

# Aesculus Hippocastanum

## Horse chestnut



Horse chestnut, or *Aesculus hippocastanum*, is a tree native to the Balkan Peninsula. Extract from the horse chestnut seed is a popular dietary supplement commonly used to improve vein health and reduce inflammation. The main active component in horse chestnut extract is aescin, which has been studied for its many health benefits.

Here are 7 health benefits of horse chestnut extract.

### *1. May relieve symptoms of chronic venous insufficiency*

Chronic venous insufficiency (CVI) is a health condition characterized by poor blood flow to the veins of the legs.

Symptoms can include

- edema, or swelling of the legs
- leg pain or cramps
- itchy legs
- varicose veins, or enlarged, twisted veins that typically occur in the legs
- leg ulcers
- weakness in the legs

A common treatment is compression therapy or stockings, which can increase blood flow to your legs.

The compound aescin in horse chestnut has multiple medicinal properties that could make it useful for treating CVI. For example, it may increase blood flow in your veins, possibly improving symptoms. In a review of 19 studies, 9 studies found that daily doses of 600 mg of horse chestnut extract containing 50 mg of aescin taken for up to 8 weeks reduced symptoms of CVI, including leg pain, [swelling](#), and itchy legs. In fact, one study noted that horse chestnut extract was as effective as compression therapy at reducing swelling and leg volume. These studies show that horse chestnut extract may be effective for treating CVI short term, but more research is needed to determine its long-term effects.



## 2. May treat varicose veins

Varicose veins are swollen, bulging veins that typically occur in the legs and can be caused by CVI.

Horse chestnut seed extract may improve venous tone by [improving blood flow](#) in your legs .

Additionally, it may help decrease leg swelling and pain associated with varicose veins .

## 3. Has potent anti-inflammatory properties

Inflammation can cause excess fluid buildup in your tissues, which can lead to fluid retention and swelling.

Aescin is a component in horse chestnut extract with [anti-inflammatory properties](#). It has been found to reduce inflammation related to injury, venous insufficiency, and swelling .A review of 17 studies observed that horse chestnut seed extract could help reduce inflammation and swelling in the legs and feet related to CVI .

In addition, studies showed that applying a topical ointment containing aescin could reduce inflammation and swelling after trauma, surgery, and sports injuries.However, this ointment also contained other anti-inflammatory compounds, making it unclear whether aescin alone would have the same effects.

## 4. May relieve hemorrhoids

Hemorrhoids are a common health condition characterized by swollen veins around your anus and rectum. Symptoms are uncomfortable and can include itching, irritation, pain, and rectal bleeding .The anti-inflammatory properties of horse chestnut seed extract may help relieve symptoms of hemorrhoids by **reducing inflammation** and swelling in the affected veins .Still, research in this area is limited and more studies are needed to confirm the potential benefits of horse chestnut extract for treating hemorrhoids.



## 5. Has antioxidant properties

Horse chestnut seed extract contains powerful antioxidants — compounds that can help prevent cell damage caused by unstable molecules called free radicals. Too many free radicals can lead to inflammation and cellular damage .

Horse chestnut seed extract is rich in flavonoid compounds, including quercetin and kaempferol, which have potent **antioxidant** properties .A test-

tube study found that both aescin and horse chestnut seed extract have antioxidant properties, but that the horse chestnut seed extract had greater effects than aescin alone. This may be due to the synergistic effects of the components in the extract .

## 6. Contains cancer-fighting compounds

Aside from its powerful anti-inflammatory properties, test-tube studies also indicate that aescin has [anticancer effects](#). These studies found that aescin could significantly reduce tumor cell growth in certain cancers like liver cancer, leukemia, and multiple myeloma .In addition, test-tube studies observed that aescin can cause cell death in cancerous cells like pancreatic cancer and lung cancer .However, these studies used concentrated amounts of aescin, and it's unclear whether the amount found in horse chestnut seed extract would have the same effects. More human studies in this area are needed before firm conclusions can be made.

## 7. May help with male infertility

One of the causes of [male infertility](#) is varicocele, or swelling of the veins near the testicles .The anti-inflammatory and anti-swelling properties in aescin — a compound in horse chestnut — may make it an effective treatment for infertility related to varicocele .A 2-month study in over 100 men with varicocele-associated infertility found that taking 30 mg of aescin every 12 hours improved sperm density, sperm motility, and sperm quality. In addition, the varicocele size decreased with the intake of aescin.



## *Safety and side effects*

While the use of horse chestnut seed extract is generally considered safe, you should be aware of some safety concerns and side effects.

Unprocessed horse chestnut seeds contain a compound called aesculin, which is considered unsafe to ingest by the Food and Drug Administration (FDA). Signs of poisoning include depression, muscle twitching, paralysis, coma, and death. For this reason, avoid ingesting unprocessed horse chestnut seeds. Reported side effects of horse chestnut seed extract are mild and include digestion issues, upset stomach, dizziness, [headache](#), and itching. Additionally, there have been reports of allergic reactions when horse chestnut extract was applied to the skin.

What's more, horse chestnut extract may interact with the following medications:

- **Blood thinners.** Horse chestnut may slow blood clotting and increase the effects of blood thinners like Coumadin.
- **Insulin or oral diabetes medicine.** Horse chestnut may lower blood sugar and cause levels to become too low if taken with diabetes medication.
- **Nonsteroidal anti-inflammatory drugs (NSAIDs).** Horse chestnut may reduce the absorption of NSAIDs, which are drugs used to treat inflammation.
- **Lithium.** Horse chestnut may have a diuretic effect, which could delay how fast your body processes lithium, a medication used to treat psychiatric disorders.

In addition, people with kidney or [liver](#) disease should not take horse chestnut as it may exacerbate symptoms of their disease. For these reasons, always consult with your healthcare provider before taking horse chestnut extract — especially if you have a medical condition or are currently taking medications. Furthermore, the safety of using horse chestnut extract during pregnancy and breastfeeding is unknown, and the supplement should, therefore, be avoided by women who are pregnant or breastfeeding.

## *Dosage*

Horse chestnut can be found in stores and [online](#) in the form of capsules, tablets, liquid drops, essential oil, and cream.

Horse chestnut extract typically contains 16–20% aescin. In most studies, the dosage used is 100–150 mg of aescin per day. Hence, potential toxic

effects of higher doses are unknown. Therefore, it's best to follow suggested dosing instructions .

This amounts to about 2–3 tablets or capsules per day. There is no standardized recommendation for liquid supplements. Further dosing information is usually available on supplement bottles.

When applied topically, extracts and creams usually contain 2% aescin and can be applied 3–4 times per day .

