



## 60 Capsules Bottle



### **Jiaogulan Leaf:** Scientific name: (*Gynostemma pentaphyllum*)



Jiaogulan (“jow-goo-lan”) is, native to S. W. China, known for the longevity of its inhabitants where it is called “*Xiancao*” or “Herb of Immortality.” In Thailand and throughout S.E. Asia, jiaogulan has been used for centuries, taken in the morning to provide energy and after work to relive fatigue.

Jiaogulan maintains vital functions, increases endurance, provides resistance to injurious stimuli and promotes individual core health with strong potential for prevention as well as healing. It is an effective adjunctive therapy to reduce side effects and speed recovery when used in conjunction with more aggressive Western treatments we may require for healing. (such as chemotherapy)

### **HOMEOSTASIS:**

With 120 saponins, jiaogulan is truly the “Saponin King” of the plant kingdom. Saponins are complex molecules that modulate and balance our physiology. Jiaogulan contains the broadest range of saponins (ginseng has 32 saponins and astragalus root has 24). The Thai concept of “The Wisdom of Equilibrium” identifies balance as the key to good health. In balance, your well-being and natural healing abilities are at their highest natural level.

Each of these saponins have been isolated, numbered and subjected to intense scientific investigation. Science is validating the specific compounds (ie: saponin gypenoside # 49 which contributes to longevity) that balance your physiology by their regulatory effects on blood pressure, blood sugar levels, immune system, nervous system etc.

### **ADAPTOGEN:**

The ability to adapt is a defining condition of life. Nothing could be more central to our existence and survival. Adaptogens are a precious category of herbs that increase the body's natural abilities to respond to stress. They transform stressful circumstances into catalysts to adapt. Adaptogens are "bi-directional." Should you require energy, they increase your energy, but if you are overactive they will calm your nerves. If your blood sugar level is low jiaogulan will raise it, but if too high it will lower the level. There is nothing like this bi-directional response in allopathic medicine. Jiaogulan works on what's given and different for each person to adjust and strengthen the body sequentially while maintaining overall balance.

A well-balanced physiology has a normalizing effect on our entire bio-physical condition. Through normalizing the balance of the central nervous system, neuro-endocrine regulation, immune system, and cardiac health jiaogulan helps to balance our entire physiology via multiple metabolic pathways.

### **ANTIOXIDANT:**

Jiaogulan strengthens the body's ability to produce the enzymes specific to catalyze the synthesis of its own endogenous antioxidants. Your body synthesizes the enzymes superoxide dismutase (SOD) and glutathione. These antioxidants are part of your natural defense system but as you age your ability to produce these enzymes decreases and you may need the extra help that jiaogulan can provide.

### **NUTRITIONAL VALUE:**

Jiaogulan contains minerals and vitamins that are part of its adaptogenic response. These should not be overlooked by taking an extract alone. Jiaogulan leaves and young green stems contain well-balanced proportions of selenium, magnesium, zinc, calcium, iron and phosphorous. Vitamins B1, B2, and carotene join the broad spectrum of strong anti-oxidant compounds as well as proteins and amino acids: lysine, phenylalanine, arginine, glutamic acid, glutamine, aspartic acid and isoleucine.

Jiaogulan grows best in its primal growing conditions high in the mountains where environmental conditions are extreme: hot days and cold nights, strong winds, excessive seasonal rains alternating with dry season. It thrives on stressful conditions and adapts to these extremes to survive. This ability to adapt to stress is inherent in jiaogulan's genetic code. What jiaogulan does for you when it enters your body is a remarkable reflection of how it survives and prospers in the wild.

### **RAW MATERIAL SPECIFICATIONS:**

We accept only the fresh green leaves with the small capillary veins since these have the highest value in terms of bioactive ingredients. If we were to accept the stems, oven dry and grind to a powder you would be getting 100% jiaogulan but with 80% of the weight being pulp from the stems.

### **PURITY & FRESHNESS:**

Due to the nature of CPT processing, we can only use wild crafted, fresh, uncontaminated harvests of very high quality.

There is a strict 24 hour harvest-to-input period applied - all freshly cut plants are delivered to the facility and input through the process immediately to maintain optimal nutrient levels and avoid contaminants.

This means: No Fillers - No Pesticides - No GMO's - No Chemical Fertilizers

## No Pollutants - No Old/Expired/Frozen Plant Harvests

The inherent intelligence that Jiaogulan demonstrates in response to intercellular messages which indicate the location and nature of imbalances and in which direction and to what degree an adjustment is required to normalize the condition is critical to its effect as an Adaptogens. It is essential that the cellular and molecular structure of the plant is kept intact. This is where CPT surpasses all other technologies for preservation of Jiaogulan.

The chemical compounds per se tell only part of the story. Our bodies consist of billions of cells operating within a collective organization. Order, information, programming and communication are essential ingredients of every biological system and particularly relevant in the case of Adaptogens.

