

# Yín Qiào Sǎn (Honeysuckle and Forsythia Powder)

## 銀翹散 銀翹散

**Pinyin Name:** *Yin Qiao San*

**Literal Name:** Honeysuckle and Forsythia Powder

**Alternate Names:** *Yin Jiao San*, Lonicera and Forsythia Formula

**Original Source:** *Wen Bing Tiao Bian* (Systematic Differentiation of Warm Disease) by Wu Ju-Tong in 1798

### COMPOSITION

<i>Jin Yin Hua</i> (Flos Lonicerae Japonicae)	30g [15g]
<i>Lian Qiao</i> (Fructus Forsythiae)	30g [15g]
<i>Jing Jie Sui</i> (Spica Schizonepetae)	12g [4g]
<i>Dan Dou Chi</i> (Semen Sojae Praeparatum)	15g [5g]
<i>Jie Geng</i> (Radix Platycodonis)	18g [6g]
<i>Niu Bang Zi</i> (Fructus Arctii)	18g [6g]
<i>Bo He</i> (Herba Menthae)	18g [6g]
<i>Zhu Ye</i> (Herba Phyllostachys)	12g [4g]
<i>Gan Cao</i> (Radix et Rhizoma Glycyrrhizae)	15g [5g]

### DOSAGE / PREPARATION / ADMINISTRATION

Grind the ingredients into powder and take 18g of the powder with a decoction made from fresh *Lu Gen* (Rhizoma Phragmitis). The decoction of *Lu Gen* (Rhizoma Phragmitis) is prepared by cooking the herb in water until its aroma fills the air. Do not overcook the herb, since a light decoction (cooking for a short period of time) enters and treats the Lung, while a heavy decoction (cooking for a long period of time) enters the middle *jiao*.

For patients with serious conditions, take the decoction three times during the day (2 hours apart) and one time at night. For patients with mild conditions, take the decoction twice during the day (3 hours apart) and one time at night. The treatment should be continued until the condition is resolved. Today, this formula may be prepared as a decoction with the doses suggested in brackets above.

### CHINESE THERAPEUTIC ACTIONS

1. Releases the exterior with acrid and cold herbs
2. Clears heat and eliminates toxins

### CLINICAL MANIFESTATIONS

Onset of *wen bing* (warm diseases): fever, aversion to cold, slight aversion to wind, little to no sweating, stiff and painful neck, thirst, a sore throat, cough, a red tongue and a superficial, rapid pulse.

### VETERINARY CLINICAL APPLICATIONS

Fever, viral and bacterial pneumonia, acute canine infectious tracheobronchitis, feline rhinotracheitis, beginning

of any febrile disease, epidemic encephalitis (early stage), as well as early onset West Nile Virus patients.

### EXPLANATION

*Yin Qiao San* (Honeysuckle and Forsythia Powder) treats the early stage of *wen bing* (warm diseases), when heat enters through the nose and mouth and attacks the Lung. When heat attacks the *wei* (defensive) level of the skin, it produces clinical signs of fever and aversion to cold and wind. When heat invades the Lung, it produces cough. Thirst and a red tongue tip are indications of heat damaging body fluids. A red tongue and a superficial, rapid pulse are signs of heat at the exterior.

*Jin Yin Hua* (Flos Lonicerae Japonicae) and *Lian Qiao* (Fructus Forsythiae) are the chief herbs in this formula. Acrid, aromatic and cold, they release exterior heat and eliminate toxins. *Jing Jie Sui* (Spica Schizonepetae) and *Dan Dou Chi* (Semen Sojae Praeparatum) open the skin pores to help expel exterior factors through the induction of a mild sweat. *Jie Geng* (Radix Platycodonis) regulates Lung qi and relieves the sore throat. *Bo He* (Herba Menthae) dispels wind-heat. *Zhu Ye* (Herba Phyllostachys) clears upper *jiao* heat, while *Niu Bang Zi* (Fructus Arctii) clears heat and eliminates toxins to relieve the sore throat. *Gan Cao* (Radix et Rhizoma Glycyrrhizae) clears heat and eliminates toxins. Finally, *Lu Gen* (Rhizoma Phragmitis) clears heat and promotes the generation of body fluids to relieve thirst.

