

# Chinese rubber tree

## *Eucommia ulmoides*



Eucommia is an herb that comes from the Chinese rubber tree (*Eucommia ulmoides*). It has been used for centuries in traditional Chinese medicine (TCM) to support the endocrine system, improve kidney health, and strengthen bones and muscles. It is also said to promote weight loss, prevent osteoporosis, and enhance heart health.

While alternative medicine practitioners turn to eucommia to increase vitality and promote

longevity, in the West, it is mostly known as a supplement to lower blood pressure.

In addition to capsules, eucommia is also sold in extract, tea, and dry forms.

## What Is Eucommia Used For?

The herb, also known as du zhong, is a rich source of antioxidants, lignans, and isoflavonoids—naturally occurring chemicals with hormone-like effects.

Eucommia has been used and studied for a variety of uses including sexual dysfunction, cancer, metabolic syndrome, neurological diseases, and more. To date, however, most of the research is limited to animal testing and small clinical trials.



## High Blood Pressure

Eucommia may help fight high blood pressure (hypertension), according to a small study published in *Alternative Medicine Review*.

For the study, 30 healthy adults took 1 gram (g) of eucommia three times daily for two weeks. At the study's end, the herb was shown to lower blood pressure by an average of 7.5/3.9 mmHg compared to the control group.

The study authors determined that compounds in eucommia may reduce blood pressure by blocking the action of epinephrine, a hormone known to raise blood pressure when released into the bloodstream.

Some animal-based research indicates that the lignans found in eucommia may also help with blood pressure management.

A rat-based study published in the *American Journal of Chinese Medicine* in 2013 found that lignans extracted from eucommia may help

prevent hypertension-related cardiac remodeling (i.e., changes to the structure of the heart induced by damage to cardiac muscle).

Additional research on humans is needed to draw conclusions as to whether or not the same would occur.



## Arthritis

Several preliminary studies show that eucommia may offer relief of osteoarthritis.

A 2015 study published in the Journal of Ethnopharmacology demonstrated that treatment with eucommia helped slow the progression of osteoarthritis, in part by reducing inflammation and inhibiting the breakdown of cartilage.

The research, however, is limited to animal studies. More research and clinical trials in humans are needed before recommending eucommia for the prevention or treatment of arthritis.

## Herbal Remedies for Osteoarthritis Diabetes

Eucommia shows promise in the treatment of diabetes and the prevention of diabetic complications.



Early studies on diabetic mice found six weeks of treatment with eucommia significantly lowered the animals' blood sugar levels. More recent research shows the herb may help reduce insulin resistance, a condition closely linked to diabetes, and may fight obesity.

Several studies have explored eucommia and the prevention of diabetes-related complications.

For instance, a 2016 study on diabetic rats found the herb decreased levels of blood urea nitrogen (BUN) and creatinine and improved renal fibrosis, a measure of kidney damage.<sup>9</sup> A 2019 study found eucommia reversed erectile dysfunction in diabetic rats.

However, again here, the research is limited to animal studies. More research and clinical trials are needed before eucommia can be recommended for the treatment of diabetes and the prevention of diabetic complications in people.

## Possible Side Effects

Eucommia has been used in traditional Chinese medicine for centuries with limited reports of side effects. However, one therapeutic trial of

eucommia documented possible concerns including moderately severe headache, dizziness, edema, and the onset of a cold.

Little is known about the safety of long-term or regular use of eucommia. There are no documented drug interactions, but people taking the following medications should not use eucommia unless under doctor supervision:

Diabetes medications

High blood pressure medications

Anticoagulants

Antiplatelets

Thrombolytics

In addition, the National Institutes of Health (NIH) warns that herbal products may be contaminated with toxic compounds, heavy metals, pesticides, or microorganisms. Manufacturing errors, in which one herb is mistakenly replaced with another, have also occurred.