**This product is approved by the Thai F.D.A. as a dietary supplement and approved by HALAL, GMP and is a US Approved Food Facility.**



### **The Technology – Cellular Preservation Technology (CPT)**

Cellular Preservation Technology or CPT is a proprietary technology which utilizes a modified form of freeze drying.

Freeze Drying has been used for centuries however the common industry standard freeze dry method typically uses traditional 'static' freeze drying with a further process of mechanical grinding.

## Image 1 – Traditional Vs Cellular Preservation Technology (CPT)

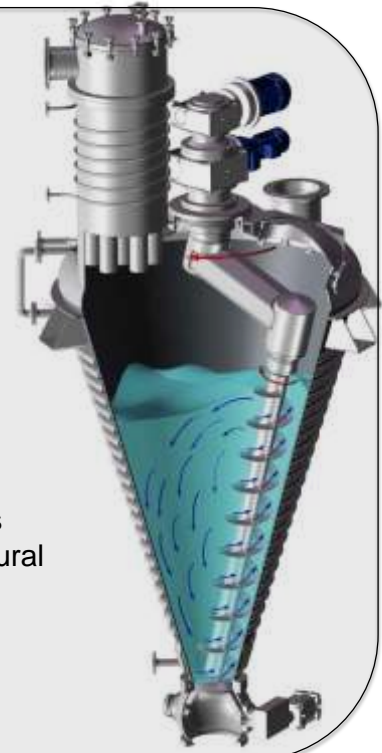
### Traditional freeze drying



- multi-step process; bacteria and mould growth risk.
- static materials sitting on trays; 10-20% residual moisture
- product ground into a powder; product cell structure destroyed

### Cellular Fracture Line technology

- 1-step process
- super frozen particles fly around in the product chamber
- no mechanical grinding.
- brittle material motion and sublimation of ice structure that hold it together causes product to break along natural elemental fracture lines.
- <0.1% residual moisture



CPT is a key component in the creation of our functional foods. It allows us to preserve a whole food in its fresh form, thus maintaining all of the medicinal activity of a live plant while providing the safety of a stable commodity.

This proprietary and transitional preservation process gives us the unique ability to provide a superior product compared to anything else available on the market today. The 'secret' to our technology is the Herbs are dried while they remain frozen in a vacuum state, rather than sitting motionless on trays (as in the traditional tray freeze drier), the product is flying round in a vortex. The deeply flash-frozen CPT granules decrease in size due to sublimation of the connecting ice structure and break into increasingly smaller particles along natural elemental fracture lines.

This creates a smaller particle size and porous structure without cellular hemorrhaging, caused by mechanical grinding of the traditional process as used in the industry today. CPT particles are much more easily absorbed and metabolized (more bio-available), and are more soluble for use as a catalyst ingredient in other formulations.

### **Solubility**

As a food ingredient our herbs are highly soluble. Solubility ties into taste as well as ease to combine with other ingredients. This high level of solubility (enhanced by the CPT freeze dry process creates a more soluble particle structure),

### **Fresh Super herbs and Super foods**

As soon as our botanicals are harvested they naturally begin to degrade. It is critically important to get them into the CPT process immediately after harvest. The logistics are challenging in any case,

but the fact that they are grown at our doorstep in the mountains surrounding Chiang Mai, Thailand makes it all possible.

### Higher Bioactivity Superior Efficacy

The objective achieved by CPT is preservation not only of the targeted ingredients but preservation of the entire cellular and molecular structure of the live plant. This is achieved by:

- An Evolutionary and Transitional Freeze Dry Process where the product is never exposed to the destructive oxidative forces of heat.
- Plant tissue fractures between/along the layers of the cell walls preserving cellular integrity and improving the retention of the bioactive intracellular contents.
- Water removed as a liquid at an extremely low constant temperature (minus 55 deg C) evaporates at a constant rate while the quantity of water steadily decreases. This creates surface tension. Any solid structure in contact with the water will normally experience surface tension strong enough to damage fragile cell walls; CPT removes water in its gaseous state (water vapor) and avoids this destructive surface tension.
- Exposure of the entire surface area to sublimation results in “even” drying which preserves cellular integrity.

The net result is preservation of the complex synergistic structure as close as possible to how it exists in nature. This translates to a more highly bioactive more effective powder.

### Higher Absorption and Higher Bio-Availability

Particles break down inside the product chamber with minimal need for mechanical grinding. They break down due to the movement of the super frozen particles and sublimation of the ice structure that holds the particles together. This causes them to fall into small porous particles along the natural Cellular Lines creating soft, porous particles which have more surface area per unit of weight and therefore are absorb more easily.

The function and value of our food supplements lie not in lab tests alone, but in their energetic breakdown and uptake inside your body and the preservation of enzymes, proteins and vitamins.

The ability of your body to store or use these nutrients is called bio-availability – yet another huge advantage of our Cellular Preservation Technology activated botanicals.

The quality and effectiveness of our Products are the result of the remarkable protocols and processes we employ from the fields to the finished product. For details on this evolutionary process, please contact us at [www.cptsuperherbs.com](http://www.cptsuperherbs.com)