HIKE IT RIGHT.

SAFETY HEALTH AND HYGIENE

ON THE TRAIL.

BELINDA COKER

Are you gearing up for an adventure that will take you through some of the world's most renowned hiking trails?

Whether your heart is set on the ancient pathways of Peru, the stark beauty of Iceland, or the remote and wild New Zealand terrain, one thing is certain. Those breathtaking views you've scrolled through on Instagram barely scratch the surface of what it truly means to travel these paths.

While the beaten tracks of Machu Picchu, Laugavegur, or the Milford Track offer their share of awe-inspiring moments, the reality of hiking on even the most well-trodden routes requires a deep awareness of health, hygiene, and safety. This holds especially true when you’re miles away from home, where familiarity and convenience are replaced by the unpredictability of nature.

This guide will equip you with the essential know-how to tackle health, hygiene, and safety head-on. Whether you are hiking within a tour group or going solo into the back country, it will arm you with the confidence and peace of mind that comes from being well-prepared. After all, your memories from these trails should be as untainted as the landscapes you'll traverse.

In this "Hike It Right" e-book, quizzes are strategically placed throughout to test your knowledge and deepen your understanding of health, safety and hygiene on the trail.

Let's begin!

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About the Author

Belinda, an Australian born in New Zealand, is a true testament to the spirit of adventure, channelling her energy into conquering trails across the globe.

Belinda's transformation from a sedentary lifestyle began with a simple pair of hiking boots and has evolved into a journey of unforgettable treks and wild camping, despite a quirky fear of possums and birds.

Her guide's practical advice is drawn from authentic experiences, ensuring fellow hikers are well-prepared.

A staunch advocate for sustainability, she promotes eco-friendly practices and gear, while welcoming all levels of hikers to share in the beauty she captures on her trails.

Deeply connected to nature, Belinda's story is not just about fitness or travel; it's an invitation to rediscover oneself, submerged in the wilderness of the world and the introspection of the trails.

Visit *soultreader.com* and join her in exploring the path less travelled, where every woman is encouraged to shine in her own trek of life.

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HEALTH

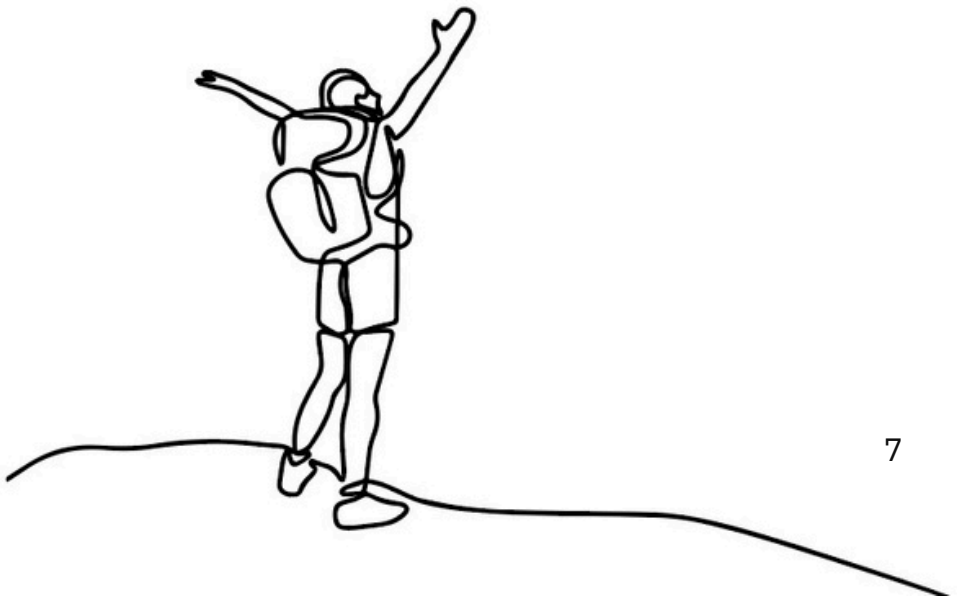
Quick Links: Hydration | Sunburn | Headwear | Heat Related Illnesses | Cold Related Illnesses | Altitude Sickness | Blister Care | Sleep & Rest | Wellbeing | Joint and Muscle Care

Hiking is exciting, but it also puts real demands on your body. This part of the book focuses on staying healthy and strong on the trail. We'll look at hydration, nutrition, preventing common problems, and what to do in emergencies.

Managing your health outdoors isn't only about avoiding illness. It's about having the stamina to keep going, staying mentally alert, and being able to enjoy the landscape without putting yourself at risk.

From humid rainforests to high alpine passes, the principles are the same: know how to look after yourself, and even the hardest hike becomes more achievable and rewarding.

In this section, we'll go through the key health practices that every hiker should understand, starting with an easy one - Hydration.



