VeinEase

Relieve Vein Pain Naturally

- Relieves chronic venous insufficiency symptoms
- Reduces risk of varicose veins
- Strengthens veins and improves circulation
- Clinically effective doses and ratios

Gluten Free  Vegan  Non-GMO

Circulation

AOR Code  Variant
AOR04281  60 VEGI-CAPS

Details
Chronic Venous Insufficiency (CVI) is a condition characterized by a weakening of the walls and valves of veins in the legs that bring blood back to the heart. One of the first and most common symptoms of CVI is varicose veins, but other symptoms can include swelling of the legs, itchy or painful legs, and even leg ulcers.

VeinEase promotes healthy vein function, especially in the legs. The ingredients in VeinEase help maintain healthy vein structure and function, and reduce blood pooling and fluid build-up in the legs. VeinEase provides clinically proven doses and ratios of the flavonoids diosmin and hesperidin, complemented by grape seed extract to provide a natural relief for those with CVI, poor circulation, painful veins or varicose veins. As an added bonus, the nutrients in VeinEase also have cardiovascular benefits. Grape seed extract is known to support healthy blood pressure, and ensuring that blood is returning to the heart from the legs is essential for adequate cardiovascular function.

Label Info

Discussion
VeinEase helps relieve symptoms related to non-complicated chronic venous insufficiency (CVI), such as sensation of swelling, heaviness and tingling of the legs.

Product Variation
Product Code  Size
**Supplements Facts**

**Serving Size:** 2 Capsules

<table>
<thead>
<tr>
<th>Amount</th>
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<tbody>
<tr>
<td>Diosmin</td>
<td>900 mg</td>
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<tr>
<td>Hesperidin</td>
<td>100 mg</td>
</tr>
<tr>
<td>Grape Seed extract (?85% oligomeric proanthocyanidins)</td>
<td>150 mg</td>
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**Guarantees**

AOR™ guarantees that all ingredients have been declared on the label. Contains no wheat, gluten, corn, nuts, peanuts, sesame seeds, sulphites, mustard, soy, dairy, eggs, fish, shellfish or any animal byproduct.

**Adult Dosage**

Take 1 capsule twice daily with/without food, or as directed by a qualified health care practitioner. Use for a minimum of 1 month to see beneficial effects.

**Cautions**

Consult a health care practitioner prior to use if you are taking any prescription medications, if you are pregnant or breastfeeding, for use beyond 3 months or if symptoms worsen.

**Source**

Bitter orange

Grape seed extract

**Main Application**

Chronic Venous Insufficiency (CVI)

Varicose veins

Antioxidant

Cardiovascular health

**Disclaimer**

The information and product descriptions appearing on this website are for information purposes only, and are not intended to provide or replace medical advice to individuals from a qualified health care professional. Consult with your physician if you have any health concerns, and before initiating any
new diet, exercise, supplement, or other lifestyle changes.

Research
Background
VeinEase – A Unique Formula for CVI

Grape seed extract has traditionally been used in herbal medicine to help treat varicose veins and chronic venous insufficiency (CVI). Surgical removal and laser therapy are now available as treatment options for such symptoms. However, good success has been found using a natural flavonoid combination treatment including diosmin and hesperidin. The combination of 90% diosmin and 10% hesperidin at a dose of 1000 mg per day is well studied and proven to be very effective in helping with the symptoms of CVI likely by decreasing inflammation and strengthening the blood vessel wall structure. Diosmin, a flavonoid glycoside, can be naturally extracted from plants or derived from Hesperidin, a flavonoid. Hesperidin can be found in citrus rinds.

Progression of CVI

Chronic Venous Insufficiency (CVI) is a weakening of the walls or valves of veins that bring used blood back to the heart. CVI occurs most commonly in the leg because the legs are far from the heart and the blood returning from the legs must work hard against gravity to get back to the heart. The first symptom of superficial CVI is usually varicose veins, which are veins that are enlarged, contorted and very visible. When there is enough pressure in the veins from the excessive volume of blood, plasma can leak out of the vein into the surrounding tissues, causing swelling or edema of the leg. If this goes on long enough, it can produce skin ulcers which are resistant to healing, and can be itchy or painful. Outward pressure on the veins and stretching of the valves is one theory.

