

Table Of Contents

BLISTER TIPSPREVENTION AND TREATMENT	2
WHY THIS E-BOOK	2
DO NOT LET IT HAPPEN	3
WHAT IS A BLISTER?	4
CAUSES OF BLISTERS	4
MYTHS ABOUT BLISTERS	6
OBJECTIVES	8
CAUSES OF BLISTERS ON THE FEET	9
TREATMENTS FOR BLISTERS ON FEET	9
BLISTER PREVENTION	10
MAKING YOUR OWN BLISTER KID	16
QUESTIONS PEOPLE ALSO ASK	17
FINAL WORD	22
BIBLIOGRAPHY	23

BLISTER TIPS PREVENTION AND TREATMENT



WHY THIS E-BOOK

It's early in the morning and everybody rush to have coffee and try to get ready for the Hike. My feet feel wonderful in my new socks.... so soft and comfy, expensive but worth it.

Halfway up the mountain I could feel a hotspot. It's fine, we will stop for breakfast and then I will attend to it.

A bit exhausted and with hot feet, I took my bag and my shoes off. I took off the new socks and there it is; blister on my big toe.

I am known to pop blisters on the trails, rub my feet in Vaseline, cover my feet in duct tape and spend way too much money on socks to keep my feet dry.

I don't need this. I planned so well for this weekend. Such a disappointment.....

Nothing can ruin a good vacation or put a kink in your day quite like a painful blister.

In fact, I could not walk in my boots on the second day and put on sneakers.

One of the girls had the same problem and she ended up walking in her flip-flops with thick socks.

I tend to blame the heat, water crossings, new boots and wet and dirty socks.

ALL OF THIS COULD HAVE BEEEN PREVENTED.

My weekend is spoiled with a stupid blister

DO NOT LET IT HAPPEN

Blisters are one of the worst nightmares for hikers. One small, tiny hot spot can throw off your game, cause excruciating pain and can prevent you from going back out on the trails. Some of us are more blister-prone than others and require blister prevention care before every hike while others can wear any type of socks and footwear and never worry about a blister.

After many years of hiking and after a couple of tearful breakdowns on the trails and many talks with outdoors experts, I have FINALLY found the best blister prevention and treatment for me.

It may take you a few different attempts and treatment combinations to find your best blister solution, so be patient, don't be scared to spend some money and happy reading. Keep in mind that every foot is different and therefore blister care may differ among individuals.



WHAT IS A BLISTER?

A blister is a small pocket of fluid that forms on an area of the body. These bubbles can vary in size and can occur for different reasons.

Blisters commonly develop on the feet. Fortunately, several home treatments can relieve discomfort and lower the risk of repeated blisters.

If you do not take care of your blisters, it can become wounds that cause discomfort for a couple of weeks. Don' take it lighthearted.

CAUSES OF BLISTERS

Tell me, what do you think causes foot blisters? Chances are you're saying something along the lines of:

Heat, moisture and friction or poorly fitting shoes ... or something along those lines.

Are they caused by friction?



Well, kind of! The problem is, when you say friction, you actually mean rubbing – and blisters are not caused by rubbing.

Let me explain:

Place the tip of your right index finger on the back of your left hand.

Wobble it back and forth but keep it stuck to the same bit of skin.

Notice how your skin stretches? **This is what causes blisters** – the skin is stretching too much. This stretching is called skin shear. Shear might look like rubbing but it's not. Notice how your fingertip has not actually moved relative to the skin of the back of your hand – because your finger is stuck to the same bit of skin?

But your skin has moved relative to the underlying bone and everything in between is stretched. It's the internal stretching part that causes blisters, not the external rubbing part.



When skin shear is excessive and repetitive, a tiny tear occurs just under the skin surface that within 2 hours, fills with fluid to look like what we know and love as a blister. Does that make sense? Learn more about what causes blisters on feet here

The outer layers of your foot's skin can move more than the sensitive inner layers can. Boots and socks apply pressure and friction as you walk, causing these skin layers to separate and fluid to fill creating a blister. In order to prevent blisters we must prevent friction and keep our feet cool and dry.

MYTHS ABOUT BLISTERS

Blisters are a burn

The reality is ...

