbs should not be used if there is no sign of deficiency and pathogens are still present.
  – 3. The practitioner should also be aware of a condition called “deficient and unable to take tonification”.

Two explanations for “deficient and unable to take tonification”.

- Firstly, signs of _fire from deficiency appear after taking tonics_, including dry mouth and lips, irritability, insomnia, indigestion, and abdominal distention.
- Secondly, _digestive systems develop_, such as nausea, bloating or loss of appetite.
  - Digestive systems in deficient patients are very weak, as is their resistance to disease. Most tonifying herbs are _rich and difficult for the body to absorb_; Their administration places an extra burden on the digestive system.
  - Many _debilitated patients_, especially those with _Yin deficiency_, suffer from _insufficient fluids and an imbalance in the autonomic nervous system_. Many of the tonifying herbs, particularly those that _tonify the Qi or yang_, stimulate the body and the sympathetic nervous system. This could give rise to signs associated with _fire from deficiency_.

**Tonifying Herbs**

- **Section 1 Tonifying Qi herbs** (13 types)
  - Ren Shen; Xi Yang Shen; Dang Shen; Tai Zi Shen; Huang Qi; Bai Zhu; Shan Yao; Ci Wu Jia; Da Zao; Gan Cao; Yi Tang; Feng Mi; Huang Jing

- **Section 2 Tonifying Yang herbs** (18 types)
  - Lu Rong; Lu Jiao Jiao; Ba Ji Tian; Yin Yang Huo; Xian Mao; Bu Gu Zhi; Yi Zhi Ren; Tu Si Zi; Sha Yuan Ji Li; Rou Cong Rong; Suo Yang; Du Zhong; Xu Duan; Ge Jie; Dong Chong Xia Cao; Zi He Che; Hu Lu Ba; Hu Tao Ren / He Tao Ren;

- **Section 3 Tonifying blood herbs** (6 types)
  - Dang Gui; Shu Di Huang; Bai Shao; He Shou Wu; E Jiao; Long Yan Rou

- **Section 4 Tonifying Yin herbs** (15 types)
  - Nan Sha Shen; Bei Sha Shen; Yu Zhu; Tian (Men) Dong; Mai (Men) Dong; Shi Hu; Bai He; Han Lian Cao/Mo Han Lian; Nu Zhen Zi; Hei Zhi Ma; Gui Ban; Bie Jia; Guo Qi Zi; Sang Shen; Yin Er
Section 1 Tonifying Qi herbs

Concept

• **Tonifying Qi herbs**
  – The herbs that has the function of tonifying Qi and strengthening the functional aspects of the body or of a particular organ, and are mainly used for Qi deficiency syndromes or blood deficiency syndromes or bleeding due to Qi deficiency are called tonifying Qi herbs.
• Most common disorders are Spleen Qi deficiency and Lung Qi deficiency.
  – Spleen Qi deficiency: lethargy, weakness in the extremities, lack of appetite, abdominal distention or pain, and loose stools or diarrhea.
  – Lung Qi deficiency: shortness of breath, shallow breathing, dyspnea on exertion, weak voice, pallid complexion, and spontaneous sweating.
• This is because of these two Yin organs are primarily responsible for the extraction of Qi from food and the air, as well as the transportive functions of Qi within the body.
• Because the Qi is responsible in part for the generation and movement of blood, these herbs are often also used in treating patterns of blood deficiency.

Caution

• These herbs are generally sweet and rich in nature. Excessive or long-term use can lead to a sense of fullness in the chest and diaphragm, or sensations of heat, it is therefore important that they be combined with small amounts of herbs that move and regulate the Qi.
Study Objective

- 1. Understand the general information on herbs that tonify Qi.
  - a. Concept, common function and indication.
  - b. Characters.
  - c. Compatibility.
  - d. Caution and contraindications

- 2. Get acquainted with the following individual information on herbs in this category.
  - a. Pinyin name, common English name and pharmaceutical name.
  - b. Characters.
  - c. Functions and indications.
  - d. Dosage and administration.
  - e. Cautions and contraindication.

