

JADE SOURCE FORMULA JIA JIAN YU QUAN WAN

ORIGINS: Yu Quan Wan from *Discussion of Formulas from Straight Directions from Ren-Zhai*, by Yang Ren-zhai, 1264.

Jade Source Formula (*Jia Jian Yu Quan Wan*) is a modification of the classic formula *Yu Quan Wan*, which was first published in *Discussion of Formulas from Straight Directions from Ren-Zhai*, written by Yang Ren-zhai in 1264. A more famous discussion, however, was published two centuries later in *The Essential Teachings of Zhu Dan Zi (Dan Xi Yin Fa)*, 1481. This formula is classical formula used to treat *xiao ke* (wasting and thirsting syndrome).

GENERAL SIGNS/SYMPOMS

Increased thirst, dryness of mouth and tongue, frequent urination, increased appetite, weight loss even though caloric intake does not necessarily decrease.

CLASSICAL ACTIONS

1. Boosts qi to help transform fluids
2. Generates fluids, moistens dryness
3. Clears heat
4. Supplements yin

INGREDIENTS

PINYIN	LATIN	ENGLISH	PERCENT OF FORMULA
<i>Huang Qi (co-chief)</i>	<i>Astragali (radix)</i>	Astragalus root	15%
<i>Mai Men Dong (co-chief)</i>	<i>Ophiopogonis (radix)</i>	Ophiopogon tuber	12%
<i>Tian Hua Fen (deputy)</i>	<i>Trichosanthis (radix)</i>	Trichosanthes root	12%
<i>Ge Gen (deputy)</i>	<i>Puerariae (radix)</i>	Kudzu root, Pueraria	12%
<i>Shan Yao (co-chief)</i>	<i>Dioscoreae (rhizoma)</i>	Chinese Yam	10%
<i>Yu Zhu (deputy)</i>	<i>Polygonati odorati (rhizoma)</i>	Aromatic Solomon's Seal rhizome	10%
<i>Fu Ling (co-chief)</i>	<i>Wolfiporiae Cocos (sclerotium)</i>	Poria, Sclerotium of Tuckahoe, China Root, Hoelen	10%
<i>Bai Ren Shen (co-chief)</i>	<i>Ginseng, dried (radix)</i>	White Ginseng root	8%
<i>Wu Mei (deputy)</i>	<i>Mume (fructus)</i>	Mume fruit, Japanese Apricot	6%
<i>Gan Cao (deputy)</i>	<i>Glycyrrhizae (radix)</i>	Chinese Licorice root	5%

GENERAL INDICATIONS / MODERN APPLICATIONS

- Appetite, increased
- Diabetes mellitus (Type 1 or Type 2)
- Dry mouth
- Dryness, post-illness
- Irritability
- Metabolic Syndrome
- Restlessness
- Thirst, excessive
- Urination, frequent
- Weight loss, unintended or abnormal

FORMULA DISCUSSION

Yù (jade) refers to the acupuncture extra point under the tongue, *yù yè* (jade fluid); *quán* (source) is the word used to designate the mouth of a spring. The formula was named to evoke the idea of a cool spring that supplies all the fluid we need to eliminate thirst and maintain proper nourishment from the yang (*jin*) fluids.

Jade Source Formula (*Jia Jian Yu Quan Wan*) is most frequently associated with the treatment of *xiao ke* (wasting and thirsting syndrome), which is frequently identified with diabetes mellitus. The two diseases have much overlap, but are not identical. The modern treatment of diabetes mellitus focuses specifically upon regulating the insulin-sugar ratio in the blood. *Xiao ke* (wasting and thirsting syndrome) is marked specifically by the signs and symptoms of excessive thirst, excessive hunger with weight loss, copious (often sugary) urination, and irritability. **Jade Source Formula** (*Jia Jian Yu Quan Wan*) is designed to address these signs and symptoms by regulating their root causes. It is often utilized to treat all types of diabetes, but it should be considered inappropriate without confirmation of the correct pattern. On the other hand, **Jade Source Formula** (*Jia Jian Yu Quan Wan*) can be applied to a number of non-diabetic conditions when the pattern is a match.