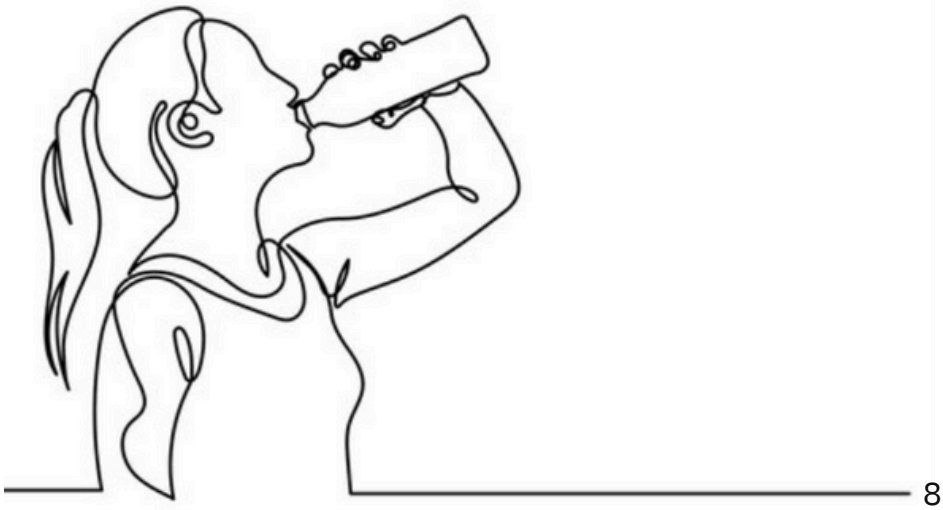
Understanding Hydration

Hydration underpins everything you do on the trail. From the way your muscles work, to how clearly you can think, to how safely your body handles temperature changes, water is at the centre of it all.

When you're walking for hours, especially under a pack, your body is constantly balancing fluid loss through sweat and breathing. Even before you feel thirsty, your concentration, judgment, and coordination can be affected. That's why water isn't just about quenching thirst, it's about keeping both body and mind working optimally.

Hydration also helps regulate body temperature and lowers the risk of heat illness. Cold conditions can be just as dehydrating, with dry air increasing water loss through every breath, layers hiding sweat, and your thirst drive dropping so it's easy to fall behind without noticing.

Let's look at what happens when your body starts running low.



Dehydration

Dehydration begins affecting you before you even feel thirsty. Even a mild loss of fluids can interfere with concentration, slow your reactions, and reduce spatial awareness.

On the trail, that might mean stumbling on uneven ground, forgetting a turn, or losing your bearings when the landscape starts to look the same.

These slips may seem minor at first, but over time they chip away at your safety, particularly if you are hiking alone or in unfamiliar country.

Strong legs will take you far, but it's your focus that keeps you safe. Reading a map, noticing trail markers, and adjusting quickly to changing conditions all rely on mental clarity. When dehydration dulls that edge, it narrows the margin you have for error.

At the other end of the spectrum lies a different risk: drinking more water than your body can handle. It often happens in hot weather, or when hikers try to stay ahead by drinking constantly.

In these situations, sodium in the blood can become too diluted; a condition known as **hyponatremia**. Early signs can resemble dehydration, with headaches, fatigue, and confusion. If it progresses, the swelling it causes in the brain and other organs can become life-threatening.

The Importance of Electrolytes

When you sweat, you lose more than just water. Your body also sheds electrolytes; minerals that carry an electric charge in your blood and body fluids. They are essential for functions such as muscle contraction, nerve signalling, and keeping fluid levels balanced.

Sodium helps regulate fluid balance, maintain blood pressure, and support both nerve and muscle function.

Potassium plays a key role in heart rhythm, muscle contractions, and nerve signalling. Keeping levels steady also helps prevent cramps and supports cardiovascular health.

Magnesium is involved in more than 300 biochemical reactions, from muscle and nerve function to protein synthesis and energy metabolism. It also helps regulate the other electrolytes in your system.

Maintaining these minerals is critical for performance and safety on the trail. You can replace them through foods, sports drinks, or supplements designed for endurance activities.

See my full guide on Food for Hikes, which goes into detail on when, where, and how to replace electrolytes and other nutrients while on the trail.

Hydrating Properly

Hydration needs to start before your boots hit the trail. Instead of chugging a big bottle of water at the trailhead (a habit sometimes called “camelling up”) spread your drinking over the hours before you leave.

Your body can only absorb a certain amount of fluid at a time, and when you overwhelm it, the excess is quickly excreted through urine rather than stored. That’s why a litre all at once leaves you running for a toilet rather than feeling hydrated.

By spacing your intake, more of that water actually moves into your bloodstream and body tissues where it’s needed. On hot days, begin topping up the evening before so you set out already well hydrated.

Once you’re on the trail, keep the same steady approach. Thirst is a lagging signal, and by the time you feel it you may already be behind. Regular sipping helps your body stay balanced and keeps your energy steady.

Aim for around half a litre to a litre an hour, adjusting for your body size, pace, terrain, and weather. Smaller, more frequent drinks are better absorbed than big gulps at long intervals.

Take the
Hydration Quiz

Items to Keep Hydrated on Your Hike:

Electrolyte Dissolvable Tablets - Easily dissolvable in water for an instant electrolyte fix. Choose an electrolyte with all three sodium, potassium and magnesium.

Electrolyte Chews - These are perfect if you're looking for a quick electrolyte fix without adding powder to your water.

Hydration Bladder - A plastic water bladder that's designed to sit inside your backpack, which has a sip-and-siphon hose that attaches to your sternum strap. Note - many modern ultra-lightweight backpacks no longer support water/hydration bladders

3L Hydrapak - A Hydrapak is a soft, foldable water bottle that is extremely useful when dry-camping or hiking where there are limited water sources. Use with the Hydrapak Water Filter, as your filter bladder.

1L Water Filter Bottle - An individual water bottle with built in filter, perfect for day hikes, or if you want a more simple set-up.

Squeeze Water Filter - Compatible with "Smart Water" bottles. Smartwater is popular amoung hikers who do not use water bladders - not for the water, but for the bottles. Their slim shape fits easily into side pockets, and the 2.5 cm mouthpiece is compatible with most squeeze-style water filters. You simply screw the filter onto the top and drink on the go. Any standard plastic bottle with the same diameter will work just as well.

Gravity Fed Water Filter - Perfect for couples or groups, a gravity-fed water filter can process a large amount of water without any squeezing or pumping. I love this system, as we hang it as soon as we arrive at camp, and it filters away in the background while we get everything else sorted.