Another theory on the progression of CVI is that tissues surrounding the veins and even the inner lining (endothelium) of the veins themselves become oxygen-deprived. This leads to increased blood vessel permeability and an inflammatory response that can cause adhesion sites to develop on the inner lining of the veins where leukocytes can attach themselves and secrete even more inflammatory factors; this damages the vessel lining. Fibrin also often accumulates. All of these inflammatory factors, when leached out of the vessels into the surrounding tissues, can damage the tissues, causing damage to the fat layer under the skin, or the skin itself, producing itchy or painful lesions.

What Causes CVI?

CVI can result from genetic weakness of the vein walls, from hormonal changes during pregnancy, or from damage to the valves. Other factors that can contribute to CVI include a sedentary lifestyle, low blood pressure or high blood pressure. Venous walls are not as elastic as arteries, so when high blood pressure constantly applies outward force against the walls of the veins, the veins become distended or stretched. This stretching changes the shape of the veins and makes it impossible for the valves to close properly, allowing blood to flow backward, or venous reflux. Venous reflux is associated with more severe CVI.

Understanding Venous Insufficiency

Venous insufficiency can occur in the superficial veins or in the deep veins. Most varicose veins are related to superficial venous insufficiency that usually begins in high-pressure areas either at the top
of the thigh and produces a varicose vein growing downward or in the calf and growing upward. Deep venous insufficiency is much more serious since the primary cause is a blood clot (deep venous thromboembolism, DVT), and half of DVT patients end up with a pulmonary embolism (blood clot in the lungs), where morbidity jumps to 1 in 3 cases. However, even just with superficial CVI the risk of DVT is 3 times higher, so it’s important to manage even minor CVI properly.

Anatomy of the Venous System

Blood in the arteries gets pushed through the body by the forceful pumping of the heart; since there is no risk of backflow, arteries do not need valves. The blood flows from the larger arteries into arterioles, smaller vessels, and then capillaries, which are tiny vessels that allow the exchange of oxygen, CO2, nutrients and cellular waste products between the tissues and the bloodstream. This exchange process happens by diffusion.

The used blood then flows into venules and then veins, through which the blood returns to the heart to be reoxygenated. At this point, there is very little pumping force from the heart pushing the blood through the veins. In addition, venous blood generally has to work against gravity, moving up from the limbs to get back to the heart. So since there is little pumping force moving the blood, and since the force of gravity is strong, how does the blood get back to the heart?

Moving Muscles Pump Blood

The pumping force does help a little. However, muscle contractions from leg movement contribute quite a bit to this process. That’s why some people experience swelling of the legs after long periods of sitting, or why others might faint after a hard workout if they don’t cool down properly by continuing to move rather than just stopping cold-turkey.

Veins Need One-Way Valves

The little, if any, force from the heart and the force of muscle contractions aren’t enough to keep the blood moving against gravity and toward the heart. Therefore, veins have one-way valves that stop blood from flowing back down the extremities with gravity in between pumps. If any of the three pumping mechanisms fail (heart pumping, muscle contractions and one-way valves), blood may begin to pool in the legs.

Research

Flavonoids for CVI

The 10:1 mixture of diosmin and hesperidin has been found to be effective in all stages of CVI. The mixture improves venous tone in women at risk for varicose veins, and there is a correlation between varicose veins and CVI.

Reduced CVI Symptoms

Earlier signs and symptoms of CVI include edema in the leg and superficial skin changes. In one
study, subjects with CVI were divided into two groups: those with and without venous reflux. The mixture of diosmin and hesperidin at a 10:1 ratio improved leg heaviness and edema (leg circumference) in both groups equally. Larger improvements were made in the non-reflux group for pain, cramps, and sensation of swelling. Venous reflux is associated with more severe CVI and occurs when blood flows back through the one-way valves down the leg, and it usually produces skin ulcers.

