

# SIGVARIS

LIFE FOR LEGS

Tired, Aching Legs?

Swollen Ankles?

Varicose Veins?

An informative guide  
for patients

# Are You at Risk?

Leg problems are widespread throughout the world, but what most people don't know is that approximately 90% of leg disorders originate within the veins. If you have tired, aching, swollen legs, or if you see the beginning of varicose veins, this brochure will help you learn how to improve the health of your venous circulation. Vein problems can progressively worsen over time and can affect your health for the rest of your life.

Much can be done to decrease the risk of developing venous disorders. SIGVARIS believes that understanding the cause of venous disease is an important first step.

*Are you at risk? Please read on...*



## Causes and Risk Factors

- Long distance travel
- Heredity
- Age over 40
- Prolonged sitting or standing
- Pregnancy
- Obesity
- Sedentary lifestyle
- Surgery or trauma
- Infectious disease
- Use of hormone medication

## Danger signals

In most cases, leg problems do not just occur 'out of the blue.' There are typical warning signs such as:

- Heavy, hot, or tired legs
- A feeling of tension, cramps, fatigue or stabbing in calves
- Swollen ankles
- First signs of small varicose veins



# The Circulatory System

The heart is the main pump of the circulatory system. It is the muscle that pumps oxygen-rich blood through the arteries and into tiny capillaries where body cells exchange the oxygen for carbon dioxide. The blood then enters the veins, which carry the blood back to the heart.

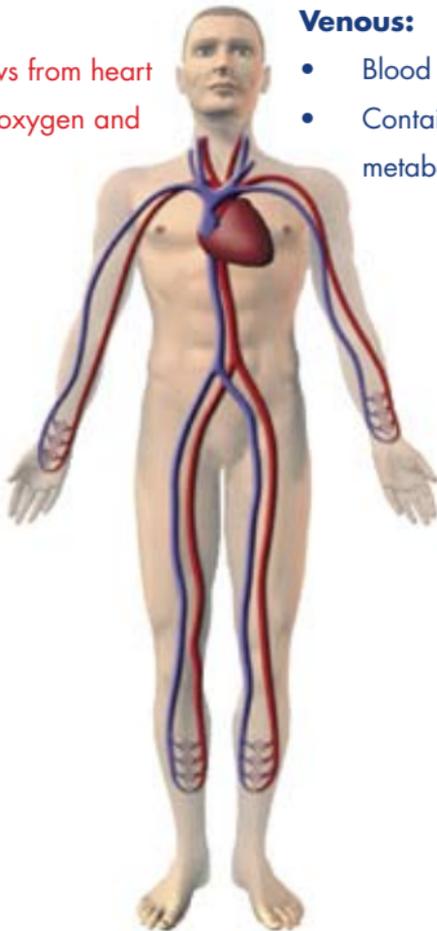
Circulating blood through the veins can be a challenge. By the time blood enters the veins, the force pushing this blood has weakened. Gravity forces veins to work even harder to return blood to the heart.

## Arterial:

- Blood flows from heart
- Rich with oxygen and nutrients

## Venous:

- Blood returns to heart
- Contains waste and metabolic residue

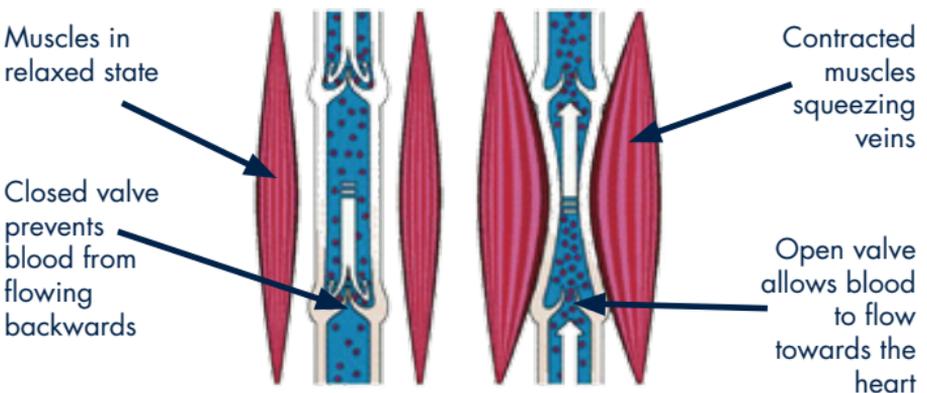


## Venous Return

The body has a number of ways to help blood return to the heart. Just as the arterial system uses the power of the heart to drive fresh blood into the tissues, the calf muscle acts as a 'second heart' by contracting and relaxing as a person walks.