Water Purification Tablets - Compact and easy to carry, water purification tablets are a convenient alternative to physical water filters.

Nalgene Water Bottle - My personal favourite for its lightweight and indestructible design. The Nalgene bottle can withstand boiling water and double as a hot water bottle in cold conditions.

Sunburn or Sunkissed?

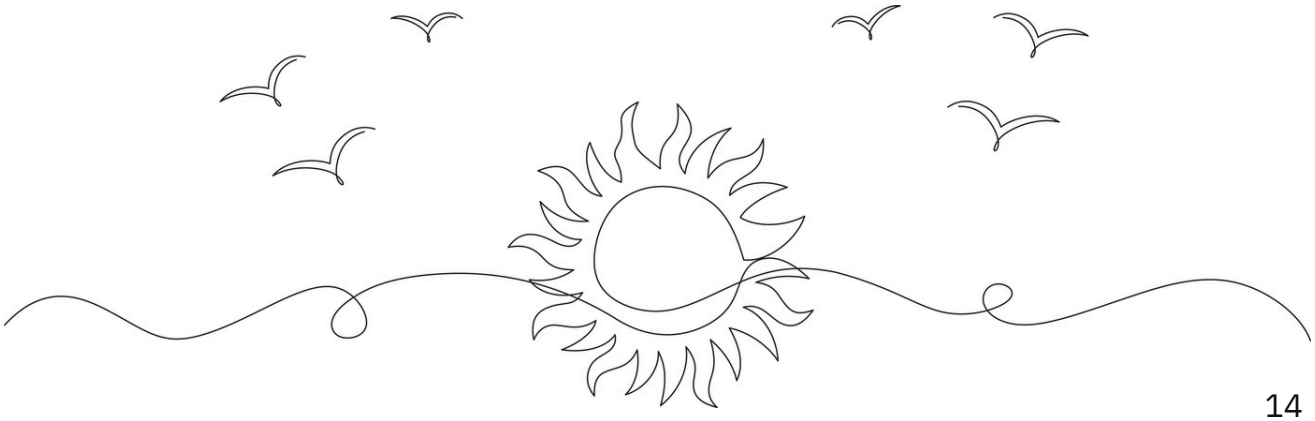
While a golden tan has often been glorified in popular culture, the truth is far less glamorous- it's a sign of DNA damage to your skin cells.

Sunburn occurs when the amount of UV exposure exceeds the protection provided by the skin's melanin, which is the pigment responsible for its colour.

The invisible UV rays can penetrate the outer skin layers and pass into the deeper layers, where they can damage or kill skin cells. In response to this assault, your immune system increases blood flow to the affected area, causing the skin to become red, warm, and swollen.

Peeling after a sunburn is your body's way of shedding damaged cells that could potentially become cancerous. This response indicates cellular damage, which accumulates over time.

Each burn leaves its mark. Repeated sun exposure speeds up the aging of your skin and, more importantly, increases the long-term risk of skin cancer.



Sunwear and Sunglasses

Clothing with a UPF rating (Ultraviolet Protection Factor) is tested to show how much UV radiation can pass through the fabric. For example, a shirt with UPF 50 lets only 1/50th of UV rays reach your skin. My **sun hoodie** is one of the best clothing items I own.

Because the protection is built into the fabric, it won't wash away with sweat or need reapplying.

Your eyes need the same level of protection. UV rays don't just cause temporary irritation, they penetrate into the cornea and lens, causing long-term changes that can lead to cataracts.

Photokeratitis, often called snow blindness, is essentially a sunburn of the cornea. It's painful, causes temporary vision loss, and doesn't just happen in snowfields. Sand, water, and even pale rock can reflect UV back into your eyes with the same intensity.

Sun protection isn't only about avoiding discomfort today. Every hour of exposure adds to the lifetime total of UV damage. On the trail, clothing and sunglasses do most of the work, and sunscreen backs them up on the parts you can't cover.

Sunscreen Explained

There are two main types: chemical (organic) sunscreens and physical (mineral) sunscreens. Chemical sunscreens absorb UV radiation and convert it into heat, while mineral sunscreens (made with zinc oxide or titanium dioxide) act like tiny mirrors, reflecting UV rays away from the skin.

Chemical sunscreens don't work instantly. They need about 20 minutes to bond with the outer layer of your skin cells. This process allows the UV-absorbing filters to settle evenly and create a stable layer of protection. Putting it on right before you head into the sun, or worse, after your skin is already burning, means you're not getting the protection you think you are.

Mineral sunscreens, on the other hand, start working straight away because they sit on the surface and reflect UV. Each type has its place: chemical formulas are often lighter and easier for daily use, while mineral sunscreens are popular on the trail for their immediate protection and lower environmental impact.

Whichever type you use, application matters. Reapply every two hours, and more often if you're sweating heavily.

It's also important to think about where your sunscreen ends up. Many common formulas contain chemicals that harm coral reefs and aquatic life. In national parks and sensitive ecosystems, this runoff can be a real problem. Mineral-based, "reef-safe" sunscreens are a better choice when you're swimming in wilderness waterways.

Items You May Need for UV Protection:

Sun Hoodie – Look for a high UPF rating of 50. Ultra Lightweight Sun Hoodies protect your neck and ears, along with the backs of your hands. When **worn with a cap**, they provide the ultimate UV Protection.

Sunglasses – Polarised sunglasses reduce glare and protect your eyesight from UV damage, cataracts, and snow blindness or photokeratitis.

Sun Gloves – Especially important if using Hiking Poles, as your hands can be highly exposed to UV rays. Sun gloves have been life savers for me, shielding my skin during long hikes.

Sun Umbrella – You may look and feel like Mary Poppins, but don't knock sun umbrellas, which can also double as rain protection. Sun Umbrellas will also reduce the temperature under the umbrella by several degrees.