Section 1 Tonifying Qi herbs

- 1. Ren Shen (Radix Ginseng) 人参
- 2. Xi Yang Shen (Radix panacis Quinquefolii) 西洋参
- 3. Dang Shen (Radix Codonopsis Pilosulae) 党参
- 4. Tai Zi Shen (Radix pseudo-stellariae) 太子参
- 5. Huang Qi (Radix Astragali seu Hedysari) 黄芪
- 6. Bai Zhu (Rhizoma Atractylodis Macroceph) 白术
- 7. Shan Yao (Rhizoma Dioscoreae) 山药
- 8. Ci Wu Jia (Radix Sev Caulis Acanthopanacis Senticosi) 刺五加
- 9. Da Zao (Fructus Ziziphi Jujubae) 大枣
- 10. Gan Cao (Radix Glycyrrhizae) 甘草
- 11. Yi Tang (Saccharum Granorum) 饴糖
- 12. Feng Mi (Mel) 蜂蜜
- 13. Huang Jing (Polygonati Rhizoma) 黄精
Ren Shen (人参)  
(Radix Ginseng)

- **English name**: ginseng root
- **Literal English translation**: “man root”
- **Latin name**: Panax ginseng C. A.  
  **Pharmaceutical name**: Radix Ginseng
- **Where grown**: Jilin, Liaoning, Heilongjiang, Korea
- **When harvested**: September to October (6-7 year-old cultivated plants)
- **Used part**: root
- **Flavor and properties**: Sweet, slightly bitter, slightly warm
- **Channel entered**: Lung, Spleen
Ren Shen (人参)  
(Radix Ginseng)

• **Functions**
  - 1. Powerfully tonifies Yuan Qi
  - 2. Tonifies Lung
  - 3. Tonifies Spleen
  - 4. Generates fluid and stops thirst
  - 5. Benefits heart and calms spirit

• **Indications**
  - 1. For Qi collapse. Now it is used for heart failure and shock.
    • A. Due to severe or prolonged illness, Used alone in large dosage (as Du Shen Tang)
    • B. Due to deficiency of Qi accompanied with Yang deficiency, with Fu Zi (as Shen Fu Tang )
  - 2. For Lung Qi deficiency manifested as short breath and wheezing, whispering voice, weak pulse and spontaneous sweating. Used with Huang Qi Wu Wei Zi.
  - 3. For fatigue, poor appetite, loose stool due to spleen Qi deficiency. Used with Bai Zhu, Fu Ling, Gan Cao (as Si Jun Zi Tang).
  - 4. For thirsty due to febrile diseases or diabetes.
    • A. Wasting and thirsting disorder, Used with Shen Di Huang, Mai Men Dong.
    • B. Profuse sweating, thirst, short breath, feeble pulse, Used with Mai Dong, Wu Wei Zi (as Sheng Mai Yin)
  - 5. For insomnia, palpitation and poor memory. Used with Dang Gui, Zao Ren, Long Yan Rou (as Gui Pi Tang ).

• **Dosage and administration**
  - 5-10g separately decocted in water for an oral dose.
  - 1.5-2g as powder.
  - 15-30g for shock or heart failure.

• **Cautions and contraindications**
  - Contraindicated in cases of yin deficiency with heat signs, excessive heat
  - Contraindicated in cases of absence of significant Qi deficiency.
  - Contraindicated in cases of liver yang hyperactivity.
  - Incompatible with Li Lu and Wu Ling Zi.
  - Do not take it with Lai Fu Zi, white radish and tea.
  - Overdosage can lead to headache, insomnia, palpitations, and a rise in blood pressure,
Ren Shen (人参) (Radix Ginseng)

- Modern study
  1. Central nervous system effect: Normally, the use of Ren Shen is stimulating and increases wakefulness. However, in large doses it has an effect of the herb is either greater or lesser than caffeine.
  2. Peripheral nervous system effect: muscarinic effect (Sweating/diaphoresis) on the peripheral nervous system with small dose, while a large dose had a nicotinic effect (sympathetic overactivity).
  3. Cardiovascular effect: inotropic effects
  4. Metabolic effect: Increases the synthesis of proteins and nucleic acids.
  5. Endocrine effect: lower plasma glucose;
  6. Effect on lipid metabolism: beneficial effect on high cholesterol.
  7. Treatment of diabetes: decrease in glycosuria; reduction in blood sugar;
  8. Immunological effect: attenuated inflammatory reaction
  10. Gastrointestinal effect: therapeutic and preventative effect of peptic ulcer disease

There are many different types of Ren Shen
- 1. Shan Shen----wild mountain Ginseng
- 2. Sheng Shai Shen----sun-dried ginseng
- 3. Hong Shen------red ginseng
- 4. Bai Sheng-----white ginseng
- 5. Shen Xu-----ginseng whiskers
Xi Yang Shen (西洋参)
(Radix panacis Quinquefolii)

- **English name:** American ginseng
- **Latin name:** Panax quinquefolius L. (Araliaceae).
- **Pharmaceutical name:** Radix Panacis Quinque Folii
- **Used part:** bone
- **Flavor and properties:** Sweet, cold, slightly bitter
- **Channel entered:** Lung, Stomach, Heart
Xi Yang Shen (西洋参)  
(Radix panacis Quinquefolii)

• **Functions**
  – 1. Benefits Qi and nourishes Yin  
  – 2. Clears fire and generates fluid

• **Indications**
  – 1. For coughing, wheezing with phlegm and blood due to Qi and Yin deficiency.  
  – 2. For fatigue, thirsty due to Qi and Yin deficiency after febrile diseases.