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Diagnosis	Clinical Signs	Treatment	Herbs
Onset of <i>wen bing</i> (warm diseases)	<ul style="list-style-type: none"> <li>• Fever, aversion to cold and wind: heat attacks the <i>wei</i> (defensive) level</li> <li>• Cough: heat enters the Lung through the mouth and nose</li> <li>• Thirst and a red tongue: body fluids damaged by heat</li> <li>• Red tongue and a superficial, rapid pulse: heat at the exterior</li> </ul>	<ul style="list-style-type: none"> <li>• Releases the exterior</li> <li>• Clears heat and eliminates toxins</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Jin Yin Hua</i> (Flos Lonicerae Japonicae) and <i>Lian Qiao</i> (Fructus Forsythiae) release exterior heat and eliminate toxins.</li> <li>• <i>Jing Jie Sui</i> (Spica Schizonepetae) and <i>Dan Dou Chi</i> (Semen Sojae Praeparatum) open the skin pores to expel exterior factors via mild sweating.</li> <li>• <i>Jie Geng</i> (Radix Platycodonis) regulates Lung qi and relieves sore throat.</li> <li>• <i>Niu Bang Zi</i> (Fructus Arctii) clears heat and eliminates toxins.</li> <li>• <i>Bo He</i> (Herba Menthae) dispels exterior wind-heat.</li> <li>• <i>Zhu Ye</i> (Herba Phyllostachys) clears interior heat from upper <i>jiao</i>.</li> <li>• <i>Lu Gen</i> (Rhizoma Phragmitis) clears heat and promotes the generation of body fluids.</li> <li>• <i>Gan Cao</i> (Radix et Rhizoma Glycyrrhizae) clears heat and eliminates toxins.</li> </ul>

### VETERINARY MODIFICATIONS

- With irritability and thirst, add *Mai Dong* (Radix Ophiopogonis) and *Shi Gao* (Gypsum Fibrosum).
- If there is nausea and vomiting, add *Huo Xiang* (Herba Agastaches) and *Zhi Qiao* (Fructus Aurantii).
- If there is thirst, add *Tian Hua Fen* (Radix Trichosanthis) or *Lu Gen* (Rhizoma Phragmitis).
- If there is cough, add *Ku Xing Ren* (Semen Armeniacae Amarum) and *Zhe Bei Mu* (Bulbus Fritillariae Thunbergii).
- For atopic dermatitis, combine with *Xiao Feng San* (Eliminate Wind Powder) and *Zi Cao* (Radix Arnebiae).
- When there is more interior heat, add *Zhi Zi* (Fructus Gardeniae) and *Huang Qin* (Radix Scutellariae).
- When heat in the Lung has injured body fluids, add *Di Huang* (Radix Rehmanniae) and *Mai Dong* (Radix Ophiopogonis).

### CAUTIONS / CONTRAINDICATIONS

- *Yin Qiao San* is contraindicated in cases of wind-cold invasion or in initial stages of damp-heat conditions.
- Wind-heat conditions can change rapidly. Optimal treatment requires close monitoring of clinical presentations and immediate adjustment of the herbal treatment.
- Avoid feeding foods that are oily, greasy, raw, cold, or sour in nature while taking this herbal formula.<sup>1</sup>

