

SUMMER TOP TIPS

FOR AMPUTEES AND
INDIVIDUALS WITH
LIMB DIFFERENCE



Summer Top Tips



There are lots of posts on social media about wearing prosthetics and managing sweating (perspiration) in the summer months and coping with the heat, so LimbPower asked lots of amputees, as well as prosthetists and physiotherapists to bring you this information sheet on summer prosthetic wear.

Top Tips for Limb Hygiene

In the summer months the heat and sweat (perspiration) can impact on wearing a prosthesis making it uncomfortable and can lead to skin related issues. Good hygiene can prevent the build-up of sweat, dirt and bacteria.

Residual limb hygiene

- Wash your residual limb every day. Wash at night to give the limb time to dry unless you make sure your skin is totally dry before donning the prosthesis. Use warm water (not hot water) with a mild antiseptic soap. Rinse with clean water, making sure all traces of soap are gone.
- Dry the residual limb, by patting not rubbing with a soft clean towel. Your limb MUST be totally dry before putting on your prosthesis. If the skin is damp it can swell causing discomfort. It also creates a moist and warm environment for bacteria to grow.
- Check your residual limb regularly for sores, dryness and abrasions. Discuss any changes with your health care professional.

Prosthesis Limb Hygiene

- You MUST keep your artificial limb clean. This applies to both the socket and the liner. Wash regularly with warm water, a clean damp cloth and mild soap. You can use sterilising solutions or antiseptic wipes. DO NOT USE DETERGENT.
- Wash your liner and/or socket at night to ensure it is dry by the morning – you can use a hairdryer if you have to wash it in the morning.
- If you don't keep your prosthetic limb clean you may get rashes and sores.

Stump Socks

- Change stump socks every day, more if the weather is hot and you are sweating. Always have spare socks with you (ask your limb centre for extras).
- Wash your stump socks with warm water not hot water. If hand washing, make sure socks are thoroughly rinsed to remove soap residue.

On the move:

- Hygiene** – Keep a 'limb bag' for your limb care essentials.
- Baby wipes
 - Antiseptic wipes
 - Alcohol spray (your limb centre will supply



- these, ask for a pen for travel).
- Dry flannel or small towel
- Chaffing cream
- Blister plasters of different sizes
- Spare socks, a thick ply and thin ply one to accommodate swelling or shrinking
- Spare belts
- Plastic bags for sweaty gear
- Duct tape for emergency prosthesis repairs.

Top Tips for managing sweating (perspiration)

New amputees or new liner wearers may notice that they are more prone to sweating than they were pre-amputation; this is caused by;

- Your bodies' reduced skin surface area following an amputation which reduces your bodies' ability to cool itself and the body has to work harder to keep cool.
- After amputation there are higher energy demands on the body to produce movement and this energy is dissipated through heat.



- An inability of the perspiration to evaporation due to the enclosed environment of the prosthetic liner.
- There are also a number of medical issues which can affect your ability to regulate your temperature.
- Some pain medications can increase sweating.

Remember sweating is a good sign, if you are getting really hot and not sweating you are at risk of overheating, so get some water and find a cool spot. It is worth noting that amputees often see a reduction in sweating after a few months, so it may improve.

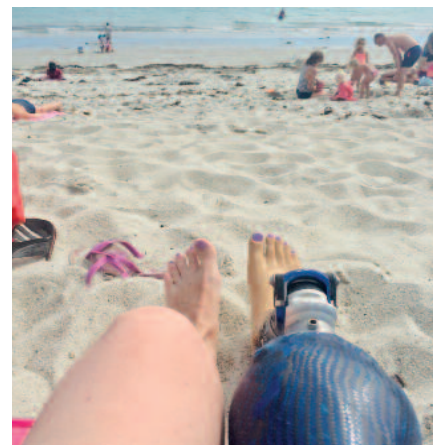
Sweat inside the prosthesis is uncomfortable and causes the liner to move around which can also lead to skin

breakdown as the skin softens. The sweat makes the skin softer and more prone to blister formation, so it is really important to be prepared and wipe away sweat on a regular basis throughout the day. Sweat is not just water, it also contains dissolved salts, glucose, urea and other substances, so remember when you are wiping your liner down during the day you need to ensure that you clean (using an antibacterial wipe or solution) and completely dry the part which will make contact with your skin. Try not to 'push through' and wear the prosthesis for extended lengths of time when it is slipping off and getting sweaty as this can cause breakdown of the skin.

Always talk to your local pharmacist and your GP or Rehab consultant before trying any of the recommended deodorants or talc as everyone is different – consider doing a patch test on a small area and leaving it overnight if you are using a new product.

How to manage sweat in the summer or during activity

Keep the residual limb clean and dry. Doffing (taking off) the prosthesis more regularly is a must during warm conditions (summer heat and exercise). Be prepared to take regular breaks to wipe sweat from the liner (keep a wash bag with you to keep the residual limb clean). Use an antibacterial soap if you have one. You can buy antibacterial soap from the chemist. Using a chlorhexidine wash as a skin wash may reduce sweating as well as keeping the skin clean and avoiding infection. It is available from chemists or ask your GP. **Using a Chlorhexidine wash, such as Hibiscrub**



regularly can dry the skin out so it is best to always apply a moisturiser following a Hibiscrub wash. This may cause some sweating to return but will help maintain the integrity of your skin. Taking breaks for sweating is a pain, but not being able to wear your limb for days because of skin issues is more of a limitation.