• **Dosage and administration**
  – 3-6g decocted in water for an oral dose.  
  – For Qi and Yin both deficiency.

• **Cautions and contraindications**
  – Incompatible with Li Lu.  
  – Do not use iron pot to decoct it.
Dang Shen (党参)  
(Radix Codonopsis Pilosulae)

- **English name:** codonopsis root  
- **Literal English translation:** “group root”  
- **Alternate names:** 路党参(lu dang shen); 防党 (fang dang)  
- **Botanical name:** Codonopsis pilosula Nannf.  
- **Pharmaceutical name:** radix Codonopsitis Pilosulae  
- **Where grown:** Shanxi, Shananxi, Gansu, Sichuan, and throughout northeastern China  
- **When harvested:** Autumn  
- **Used part:** root  
- **Flavor and properties:** sweet, neutral  
- **Channel entered:** Lung, Spleen
Dang Shen (党参)  
(Radix Codonopsis Pilosulae)

• **Functions**
  – 1. Tonifies Qi and benefits the middle
  – 2. Tonifies lung
  – 3. Generates fluid and stops thirst
  – 4. Tonifies blood

• **Indications**
  – 1. For poor appetite, loose stool, fatigue due to spleen Qi deficiency. with Bai Zhu, Fu Ling, Gan Cao (as Si Jun Zi Tang)
  – 2. For shortness of breath, coughing and wheezing, whispered voice due to lung Qi deficiency. Used with Huang Qi, Wu Wei Zi.
  – 3. For thirsty due to febrile diseases or diabetes. with Wu Wei Zi, Mai Dong
  – 4. For pale face, dizziness and palpitation due to Qi and blood deficiency.

Dang Shen (党参)  
(Radix Codonopsis Pilosulae)

• **Dosage and administration**
  – 10-30g decocted in water for an oral dose.

• **Cautions and contraindications**
  – Contraindication for heat syndromes, hyperactive of liver yang
  – Incompatible with Li lu.

• **Modern study**
  – 1. Hematologic effect: increase in the red blood cell count and hemoglobin; decrease in the number of leucocytes with an increased percentage of neutrophils.
  – 2. Endocrine effect: raise serum glucose
  – 3. Cardiovascular effect: lower blood pressure
  – 4. Effect on fatigue: prolonged the swimming time of mice
  – 5. Immunologic effect: inhibit the febrile reaction to toxin
  – 6. Central nervous system effect: stimulatory response; reduction in sleep time
Tai Zi Shen (太子参)  
(Radix pseudo-stellariae)

- **English name:** pseudostellaria
- **Literal English translation:** “child root” or “prince root”
- **Alternate name:** 孩儿参 (hai er shen); 童参 (tong shen)
- **Botanical name:** Pseudostellaria heterophylla
- **Pharmaceutical name:** Radix Pseudostellariae Heterophyllae
- **Where grown:** Jiangsu, Shandong, Anhui
- **When harvested:** summer
- **Used part:** root
- **Flavor and properties:** Sweet. Slightly bitter, neutral
- **Channel entered:** Lung, spleen
Tai Zi Shen (太子参)
(Radix pseudo-stellariae)

• Functions:
  – 1. Tonifies Qi and benefits spleen
  – 2. Generates fluid

• Indications
  – 1. For poor appetite, fatigue due to spleen deficiency with stomach Yin deficiency.
  – 2. For dry coughing, palpitation, insomnia and night or spontaneous sweating.

• Dosage and administration
  – 10-30g decocted in water for an oral dose.

• Cautions and contraindications
  – Incompatible with Li Lu.