If lack of fluids were at the root of the pattern treated by **Jade Source Formula** (*Jia Jian Yu Quan Wan*), the formula

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- Generates fluids, moistens dryness
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TONGUE

- 1) Slight pale, with peeled or dry coating.
- 2) Slight red and dry
- 3) May be small

PULSE

Large and forceless, may be rapid.

CONTRAINDICATIONS / CAUTIONS

Do not take during the acute phase of a febrile disease.

Since over-consumption of acrid/spicy foods can contribute to the development of this pattern, it is advised to consume them only in moderation while taking this formula.

DOSAGE

Standard dosage is 2 tablets, 3 times daily.

would address a more global dryness, including not just dryness in the area of the mouth and throat, but also dry skin, floating thin pulse, nose bleeds, constipation, etc.) But **Jade Source Formula** (*Jia Jian Yu Quan Wan*) does not treat all of these signs of dryness. In the correct pattern, damage to, or insufficiency of, both qi and fluids are assumed. The strategy of **Jade Source Formula** (*Jia Jian Yu Quan Wan*) is focused on supplementing the qi and regulating the fluids, rather than mere supplementation of fluids. The chief herbs augment the qi and support the qi's action to produce and distribute fluids. Only two of the ten ingredients directly supplement yin and fluids. The pulse indicating use of this formula, rather than being thin (as might be expected in a yin deficiency pattern), is often large and empty, indicating a deficiency in the qi mechanism, rather than major yin deficiency.

Just as not all diabetes mellitus manifests as *xiao ke* (wasting and thirsting syndrome), not all patients with *xiao ke* are diabetic. *Xiao ke* can be developed as a result of too much heat-producing foods (spicy or rich foods) in the diet; it can be the result of liver qi stagnation transforming into heat and invading the middle warmer, where it consumes the yin and damages the qi; or it can result from an external warm pathogen invading into the qi level, causing damage to the qi and yin. There are types of *xiao ke* syndrome that are not related to diet/lifestyle or an external invasion. A *xiao ke* pattern can be the result of a frail constitution where a deficiency of qi and yin develop into heat constraint and dry up the fluids. A good way to think about the pattern that **Jade Source Formula** (*Jia Jian Yu Quan Wan*) treats is this: lack of fluids due to qi and yin deficiency with mild internal heat.

Most formulations of **Jade Source Formula** (*Jia Jian Yu Quan Wan*) focus on dryness in the upper warmer. The formulation under discussion is a bit broader and can be used to treat *xiao ke* in any of the three warmers. In short, use of **Jade Source Formula** (*Jia Jian Yu Quan Wan*) is appropriate when there is qi and fluid deficiency with thirst. It is not appropriate in the absence of thirst, where there is no qi deficiency, or during acute febrile disease.

SYNERGY OF INGREDIENTS

Jade Source Formula (*Jia Jian Yu Quan Wan*) can be viewed as consisting of five chiefs and five deputies with no true assistants or guides.

The five chiefs are all supplementing/tonifying. White ginseng and astragalus (*bai ren shen* and *huang qi*) are both qi supplementing herbs with the ability to generate fluids and support proper regulation of the fluids through the qi function. Dioscorea (*shan yao*) supplements spleen and stomach qi, supports the generation of fluids, supplements lung qi and yin, and supports both the yin and yang of the kidneys. Because it benefits the qi in all three warmers, supports the yin in the lung and kidneys, and is neutral in temperature, dioscorea (*shan yao*) is sometimes used as a stand-alone herb for the treatment of *xiao ke* (wasting and thirsting syndrome). Poria (*fu ling*) is included because it not only supplements the middle warmer, it also is used "to treat symptoms of collected water, affecting any of the five viscera and six bowels, appearing anywhere in the body."¹ This latter action of poria (*fu ling*) is an important function in a formula that generates fluids as

it helps to prevent water from collecting, thereby assisting in the regulation of the water passages and helping to restore the qi aspect of water regulation. Another function of poria (*fu ling*) in this formula is its remarkable ability to calm shen. Part of the pattern of *xiao ke* (wasting and thirsting syndrome) is irritability, and poria (*fu ling*) is the only one of the qi-supplementing substances that addresses this component. The fifth chief, ophiopogon (*mai men dong*) is the only true yin tonic from the original formulation. (The present formulation is augmented with polygonatum (*yu zhu*), which is also a yin tonic, but serves in the role of deputy.) The ability of ophiopogon (*mai men dong*) to nourish the yin and generate fluids without being cloying makes it ideal for yin deficiency issues where there is also middle warmer qi deficiency. It is slightly cooling and assists in eliminating heat and relieving irritability.