- 1. Friction blisters do not resemble thermal burns either clinically or histologically
- 2. Experimental blister studies show only moderate increases in skin temperature to between 41-50 °C (insufficient to cause a burn).

Friction is rubbing

The reality is ... (Friction is misunderstood)

Friction is the force that resists rubbing. As the bone moves one way, the force of friction opposes this to keep the surface of the skin stationary. The result is all the soft tissue in between stretches. This is shear and this is what causes blisters. You don't need rubbing to form blisters!

- Blister Cause = Shear
- Deroofed Blister Cause = Rubbing

Wearing cotton socks will stop blisters

The reality is ... (This is the worst thing you can do!)

- Cotton is a hydrophilic (water-attracting) fibre
- It keeps moisture trapped near the skin
- Moisture increases friction levels
- So cotton increases blister incidence

Powders stop friction

The reality is ... (This won't work for long)

- Feet perspire a lot (especially when you exercise.
- Powder absorbs as much perspiration as it can.
- Then it clumps together and increases friction levels.

Lubricants are the best way to stop friction

The reality is ... (This one is a semi-myth)

- Initially friction reduces.
- Then friction increases.

Heat, moisture and friction cause blisters

The reality is ... (This is an over-simplification)

There are 4 factors required to produce blisters:

- 1. Thick and immobile skin
- 2. High coefficient of friction (friction & pressure)
- 3. Moving bone
- 4. Repetition

Blisters are a part of sport – wear them with pride!

The reality is ... (Blisters are not inevitable!)

Blisters are not inevitable! Get the facts.

OBJECTIVES

I BELIEVE THAT THERE ARE 3 THINGS TO FOCUS ON

- Causes
- Treatment
- Prevention

CAUSES OF BLISTERS ON THE FEET

- If you have blisters on your feet, friction may be the culprit.
- Walking or standing for several hours a day puts pressure on the heels, soles, and toes. The longer you're on your feet during the day, the greater your risk for feet blisters.
- Fluid-filled bubbles result from poorly fitted shoes. Shoes that fit too tightly or too loosely can rub against the skin.
- Excessive moisture or perspiration can also trigger these skin bubbles.
- Feet blisters can also develop after a sunburn.

TREATMENTS FOR BLISTERS ON FEET

You may be tempted to pick at or burst a blister. But you should leave a blister intact because an open blister can become infected. Covering your blister with an adhesive bandage helps protect your blister while it heals.

If you leave a blister alone, it may eventually harden and disappear. Until this happens, the bubble may be uncomfortable, depending on its size. While you shouldn't burst a blister, safely draining the blister may provide relief.

Here are steps to properly drain a blister at home:

- 1. Wash your hands with warm water and antibacterial soap.
- 2. Using a cotton swab, disinfect a needle with rubbing alcohol.
- 3. Clean the blister with antiseptic.
- 4. Take the needle and make a small puncture in the blister.
- 5. Allow fluid to completely drain from the blister.
- 6. Apply antibacterial Ointment or cream to the blister.
- 7. Cover the blister with a bandage or gauze.
- 8. Use padding. To protect blisters in pressure areas, such as the bottom of your feet, use padding. Cut the padding into a donut shape with a hole in the middle and place it around the blister. Then, cover the blister and padding with a bandage. Clean and reapply antibacterial ointment daily.
- 9. Keep the blister covered until it heals.

As your blister heals, watch for signs of an infection. If you notice any redness, pus, or increased pain or swelling, make an appointment to see your doctor.

BLISTER PREVENTION



Shoes

Hiking boots should fit snug everywhere, tight nowhere and offer room to wiggle your toes. Go and get your feet fitted by a footwear expert or your local outdoor retail store and the rule of thumb, depending on the shoe, is to go up a half or one full size because your feet will swell on a hike. Every brand fits differently so try on different brands to see which ones fit your feet the best.

New Shoes

If you take new shoes out for a long walk or run, you may get a blister as it rubs different areas than the last pair of shoes. Any shoes can give you a blister in their first few wearing before your feet have grown accustomed to them.

Solution: Most importantly, get a shoe that fits well so your heel isn't slipping and your toes are not rubbing against the front of the shoe.1 Take it slow and only go on short walks or runs with new pairs of shoes, even if they are the same brand and model you have been wearing. Build up your mileage and speed in each pair of shoes.