Sunscreen Stick – Opt for an SPF 50 sunscreen stick to protect all areas of your skin that are not covered by clothing or hats. Sticks reduce the chance of spills or leakage throughout your pack – spoken from experience!

SPF 50 Lip Balm – A good quality lip balm will also protect your lips against windburn.

Face Buff – A face or neck buff has many uses – to protect against sun or wind, an eyemask at night, and a sweat band or ear muff, when worn as a head band.

Understanding Headwear

Headwear for Sun

Your head takes the brunt of the sun on a hike. With such a broad surface area and little natural insulation, your head can heat up quickly, often faster than hikers realise.

Your scalp lacks the fat and muscle layers that help regulate temperature elsewhere in the body, and sweat doesn't evaporate as efficiently from hair-covered skin.

The result is a hot spot for overheating that can raise your core temperature and contribute to heat exhaustion or even heat stroke.

A good hat is the simplest defence. Wide brims, caps with neck flaps, or sun hoodies all create shade for the scalp, face, and neck while cutting down glare.

Pairing head wear with quality sunglasses extends that protection to your eyes, reducing not just immediate discomfort but also the long-term risks of cataracts and macular degeneration.

SunHat Options:

Cap – A cap pairs perfectly with a Sun Hoodie, offering excellent face protection. Remember, if worn alone, it leaves your neck and ears vulnerable to sun exposure.

Cap with Neck Shield – A cap with a neck shield gives you comprehensive sun protection similar to that of a Sun Hoodie. Many models feature a removable neck shield, which is versatile for days when full coverage is not needed.

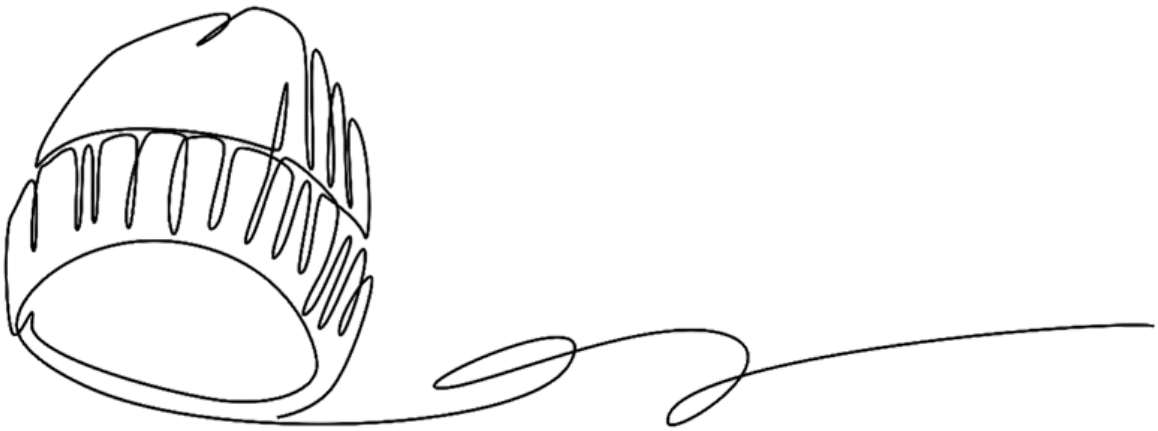
Wide Brimmed Hat – Make sure your lightweight hat has a brim wide enough to provide ample shade for your face, including your neck and ears.

Headwear for Cold Weather

When I stop during a hike, the first thing I do is put on my beanie, especially if I've been working hard or the temperature is cool. I keep it handy in the back pocket of my pack so I can grab it quickly.

Our bodies prioritise warming vital organs, and the head is one of the first areas to cool. The scalp is rich in blood vessels but lacks the fat and muscle insulation of other parts of the body. Unlike the rest of the body, it also can't shiver to generate extra warmth, which makes it especially prone to heat loss.

There's a common myth, based on a misinterpreted military study, that we lose most of our heat through our heads. This has been debunked. Heat loss is proportional to exposed skin. But because the head is usually uncovered and has such a strong blood supply, it can still be a major source of heat loss if left bare.



During cold-weather hikes, putting on a beanie or other insulated headwear when you stop helps trap the warmth your body built up while moving. Activity generates heat, but once you rest, production drops quickly. Covering your head at that point helps stabilise core temperature and reduces the risk of feeling chilled, or in extreme cases, hypothermia.

On the flip side, wearing a beanie while you're exerting can cause overheating, so it's situational. When your body is generating heat on climbs or during fast-paced hiking, trapping too much warmth under a beanie can leave you sweaty and uncomfortable.

More importantly, excess sweat soaks into clothing layers, which can cool rapidly when you stop and increase your risk of getting chilled. Knowing when to pull the beanie off and when to put it back on is part of managing your temperature effectively in cold weather.

Have You Got a Beanie?

Beanie - Ensure it's lightweight and packable, and is designed deep enough to cover your ears.

Temperature and Altitude-Related Illnesses

Heat and cold-related illnesses are real concerns for hikers in extreme conditions. Statistics show that heat is often the bigger danger: over the past 17 years, excessive heat has caused 76 deaths from hyperthermia (dangerously high body temperature) in USA national parks, compared with 46 from hypothermia (dangerously low body temperature).

That said, this doesn't make cold-related illnesses any less serious or noteworthy. Both ends of the temperature spectrum can put hikers at risk. We'll start by looking at heat-related illnesses before moving on to the dangers of cold.

Heat-Related Illnesses

When hiking in summer, it's important to understand heat-related conditions. Hyperthermia is the umbrella term, and it can present as heat exhaustion or progress to the more severe heat stroke. A related but less recognised risk is hyponatremia, caused by drinking excessive water without replacing electrolytes.