One-way valves in the superficial and deep veins help blood to flow back to the heart. The deep system handles up to 90% of the venous blood volume and is the high pressure system of the venous circulation in the legs. The superficial system handles the other 10% and is the low pressure system. When calf muscles relax, the valves close to prevent blood from flowing backwards into the lower part of the vein. These valves are fragile and can be easily damaged.

Other 'pumps' help push blood toward the heart, such as the ankle, the foot, and the diaphragm.



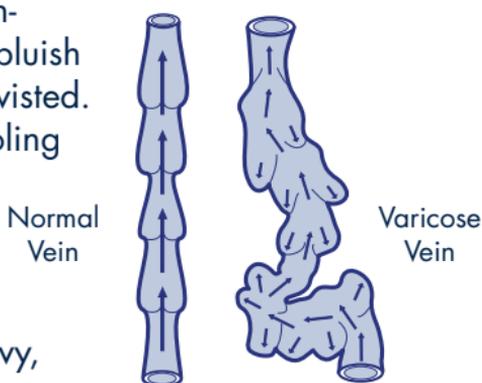
# Venous Problems in the Legs

*Venous insufficiency* is a condition in which the valves of the veins fail to function. This interferes with venous return to the heart and causes blood to pool in the vein. Factors leading to venous insufficiency include venous stasis, changes or damage to the vein wall or valve,

Venous insufficiency can lead to varicose veins, phlebitis, thrombophlebitis, blood clots, and changes in the skin, including leg ulcers.

## Descriptions of Venous Problems

*Varicose veins* are visibly enlarged veins that are often bluish in color and may appear twisted. They are caused by the pooling of blood in a damaged vein and can sometimes be painful. In the early stages of varicose veins, the legs may feel tired, heavy, achy, or tense.



*Phlebitis* is the inflammation of a vein wall, and is the most common problem associated with varicose veins. Symptoms can include swelling, redness, warmth, or pain in the affected area.

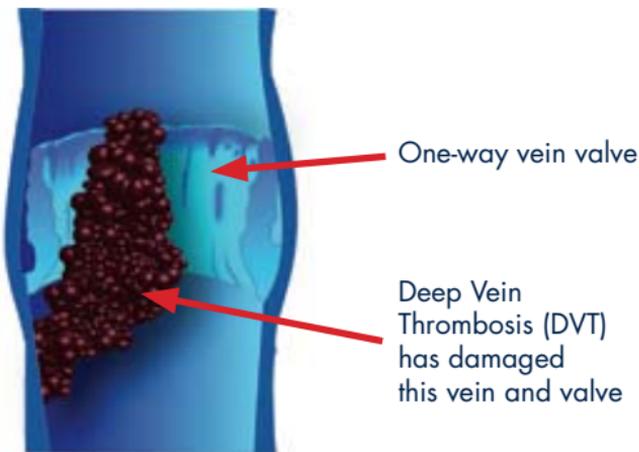
*Superficial Thrombophlebitis* is the inflammation of a vein caused by a blood clot. Symptoms are similar to phlebitis.

## Descriptions of Venous Problems

A *Deep Vein Thrombosis (DVT)* is a blood clot in one of the deep veins. About 25% of DVTs move away from the deep veins and travel through the bloodstream into the lungs. This is known as a *pulmonary embolism*, and can have life-threatening consequences. Symptoms include:

- Pain and tenderness in one leg
- Swelling in one leg
- Increased warmth and redness in one leg
- Shortness of breath and fainting
- Pain in the chest

***DVTs can occur with no symptoms.***



# Description of Venous Problems

*Chronic Venous Insufficiency (CVI)* is a collective term used to describe a long-standing condition involving impaired venous return in varying degrees of severity. Symptoms include:

- Edema (swelling)
- Feeling of heaviness in the legs
- Pain or cramps in the calves
- Skin discolorations
- Dermatitis (skin problems)
- Dry or weeping eczema
- Venous leg ulcer

A *Venous Leg Ulcer* is an open wound that usually forms near the ankle and is due to chronic poor circulation. The ulcer has a weeping, raw appearance and the skin surrounding the ulcer is dry, itchy, and reddish-brownish in color. Venous leg ulcers are usually slow to heal.

