

A photograph of a person running on a paved surface, overlaid with a semi-transparent blue filter. The runner is captured in mid-stride, wearing a dark athletic top, shorts, and running shoes. The background is a light blue wall.

# What's the Skinny on Compression Stockings?

## **OVERVIEW:**

If you have varicose veins and the painful symptoms that often come with it, compression stockings could bring the relief you have been seeking. Doctors who treat people with leg pain or a vein condition have recommended compression stockings for years to reduce pain, improve circulation, and reduce the severity of symptoms associated with new varicose veins. Below we discuss the various types of compression stockings, their benefits, risks, and everything else you need to know to make the best purchasing decision for your current health needs.

## History of Compression Stockings

Although the origins of compression stockings trace back to Roman and Egyptian ancient civilizations, it wasn't until the 1950s that people began to use them for genuine medical purposes in the United States. Europeans used them a bit earlier around the time of World War II when hosiery manufacturing companies Mediven, Juzo, and Jobst marketed them as a solution for venous insufficiency problems. In fact, Conrad Jobst, a German engineer and entrepreneur, suffered from vein reflux himself. When he discovered that the only relief he felt from pain and swelling in his legs was during visits to a local spa as he sat in a swimming pool enjoying the extra pressure of the water on his legs. Motivated to find a way to replicate that water pressure on his legs into something he could wear all the time, Jobst created the first elastic stockings.

In ancient times, people used garments similar to compression stockings to bind and treat various injuries. Today, people understand and appreciate the benefits of compression stockings much better than they once did. They are a common sight at drugstores and continue to grow in popularity as people openly discuss the benefits they receive from wearing them.

## How Compression Stockings Work

When you have a vein condition, and the corresponding swelling, fullness, heaviness and discomfort...even pain... that accompanies a vein condition, compression stockings serve to reduce the amount of stagnant blood pooling in your legs. A vein condition, the result of vein reflux, affects

the speed and efficiency in which blood flows to your heart. Vein reflux happens when the valves in the veins of your legs, that serve to open and close as your heart pumps blood to and from your legs, no longer open and close completely. Because they don't close completely, blood flows backwards into your legs and begins to pool. Compression stockings apply the right amount of pressure around your leg to get the valves to close properly, revitalizing stagnant blood flow and helping your veins work better. They also enable the arteries that deliver blood, rich in oxygen, to your muscles, helping them relax. Reduced pain and fatigue are a natural by-product.

Note that for compression stockings to be effective in the event of a vein condition, they must be worn all day. When a vein condition is the source of your symptoms, they always worsen at night and improve or vanish in the morning after resting overnight. This is because the stagnant blood creates an inflammation reaction in your body which slowly accumulates throughout the day, culminating in a very uncomfortable evening. Compression stockings are designed to prevent blood from pooling, and therefore must be worn from within the first few minutes after waking until right before you turn out the light at night. Some people even find that their primary symptoms come back immediately upon removing their stockings before going to bed at night. Even so, it is not safe for you to wear these stockings to bed. While you sleep, they can hinder rather than help circulation because you are not awake and active.

Keeping the blood flowing in your legs is critical to prevent the formation of clots. Once a clot develops, it can travel to other parts of your body and become lodged there. This can become life-threatening depending on the location of the clot. Blood clots in the heart and lungs



are especially dangerous. Even if you do not experience serious health consequences of a blood clot, you will likely notice swelling, skin discoloration, and other cosmetic problems that could eventually cause discomfort.

While compression stockings offer numerous benefits, keep in mind that they cannot reverse the vein condition you already have or prevent new ones from developing. What they do is reduce symptoms like swelling, pain, and achiness to allow you to remain as comfortable as possible. When you find that compression stockings successfully alleviate your symptoms, it's an indication that your symptoms are the result of a vein condition and that the only long-term solution is to receive vein treatment.