These conditions can develop quickly on the trail, and being able to recognise the signs and respond early is one of the most effective ways to stay safe.

Let's look at these in detail.

Heat Exhaustion

Heat exhaustion happens when your core temperature rises and your body can't keep up with the heat stress. This usually comes from losing too much water and salt through sweat.

On the trail it often develops during long climbs in full sun, especially if you're drinking only water without replacing electrolytes. In that case, the fluid you take in can actually dilute sodium levels and make symptoms worse.

Typical signs include heavy sweating, weakness, dizziness, nausea, headache, and a fast heartbeat. Some hikers describe it as suddenly feeling drained or shaky, even if they thought they were pacing well.

If you notice these symptoms, stop and deal with them straight away. Move into the shade if you can, rest, and sip water slowly. If you have electrolytes with you, take them to help replace what's been lost. If not, keep your intake steady and focus on cooling your body with simple measures like a wet bandana, dunking your hat in a stream, or pouring water over your wrists and neck.

Most cases can be treated on the spot with rest, fluids, and cooling, but if symptoms don't improve, or if they worsen, seek medical help. Left untreated, heat exhaustion can progress to heat stroke. This is a medical emergency and can be fatal.

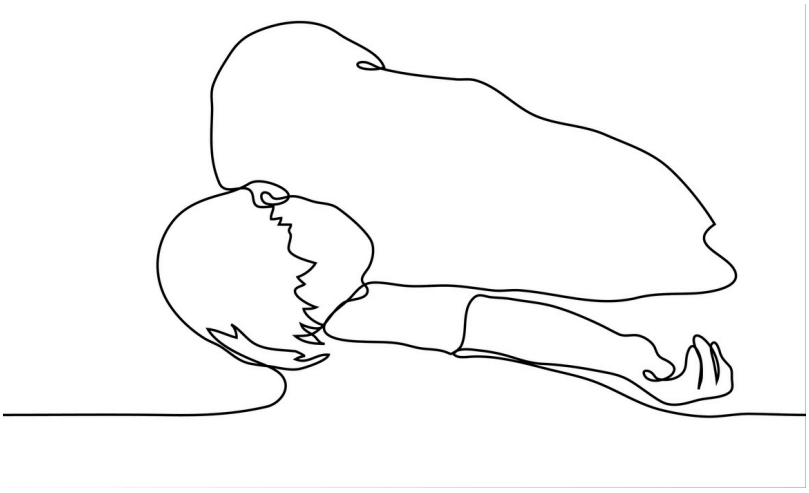
Heat Stroke

Heat stroke is the most serious heat-related illness and always a medical emergency. It happens when the body's temperature control system shuts down and core temperature climbs rapidly, often above 40°C (104°F).

Symptoms are severe: hot, red, or dry skin with little or no sweating, confusion, slurred speech, loss of coordination, seizures, or even unconsciousness.

If this happens on the trail, you need to act immediately. Call for emergency help if you can, move the person into shade, and strip off excess clothing. Cool them as fast as possible by pouring water over their skin, fanning them, or immersing clothing in a stream and draping it over the body.

Do not wait for medical help to arrive without taking action. Heat stroke can cause organ failure and death if untreated, so every minute counts.



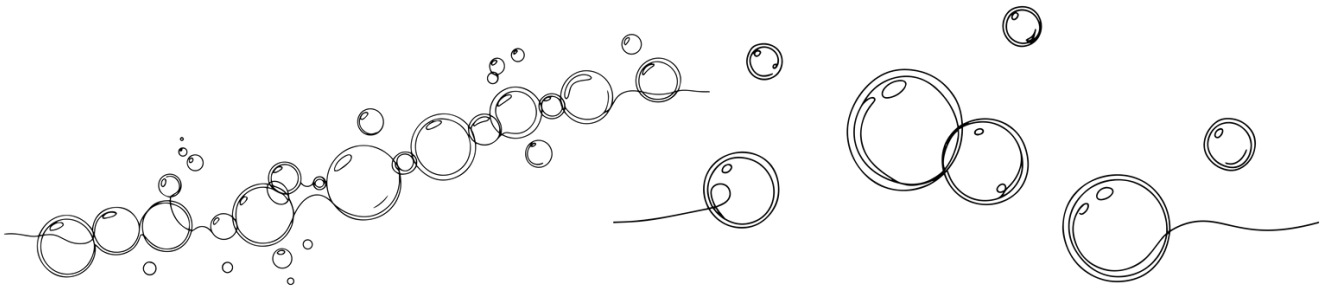
Hyponatremia

While heat exhaustion and heat stroke are well-known dangers in hot conditions, hyponatremia is a less recognised but equally serious risk. It happens when you drink more water than your body can balance, without replacing the sodium lost through sweat. The sodium in your bloodstream becomes diluted, and fluids shift into cells, causing them to swell.

This swelling can be especially dangerous in the brain and other vital organs. Symptoms often look similar to dehydration at first, with headache, nausea, fatigue, or confusion, but they can progress to swelling in the hands or feet, seizures, and in severe cases, collapse.

Prevention is about balance. Keep drinking water, but also replace the salts you're sweating out. Electrolyte tablets or sports drink powders are an easy option, but simple trail foods like salted nuts, pretzels, or crackers can also help.

If symptoms suggest hyponatremia, it's not something to wait out. Seek medical care immediately.



Cold-Related Illnesses

Just as heat can be dangerous, so can extreme cold. Understanding conditions such as hypothermia and frostbite is essential for safe cold-weather hiking.

Hypothermia

Hypothermia sets in when your body loses heat faster than it can make it, dropping your core temperature to dangerous levels. On the trail, it can develop more quickly than many people realise — cold winds, damp clothes, or an unexpected drop in temperature can all trigger it.