The two deputies with the largest percentage in the formula are trichosanthes root (*tian hua fen*) and pueraria (*ge gen*). These two herbs come from different categories of the *materia medica*. Trichosanthes root (*tian hua fen*) is from the heat-clearing category, while pueraria (*ge gen*) is from the exterior-releasing category, but both can generate fluids. Trichosanthes is cold, drains heat from the lungs and stomach, and generates fluids. It is especially strong in directing phlegm above the diaphragm downward—a collateral condition that often results when the lungs have been scorched by heat or where lung yin deficiency has given rise to empty heat. The body will produce phlegm as a substitute coating for the yin, which has become difficult to keep properly nourished.

Pueraria (*ge gen*) is included, not for its ability to release the exterior, but because its raising and dispersing action can lift qi and fluids from the stomach into the upper warmer. Along with poria (*fu ling*), pueraria (*ge gen*) regulates the water passages to restore the relationship between the qi and the fluids.

Polygonati (*yu zhu*) is a slightly cold yin tonic, and, like ophiopogon (*mai men dong*) it is not cloying. It is often used to treat damage to fluids from external warm pathogens because it can nourish the fluids without retaining the pathogenic factor. Polygonati (*yu zhu*) can also generate fluids and calm irritability. Mume fruit (*wu mei*) is from the stabilize and bind category of the *materia medica*. It is sour and astringent and enters the stomach/ middle warmer as well as the lungs. In the stomach, the sourness consolidates the fluids of the stomach and promotes the generation of yang (*jin*) fluids. In the lung, it helps to restrain lung qi and yin that has been damaged.

The final substance in the formula is licorice root (*gan cao*). Usually licorice root (*gan cao*) is included in a formula to act as an envoy/ guide herb, especially when it occurs in low doses, as it does here. But in **Jade Source Formula** (*Jia Jian Yu Quan Wan*), the licorice is another deputy. The role of the deputy in a Chinese herbal formula is twofold. On the one hand, it assists the chiefs in treating the principle pattern; on the other hand, it serves as the main substance for a secondary action/ coexisting pattern. The licorice (*gan cao*) in **Jade Source Formula** (*Jia Jian Yu Quan Wan*) serves both of these functions. The principle aspect of the disease pattern in this formula is qi and yin deficiency; licorice root (*gan cao*) augments the qi and moistens the lung and middle warmer. The secondary disease aspect in the patterns treated by **Jade Source Formula** (*Jia Jian Yu Quan Wan*) is fluid damage or insufficiency. The sweetness of the licorice root combines with the sour of the mume (*wu mei*) to transform the yin and moisten the lung. “Transformation of yin” can mean a number of things. It can be the transformation of one kind of fluid (*jin*, *ye*, or blood) into another. It can also mean that the yin is not sufficiently mobilized; it has become stagnant and is not circulating and nourishing properly. In the pattern under present discussion, “yin transformation” implies mainly the first action. The sweet and sour combination of the mume and licorice encourages the transformation of the thick yin (*ye*) fluids (which are sufficient, but stagnant) into yang (*jin*) fluids. It is the action of the other substances to mobilize the fluids.

The synergy of the ten substances in **Jade Source Formula** (*Jia Jian Yu Quan Wan*) can be summarized in the following way: most of the chief herbs supplement the qi of the middle warmer and lungs; many of the substances help to generate fluids or transform the thick *ye* fluids into thin *jin* fluids. This is the base action of the formula. With the qi supported, and the fluids in greater abundance, the pueraria (*ge gen*) lifts the fluids upward into the lungs and throat. Finally, the supplemented lung qi helps to dispense the fluids, and the poria (*fu ling*) assures that the water passages are open so that no stagnation results.

