







These are the vain of some of my walkers, you can eliminate or reduce the severity & number of blisters, in the worse cases I've seen feet falling to bits on Ten Tors, horrific & unnecessary.

It will take me 44,000 paces to walk the Abbots' Way route & 71680 for the 35mile Ten Tors, the children will do a lot more, if your feet fail, you will be in a lot of unnecessary pain & may have to drop out or worse miss the event completion deadline.

Blisters are caused by all 3 of these together:

- 1. Friction (often felt as hot spots on your feet)
- 2. Moisture
- 3. Heat

Take away one of these & in theory you will not get blisters.

### What causes blisters?

Blisters occur when feet get hot & sweaty, making socks stick to the feet. The sock and foot then rub against each other and the inside of the shoe causing a friction burns. As the outer layer of skin separates from the inner layers the space between fills with lymph fluid to protect the area, like a small balloon.

They are a common problem with athletes wearing in new shoes as well as athletes or walkers who take part in exceptionally long events such as marathons or long hill walks. Blisters do not need to be a part of sporting life and can be prevented or greatly reduced.

Some peoples feet are as tough as nails & they seem never to get problems, but others & most children fall in this bracket, have a disposition to blisters & require a lot of care, preparation & experimentation & money to find out what works best for them. We must do all we can to help them with their feet, otherwise they are preparing to fail......





## 1. Do the **BOOTS** fit well (GOLDEN RULE NUMBER ONE)

• Everybody has different feet, so different brands suit different people, try on lots.

I like 'Moorland Rambler' you can take the boots away for 2 weeks, walk around the house & if you don't like them, change them. The staff knows what they are talking about, not my experience in Millets & Blacks.

- Modern boots need hardly any breaking in.
- Lighter boots are better, each ounce lighter = 1mile further walked for the same effort in a day. But comfort is key.
- Take your insole out & place your heal in the depression on it, no part of your foot should be larger than the insole & your toes should have 1/2" to 1" of free space in front of them.
- What is the insole like?
  - **§** does it cradle/cup the heel
  - **§** provide arch support
  - **§** Is the arch support in the right place for your foot?
  - \$ A lot of boots have poor quality insoles, I use 'SuperFeet' expensive, £30, but they work for me
- Check the seams inside to ensure none are rough or uncomfortable on your foot.
- They should have a Vibram type sole
- They should come up over your ankle.
- Trying boots on:
  - § Do this at the end of the day, your feet swell throughout the day.
  - **§** Take your own walking socks to wear.
- Do those laces up tight, the heel needs to be held into the boot & should not move about. You should be able to wiggles those pinkies though!
  - **§** Parents rarely do laces up tight enough & children defiantly don't.
  - **§** If your heel moves about in the boot you Will get blisters.
  - § Tie a double knot in the laces. tying a single bow & then a second bow seems to work really well
- Check your footprint, & fit custom foot-beds if necessary.
- In bare feet, wet your foot, & walk across a hard floor, your foot will leave an imprint, which tells you a lot about your feet. Looking at old shoes & where they have worn also yields lots of information.
- You may well find, your first purchase is not the right one & you need to get a 2<sup>nd</sup> or 3<sup>rd</sup> pair, expensive I know.
- Remember children grow at an exorbitant rate, they usually need a new pair each year.





## 2. SOCKS (GOLDEN RULE NUMBER TWO)

Make sure they are of the highest quality, Coolmax, SmartWool, SealSkinz & 'Thousand Mile' are a few good makes

- They must be specialist hiking socks, trekking socks are even better.
- They must go past the top of your boot (are you listening girls, no ankle socks), this bit above the boot, wicks away moisture from your foot & allows it to evaporate into the air
- $\circ$   $\,$  no seams to rub on your foot
- No cotton socks, a MUST
- Wear 2 pairs of socks, a thin inner sock & a specialist outer sock, that is what 'Thousand Mile' socks are. It works for some.
- Dry socks are a must, once your feet get wet, they will almost certainly blister
  - **§** why not pack a spare pare
  - § if you always get wet feet, try 'SealSkinz' socks they are water proof, but still push water out from your foot.
- 3. Gaiters are great at keeping out prickles & water, use them. Once you are on tracks & roads, take them off & let your lower leg breath.
- 4. If you know you have problems on your feet, tape them up before the event
  - Use the minimum of tape.
  - Don't tape around the whole foot
  - Type of tape:
    - § 'Duck Tape' works really well,
      - Don't use a copy, make sure it's 'Duck Tape'
    - § 'Second skin' works fine
    - § 'Micro pore' can work to
    - § Moleskin
    - § Blister plasters are efficient & I would recommended carrying a few
  - Round of all edges around the tape ends
  - Don't overlap tape
  - Use a adherent to help the tape stick to your feet:
    - § Tincture of Benzoin
    - **§** Mueller Tuffner Clear Adherent Spray
    - **§** Rubbing alcohol
  - Powder your foot after taping to eliminate any sticky bits showing.