Improved Healing

The clinically tested mixture of 10:1 diosmin and hesperidin helps speed leg ulcer healing. Some people experience complete healing along with standard ulcer care, which typically includes compression stockings, leg elevation and local wound care. One study found that the mixture improved time to complete healing (16 vs 21 weeks), but that it took about 8 weeks to show favour for the mixture vs. the control group. A meta-analysis found that within 6 months, those being treated with a diosmin and hesperidin mixture had a 32% improved chance of complete healing from skin ulcers, and that the healing process was shortened by 5 weeks. It also suggested that this treatment was most effective for ulcers with a size between 5-10 cm² and that had been present for 6-12 months, and it has been suggested that standard ulcer care may be sufficient for small or new ulcers.

Quality of Life

More subjectively but equally as important for those suffering from CVI, treatment with the 10:1 mixture of diosmin and hesperidin and its results also improved the subjects’ quality of life scores.

Mechanisms of Action

Anti-inflammatory and venous tone: Studies have measured many physiological changes that occur with the treatment of diosmin and hesperidin. The generally accepted mechanisms of action include anti-inflammatory effects and improved venous tone.

Calcium regulation: One study found that the mixture increases calcium sensitivity of vascular smooth muscle, improving contractions and tension in the veins. Calcium is vital in regulating muscle contractions, and blood vessels are a type of muscle.

Antioxidant and adhesion molecules: Another study also found that the mixture inhibits free radical and prostaglandin synthesis, reduces microvascular leakage, and reduces leukocyte activity, trapping and migration.

Hypoxia and inflammation: Venous blood does still contain some oxygen, just enough to supply the cells of the veins to function since they require oxygen just as much as any other cell. In CVI, blood pooling results in reduced blood flow, which means that less oxygen is reaching the venous cells and the surrounding tissues such as skin and fat cells. This then results in a drop in energy (ATP) production by these cells, resulting in the vicious cycle of inflammation and further injury. The diosmin and hesperidin mixture improves microcirculation, oxygen partial pressure (PO2) in the blood and oxygen saturation, and decreases carbon dioxide partial pressure (PCO2). It also helped reduce the drop in ATP production by the venous cells, reducing the perpetuation of inflammation and damage.

Other benefits of diosmin: Diosmin is known to be a phlebotonic and has been shown to reduce
lymphedema and limb volume and increases lymphatic drainage. Diosmin decreases red blood cell aggregation, which can help improve blood flow and capillary filtration in diabetes. It also reduced HbA1c (a blood glucose measure that is used to assess diabetic severity) and increased glutathione peroxidase (antioxidant) levels. This is excellent news for those struggling with the side effects of diabetes! Diosmin has also been shown to have chemopreventive and antiproliferative effects in animal and in vitro studies.

**Grape Seed Extract for CVI**

Grape seed extract is an antioxidant, protecting vessels from injury and from the furthering of CVI complications. It may also help maintain a healthy blood pressure and reduce edema. Since the presence of skin ulcers is directly proportional to venous pressure, improving venous blood pressure may help reduce skin ulcers.

One study administered 100 mg a of grape seed extract per day and found symptom improvements in 80% of subjects in as little as 10 days, including itching, heaviness, pain, and edema. Itching disappeared in 80% of patients. Pain disappeared in 53% of patients.

**Safety and Toxicity**

Animal studies showed no toxicity after 26 weeks of supplementation of a mixture of 90% diosmin and 10% hesperidin with doses of 35 times that recommended.

A mixture of diosmin and hesperidin taken by pregnant and nursing women for hemorrhoids did not affect fetus. However, consulting a health care professionnel in pregnancy and nursing is still recommended.

Diosmin may inhibit CYP 450 (phase I enzymes), so be careful in taking this product with drugs. No adverse events with blood thinning medications have occurred, but diosmin does have a slight blood thinning effect.

**Market Trends**

Varicose veins are primarily treated with lifestyle changes including diet, by wearing compression garments and avoiding prolonged periods of sitting. Certain medical procedures such as vein removal and closure of the vein are also used. The goals of these treatments are to relieve the sometimes painful symptoms, prevent complications, and improve appearance of the veins.

**AOR Advantage**

Daflon 500 is a drug sold in other countries that combines a 10:1 ratio of diosmin and hesperidin. VeinEase is unique in that it combines this clinically tested combination and ratio of diosmin and hesperidin with grape seed extract, which is traditionally used in herbal medicine to help treat CVI. VeinEase uses 100% natural ingredients.
References


Abstract

From symptoms to leg edema: efficacy of Daflon 500 mg.