MODERN APPLICATIONS

Metabolic Syndrome – “Metabolic syndrome is a direct consequence of diet, specifically intake of large amounts of refined carbohydrates and sugars.... It is now estimated that 24% of America’s population is at risk for metabolic syndrome and Type II diabetes.”ⁱⁱ Metabolic syndrome may include a tendency towards high blood sugar, high blood pressure, high cholesterol (specifically high triglyceride levels), and fat accumulation around

the waistline. Jake Paul Fratkin, OMD, L.Ac., suggests that the combination of *Yu Quan Wan* with dietary changes may be a useful strategy for treating metabolic syndrome.ⁱⁱⁱ

Diabetes Mellitus – This Western medical diagnosis refers both to Type 1, insulin-dependent diabetes and Type 2, insulin resistant diabetes. An Oriental medical diagnosis is still necessary to treat either of these types of diabetes. *Xiao ke* syndrome may include any combination of qi and yin deficiencies. *Yu Quan Wan* has been shown in clinical trials to effectively reduce blood sugar levels in 79% of the 103 cases treated.^{iv}

FORMULA COMPARISONS

Jade Source Formula & Lily Preserve Metal Formula

Lily Preserve Metal Formula (*Bai He Gu Jin Tang*) is generally used during the post-acute phase of a heat-type respiratory disease. It is assumed in such circumstances that the lung yin has been damaged by a heat pathogen, that the pathogen has been mostly cleared, but that some heat lingers. The main symptoms will be dry cough with scant phlegm, and the course of treatment is usually a few days to a few weeks. In the pattern treated by **Jade Source Formula** (*Jia Jian Yu Quan Wan*), the main symptom will be dry mouth and thirst, which can arise not only as the result of external damage from a warm pathogen, but from a number of internal causes as well see **Formula Discussion**, above).

Jade Source Formula & Rehmannia Six Formula

Rehmannia Six Formula (*Liu Wei Di Huang Wan*) has traditionally been used to treat *xiao ke* syndrome that is caused by kidney and liver yin deficiency. This diagnosis would be indicated if, along with other *xiao ke*

indications, the patient’s symptoms include soreness and weakness of the lumbar area and knees, hot palms and/or feet, dizziness or tinnitus. Rehmannia Six is weak at supplementing the qi and is not as strong to eliminate thirst as **Jade Source Formula** (*Jia Jian Yu Quan Wan*), but is indicated when there are clear signs of liver and kidney yin deficiency. The pulse too will be different with the Rehmannia Six pattern. Whereas the pulse in the Jade Source pattern indicates qi deficiency by being large and forceless, the pulse in a Rehmannia Six pattern will likely be thin and maybe rapid or deep, reflecting a deficiency of yin in the liver and kidney.

Jade Source Formula & Eight Immortals Formula

Eight Immortals Formula (*Ba Xian Chang Shou Wan*) may be used to treat intermediate *xiao ke* syndrome affecting all three burners, but affecting the upper burner most severely. This formula is nourishing to kidney, stomach and lung yin. It is most useful when the main symptom is chronic dry cough, as opposed to the main symptom in a **Jade Source Formula** (*Jia Jian Yu Quan Wan*) pattern, which is thirst.

ENDNOTES

ⁱJiao, Shu-de (trans. and ed. Craig Mitchell, Nigel Wiseman, et al.) *Ten Lectures on the Use of Medicinals from the Personal Experience of Jiao Shu-de*, Paradigm Press, 2003.

ⁱⁱFratkin, JP. Treating Metabolic Syndrome (Type II Diabetes), *Acupuncture Today*, April 2008.

ⁱⁱⁱ*Ibid.*

^{iv}Fegn, JH, et al., 103 cases of diabetes mellitus treated by Jiang Tang Le, *Journal of the Shangdong College of Traditional Chinese Medicine*, Vol. 18, Issue 6, pp. 376-377, 1994.

USEFUL COMBINATIONS

For diabetic neuropathy in the limbs	Combine with Ji Xue Formula .
With metabolic syndrome, diabetes, or <i>xiao ke</i> when the symptoms include hypertension	Use with Luo Bu Ma Formula .
When obesity is a major factor in the development of Type 2 Diabetes	Use with Hawthorn and Fennel Formula .
With metabolic syndrome, diabetes, or <i>xiao ke</i> when the symptoms include cyst formation and thirst	Combine with Phlegm-Transforming Formula .