• Modern study
  – Use in psychology: Tai Zi Shen and Wu Wei Zi (Fructus Schisandrae Chinensis) in combination is an effective in the treatment of neurasthenia.
Huang Qi (黄芪)  
(Radix Astragali seu Hedysari)  
- **English name:** milk-vetch root, astragalus  
- **Alternate name:** 北芪 (bei qi)  
- **Latin name:** Astragalus membranaceus (Fisch.) Bge.  
- **Pharmaceutical name:** Radix astragali Membranaceus  
- **Where grown:** Shanxi, Heilongjiang, Inner Mongolia, Gansu, northeastern China  
- **When harvested:** Spring or autumn (4-year-old plants or older)  
- **Used part:** root  
- **Flavor and properties:** Sweet, slightly warm  
- **Channel entered:** Lung, spleen
Huang Qi (黄芪)  
(Radix Astragali seu Hedysari)

- **Functions**
  - 1. Tonifies Qi and raises Yang
  - 2. Tonifies protective (Wei) Qi and stabilizes the exterior
  - 3. Promotes urination and reduces edema
  - 4. Promotes discharge of pus and generates flesh

- **Indications**
  - 1. For shortness of breath, poor appetite, loose stool, fatigue due to spleen Qi deficiency; or abdominal pain due to middle Jiao deficient cold; fatigue with sweating due to Qi and Yang deficiency; and sinking syndromes such as prolapse of anus and inner organs.
    - A. Spleen Qi deficiency syndrome, Used with Bai Zhu
    - B. Lung Qi deficiency syndrome
    - C. General Qi deficiency after an illness, Used with Ren Shen
    - D. Both Qi and blood deficiency, with Dang Gui (as Dang Gui Bu Xu Tang)
    - E. Sinking of the middle Qi, Used with Ren Shen, Bai Zhu, Sheng Ma, Chai Hu, Dang Gui, Jie Geng (as Bu Zhong Yi Qi Tang)
  - 2. For spontaneous sweating, easily to get cold due to lung and defensive Qi deficiency.
    - A. Spontaneous sweating due to Qi deficiency, Used with Bai Zhu, Fang Feng (as Yu Ping Feng San)
    - B. Night sweating due to Yin deficiency, Used with Sheng Di, Huang Bai, Huang Qin, Huang Lian, Dang Gui (as Dang Gui Liu Huang Tang)
  - 3. For edema due to spleen deficiency with water retention. Used with Fang Ji, Bai Zhu (as Fang Ji Huang Qi Tang).
  - 4. For carbuncles with pus but difficult to open; or can not recover after long time pus discharging.
    - A. Non-formed pus, Used with Chuan Shan Jia, Dang Gui, Zao Jiao Ci (as Tou Nong San).
    - B. No healing, Used with Dang Gui, Ren Shen, Bai Zhu, Shu Di (as Shi Quan Da Bu Wan).

- **Dosage and administration**
  - 10-15g decocted in water for an oral dose.
  - Can be used up to 120g if necessary.
  - Dry-fry or honey-fry is good at tonifying Qi and raise the Yang.
  - The raw is good for abscesses.

- **Cautions and contraindications**
  - 1. Contraindication in cases of exterior excess.
  - 2. Contraindication in cases of Qi stagnation, damp obstruction, food stagnation.
  - 3. Early stages of carbuncles and sore or there is heat toxin.
  - 4. Large dosage may lead to chest stuffiness and abdominal distention.
Huang Qi (黄芪)  
(Radix Astragali seu Hedysari)

- Modern study
  - 1. Cardiovascular effect: lower blood pressure
  - 2. Urinary effect: diuretic effect
  - 3. Renal effect: less proteinuria
  - 4. Effect on endurance: increase endurance in swimming tests
  - 5. Hepatic effect: protect the glycogen storage levels
  - 6. Endocrine effect: contradictory reports as to whether or not Huang Qi has a positive effect on plasma glucose.

Bai Zhu (白术)  
(Rhizoma Atractylodis Macroceph)

- **English name**: atractylodes (white) rhizome
- **Latin Name**: Atractylodes macrocephala Koidz
- **Pharmaceutical name**: Atractylodes macrocephalae.
- **Where grown**: Zhejiang (best), Anhui, Hubei, Hunan, Jiangxi, Fujian
- **When harvested**: Late autumn to winter
- **Used part**: Rhizome
- **Flavor and properties**: Bitter, sweet, warm
- **Channel entered**: Spleen, stomach
Bai Zhu (白术)
(Rhizoma Atractylodis Macroceph)

• **Function**
  – 1. Tonifies Qi
  – 2. Promotes urination
  – 3. Stabilizes the exterior
  – 4. Calms fetus

• **Indications**
  – 1. For poor appetite, loose stool, abdominal distention, low energy due to *spleen Qi deficiency* (especially SP Yang deficiency). Used with Ren Shen, Fu Ling, Gan Cao (as Si Ju Zi Tang).
  – 2. For edema, urinary retention, phlegm accumulation due to *spleen Qi deficiency*. Used with Fu Ling, Zhu Ling, Ze Xie, Gui Zhi (as Wu Ling San).
  – 3. For night or spontaneous sweating due to *spleen Qi deficiency*. Used with Huang Qi, Fang Feng (as Yu Ping Feng San).
  – 4. For restless fetus due to *spleen Qi deficiency*. with Dang Shen.
Bai Zhu (白术)  
(Rhizoma Atractylodis Macroceph)

- **Dosage and administration**
  - 10-15g decocted in water for an oral dose
  - Raw for dampness, promote urination
  - Dry-fry to strengthen the spleen and tonify the Qi.