**DID YOU KNOW:**



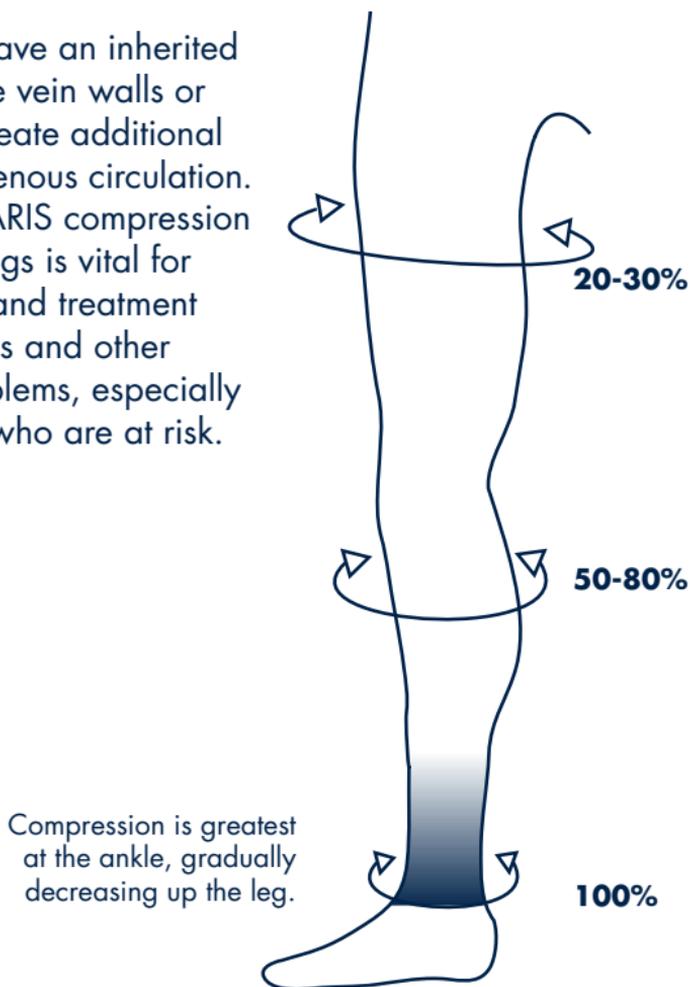
Compression therapy is the treatment of choice for CVI.

## Why Compression Works

*Compression therapy* is the application of external pressure to the limb to reduce venous pressure within the limb. This means wearing socks or stockings that are specially designed to support your veins and increase circulation. To be most effective, the socks or stockings should be put on at the start of your day and removed before you go to bed.

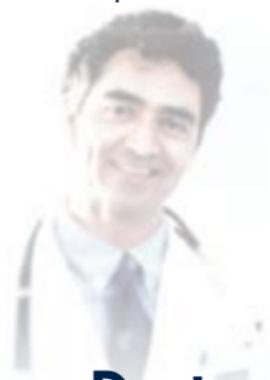
Remember that the heart attempts to pump blood against gravity up the veins of the legs. As a person walks, the regular contraction and relaxation of the calf muscles around the veins are necessary to help move blood towards the heart.

Some people have an inherited weakness of the vein walls or valves which create additional challenges to venous circulation. Wearing SIGVARIS compression socks or stockings is vital for the prevention and treatment of varicose veins and other circulatory problems, especially for individuals who are at risk.



# Your Doctor Can Help

Effective methods for the treatment of venous disorders are readily available. Your physician can provide a diagnosis to correctly assess the course and severity of your condition, and to take appropriate therapeutic measures.



## When Does a Doctor Prescribe SIGVARIS

A doctor prescribes SIGVARIS medical socks or stockings for any active vein disorder of the leg, or as a preventative measure in cases when risk factors are present. They are also prescribed after surgery for patients who are not confined to bed.

Filling your prescription is easy. Just go to a certified SIGVARIS dealer, where a trained fitter takes your measurements and can recommend the correct socks or stockings for you based on your physician's advice.

### Available in these compressions:

- 15-20 mmHg
- 20-30 mmHg
- 30-40 mmHg
- 40-50 mmHg
- 50-60 mmHg



## Nothing Compares to SIGVARIS!

SIGVARIS medical socks and stockings are specially designed to work with the body's venous flow and to help push the blood up the legs. They exert the greatest pressure at the ankle, with the compression decreasing gradually in the direction of the knee and thigh.