## Types of Compression Stockings

Compression stockings come in four primary types. These include:

- **Knee-high:** This is the most common style prescribed and used. These socks come right up to the knee and are the most appropriate if most of your symptoms are in the lower legs. Styles range from a thin type of pantyhose material to a thick and cushioned cotton sock.
- **Maternity pantyhose:** The rapid weight gain and other physical changes of pregnancy puts enormous pressure on the legs. Varicose veins are especially common at this time. Specialty compression stockings made just for pregnant women can keep you comfortable throughout your pregnancy by reducing circulation problems in your legs.
- **Pantyhose leotard style:** This is a good option if

your leg pain extends from your ankles all the way up to your hips. Wearing the compression pantyhose all day takes pressure off the entire leg to help you experience less fatigue and achiness. Doctors typically reserve this recommendation for people who have a severe vein condition.

- **Thigh high:** Doctors often recommend the thigh high compression sock when a patient requires support for painful calves and thighs.

Stockings are available in several colors and fabrics and may be open-toe or closed-toe. When choosing a style, pay attention to the areas in your leg that typically experience the greatest discomfort.

Knee-high compression stockings are a common doctor recommendation. They are easier to put on than other types, cost less, and are just as effective. However, they may not be the best choice if you have several painful veins in your thighs or around your knees. In that case, thigh high compression stockings may be more appropriate for you. It may also come down to a case of trial and error. After ensuring that you have the right fit, try wearing each pair separately for approximately two hours. The best test comes when you need to sit for at least that long such as when traveling by car or airplane.

## I've Heard of Tubigrip. Is That An Alternative to Compression Stockings?

Tubigrip is a soft gentle compression tubular bandage made to wear over sprains, strains and weakened joints. Tubigrip is easy to put on, breathes well and, when worn



in 2 layers at the same time, can offer similar compression to a compression stocking. They are especially helpful for people with arthritis of their hands who have trouble putting stockings on. They come in a long roll and must be measured and cut to the right length for your leg. When used daily, the elasticity lasts only about a week. If you're not sure if they would work for you, ask your vein care specialist. They can help you decide if Tubigrip versus compression stockings is the right solution for you, and if so, make sure you have the correct length.

## Won't Ace Bandages or a Wrap Do the Same Thing?

In short, no. Ace bandages are great for offering additional support to weak joints or for holding bandages in place post surgery. However, ace bandages lose their elasticity almost immediately after wrapping them in place, rendering them almost useless for compression. Ace wraps also tend to fall down. For compression stockings to be effective, they need to apply constant pressure evenly around the circumference of your leg. Ace bandages have their benefits, but compression is not one of them.

There is a product called an Unna Wrap or Unna Boot that is medicated with zinc, glycerine or calamine. Unna Wraps are non elastic, but harden some after you put them on. They do not function as compression stockings, but are recommended for treating venous leg ulcers or lymphedema. They are inelastic and serve to apply gentle pressure on skin tissue and when applied correctly never pinch or hurt. The medication in the wrap and the compression helps to heal leg sores. They are gentle, comfortable and, unlike compression stockings, can be worn all night.

## Benefits of Wearing Compression Stockings

The benefits you receive from your specialty socks depends largely on why you need them in the first place. The following are benefits from wearing compression socks:

- Improved circulation in the legs
- Extra support for veins
- Reduces leg swelling
- Prevents the blood in your legs from becoming stagnant and reduces the risk of blood clots
- Prevents ulcers in the calf and ankle
- Reduces light-headedness and dizziness upon standing, a condition formally known as orthostatic hypotension
- Reduces symptoms associated with venous hypertension
- Reduces leg pain associated with a vein condition
- Improves drainage in your lymphatic system
- Increased stamina and energy
- Reduced restless legs and night-time cramps
- Improved quality of sleep

Of course, you may experience other benefits than what we have listed here. These are just the most common ones.

## How Much Do You Really Know About Compression Stockings?

Perhaps you have heard inaccurate statements about



compression stockings in the past and just assumed they were true. Here are some true and false statements to help you know the most accurate information possible about them.