- **Cautions and contraindications**
  - Caution in cases of yin deficiency with heat signs

- **Modern study**
  - 1. Urinary effect: diuretic effect.
  - 2. Endocrine effect: increase the assimilation of glucose and lower plasma glucose levels.
  - 3. Effect on endurance: increase in weight and endurance.

Shan Yao (山药)  
(Rhizoma Dioscoreae)

- **English name:** Chinese yam, dioscorea
- **Literal English Translation:** “mountain herb”
- **Alternate name:** 淮山 (huai shan); 薯蓣 (shu yu)
- **Latin Name:** Dioscorea opposita Thunb.
- **Pharmaceutical name:** Radix Dioscoreae Oppositae
- **Where grown:** Henan (best), Hunan, Jiangxi, Guangdong, Guangxi
- **When harvested:** Winter
- **Used part:** Rhizome
- **Flavor and properties:** Sweet, neutral
- **Channel entered:** Kidney, lung, spleen
Shan Yao (山药)
(Rhizoma Dioscoreae)

- Functions
  - 1. Tonifies Qi and nourishes Yin
  - 2. Tonifies lung and kidney

- Indications
  - 1. For diarrhea, poor appetite due to spleen Qi deficiency. Used with Ren Shen, Bai Zhu, Fu Ling, Bian Dou (as Shen Ling Bai Zhu San).
  - 2. For coughing, wheezing, spermatorrhea, frequent urination due to spleen, lung and kidney Qi deficiency. Used with Mai Dong, Wu Wei Zi.
Shan Yao (山药)  
(Rhizoma Dioscoreae)

- **Dosage and administration**
  - 10-30g decocted in water for an oral dose
  - Can be used up to 250g if necessary.
  - Up to 250g alone for wasting and thirsting disorder, decocted and taken as a tea.
  - Use raw to tonify the Yin and dry-fry to strengthen the spleen.

- **Cautions and contraindications**
  - Excessive syndrome, especially when there is dampness, stagnation or accumulation.

Ci Wu Jia (刺五加)  
(Radix Sev Caulis Acantho-panacis Senticosi)

- **English name:** Eleuthero root, Siberian ginseng
- **Alternate name:** 五加参（wu jia shen）
- **Latin Name:** Acanthopanax senticosus
- **Pharmaceutical name:** Spina Acanthopanacis
- **Used part:** root
- **Flavor and properties:** Pungent, Slightly, Bitter, Warm
- **Channel entered:** Spleen, Kidney, Heart
Ci Wi Jia (刺五加)
(Radix Sev Caulis Acantho-panacis Senticosi)

- **Functions**
  - 1. Tonifies spleen and lung Qi
  - 2. Tonifies kidney and strengthens lower back
  - 3. Tonifies spleen and heart, calms Shen

- **Indications**
  - 1. For fatigue, poor appetite, coughing due to spleen and lung Qi deficiency.
  - 2. For soreness and pain of lower back, impotence, kids retardation of walk, and due to kidney deficiency, or Bi syndrome with liver and kidney deficiency.
  - 3. For insomnia, forgetfulness due to spleen and heart deficiency.
Ci Wi Jia (刺五加)  
(Radix Sev Caulis Acantho-panacis Senticosi)

- **Dosage and administration**  
  - 9-20g decocted in water for an oral dose

- **Cautions and contraindications**  
  - Contraindicated for conditions due to Yin deficiency or excess heat.
  - Use with caution during the early stages of acute illness such as cold and flu, or during an acute infection.