Cramped Shoes

With a cramped toe box, your toes rub against sides or end of shoes. This can even lead to blackened toenails or losing the toenails after a long walk.

Solution: Your walking shoes should have a finger's width of length between the end of your toe and the end of your shoes to allow your feet to expand while walking. Select shoes of the proper width for your foot so that toes have enough room.

Feet Sliding Around in Shoes

If your shoes are too loose and your feet slide forward and back within the shoe with each step, you are adding extra blister-causing friction. You may also get a black toenail.

Solution: You want your feet to have enough room to expand when you walk, but not enough to slide around. Wear a thicker sock to take up some of the extra space. Learn how to lace your shoes to keep your heel in the heel cup with each step rather than sliding forward. If you still seem to have too much space, buy shoes that fit better.



Socks

I recommend sock liners under wool socks. Used in conjunction with a thicker sock, sock liners feature optimum moisture-wicking capabilities and further protect your feet from irritation. For individuals who are blister prone in between the toes, try toe socks liners

Stay away from cotton socks. The best rule of thumb is to stay with wool socks.

Try supportive insoles

Both custom-made and over-the-counter insoles reduce movement inside a boot, thus limiting friction. Make sure these insoles FIT YOUR SHOE or else they will CREATE blisters. For example, do not switch out your insoles into different shoes, I made this mistake and it resulted in tears and a six-inch fluid filled blister.

Rough Edges in Your Shoes or Insoles

The seams and the edge of the insole can rub against your foot or toes.

Solution: You can change styles of shoes or insoles. Some shoes are designed to be seamless inside. You can also try heat-molded insoles.



Lubricate

Whether you use deodorant, or Vaseline, cover your feet with lubrication before you put your socks on. I usually re-lubricate my feet after 10-12 miles and switch to a new pair of socks after 15 miles. I use Vaseline because it is cheaper and it works like a charm.

Cover your common blister areas

Whether it's in between your toes, on your heel or on the balls of your feet, after enough hiking you WILL learn where you are blister prone. Cover these areas plaster before you lubricate your feet.

Preventing "ball of your feet" blisters

- Place a long, wide strip of tape on the floor, adhesive side up, and set the ball of your foot directly atop it.
- Press down to make your foot as wide as possible. Pull the ends of the tape up around the sides of your foot to meet on the top of your foot.
- Trim the tape to conform to the shape of your foot so the tape doesn't contact your toes.

Preventing toe blisters



- Wrap a small strip of tape, sticky side down, from the base of the toenail over the tip of your toe and then underneath it.
- Wrap a second strip around the circumference of the toe, covering the ends of the first strip. Cut the ends of the second strip as close to each other as possible without overlapping them.

Prevent Blisters by Toughening Your Feet

A newbie is called a tenderfoot for good reasons. Your soft, pink feet will have fewer problems with blisters if your skin gets a little tougher.

- 1. Add distance gradually. Help your feet develop protective calluses instead of blisters by gradually building up your walking time.
- 2. Moisturize away heel cracks. To keep your calluses from drying out too much and developing painful cracks, moisturize your feet after each bath or shower with good foot cream or hand cream.
- 3. Toughen with tannins. Some marathoners and long-distance walkers toughen their feet with 10% tannic acid
- 4. or a tea soak (tea contains tannins).

Stop and Readjust When You Feel a Hot Spot

You will often feel a hot spot developing that can turn into a blister. While you may want to keep going, the best thing to do is stop immediately and use these ideas.

If you are carrying a blister kit, place a blister bandage or other cover over the spot, or create a protective doughnut around it. You can find take-along kits online or at sports stores.

Or, you can make up your own with the cover-ups you prefer (such as gel bandages or moleskin), antiseptic wipes, athletic tape, small scissors, and a miniature container of lubricant.

Readjust your socks and shoes to try to eliminate places where your socks may have become bunched up. If your socks are damp, change to a dry pair if you can.

MAKING YOUR OWN BLISTER KID

Here are the items you'll want to think about bringing along:

A prepackaged kit may be tempting, but as you become more familiar with treating and preventing blisters, you will find what works best for you. At that point, you'll want to customize your own blister kit.