Nicolaides AN.

This article reviews the mechanisms by which micronized purified flavonoid fraction (MPFF; Daflon 500 mg) acts on symptoms as well as on edema in patients with chronic venous disease, in the light of new advances in the understanding of the pathophysiology of this chronic condition. Deterioration of venous wall tone followed by valve dysfunction leading eventually to varicose veins are the key pathophysiologic features that produce venous hypertension. Both mechanical and biological factors are responsible for the deterioration of the venous wall in large veins. These are decreased shear stress and hypoxia of the media and of the endothelium, which act as triggering factors for biochemical reactions leading to inflammation. There is a body of evidence that inflammation in chronic venous insufficiency (CVI) plays a role right from the early stages of venous dysfunction and venous valve restructuring. The whole process of venous wall stretching and dilation is painful and may present as leg heaviness, a sensation of swelling, and paresthesia. Daflon 500 mg relieves symptoms, edema, and red blood cell aggregation, which cause paresthesia and restless legs. At the level of the microcirculation, dysfunction of microvessels is observed, characterized by an increase in capillary permeability followed by skin changes. The earliest manifestation of microcirculatory disorder is edema. At this level, Daflon 500 mg acts favorably on microcirculatory complications by normalizing the synthesis of prostaglandins and free radicals. It decreases bradykinin-induced microvascular leakage and inhibits leukocyte activation, trapping, and migration. Its efficacy in decreasing CVI
edema and ankle swelling has been proven in rigorous studies that are reviewed in this paper. Daflon 500 mg, a well-established oral flavonoid that consists of 90% micronized diosmin and 10% flavonoids expressed as hesperidin, may be prescribed from the very beginning of the disease for the relief of pain and edema, and in any CVI patient presenting with symptoms as well. Daflon 500 mg is thus the first-line treatment for edema and symptoms of CVI at any stage of the disease. At advanced disease stages, Daflon 500 mg may be used in conjunction with sclerotherapy, surgery, and/or compression therapy or as an alternative treatment when other treatments are not indicated or not feasible.

[Clinical and capillaroscopic evaluation of chronic uncomplicated venous insufficiency with procyandins extracted from vitis vinifera]. [Article in Italian]


Costantini A, De Bernardi T, Gotti A.

BACKGROUND: The pharmacological treatment of non-complicated chronic venous insufficiency is a current and well-debated topic. The introduction of new products with action on the venous system, improved knowledge on the physiopathology of venous insufficiency and the possibility provided by new analytical instruments, have given new impulse to the consolidation of the clinical value of phlebotonics in this indication.

METHODS: In light of this, 24 patients with non-complicated chronic venous insufficiency were treated with oral administration of Oligomeric Proanthocyanidins (Pycnogenols-OPC) 100 mg/day. To evaluate the therapeutic efficacy of the treatment, an instrumental evaluation by optical probe capillaroscope was employed in addition to the traditional subjective clinical parameters: swelling, itching, heaviness and pain. The videocapillaroscope examination was performed at the lower third of the leg and the first toe. Edema in the capillaroscopic field, the number of observable capillaries and the capillary dilatation were the parameter chosen to evaluate the efficacy of treatment. All patients completed the study with no reports of adverse events during the period of observation.

RESULTS: The results obtained show a positive clinical response (improved or absent symptoms) in over 80% of patients, with significant improvement of symptoms already evident after the first 10 days of treatment. The mechanism of action of the OPCs explains the rapid reduction of the swelling of the lower limbs and correlated with this are the other evaluable symptoms: heaviness and itching. Particularly striking results were observed for itching and pain which completely disappeared during the course of therapy in 80% and 53% of the patients respectively. Noteworthy is the good correlation between the clinical and instrumental data, with improvement in a total of 70% of patients.

CONCLUSIONS: The results obtained in the course of this clinical experience, with evident improvement already during the first weeks of treatment, the absence of adverse events added to the benefit of a once-a-day administration, justify the use of OPC in the treatment of non-complicated chronic venous insufficiency.