Da Zao (大枣)  
(Fructus Ziziphi Jujubae)

- **English name:** Chinese date, jujube
- **Literal English name:** “big date”
- **Latin Name:** Ziziphus jujuba Mill. War. Inermis (Bge.) Rehd.
- **Pharmaceutical name:** Fructus Zizyphi Jujubae
- **Where grown:** Henan, Hebei, Shandong, Shaanxi
- **When harvested:** Early autumn when fruit has ripened
- **Used part:** fruit
- **Flavor and properties:** Sweet, neutral
- **Channel entered:** Spleen, stomach
Da Zao (大枣)  
(Fructus Ziziphi Jujubae)

- **Function**
  - 1. Tonifies spleen Qi
  - 2. Nourishes blood and calms spirit
  - 3. Moderates and harmonizes other herbs

- **Indications**
  - 1. For poor appetite, loose stool, low energy due to spleen Qi deficiency. with Dang Shen, Bai Zhu
  - 2. For pale face and hysteria (Zang Zao) due to blood deficiency. Used with Gan Cao, Fu Xiao Mai (as Gan Mai Da Zao Tang).
  - 3. For reducing side effects and protect health Qi. Such as Ting Li Da Zao Xie Fei Tang and Shi Zao Tang.  

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**Da Zao** (大枣)  
(Fructus Ziziphi Jujubae)

- **Dosage and administration**
  - 10-30g decocted in water for an oral dose.
  - Use raw to clear heat and relieve toxicity
  - Honey-fry to tonify the middle and moderate the harsh properties of other herbs.

- **Cautions and contraindications**
  - Contraindicated with parasites, food stagnation, and dampness disorder.
  - Contraindicated in cases of excess dampness, nausea, vomiting.

- **Modern study**
  - 1. Generalized effect: weight gain and endurance
  - 2. Effect on the liver: relieve toxicity
  - 3. Treatment of hepatic disease: hepatitis or cirrhosis

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**Gan Cao** (甘草)  
(Radix Glycyrrhizae)

- **English name**: licorice root
- **Literal English name**: “sweet herb”
- **Alternate name**: 国老 (guo lao)
- **Latin Name**: Glycyrrhiza uralensis Fischer
- **Pharmaceutical name**: Radix Glycyrrhizae Uralensis
- **Where grown**: Inner Mongolia, Gansu, Xinjiang, northeastern China
- **When harvested**: Spring and autumn
- **Used part**: root
- **Flavor and properties**: Sweet, neutral (raw; sweet, warm (dry-fried))
- **Channel entered**: All 12 channels (principally heart, lung, spleen, stomach)
Gan Cao (甘草) (Radix Glycyrrhizae)

• **Actions**
  - 1. Tonifies Qi and benefits the middle
  - 2. Stops coughing
  - 3. Moderates spasm and alleviates pain
  - 4. Clears heat toxicity
  - 5. Moderates and harmonise other herbs

• **Indications**
  - 1. For palpitation, intermittent pulse, and fatigue, poor appetite, diarrhea
    • A. Spleen Qi deficiency, with Ren Shen, Bai Zhu, Fu Ling (as Si Jun ZI Tang).
    • B. Heart Qi deficiency, with Ren Shen, Gui Zhi, Mai Dong, Sheng Di, Da Zao (as Zhi Gan Cao Tang).
  - 2. For coughing, wheezing whatever cold or hot, deficient or excess syndrome. with Ma Huang, Xing Ren (San Ao Tang or Ma Xing Shi Gan Tang).
  - 3. For spasmodic pain, with Shao Yao (as Shao Yao Tang).
  - 4. For carbuncles, sore throat, drug or food poisoning
    • A. Carbuncles, sores and other skin infections, with Jin Yin Hua, Lian Qiao.
    • B. Sore throat, with Jie Geng (as Jie Geng Tang).
    • C. Food and drug poisoning, with Lu Dou
  - 5. For reducing side effects and protect SP and ST.
    • A. Used in a formula to reduce the toxicity of other herbs or moderate the cold or hot properties and coordinate the effects of different herbs.
    • B. Lead and conduct other herbs into the channels.
Gan Cao (甘草)
(Radix Glycyrrhizae)

• Dosage and administration
  – 3-10g decocted in water for an oral dose.
  – Use raw to clear heat and relieve toxicity, and honey-fry to tonify the middle and moderate spasms.

• Cautions and contraindications
  – 1. Contraindicated in cases of excess dampness.
  – 2. Incompatible with Da Ji, Yuan Hua, Gan Sui and Hai Zao.