Once you make your kit, check it every season to replace items as needed or that have reached their expiration dates. Sometimes you will also notice that your kit has some water damage or damage from heat or humidity. You want your kit to be stocked, fresh, and ready when you need it.

- **Lubricant**: You can lubricate your feet or other areas that are prone to blisters and chafing. You may want to reapply it as you are out on a walk. You can find miniature sizes of some lubricant sticks at running stores.
- **Powder:** Some walkers prefer to keep their feet dry with cornstarch or other types of powder. You can put some in a Ziplock bag or pill bottle to bring along and apply during a long walk.
- Bandages, moleskin, Tape: Use these to cover hot spots or blisters when they form.
- **Alcohol or antiseptic:** Use alcohol or antiseptic wipes to clean blistered areas or hot spots before covering with a bandage.
- **Small scissors:** Use this to cut bandages, moleskin, or tape to fit the area you wish to cover. You may want to carry a small Swiss army knife that has miniature scissors as one of the utility tools.
- Needle or other blister-pricker: It is recommended that you do not drain blisters unless they are at risk of bursting. Use this if you need to puncture and drain a large blister while still out on a walk. You will also need alcohol and/or a flame to sterilize it if it is not sterile-packed.
- A package to carry it all and keep it dry and clean.

QUESTIONS PEOPLE ALSO ASK

Tplease take note that some of these questions have already been discussed earlier.

How do you make blisters heal faster?

- Leave the blister alone.
- Keep the blister clean.
- Add a second skin.
- Keep the blister lubricated.

Is it better to cover a blister or leave it open?

Leave it alone to heal, and cover it with a blister plaster. As long as it is covered, the wound is protected from infection. A blister should not be opened because the blister roof protects against additional infection.

What is antibiotic ointment for blisters?

Apply an antibiotic ointment (eg, **bacitracin**) to the blister, and bandage the affected area. Once the overlying skin has dried, allow it to fall off naturally or use sterilized scissors to cut the dead skin off.

What is a common treatment for blisters?

Usually, there's no need to drain your **blister**, but you may want to if it's large and hurts a lot. If you decide to do it, use a small needle that you've sterilized with rubbing alcohol. Then pierce the edge of the **blister**.

Afterward, wash the spot with soap and water and cover with petroleum jelly.

How long do blisters take to heal?

Most **blisters heal** naturally after seven to fourteen days and don't require medical attention. It's important to avoid bursting the **blister**, because this could lead to an infection or slow down the healing process. If the **blister does** burst, don't peel off the dead skin.

Does ice help blisters?

Similarly, with blood **blisters**, allow them to **heal** under in their own time.

They **can** be more painful than standard **blisters** and an **ice** pack **can** offer some relief. Place a towel over the affected area, ensuring that the **ice** pack **does** not come into contact with the skin directly.

Do blisters need air to heal?

These are the only **blisters** you can use Compeed on. The most common mistake I see people make is 'letting the **air** get to it'. If you let a deroofed **blister** dry out, all that will happen is you'll get a scab over it. A scab isn't healed skin.

Is it better to keep a blister moist or dry?

Leave the skin on top intact to **protect** the underlying skin, then put a **dry**, clean dressing over the top to **protect** the area while it heals. Eventually, that bubble of skin will **dry** and peel away, and the skin underneath will have had a chance to recover.

How long do blisters take to heal on foot?

Most **blisters heal** on their own in one to two weeks. Don't resume the activity that caused your **blister** until it's **healed**. To **treat** a **blister**, dermatologists recommend the following: cover the **blister**.

What ointment is good for blisters?

Apply an **ointment** such as petroleum jelly to the **blister** and cover it with a nonstick gauze bandage. If a rash appears, stop using the **ointment**. Follow-up care. Check the area every day for infection.

What is the best antibiotic ointment for blisters?

After washing both your hands and the wound, apply a **topical antibiotic ointment**.

Do showers help blisters?

Blisters protect the skin underneath as they **heal**. If they get peeled off, the skin **can** get infected. Cool the burn. Use cold compresses off and on or take a quick **shower** or bath with cool water.

How do you treat a hard blister?