Early symptoms include shivering, slurred speech, slow breathing, and a loss of coordination. As it worsens, shivering may stop, and confusion or unconsciousness can follow.

If this happens, act fast. Move the person to a dry, sheltered spot, strip off wet clothing, and get them into warm layers, a sleeping bag, or a bivvy sack. Sharing body heat inside a sleeping bag is also effective.

Offer a warm, non-alcoholic drink if they are alert enough to swallow safely. Always treat hypothermia as an emergency, and seek medical help as soon as possible because without intervention it can be fatal.

Frostbite

Frostbite is the freezing of skin and underlying tissue caused by prolonged exposure to cold temperatures. It most often affects fingers, toes, ears, and the nose.

Early signs include numbness, tingling, and a burning sensation. These are followed by skin that turns white or greyish-yellow and feels hard or waxy to the touch. In severe cases, blisters may form and the tissue can become blackened.

Treatment begins with moving the person to a warm environment. Gently rewarm the affected areas using body heat or warm (not hot) water. Tuck fingers into armpits, place hands between your own, or use shared warmth inside clothing or a sleeping bag. Do not rub or massage frostbitten skin, as this can cause further injury.

Equally important, **do not begin rewarming if there's a chance the tissue could freeze again**. Thawing and then refreezing causes far greater injury than leaving the tissue frozen. Ice crystals re-form inside the cells, leading to permanent tissue death, gangrene, and in many cases, amputation of the affected part.

If frostbite goes beyond the early stages, no amount of trail care is enough. You need medical help fast.

Altitude Sickness

Altitude Sickness is very real for many tourists and hikers visiting mountainous locations such as Machu Picchu or Nepal. In fact, when I lived in Cuenca, Ecuador, which is at 9,000 feet, many tourists experienced altitude sickness symptoms when they first arrived.

Altitude sickness, also known as acute mountain sickness (AMS), occurs when your body cannot get enough oxygen from the air at high elevations.

This condition typically affects hikers at elevations above 8,000 feet (2,400 metres). When I was hiking in Guatemala, at an elevation of 11,000 feet, I experienced altitude sickness; to be honest, it felt like a massive hangover.

Symptoms of altitude sickness include headache, nausea, vomiting, dizziness, fatigue, shortness of breath, difficulty sleeping, and loss of appetite.

In severe cases, altitude sickness can progress to High Altitude Pulmonary Edema (HAPE) or High Altitude Cerebral Edema (HACE). Symptoms of these more serious conditions include a persistent dry cough, fever, shortness of breath even at rest, confusion, loss of coordination, and hallucinations.

Prevention & Management

To prevent altitude sickness, ascend gradually, allowing your body time to acclimate to the higher elevation. It is recommended not to ascend more than 1,000 feet (300 metres) per day once you are above 8,000 feet.

Most hikes above a certain altitude will have acclimatisation hikes scheduled. An acclimatisation hike is when you spend an extra night at altitude and take a shorter day hike higher up before returning to sleep lower.

This gives your body a chance to adjust gradually. For example, on the Everest Base Camp trek there are usually two or three of these scheduled days built in.

Other measures you can take include staying hydrated, consuming carbohydrates for energy, and avoiding alcohol and sedatives, which can worsen symptoms.

Certain medications can help mitigate altitude sickness. Before heading to the Andes or Nepal, it’s a good idea to visit your doctor for a prescription, as pharmaceuticals in developing countries can be sub-par despite being inexpensive.

A common prescription medicine is Acetazolamide (Diamox), which aids acclimatisation by stimulating breathing and improving oxygen levels.

Also, if your iron levels are low, your doctors may prescribe iron supplements to improve your blood's oxygen-carrying capacity; so this is worth checking.

Coca leaves, which you can buy on the streets in most towns in the Andes region, are a traditional remedy used to alleviate symptoms. Typically, the hawkers sell these in the form of a tea or a chewable leaf.

If symptoms of altitude sickness develop, the most effective management is to stop ascending and give your body time to adjust.

Rest, stay warm, and keep your fluid and food intake steady. If symptoms worsen, the safest step is to descend to a lower elevation. Even a drop of 500 to 1,000 feet (150 to 300 metres) can make a big difference.

When signs of HAPE or HACE appear, your urgent priority is to get to a lower elevation without delay and access medical help.

Take the Temperature & Altitude Illnesses Quiz

Blister Care

Hiking blisters result from skin friction or pressure, separating the outer skin layers and creating a pocket of clear fluid (serum). Friction from repetitive foot movements, combined with moisture, is the primary cause of hiking blisters.

Blisters progress through four defined stages, starting with the hot spot phase as a warning sign of skin stress. In the hot spot stage, immediate action can prevent the progression to a full blister by addressing early signs of friction.

Stage 2, an intact blister roof forms to cushion and protect the deeper tissues. At this stage your blister will look like a “bubble”.

As the blister progresses and the roof tears in the following stage, the risk of infection increases, and this requires protection and keeping the wound clean. This later stage is called the de-roofed blister stage.

The de-roofed blister stage exposes sensitive lower skin layers, making it vulnerable to infection. Hygiene, antiseptic ointment, and a hydrocolloid dressing are essential for effective skin regeneration. An infected blister can quickly escalate to septicemia, a serious blood infection, if left untreated.

Prevention strategies for hiking blisters involve choosing well-fitting footwear, moisture-wicking socks, and foot powders to keep feet dry. Regular sock changes and early treatment of hot spots can safeguard against blister formation.