• Modern study
  – 1. Mineralocorticoid effect: aldosterone-like effects (cause reduced urine output and excretion of sodium while increasing excretion of potassium)
  – 2. Glucocorticoid effect: increases both the duration and strength of the effects of cortisone. (increase in urinary excretion of 17-ketosteroids, a decrease in MSH secretion by the pituitary, a decrease in Vitamin C content of the adrenals, and leukopenia).
  – 3. Treatment of Addison’s disease: increase weight and strength, improve appetite, high blood pressure, balance electrolytes and increase excretion of 17-ketosteroids.
  – 4. Treatment of diabetes insipidus:
  – 5. Anti-inflammatory effect
  – 6. Treatment of chronic bronchial asthma
  – 7. Use as an adjunct in the treatment of pulmonary tuberculosis
  – 8. Anti-allergic effect
Gan Cao (甘草)  
(Radix Glycyrrhizae)

- 9. Gastrointestinal effect: inhibitory effect against artificially-induced ulcers in dogs; relax animal stomach and intestinal specimens, and relieve spasms
- 10. Use in gastroenterology: treating the pain
- 11. Effect on lipid metabolism: lower cholesterol levels and stop the progression of the lesions.
- 12. Effect on jaundice: lower serum bilirubin and increase the urinary excretion of urobilinogen in rabbits or dogs with ligated bile ducts. Increase the extretion of bile in rabbits.
- 14. Treatment of paramyotonia congenita:
- 15. Detoxifying effect: reduce the toxic effect of strychnine and mortality rate of animals exposed to overdoses of this drug. Reduce the toxicity of many others, including caffeine, acetylcholine, pilocarpine, and nicotine.

Yi Tang (饴糖)  
(Saccharum Granorum)

- **English name**: barley malt sugar, maltose
- **Alternate name**: 胶糖(jiao tang)
- **Pharmaceutical name**: Saccharum Granorum
- **Used part**: Maltose
- **Flavor and properties**: Sweet, slightly warm
- **Channel entered**: Lung, spleen, stomach
Yi Tang (饴糖)  
(Saccharum Granorum)

• **Actions**  
  – 1. Tonifies spleen Qi  
  – 2. Moderates *spasm* and alleviates *pain*  
  – 3. Moistens lung and stops *coughing*

• **Indications**  
  – 1. For poor appetite, low energy due to spleen Qi deficiency.  
  – 2. For deficient cold *abdominal pain*.  
  – 3. For *coughing* due to lung dryness.
Yi Tang (饴糖)  
(Saccharum Granorum)

- **Dosage and administration**
  - 15-30g dissolve in strained decoction at the very end of cooking

- **Cautions and contraindications**
  - 1. Contraindicated in cases of excessive dampness, internal damp-heat
  - 2. Contraindicated in cases of cough due to phlegm-heat
  - 3. Contraindicated in childhood nutritional impairment with food stagnation

Feng Mi (蜂蜜)  
(Mel)

- **English name:** honey
- **Used part:** honey
- **Flavor and properties:** Sweet, neutral
- **Channel entered:** Lung, spleen, large intestine
Feng Mi (蜂蜜)  
(Mel)

**Actions**
- 1. Tonifies Qi and relaxes spasm
- 2. Moistens lung and large intestine
- 3. Resolves toxicity

**Indications**
- 1. For abdominal pain.
- 2. For dry coughing and constipation.
- 3. For reducing toxicity of all kind of Wu Tou.
Feng Mi (蜂蜜)  
(Mel)

- **Dosage and administration**  
  - 15-30g dissolve in strained decoction at the very end of cooking

- **Cautions and contraindications**  
  - 1. Contraindicated in cases of excessive dampness, internal damp-heat
  - 2. Contraindicated in cases of cough due to phlegm-heat
  - 3. Contraindicated in childhood nutritional impairment with food stagnation

Huang Jing (黄精)  
(Polygonati Rhizoma)

- **English name:** Siberian Solomon Seal rhizome, polygonati, polygonatum
- **Literal English translation:** “yellow essence”
- **Latin name:** Polygonatum sibiricum Redoute
- **Pharmaceutical name:** Rhizoma Polygonati
- **Where grown:** Hebei, Inner Mongolia, Shaanxi, Guizhou, Hunan, Yunnan, Anhui, Zhejiang, Guizhou, Guangxi, Yunnan
- **When harvested:** Spring or autumn
- **Used part:** Rhizome
- **Flavor and properties:** Sweet, neutral
- **Channel entered:** Kidney, lung, spleen
Huang Jing (黄精)  
(Polygonati Rhizoma)

• **Actions:**
  – 1. Tonifies Qi and Yin
  – 2. Moistens LU
  – 3. Tonifies kidney essence

• **Indications:**
  – 1. For poor appetite, low energy due to spleen Qi deficiency. with Ren Shen, Dang Shen, Bai Zhu or Sha Shen, Mai Men Dong.
  – 2. For dry cough due to kidney Yin deficiency and lung dryness.
    • A. Dry cough with little sputum due to consumption, with Sha Shen, Zhi Mu
    • B. Kidney essence deficiency, with Xu Dan.
  – 3. For dizziness, lower back and knee soreness, gray hair due to kidney essence deficiency. with Xu Dan.
Huang Jing (黄精)
(Polygononati Rhizoma)