### PHARMACOLOGICAL EFFECTS

1. **Antibiotic:** According to *in vitro* studies, *Yin Qiao San* has broad spectrum of inhibitory effects against such pathogens as *Staphylococcus aureus*, *Bacillus subtilis*, *Bacillus proteus*, *Pseudomonas aeruginosa*, and *Candida albicans*. The minimum inhibitory concentration was 110 mg/mL (equivalent to 550 mg/mL of raw herb).<sup>2</sup>
2. **Effect on temperature regulation:** Administration of *Yin Qiao San* was effective in reducing body temperature in rabbits with artificially-induced fever. Oral ingestion of decoction at 3.8 mL/kg (equivalent to 8.8 g/kg of dried herbs) was effective in reducing body temperature by 1°C for up to six hours. In comparison with aspirin (0.2 mg/kg), the herbal formula and the drug are approximately the same in their effect to reduce fever.<sup>3</sup>
3. **Anti-inflammatory:** Administration of various dosage forms of *Yin Qiao San* was effective in reducing swelling and inflammation in rats. The dosage forms tested include decoction, pills, and tea bags. It has been determined that to achieve an anti-inflammatory effect, the minimum effective dose is 1.5 g/kg. The pharmacokinetic parameters of *Yin Qiao San* are: 2.31 hours to reach peak therapeutic effect, 16.23 hours for duration of action, and 4.53 hours for half life.<sup>4</sup>
4. **Analgesic:** Administration of *Yin Qiao San* at doses of 50 mg/kg and 100 mg/kg via intraperitoneal injection was associated with mild analgesic effects in mice for up to one hour.<sup>5</sup>

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### HUMAN CLINICAL STUDIES AND RESEARCH

- 1. Common cold and influenza:** Three hundred patients with infectious viral infection were treated with *Yin Qiao San* with most reporting improvement after 1-2 doses.<sup>6</sup>
- 2. High fever:** In one study, 102 children with high fever caused by infection were treated with 87.25% effectiveness using modified *Yin Qiao San*. Modifications included addition of *Shi Gao* (Gypsum Fibrosum), *Di Gu Pi* (Cortex Lycii), and *Zhi Mu* (Rhizoma Anemarrhenae) for persistent high fever; *Jiang Can* (Bombyx Batryticatus) and *Gou Teng* (Ramulus Uncariae cum Uncis) for spasms and cramps; *Ma Huang* (Herba Ephedrae), *Ku Xing Ren* (Semen Armeniaca Amarum), and *Qian Hu* (Radix Peucedani) for cough; *Chi Shao* (Radix Paeoniae Rubra), *Chan Tui* (Periostracum Cicadae), and *Ju Hua* (Flos Chrysanthemi) for red eyes; *Ban Xia* (Rhizoma Pinelliae) and *Sheng Jiang* (Rhizoma Zingiberis Recens) for nausea and vomiting; and *Yi Yi Ren* (Semen Coicis) and *Hua Shi* (Talcum) for diarrhea. After using 1-3 packs of the herbs, the study reported improvement in 89 of 102 patients.<sup>7</sup>
- 3. Pneumonia:** One study reported recovery in all 25 children with pneumonia after they were treated with 3-5 packs of modified *Yin Qiao San* plus *Zhi Mu* (Rhizoma Anemarrhenae) and *Ku Xing Ren* (Semen Armeniaca Amarum). Additional modifications were made as needed. For irritability and thirst due to excess heat, *Tian Hua Fen* (Radix Trichosanthis) and *Huang Lian* (Rhizoma Coptidis) were added, and *Jing Jie Sui* (Spica Schizonepetae), *Bo He* (Herba Menthae) and *Niu Bang Zi* (Fructus Arctii) were removed. For severe cough with thick sputum, *Chuan Bei Mu* (Bulbus Fritillariae Cirrhosae) and *Gua Lou* (Fructus Trichosanthis) were added, and *Niu Bang Zi* (Fructus Arctii) and *Jing Jie Sui* (Spica Schizonepetae) were removed. For dry or foul-smelling stools, *Da Huang* (Radix et Rhizoma Rhei) was added, and *Jie Geng* (Radix Platycodonis) and *Bo He* (Herba Menthae) were removed. For reduced frequency and volume of urine with painful urination, *Che Qian Zi* (Semen Plantaginis) was added, and *Niu Bang Zi* (Fructus Arctii) and *Jing Jie Sui* (Spica Schizonepetae) were removed.<sup>8</sup>
- 4. Acute upper respiratory infection:** In one report, 1150 patients with wind-heat exterior infection were treated with *Yin Qiao San* with relief of fever within an average of 2.7 days.<sup>9</sup>