For more information on the 4 steps of a blister, please visit our in depth article *How to Treat and Prevent Hiking Blisters on the Trail.*

Items You May Need for Blister Prevention:

Footwear with Wide Toe Box – Shoes with a wide toe box allow your toes to splay naturally as you walk, reducing friction between the toes and against the inside of the shoe. This extra space helps prevent the kind of pressure points and rubbing that often lead to blisters, especially on long descents or in hot conditions.

Moisture Wicking Socks – Personally I find synthetic socks labeled as moisture wicking do not work for me – neither do unbranded cheap "merino" socks, as I learned the hard way during my hike in Greenland. Your feet do the hard work out there, and if they're miserable, so are you. Keep them happy, and the rest of the hike usually behaves itself. **Smartwool** and **Darn Tough** are two brands I use and recommend.

Liner Socks – Thin liner socks such as toe socks are worn under your regular hiking socks. These provide an extra layer of protection by reducing friction and wicking away moisture.

Foot Powders – Foot powders and anti-perspirants work well by keeping your feet dry and reducing moisture buildup. These products help absorb sweat and so particularly useful in hot, humid conditions.

Hot Spot Protection – Apply blister prevention tape (Rock Tape is excellent), moleskin, or specialised blister bandages such as Engo Blister Patches to hot spots as soon as you notice them or in the spots you know from experience are likely to cause trouble.

Blister Wool or Hiker's Wool – Hiker's Wool is soft, unspun wool (commonly from New Zealand) used to prevent blisters by reducing friction. It contains natural lanolin, which helps moisturise and soothe the skin, reduces chafing, and offers mild antimicrobial benefits. You place it directly on hot spot-prone areas, and it stays in place under your sock without tape

Items You May Need for Blister Management:

Betadine – is a topical antiseptic solution containing povidone-iodine, which kills bacteria, viruses, and fungi by releasing active iodine that penetrates microbial cell walls and disrupts their function. It leaves a brown stain on the skin, which is actually a useful visual indicator. When the colour fades, it usually means the iodine has been depleted, and the area may need to be cleaned and re-treated.

Antiseptic Wipes (Alcohol-Based) – Alcohol-based antiseptic wipes are used to quickly disinfect skin before treating wounds or applying dressings. They work by denaturing proteins in bacteria and viruses, effectively killing most surface pathogens.

Neosporin – Neosporin is a commonly used over-the-counter antibiotic ointment ffor treating minor skin infections in cuts, scrapes, and burns. It contains three active ingredients: neomycin, bacitracin, and polymyxin B. These work together to target bacteria once infection is present or suspected and help prevent it from spreading.

Note: In Australasia, the UK, and much of Europe, antibiotic ointments like Neosporin are not available over the counter and require a prescription.

Island Dressings – An island dressing has a non-stick pad in the centre with an adhesive border around it. It's ideal for the de-roofed blister stage, protecting the exposed skin without sticking and making dressing changes less painful.

Hydrocolloid Bandages – Hydrocolloid blister plasters are specifically designed for treating de-roofed blisters. These adhesive, waterproof dressings maintain full contact with the wound and can remain in place for several days. By interacting with the weeping blister base, the hydrocolloid particles in the plaster create an ideal healing environment for the blister.

Sleep and Rest

A good night's sleep is essential on a multi-day hike. After hours on the trail, it's during sleep that your body carries out much of its repair and recovery.

Deep sleep triggers the release of growth hormone, which stimulates protein synthesis and rebuilds muscle fibres stressed or torn during strenuous walking.

At the same time, sleep facilitates wider cellular repair and regeneration, directing energy toward healing damaged tissues, producing new cells, and reinforcing the strength and integrity of muscles.

Energy replenishment also takes place overnight. Glycogen — the stored form of glucose in muscles — is depleted during exertion, and sleep helps restore these reserves so you have fuel ready for the next day's hike.

When rest is inadequate, the opposite occurs. Inflammatory markers increase, slowing muscle recovery and prolonging soreness. The immune system also weakens, leaving you more susceptible to infections and illness at a time when your body is already under physical stress.

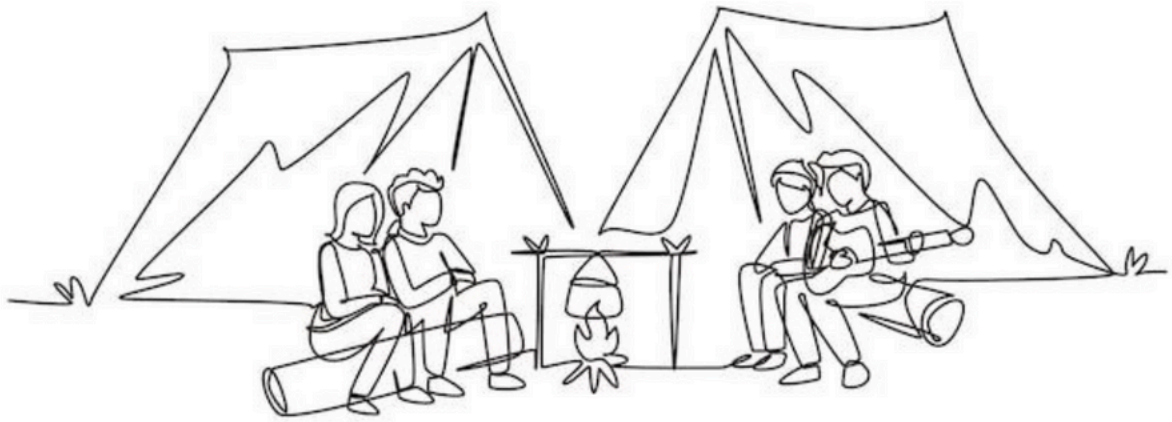
Sleep supports the mind as well as the body. It improves cognitive functions like decision-making, reaction times, and coordination. These abilities make a real difference when you're navigating the trail or dealing with unexpected situations.

