

How can compression therapy help?

The wellness consumer

1 Everyday worker

In many countries, the working age population lies between 25 - 65 years of age. When considering the U.S. workforce alone, 27% of the working population are either sitting or standing at work. [1]

Employees in hospitality, food and beverages, retail, manufacturing, healthcare (e.g., nurses, doctors, paramedics) and security industries are usually on their feet for prolonged periods of time (> 5hrs per day).

In contrast, accountants, legal workers, IT professionals, long-distance travelers and customer-care workers lead more of a sedentary lifestyle.

Studies have shown that prolonged standing and/or sitting is associated with an increase in muscular pain associated with the lower back and limbs. Further the chances of being diagnosed with conditions such as obesity, cardiovascular diseases, varicose veins and other chronic diseases is increased with prolonged seating/standing. [2] [3] [4] [5] [6]

About 90% of venous return from the legs is through the action of the calf muscle pumps. This prolonged seating/standing as a result of one's occupation results in the calf muscle pump being inactive for a large part of the day. This would cause circulation of the lower limbs to be impeded - resulting in blood pooling in the lower limbs. This can result in either the swelling up of the limbs and/or feeling pain/tired limbs. This can have an adverse effect of one's ability to carry out their tasks at work.

In such situations, compression can help your everyday worker to feel rejuvenated and refreshed. Further providing compression to aid the calf muscle pump and thus restore lower limb circulation can also reduce the swelling, pain associated with lower limbs and reduce the likelihood of being diagnosed with circulatory conditions such as Chronic Venous Insufficiency (CVI) and varicose veins [7]

2 Seniors

Seniors over 65 years are another risk group as they are retired and less active. Between 2015 and 2050, the proportion of the world's population over 60 years will almost double from 12% to 22%. [8] In the U.S., 31% of seniors are inactive with no exercise or physical activity. [8]

With age, the main artery from the heart and capillary walls become stiffer slightly. Muscle fibers become thinner. [9] Thus the overall functionality of the circulatory system deteriorates with age.

However, age does not have an effect on maximal blood flow capacity. Maximal blood flow capacity is related to activity level. [11] Hence, it is important for seniors to keep active to ensure that the circulatory system is kept in good shape to provide the required nutrients to parts of the body.

Therefore, compression therapy can be used to support Seniors get more active by helping the muscles recover faster via the external compression provided. Further compression therapy can also aid those who are only able to have minimal physical therapy by providing an external mechanism to activate the calf muscle pump – providing the circulation that the body needs.

Regardless of occupation or age, there are several risk factors affecting CVI. Studies show CVI is closely linked to family history, gender, obesity, diabetes, pregnancy, smoking, constipation, and previous leg injury. [12] [13] Any person in a risk group can use compression therapy to reduce the discomfort they feel due to CVI. It also helps them better manage their day-to-day activities and avoid having negative impacts on their overall emotional and physical well-being.

3 References

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