### TOXICOLOGY

The LD<sub>50</sub> for *Yin Qiao San* in mice via oral ingestion was 100 g/kg in decoction, and 75 g/kg in pills.<sup>10</sup>

### SUGGESTED ACUPUNCTURE TREATMENT

1. Points: *Dazhui* (GV 14), *Fengchi* (GB 20), *Waiguan* (TH 5), *Quchi* (LI 11), *Hegu* (LI 4), *Chize* (LU 5), *Shangyang*

(LI 1), *Feishu* (BL 13), *Lieque* (LU 7), *Tiantu* (CV 22), *Yuji* (LU 10), *Shaoshang* (LU 11) and *Dingchuan*.

2. Technique: sedation.

*Dazhui* (GV 14) dispels heat from the exterior. *Fengchi* (GB 20) relieves exterior wind. *Waiguan* (TH 5), *Quchi* (LI 11), and *Hegu* (LI 4) dispel wind-heat and regulate the qi flow of the Lung. *Chize* (LU 5) clears Lung heat. *Shangyang* (LI 1) opens the channel and clears wind-heat. *Feishu* (BL 13) and *Lieque* (LU 7) disperse the Lung and consolidate the exterior. *Tiantu* (CV 22) stops cough. *Yuji* (LU 10) and *Shaoshang* (LU 11) sedate Lung heat and relieve sore throat. *Dingchuan* stops cough and dyspnea.

### AUTHORS' COMMENTS

*Yin Qiao San* is the representative formula for treating the initial stage of *wen bing* (warm diseases), with chief manifestations of fever, aversion to cold, slight aversion to wind, thirst, and a superficial, rapid pulse. It is widely used in the treatment of various types of respiratory diseases and is most effective when administered immediately after clinical signs appear. Appropriate use of this formula will reduce the severity and duration of viral infections. It is best to administer *Yin Qiao San* three to four times daily instead of twice for optimal clinical results. Cattery, kennel, and stable owners have used this formula at the first sign of respiratory disease to prevent the remainder of the population in their care from becoming ill.

*Yin Qiao San* is also effective in the treatment of chronic rhinitis-sinusitis with nasal discharge and significant nasal-sinus tissue destruction (as evidenced upon radiographs or computerized tomography) in the dog and cat when combined with *Xue Fu Zhu Yu Tang* (Drive Out Stasis in the Mansion of Blood Decoction) or *Tong Qiao Huo Xue Tang* (Unblock the Orifices and Invigorate the Blood Decoction). They can be combined in a 3:1 or 4:1 ratio of *Yin Qiao San* to *Xue Fu Zhu Yu Tang* (Drive Out Stasis in the Mansion of Blood Decoction) or *Tong Qiao Huo Xue Tang* (Unblock the Orifices and Invigorate the Blood Decoction), depending on the case. This protocol can be used in a similar fashion in horses that develop chronic sinusitis subsequent to intranasal vaccination. This protocol may also be useful in many cases of ethmoid hematoma in patients that are not bleeding profusely, in which case herbs such as *San Qi* (Radix et Rhizoma Notoginseng) should be used initially until bleeding is controlled. The authors have also used *Yin Qiao San* in combination with *San Qi* (Radix et Rhizoma Notoginseng) and *Gui Pi Tang* (Restore the Spleen Decoction) in cases of exercise induced pulmonary hemorrhage (EIPH).