- **Dosage and administration**
  - 15-30g decocted in water for an oral dose.
- **Cautions and contraindications**
  - Contraindicated in cases of spleen deficiency with dampness
- **Modern study**
  - 1. Antibiotic effect: inhibitory effects against tuberculosis bacilli
  - 2. Treatment of tuberculosis: infiltrative pulmonary tuberculosis
  - 3. Effect on blood pressure: lower blood pressure

Section 1 Tonifying Qi herbs
- 1. Ren Shen (Radix Ginseng) 人参
- 2. Xi Yang Shen (Radix panacis Quinquefolii) 西洋参
- 3. Dang Shen (Radix Codonopsis Pilosulae) 党参
- 4. Tai Zi Shen (Radix pseudo-stellariae) 太子参
- 5. Huang Qi (Radix Astragali seu Hedysari) 黄芪
- 6. Bai Zhu (Rhizoma Atractylodis Macroceph) 白术
- 7. Shan Yao (Rhizoma Dioscoreae) 山药
- 8. Ci Wu Jia (Radix Sev Caulis Acanthopanacis Senticosi) 刺五加
- 9. Da Zao (Fructus Ziziphi Jujubae) 大枣
- 10. Gan Cao (Radix Glycyrrhizae) 甘草
- 11. Yi Tang (Saccharum Granorum) 饴糖
- 12. Feng Mi (Mel) 蜂蜜
- 13. Huang Jing (Polygononati Rhizoma) 黄精
### Practice questions

1. The patient with pale face due to blood deficiency, with dizziness, palpitation, poor appetite and diarrhea should be treated by:
   - A. Dang Gui
   - B. Shu Di Huang
   - C. Dang Shen
   - D. Bai Shao Yao

2. Which of the following herbs is often used to rescue the collapsed Qi?
   - A. Dang Shen
   - B. Yi Mu Cao
   - C. Ren Shen
   - D. Huang Qi

3. The herb that tonifies Qi and lifts sinking Yang, strengthens Wei Qi to stops sweating, induces urination to reduce edema is:
   - A. Huang Qi
   - B. Dang Shen
   - C. Gan Cao
   - D. Da Zao

4. The functions of Bai Zhu are:
   - A. Tonify SP Qi and lift sinking Yang Qi, nourish blood and calm spirit.
   - B. Promote blood circulation to remove blood stasis, stop cough and relieve asthma
   - C. Tonify SP Qi and lift sinking Yang Qi, promote flow of Qi and moisten bowels.
   - D. Tonify Qi and strengthen SP, induce urination and drain dampness, stabilize exterior to stop sweating.
Practice questions

5. Which of the following herbs has the function of promote pus discharge and tissue regeneration:
   - A. Dang Shen
   - B. Huang Qi
   - C. Shan Yao
   - D. Bai Zhu

6. Which of the following herbs that tonify Qi, and promote body fluid as well?
   - A. Shan Yao
   - B. Gan Cao
   - C. Dang Shen
   - D. Huang Qi

7. The properties of Ren Shen are:
   - A. Sweet, bitter, slight warm.
   - B. Sweet, slight warm.
   - C. Sweet, slight bitter, warm.
   - D. Sweet, slight bitter, slight warm.

8. Bai Zhu treats which kind of sweating:
   - A. Due to Yang collapse.
   - B. Due to Qi deficiency.
   - C. Due to Yin deficiency.
   - D. Due to excessive heat
Practice questions

• 9. The best herb to treat SP and LU Qi deficiency, with shallow respiration, shortness of breath, sweating and lassitude of extremities is?
  – A. Huang Qi
  – B. Dang Shen
  – C. Ren Shen
  – D. He Shou Wu

• 10. Gan Cao enters:
  – A. HT LU SP and ST channels
  – B. HT and ST channels
  – C. LU, SP and LV channels
  – D. SP and HT channels

Practice questions

• 11. Which of the following herbs is sweet, warm, and has the functions of tonifying Qi and strengthening middle Jiao, nourishing blood and calming spirit, relieving toxins of other herbs?
  – A. Huang Qi
  – B. Da Zao
  – C. Dang Shen
  – D. Gan Cao

• 12. Which of following herbs treat cough, and muscle spasm?
  – A. Shan Yao
  – B. Dang Shen
  – C. Bai Shao Yao
  – D. Gan Cao
Practice questions

• 13. Which of the following Qi tonics can also clear heat and fire toxins to treat carbuncles and sores?
  – A. Huang Qi
  – B. Bai Zhu
  – C. Gan Cao
  – D. Ren Shen