1. You need a prescription for prescription stockings.  
**FALSE IN MOST CASES**
2. These socks will cut off your circulation.  
**FALSE**
3. Compression stockings are expensive.  
**FALSE**
4. Compression stockings are ugly.  
**FALSE**
5. Compression stockings are only for old people.  
**FALSE**
6. These socks are hard to put on.  
**TRUE FOR SOME PEOPLE**
7. Compression stockings don't really work.  
**FALSE**
8. These socks are a cure-all for your health problems.  
**FALSE**
9. You should not wear compression stockings to bed.  
**TRUE**

## A Proper Fit is Essential for Maximum Benefit

Before you purchase a pair of compression socks, get familiar with how to fit them with a YouTube video or ask your provider, vein care specialist or pharmacist to show you how to fit them properly. Often the nursing staff has

the most knowledge and expertise on how to do this. Unfortunately, poorly fit stockings can cause more harm than good if you neglect this step. Typical problems associated with ill-fitting compression stockings include numbness, tingling, and nerve pain. Ask your provider to measure your calf and ankle on each leg to ensure you purchase the proper size of socks.

## Suggestions to Achieve Optimal Benefits

Doctors who specialize in treating people with a vein condition typically recommend starting with a compression of 20-30 mmhg or less if possible. The danger in stronger compression is that it could cause numbness and irritation to the nerves. You may also experience pain or numbness in your feet and ankles.

It may take some trial and error and exploring different styles, but you will find which style of stocking and how much compression you prefer, especially if you wear them every day. Remember to replace your compression stockings at least every two to three months as they will become stretched out over time. You may need to experiment with different styles until you find the one perfect for you.

If you suffer from bunions, calluses, or general tenderness in your toes, open-toed compression stockings would work best for you. Again, we cannot stress enough how important it is to make sure you have the right size of specialty socks. That can make all the difference in comfort and effectiveness.

Two of the biggest complaints that people have about



wearing compression stockings are that they are hot and dense when wearing them all day and that they feel too tight around the knees. The best way to get around this is to look for compression stockings made from at least 75 percent cotton. Also helpful is an open weave and thinner material; online reviews can help in your selection. You should be able to find them online if you cannot locate them at your local pharmacy.

## How to Put Compression Stockings On Correctly

If the socks you purchase are very thin, start by putting them on just above the ankle. Keep in mind that it may be challenging to pull them over your ankles and feet at first. You can purchase socks made of polyester if you think this will be a problem for you. If hand strength is an issue, you can purchase an additional item called a stocking butler. This device is large enough for you to hold onto comfortably but small enough not to be cumbersome. You place each sock in the stocking butler to stretch the opening up to four inches. This allows you to easily slide each foot into the waiting stocking.

A circaid compression wrap is another style you can use to get the benefits of compression stockings - a velcro compression wrap. You should be familiar with its appearance if you have ever had to wear any type of supportive device for a sprained or broken leg or ankle. Instead of struggling with putting on a compression wrap, you place the wrap around your leg and close the Velcro bands to create compression.

## Compression Stockings Could Be the Ideal Solution for Your Vein Condition

Dealing with tired, aching legs every day can quickly lead to fatigue. Chronic fatigue is discouraging and draining. For a minimal investment, wearing compression stockings is one of the simplest ways to improve blood flow between your legs and heart. You can either pick up a pair at your closest drugstore, order them online, or ask your vein care specialist to write you a prescription for a specialty pair. Whichever way you obtain your compression stockings, be sure to wear them as directed and speak to your vein care specialist right away about any challenges you experience.

No longer your grandmother's beige "old lady" socks, they come in a wide variety of colors, patterns, sizes, strengths and lengths. Put simply, life is too short to live in unnecessary pain and discomfort from vein conditions. The benefits to wearing compression stockings far outweigh any perceived negatives. Your vein care specialist will help you obtain the maximum benefit from these stockings as quickly as possible.