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*Xue Fu Zhu Yu Tang* (Drive Out Stasis in the Mansion of Blood Decoction) activates qi and blood circulation, removes blood stagnation, and relieves pain. It is used to treat qi and blood stagnation in the chest, which includes the Lung. In Chinese medicine, the nose is the sensory orifice related to the Lung, and, as such, this formula can be used to treat rhinitis-sinusitis. *Xue Fu Zhu Yu Tang* (Drive Out Stasis in the Mansion of Blood Decoction) has the unique ability to activate blood circulation and dispel blood stasis without injuring the blood, soothe the Liver, and relieve qi stagnation without consuming qi. *Tong Qiao Huo Xue Tang* (Unblock the Orifices and Invigorate the Blood Decoction) specifically activates blood circulation to the head and face and opens the sensory orifices. The use of blood-moving formulas in chronic rhinitis-sinusitis is essential because long-term tissue destruction, toxic heat, and dampness cause stagnation, which leads to blood stasis. In addition, herbal formulas that invigorate blood flow to the upper orifices help to increase delivery of antibiotics, oxygen, nutrients, immune factors, and other formulas to compromised tissue and help to drain discharge and enhance chemotherapeutic effects.

*Yin Qiao San* can be used in combination with *Ma Huang Xing Ren Gan Cao Shi Gao Tang* (Ephedra, Apricot Kernel, Licorice, and Gypsum Decoction) to treat pneumonia in the dog and horse. *Ma Huang Xing Ren Gan Cao Shi Gao Tang* (Ephedra, Apricot Kernel, Licorice, and Gypsum Decoction) is a strong formula that clears and ventilates the Lung to treat cough and dyspnea caused by Lung heat. When used with *Yin Qiao San* this combination can clear heat toxins, disperse the Lung, relieve the exterior, and unblock the collaterals. In the treatment of acute bacterial pneumonia, it can be combined with *Yin Qiao San* in a ratio of 1:4. Diseases of the horse such as Eastern, Western, and Venezuelan equine encephalitis, West Nile Virus, strangles, and Rhodococcus, which all can move quickly to generate heat toxins, can be treated using a combination of *Yin Qiao San* with *Huang Lian Jie Du Tang* (Coptis Decoction to Relieve Toxicity), also in a 1:4 ratio. The latter formula is quite effective at draining heat, but it is very cold and should be used with caution in weak or debilitated animals. Additionally, when used to treat *Streptococcus equi*, abscesses that can be drained to the exterior should be opened at the onset of treatment.

It is common in the treatment of bacterial, neoplastic or mycotic pneumonia to add additional single herbs to improve the ability of *Yin Qiao San* to clear heat and toxins from the Lungs. The following herbs can be added to enhance the overall effects: *Yu Xing Cao* (Herba Houttuyniae), *Zi Hua Di Ding* (Herba Violae), *Ma Bian Cao* (Herba Verbenae), *Chuan Xin Lian* (Herba Andrographis), *Da Qing Ye* (Folium Isatidis), and *Ban Lan Gen* (Radix Isatidis). Once the acute signs (e.g., fever, nasal discharge, cough with thick, yellow phlegm, dyspnea, anorexia, lethargy) of pneumonia have been cleared, those herbal formulas administered to clear heat, eliminate toxins and ventilate the Lung should be decreased, and herbal formulas to tonify Lung qi and yin and to tonify the Spleen and Stomach should be added.

*Sang Ju Yin* (Mulberry Leaf and Chrysanthemum Decoction) and *Yin Qiao San* both clear heat, eliminate toxins, disperse wind-heat, and ventilate the Lung. Both are suitable for wind-heat invasion with fever and cough. The differences between the two formulas are as follows:

- *Sang Ju Yin* contains *Sang Ye* (Folium Mori), *Ju Hua* (Flos Chrysanthemi), and *Ku Xing Ren* (Semen Armeniacae Amarum). This formula ventilates the Lung and arrests cough associated with initial stages of wind-heat invasion.
- *Yin Qiao San* contains *Jin Yin Hua* (Flos Lonicerae Japonicae), *Jing Jie* (Herba Schizonepetae), *Dan Dou Chi* (Semen Sojae Praeparatum), *Niu Bang Zi* (Fructus Arctii), and *Zhu Ye* (Herba Phyllostachys). This formula eliminates toxins to treat *wen bing* (warm disease) conditions with chief manifestations of sore throat and fever.

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