1. Make sure your liner fits.

If your liner is too big there is room for the sweat to gather at the bottom of the liner, which can soften the skin and lead to blisters formation. Also, the thickness of the gel liner and type of materials affect sweat production. Thicker gel liners increase sweat production due to increased heat retention. Call you Limb Centre and make an appointment to be measured for a new liner. There are newly available perforated prosthetic liners for sweat management (with very small holes) that allow the perspiration to leave the liner and drain out and down the pin lock, which are worth discussing with your prosthetist. If sweating is a persistent issue, not just in warm conditions and prescription grade antiperspirants (see below for recommendations) do not work, we recommend a visit to the prosthetist to discuss liner and socket fitting options, such as the Alpha Smart Temp, Silcare Breath Liner, Valor Sheath etc. You need to be aware of what options exist to help you reduce sweating.



2. What to do if your liner doesn't fit.

You can purchase a range of socks to use against the skin rather than over the liner. Examples are wicking socks such as Swiftwick Valor socks and Knit Rite liner liners.

3. If you wear a below knee prosthesis and sweat drips down from the thigh where the top of the prosthesis contacts the skin, consider a wide sweat head band to place just inside the liner at the top. Make sure it is the right width to not slip down the limb but not too tight to cut off circulation (it should not leave an imprint on the skin).

4. Ask your prosthetist about a porous (breathable) liner.

5. You may want to try nappy liners.

Yes, unperfumed nappy liners carefully wrapped around your stump so that they

do not bunch up and cause pressure and irritation. The moisture moves from your skin to the other side of the nappy liner and keeps the skin dry.

6. There are a number of oral (taken by mouth) prescription medications that may be used to manage certain types of excessive sweating. The medications

work in a variety of ways to systemically (in your body's whole "system") limit sweating. They do this by helping to prevent the stimulation of sweat glands and thus decreasing overall sweating. Glycopyronium Bromide (prescription) can be very effective for reducing sweating. The Glycopyronium Bromide is reconstituted as an ointment to be applied to the skin, not as an oral preparation. It is effective but very expensive, (£290 a little tub of 1%). There is also a risk that these may interfere with other functions and medication that you are taking so always consult your GP before starting on any new medication.

7. Using a sock suspension – Old school multisock fit, allows absorption of fluids, vents can be made in the PElite liner and the socket if necessary and the socks are easily changed. Swift wick socks absorb the sweat and can be worn underneath a liner, even a non-porous one.

8. Botox injection – Only investigate this as a last resort. This is essentially injecting a toxin into the superficial layer of the skin to paralyse the sweat glands for 6 to 12 months. It is recommended to apply a moisturising lotion in the evening to prevent the skin from becoming dry as a result of lack of sweating. If you do turn to this option, make sure you get it done professionally.

No one treatment is completely effective, so combining treatments is currently the best option. Remember that sweating is normal and healthy so try and set a measure like 'I can exercise for 10 minutes before pooling in the bottom of the prostheses' to assess how one method is more effective than another for your body. Also, make sure you really take time to rest the limb when you can. If you are sweating so much during work, your body is doing a good job of cooling you down but needs all the help it can get.

Top Tips for coping with summer heat

- **Volume Change** – humidity or activity levels can lead to increased perspiration and changes in air conditions; routine and diet can change the volume of your residual limb and cause problems with your prosthetic fit.



Summer Top Tips



- **Temperature** – Some functions and features of a prosthesis will alter dependent on the ambient temperature. Hydraulic and Pneumatic cylinders in particular function slightly differently and electronics may not function below certain temperatures.
- **Sun exposure** – keep prosthesis away from direct sun exposure as some plastics can oxidize making them brittle, or soft and spongy causing them to deform. Find a cool place to take a break before any damage occurs to your residual limb. Also, metal components can become very hot.
- **Sand and debris** – avoid getting bits of sand or dirt in the pin lock mechanism. don't be tempted to wash the prosthesis, wipe it down with anti-bacterial wipes and use a dry paint brush to get at crevasse. Talc is really good for getting sand off the prosthetic liner if the liner is dry.
- **Water exposure** – Is your prosthesis waterproof? If your prosthesis is not waterproof wrap the foot-shell in plastic

if it is going to get splashed with water. You can buy waterproof bags (Design to cover casts) that can be used in water. Do not submerge the whole prosthesis in water.

- **Cooling the rest of the body** – It won't stop you sweating but applying a cold compress (a cloth drenched in cold water) to your forehead, intact hand or foot or between the shoulder blades can help the body regulate heat and cool better. Be careful with applying ice or ice water though as this can cause ice burns.
- **Get up** – It might seem counter intuitive to move about in the heat but there are a number of benefits to avoiding long period of sitting in the heat, the contact of the body with the chair can increase heat production and standing can reduce contact and allow the body to cool. Additionally, gradually increasing activity in the heat can help you acclimatise.
- **Keep the wheelchair cool** – Everything touching your body can stimulate the sweat glands and wheelchairs tend to be fitted to your body. Try a water bottle full of cold water if you can fit it in the chair without causing risk of pressure sores or sitting disruption. If it won't fit try a small bottle of cold water on your lap. Always be cautious with ice or ice-cold water, especially on areas of the body where sensation is limited.



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