

The Low-Down on Liners



Editor's Note: Previously published in thrive magazine, and due to popular demand we're happy to share it again.

Q. Fashion. Aren't there more colour choices?

A. While your favourite shirt may be available in a multitude of colours, liners are usually limited in colour offerings due to manufacturing processes. Not all fabrics may take or hold dyes well through the manufacturing process, especially when combined with gel, silicone and urethane interface materials.

Q. Function. How do I prevent pooling?

A. Breathability and sweat are common concerns for amputees. There are liners that work to manage or evacuate the sweat from the prosthesis. One-way valves on the socket help generate a better vacuum and more secure fit. It reduces the damaging effects of motion on damp tissue.

Liners function as the interface between the skin and the inner socket wall to protect the residual limb and provide comfort. Liners are available in a range of designs to suit different residual limb conditions and activity levels.

Thrive readers were asked "How do you like your liner?" While the consensus was quite good, there were some consumer questions around fashion, fit and function. So, we looked to liner manufacturers for answers.

Q. Function. Is there such a thing as a breathable liner?

A. Breathable technology for drier skin and socket security has been introduced which works by letting air and perspiration that are often trapped between the liner and skin to escape. Heat management technology is being used to pull heat away from your limb throughout the day and during high activity.

Q. Fit. Are they all made the same?

A. Not all liners are designed the same. Liner profiles represent the shape of the residual limb more closely inside of the liner, whereas the outside of the liner looks tubular in shape. Different manufacturers have differing thicknesses. Some companies also pre-flex their liners and suspension sleeves.

Q. Stink. What can I do to prevent odour?

A. Unless a liner has specific properties to eliminate or control odour, the best rule of thumb is to make sure liners are being cleaned daily



and disinfected weekly. At the end of each day, wash the liner with water and a body soap that does not irritate the skin. Allow the liner to dry on a drying stand overnight. Once a week, disinfect the liner by wiping the gel with ethyl or isopropyl alcohol and allow the liner to dry overnight.

It's also important to take care of your skin in this area too. Wash daily with a simple, unperfumed soap (ideally pH balanced) and rinse thoroughly to remove any soapy residue before drying. Use a lotion for dry skin and be sure that any damaged skin is properly cared for.

becoming loose during the day. Moisture and air can get trapped inside (between the liner and the residual limb) and is then expelled when you're walking.

Make sure that your liner fits properly. Socket trim lines might need adjusting to provide support to the liner and help prevent moisture and air from getting trapped. Also, make sure that your residual limb surface and the liner surface are as dry as possible before donning.

Ask your prosthetist about liner options that are right for you and be sure to let your clinician know of any fitting issues.

NOTE: Many common household or bath products, including soaps, deodorant, perfumes, aerosol or alcohol sprays, or abrasive cleaners, may cause or contribute to skin irritation. In the event of a bacterial infection, discontinue use of the liner immediately and see your family physician, prosthetist or a dermatologist.

Q. Noise. As in controlling embarrassing bodily function sounds from my leg?

A. Noise usually comes from a liner that's either too loose or



SHAPE OF THINGS

There are different profiles for transtibial and transfemoral liners. Liners tend to be thinner behind the knee to reduce bunching when the knee is bent and to allow for easy bending. All profiles have different patterns of thickness throughout to provide comfort for various residual limb shapes.

Uniform: Protection is provided down the front of the liner where the shin is thinner and behind the knee for easy bending.

Tapered: Best for conical-shaped residual limbs, the interior of the liner narrows as it moves down due to the changing thickness of the interface material.

Contoured: Suited for a prominent shin that needs cushioning on either side of the shinbone.

Progressive: A combination of Uniform, Tapered and Contoured profiles that accommodates a broad range of residual limb shapes.

Symmetrical: Equal thickness around the liner allows it to be rotated.

AK: Extra protection is provided along the front of the femur then thins for less bulk under clothing.

Custom: Ideal for amputees with atypical residual limb contours or for users who don't get the best fit from prefabricated liners.

Liner and Residual Limb Care: For a range of products designed for the care of prosthetic liners, sleeves, and residual limbs, visit ALPS South at easyliner.com/liner-and-residual-limb-care.

