

# Gradient Compression Stockings

## Eastern Zone

### What are gradient compression stockings for?

- Gradient compression stockings help return blood to your heart by compressing (squeezing) your leg muscles. This gently squeezes your veins and helps to push your blood in the right direction.
- ‘Gradient compression’ means that the amount of compression in the stocking gradually changes. The amount of compression is higher at the bottom of the stocking than at the top. This counteracts (balances out) the force of gravity on your body, and helps blood flow back up to your heart.
- Other similar products (like T.E.D.<sup>™</sup> compression stockings) do not provide gradient compression when standing. They are meant to be worn by people who are lying down, not walking or standing. The goal of T.E.D.<sup>™</sup> stockings is to prevent thrombosis (a blood clot in a blood vessel) while a person is on bedrest. These stockings do not work well for patients who walk.

### How does blood flow in the body?

Blood is part of your body’s circulatory system. This system has 2 major types of blood vessels: arteries and veins.

- › Arteries carry blood with oxygen from your heart to the rest of your body.
- › Veins return blood with no oxygen from your body’s tissues back to your heart.

### How do arteries and veins keep blood moving?

- Arteries have thick walls and can expand and contract (get bigger and smaller). This helps your heart to pump blood around your body.
- Veins have thin walls. To keep blood moving from your body’s tissues back to your heart, other muscles contract (get smaller) to help with circulation.

## **What happens when I have valves that are not working well in my veins?**

Each vein has a series of small valves that help circulate blood back to your heart. When your heart beats, the valves open to let blood pass. They close after each heartbeat. This stops the blood from flowing backward (or downward in your legs). Sometimes, the valves get damaged and are not able to do their job properly. The blood pools (builds up) and pushes against the vein walls, causing varicose veins.

## **Why do I need a prescription for gradient compression stockings?**

Only a primary health care provider (family doctor or nurse practitioner) who knows your history can choose the right amount of compression for your medical condition. You may also need other tests, like an ankle-brachial index (ABI) test, to make sure compression is the right treatment for you.

## **How does an Occupational Therapist help?**

- Your primary health care provider will refer you to an Occupational Therapist (OT). The OT will assess you to find the best garment for your needs (for example, you may need a custom garment with a zipper so it is easier to put on). They will also take leg measurements for your stocking size, and teach you about buying, wearing, and taking care of your stocking(s).
- Leg measurements must be taken in the morning when there tends to be less swelling. You may need compression wraps put on by a nurse to help lower leg swelling and get the best measurements for a compression stocking prescription.
- The OT may refer you to a local vendor, where you will be measured by a person called a fitter.
- A device called a stocking donner, which can help you put a compression stocking on, can help if a condition like arthritis makes it hard for you to hold and pull. Ask your OT about the many tools and/or aids that are available to help you get your stockings on and off.

## When should I put on my compression stocking(s) each day?

- It is best to put your stocking(s) on as soon as you get up in the morning. Later in the day, your legs and feet may swell, making it harder to put the stocking(s) on. Also, if you wear slippers or shoes even for a short time, your heel(s) may sweat and the stocking(s) will not slip on as easily.
- **Always take off your stocking(s) at bedtime.**

## What is the easiest way to put my stocking(s) on?

1. Try wearing rubber gloves when putting on your stocking(s). This will make the stocking easier to hold on to, and keep you from tearing it with a fingernail or ring. You can also try putting talcum powder on your skin to help the stocking(s) slide on more easily.
2. Turn the stocking inside out from the ankle up. Leave the foot part of the stocking as is.
3. Slip your foot into the stocking, holding onto it at the ankle part. Let the leg part of the stocking hang at the end of your toes.
4. Once your foot is in place, hold the top edge of the part that is hanging down, and pull it all the way up your leg to your knee.
5. Remember not to scrunch up the stocking like you would when pulling on a sock. This will make the elastic even tighter and almost impossible to pull up.
6. The top edge of the stocking should rest 2.5 cm (1 inch) below where your knee bends. Do not pull too much on the stocking to create extra material at the top.

**DO NOT fold down the top of the stocking, as this will squeeze your leg too much.** If there is extra material at the top, place the top edge 2.5 cm (1 inch) below where your knee bends and massage the extra material down your leg until it evens out and fits smoothly with no creases.

## How tight should my stocking(s) feel?

A properly fitted gradient compression stocking should feel snug at first. It only takes a short time to get used to the pressure.

## How many stockings should I have?

If you use one stocking at a time, we recommend having at least 2 stockings. This gives you one to wear while the other one is being washed. If you wear a pair of stockings, we recommend having 2 pairs.

## How do I take care of my stocking(s)?

- It is very important to take proper care of your stocking(s). Hand or machine wash it with warm water, and mild soap or detergent. Rinse in warm water. Roll your stocking(s) in a towel to remove the extra water, and hang it to dry.
- **Do not bleach, machine dry, or iron your stocking(s).**

## When should I replace my stocking(s)?

- Your stocking(s) should keep its compression for about 6 months under normal wearing conditions. You should replace your stocking(s) after 6 months to make sure it is still working well.
- You should be remeasured at least once every year, or sooner if your body weight has changed by more than 10 pounds since your last measurement.

## What else can I do to help my condition?

Follow the instructions given by your primary health care provider and OT carefully. You should also follow the instructions that come with the stocking(s). These tips can help you to feel and look better:

- › Walk for at least 5 minutes out of every 30 minutes
- › Avoid standing in one position for more than 10 minutes
- › Avoid crossing your legs at the knee
- › When sitting, place your feet a little bit forward instead of directly under your knees

*Prepared by: Occupational Therapy, Eastern Zone  
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