Blisters usually **heal** on their own. Keep a **blister** clean and dry and cover it with a bandage until it goes away. While it **heals**, try to avoid putting pressure on the area or rubbing it.

Is it safe to shower with a blister?

Showering is preferable to **bathing**, so that the wound does not 'soak' in water. Do not use soap, **shower** gel, body lotion, talcum powder or other **bathing** products directly over your healing wound; and do not rub the area, as this might be painful and could delay healing.

How long do friction blisters last?

Blisters often heal on their own within a week or two. They can be painful while they heal, but you will not usually need to see a GP.

Does soaking feet help blisters?

Soaking in Epsom salt and warm water will provide relief as well. Puncturing the **blister** with a sterilized needle and preserving the top of the **blister** can **relieve** the pain. However be careful, as if you take the roof of a newly formed **blister** off, you may experience more pain and be more at risk for an infection.

What is the liquid in a blister?

The clear, watery **liquid** inside a **blister** is called serum. It leaks in from neighboring tissues as a reaction to injured skin.

Should you put Vaseline on a blister?

Don't remove the flap of skin over a **blister** unless it's very dirty or torn or there is pus under it. Gently smooth the flap over the tender skin. **You** may cover the area with a thin layer of **petroleum jelly**, such as **Vaseline**, and a nonstick bandage. Apply more **petroleum jelly** and replace the bandage as needed.

How long should you leave a blister before popping it?

Ideally, nothing. **Blisters** take roughly 7-10 days to heal and usually **leave** no scar. However, **they** can become infected if exposed to bacteria. If **you** don't **pop** a **blister**, it remains a sterile environment, virtually eliminating any risks of infection.

How do you wear shoes with blisters?

Try these hacks:

- 1. Wear socks. They can act as a cushion between your foot and the shoe.
- 2. Use toe protectors or toe caps. They can cushion toes from the **shoe** and prevent friction.
- 3. Insert **shoe** pads or insoles. These can help prevent abrasion in areas such as your heels.
- 4. Apply paper tape.

When should you drain a blister?

Do not puncture a **blister** unless it is large, painful, or likely to be further irritated. The fluid-filled **blister** keeps the underlying skin clean, which prevents infection and promotes healing.

What is a friction blister?

Friction blisters are intraepidermal **blisters** caused by the skin repeatedly rubbing on another object. This type of **blister** most commonly occurs on the hands, fingers, feet, and toes.

How do you stop a blister from hurting?

Then, clean off the **blister** with a little bit of rubbing alcohol or some iodine. Gently rub the **blister** to see if it will pop. If it does not, consider soaking the **blister** in warm water for 30 minues and gently rub again. Rub a little antibiotic ointment on the area, then put a bandage over it.

How do you treat blisters between your toes?

Gently cleaning the area with warm water is also fine. Use an adhesive bandage or place a round piece of moleskin over the **blister** to protect it while it heals. If the skin inside the **blister** is exposed, you may want to apply a moisture barrier such as Vaseline over it before applying a dressing.

FINAL WORD

Don't let blisters stop you in your tracks. Take the time before your long workouts to lubricate and protect your feet. Monitor how your feet feel and don't ignore any signs of hot spots. Switch to the shoes and socks that will best help you stay blister-free.

BIBLIOGRAPHY

- Blisters Treatment. (2015).

 nhs.uk/Conditions/Blisters/Pages/Treatment.aspx
- Causes of blisters. (n.d.). ipfh.org/foot-conditions/foot-conditions-a-z/blisters/causes-of-blisters
- Mayo Clinic Staff. (2015). Blisters: First aid. mayoclinic.org/first-aid/first-aid-blisters/basics/art-20056691
- Blisters on Feet: Causes and Treatments Healthline https://www.healthline.com > health > blisters-on-feet
- People also search for unexplained blisters on feetitchy blisters on feetblisters on feet pictures small water blisters on feethow to cure blisters on feet fastdiabetic blisters on feet
- Learn more about what causes blisters on feet here: https://www.blister-prevention.com/wh...
- What causes TOE blisters: https://www.blister-prevention.com/to...
- What causes HEEL blisters: https://www.blister-prevention.com/he..
- Learn more about treating foot blisters here: Learn more here: https://www.blister-prevention.com/fo....

