



Toyo Bio-Pharma™



Puer Flower™ Extract

A Cleansing Path to Overall Health

Pueraria thomsonii has a rich tradition in Oriental Medicine with documented historical uses dating back to 600 AD. Pueraria, also known as kudzu, grows in mountainous terrain and transition zones between fields and forests throughout East Asia. The flowers of this lush vine possess numerous beneficial properties ranging from overall detoxifying effects to safe and gentle weight management. It remains one of the most trusted prescribed traditional Asian medicines.

Derived from the flowers of the Pueraria vine, Puer Flower™ extract is most frequently used as the secret ingredient of successful weight management programs, in combination with dieting and exercise. Its general cleansing properties, making it vital to overall health, have also built Puer Flower's reputation as an excellent way to help reduce hangovers and effects associated with overindulgence.*



Puer Flower Extract is often used as the secret ingredient of successful weight management programs, in combination with dieting and exercising.*



Gentle, Natural Weight Management Support

Puer Flower Extract has been proven to regulate visceral fat (around vital organs) and body fat (cellulite). Over a four-month period, human subjects taking a dosage of 300mg/day lost an average of 1.1 inches off their waist and dropped their total percentage of body fat by 0.9 percent.

In lab studies where mice were fed a high-fat diet for 25 days, those that were administered food comprised of 5% Puer Flower Extract had half of the visceral fat and one-third less body fat, when compared to the control group.

A study of human liver cells that were administered varying levels of Puer Flower Extract showed significant support for regulating intracellular triglyceride concentration when compared to a control group. Further animal studies confirm findings regarding the effectiveness of Puer Flower in regulating hepatic triglyceride levels.

Puer Flower Extract has been shown to be a safe effective supplement for use in a comprehensive weight management lifestyle.*

Cleansing and Detoxification

Products that promote cleansing and detoxification are vital to maintaining a solid base of overall health. An *in vitro* study of human liver cells administered with Puer Flower Extract demonstrated support for hepatoprotective activity. Puer Flower Extract is exceedingly valuable for its overarching detoxifying effects.*

Pueraria has been shown to promote healthy liver function and regulate the enzymes GOT (glutamic-oxaloacetic transaminase) and GTP (guanosine triphosphate). In GOT and GTP tests conducted on rats, Puer Flower Extract was administered via gavage for seven days. Hepatic disorder was then induced by 16 hours of fasting and administration of acetaldehyde. This method was used to test Pueraria's ability to support the liver by neutralizing an induced toxicity. When compared to the control group, Puer Flower showed significant regulation of GOT and GTP elevations in the blood.

Modern studies simply validate and explain the traditional folk use of Pueraria to combat the toxic effects of alcohol metabolism. Taken before or during alcohol consumption, Puer Flower Extract detoxifies the body as the alcohol is metabolized, thus easing the impact of hangovers and lingering effects.*



Other Benefits

Puer Flower Extract's other benefits should also be noted. In animal studies, Pueraria was shown to regulate fatty liver and hepatic cholesterol when administered in conjunction with a high risk diet. Pueraria is also known for its high content of saponins and isoflavones.

There are links to Pueraria being useful in supporting hormone balance. For women seeking to naturally relieve common symptoms associated with menopause, Pueraria is high in isoflavones daidzein, daidzin, genistein and puerarin (all phytoestrogens).* Because of the potential for mild estrogenic effects, this possible application of Pueraria should only be utilized under the guidance of a physician.

Manufacturing & Safety

- Natural hot-water extract *Puerariae thomsonii* flower from China and Taiwan
- No chemical media used in the extraction process
- Shelf life of 24 months
- Bulk packaged as a powder in 10kg units
- May be formulated as a granulated powder, liquid or tablet

The main active ingredients in Puer Flower are isoflavones. Toyo Bio-Pharma™ specifications require a content minimum of five percent isoflavones. Toyo Bio-Pharma assists manufacturers to determine the most appropriate form for the final product, paying special attention to the issue of liquid solubility. Based on Toyo Bio-Pharma's human trial for optimum weight management goals, a dose of 300mg/day is the most effective. However, simply enhancing liver function may be achieved with a smaller dose of 100mg/daily.

Multiple human clinical trials and animal studies have proven Puer Flower to be safe and effective. Women who are pregnant or nursing and those less than 18 years of age should consult with a physician before taking this or any other natural supplement product.

The Company

Toyo Bio-Pharma has tremendous capacity and expertise in manufacturing custom formulations, conducting laboratory tests and validating results. They are Japan's largest developer and OEM producer of raw materials for food supplements. Competitive and research-driven, they sell more FOSHU products than any other company worldwide. Toyo Bio-Pharma is ideally situated to work with clients on a contract basis, possessing proven formulas that the company is willing to share for mutual success.

The company follows the rigorous standards of ISO 9001:2000 and is GMP (FDA's Good Manufacturing Practices) compliant for food products. FOSHU application, as well as several Japanese patent applications, for Puer Flower are now underway.





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Primary Benefits of Puer Flower as Studied by Toyo Bio-Pharma:

- + Supports healthy liver function*
- + Regulates GOT and GTP levels in the blood*
- + Helps maintain healthy weight*
- + Regulates hepatic total cholesterol and hepatic triglyceride*

Benefits to be further studied:

- + Mild estrogenic effects may indicate support for natural hormone replacement*
- + High level of saponins and isoflavones



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*** These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.**