- 5. Some other ideas recommended by endurance athletes:
  - 1. Antiperspirant works well for those with sweaty feet, an adult will produce 1 pint of sweat from their feet in a day from 250,000 sweat glands, good quality socks & boots will evaporate this away from the foot.
  - 2. Talcum powder or Myclin Powder or similar can help reduce hot spots by lubricating the foot & helping keep it dry
- 6. Preventing blisters, tips:
  - § Get good/wonderful boots for YOUR feet
  - **§** Purchase sublime hiking socks x2
  - **§** Check out those insoles, are they right for you?
  - **§** Walk-in your new boots
  - § Get rid of calluses
  - § Clip your toenails short
  - **§** Keep your feet dry & when they get wet, change your socks.
  - § Toughen your feet by walking around bare foot
  - **§** Tape up problem areas before the event.
  - **§** Take up running
  - § Look after your boots & Socks
    - 1. Clean them after your walks.
    - 2. Dry them away from direct sources of heat.
    - 3. Reproof them when dry
    - 4. Love your boots & dream about your socks.
  - **§** The Chinese tea ceremony for your feet
    - 1. Prepare your feet, clip, clean, tape etc
    - Inspect, remove any trace of foreign matter from, feet, socks & boots
    - 3. Roll your socks on
    - 4. Put your boots on, ensure no ruffles, take time with the tongues.
    - 5. Lace up your boots from the very bottom eyes to the very top, ensure they are firm & tied of for the duration of the walk.
    - 6. Fit your gaiters, get them as low on your boot as possible.
  - § Rain trousers should have zips up to the knee or even better to the waist, so you don't have to take your boots & gaiters off to take them on & off, which can be many, many times through the day. Rain trousers cause friction on your legs & make walking difficult, but do allow you to persist when the rain is lashing, without fear of hypothermia.
  - When you feel a hot spot, STOP, treat it early, a piece of Duck Tape can, cure the problem if caught in time, it will only get worse if you don't stop.



# <u>Magdalen Court School</u>



- 7. Keep your feet dry:
  - **§** Walk wise! Avoid those bogs & steams.
  - Wherever possible change socks regularly and use foot powder to help keep them dry
  - **§** To keep your feet extra dry, you may want to try sprinkling a sweatabsorbing foot powder in your socks before you put them on,
  - s or simply apply an antiperspirant that contains aluminium chlorohydrate or aluminium chloride to the soles of your feet to minimize sweating and decrease moisture
- 8. Keep your backpack weight as low as possible.
- 9. How can the athlete treat a blister?
  - § If the blister has not burst then it may be necessary to make a small hole at the edge with a sterilised pin or needle, particularly if the blister is on a weight bearing surface. A pin can be sterilized by passing it through a flame.
  - **§** Do not drain a blood filled blister.
  - **§** Drain the fluid but leave as much of the skin as possible covering the wound. This is an important protective layer for the underlying skin and will help to prevent infection.
  - S Clean the blister with a sterilising wipe. Cover the wound with a second skin take the time to apply it correctly.
  - **§** For additional security apply tape over top.
  - § Unfortunately it will take at least a fortnight to heel.

### 10. Blister treatment at home

- **§** If they are bad go to the NHS walk in centre, they have some great creams & tapes.
- § If you want to harden it quickly for the next walk, get surgical spirit under the dead skin of the blister, but it is excruciatingly painful.

## Do what you can but limp with pride if it happens.

This short info sheet was produced from: 'Fixing your Feet' Prevention & treatments for Athletes By John Vonhof Wilderness Press ISBN: 0-89997-354-X

You can borrow my copy if you want. A 340 page bible on feet! Good bedtime reading......

#### **References:**

- o http://www.thewalkingsite.com/blisters.html
- o http://www.bellaonline.com/articles/art17473.asp
- $\circ \ \underline{http://www.sportsinjuryclinic.net/cybertherapist/front/foot/blisters.htm}$