The key to the medical effectiveness of SIGVARIS compression socks and stockings is the

## PRECISE FIT SIZING™ SYSTEM



The SIGVARIS Precise Fit Sizing (PFS) System offers more standard stocking sizes than any other brand. This ensures a custom-like fit that is comfortable while delivering precise compression where it is needed. Medical experts agree, the key to comfort, compliance and therapeutic effectiveness is a precisely-fitted medical compression stocking.

# You Can Play Your Part

## Six easy steps to better blood flow



1) *Avoid sitting or standing for long periods of time.* Exercise, especially walking, contracts and relaxes the calf muscles. The regular contraction and relaxation of these muscles act like a “second heart” as the veins are alternately squeezed and released, causing blood to be pushed towards the heart, thereby improving blood flow.

2) When it is necessary to sit or stand for a long time, *rock your feet up and down.* This exercise simulates the beneficial effects of walking and promotes venous circulation.

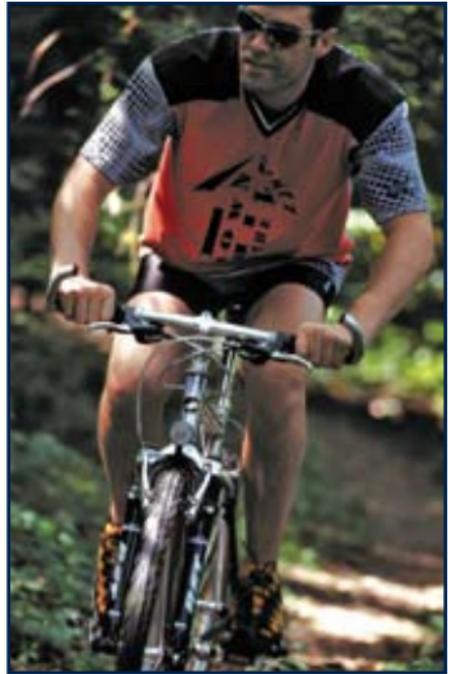
3) *Elevate your feet.* Elevating your feet above the level of the heart several times each day helps venous blood fight the effects of gravity.



4) *Avoid excessive heat*, such as sunbathing and very hot baths. Heat dilates veins, reducing effective circulation and increasing the pooling of blood.

5) *Control your weight*. Excess weight burdens the entire circulatory system.

6) *Wear graduated compression socks and stockings*. SIGVARIS quality compression socks and stockings improve venous circulation to prevent and treat venous problems.



**DID YOU KNOW:**

SIGVARIS socks and stockings are ideal for travel

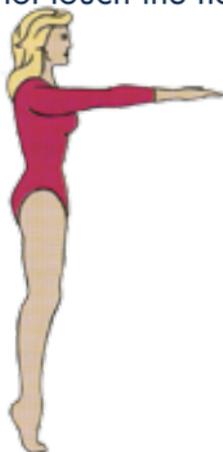
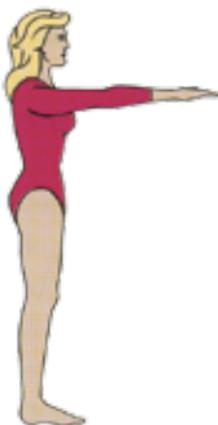
# Special Exercises You Can Do to Help Your Circulation



Sit on the floor, draw up your legs and press your knees outwards onto the floor with the help of your arms.



Sit on the floor, draw up your legs, and then straighten them so that they do not touch the floor.



Stand up straight, arms forward, raise yourself onto your toes and lower yourself again until the foot sole is back on the floor. Repeat in a rhythmic movement.

Lie on your back, support your hips with your arms and "cycle" with your legs in the air.



As a manufacturer of high-quality, comfortable compression products for over 50 years, our goal at SIGVARIS is to offer therapeutic compression that:

- Supports distended (stretched) veins
- Prevents blood from pooling in the veins
- Speeds up a sluggish blood flow
- Forces fluid out of swollen legs and ankles to back into circulation
- Is versatile, comfortable, and attractive

**DID YOU KNOW:**

Many prescribed socks and stockings are reimbursed by insurance plans.

**CHECK YOUR PLAN TODAY**

# SIGVARIS

LIFE FOR LEGS

**courtesy of:**



SIGVARIS, Inc.  
1119 Highway 74 South  
Peachtree City, GA 30269  
USA  
[www.sigvarisusa.com](http://www.sigvarisusa.com)

SIGVARIS Corp.  
4535 Dobrin  
Ville St-Laurent, Quebec  
H4R 2L8  
Canada  
[www.sigvaris.ca](http://www.sigvaris.ca)