“Hikers Midnight”

Hiker’s midnight describes an early bedtime, often around 9 p.m. This shift isn’t just tradition, it mirrors the body’s natural circadian rhythm, the internal clock that regulates sleep, hormone release, and energy cycles over a 24-hour period.

Exposure to natural light on the trail helps reset this rhythm. Daylight stimulates the release of cortisol in the morning, giving you alertness and energy, while darkness triggers melatonin production in the evening, preparing you for sleep. Without artificial lighting, hikers often find themselves naturally winding down earlier than at home.

Many hikers prefer to be up and packed for a sunrise departure, especially in hot conditions. An early start takes advantage of cooler morning temperatures, allows you to cover more ground before midday heat sets in, and aligns perfectly with a body clock that has been reset to the natural light-dark cycle.



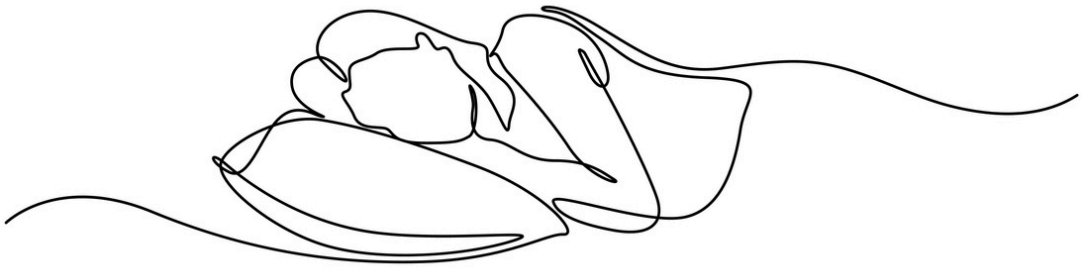
Hut Culture

If you're hiking in areas with a strong hut culture, such as many European trails, be aware that Europeans often stay up later in the evening. This cultural difference can impact your sleep schedule, especially when staying in shared accommodations. Pack ear plugs and possibly an eye mask.

When staying in hiking huts or other shared sleeping areas, it's important to minimise disturbances to fellow hikers. Use the red-light setting on your head torch for night-time activities.

Red light preserves night vision better than white light and is less disruptive to both your sleep and that of others around you. It allows you to move around and get organised without flooding the room with a bright light that could disturb others.

By prioritising good sleep hygiene and being mindful of your sleeping environment, you can help your body recover properly each night.



Items You May Need at Night!

Sleep Mask - A quality sleep mask will block out light from other hikers during the night in huts, and late night or early morning sun - especially if hiking far north or south of the equator.

Ear Plugs - Choose ear plugs that can mold to your ear canals and are soft enough to sleep with. Essential for hut sleeping when sleeping in shared dormitories.

Head Lamp - Ensure your headlamp has a red light (or green) for use at night when others are asleep or when facing other hikers so as not to blind them.

Sleeping Quilt - Sleeping quilts have become popular due to their weight-to-warmth ratio. Down insulation works optimally when the loft is filled with warm air, making down and fabric under your body redundant. Without this excess, you can afford to increase the loft.

Sleeping Bag - For those that haven't converted to a quilt, choose a sleeping bag which is warm but light and able to pack down small.

Thermolite Liner - Adding up to 15C, a thermolite liner can increase your sleeping bag's temperature rating for colder climates

Sleeping Pad - Choose a sleeping pad that doesn't sound like plastic snack wrappers when moved on, and is durable and comfortable.

Joint and Muscle Care on the Trail

Prep and Pace

Before setting out each day, take time to prepare your body and reduce the risk of joint or muscle problems. A short warm-up walk, a few minutes around camp or on a gentle stretch of trail, is often enough to get your blood flowing.

Follow this with light stretching, focusing on key areas like calves, thighs, and shoulders. This helps improve flexibility and lowers the chance of strains.

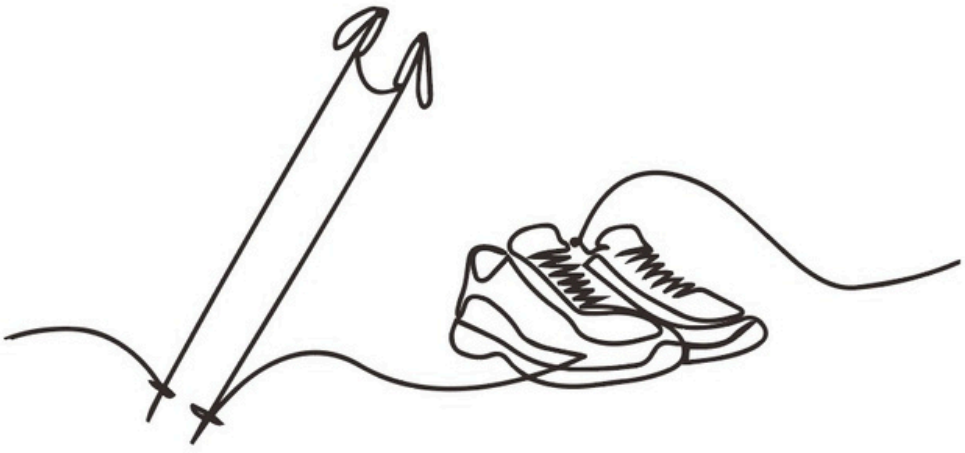
And hiking isn't a race. Keeping a steady, manageable pace conserves energy, reduces stress on your joints and muscles, and helps prevent both fatigue and injury.

Hiking Poles

Hiking poles are a valuable tool for stability and joint protection on the trail. By distributing body weight more evenly, they take pressure off your knees and legs during climbs and descents. This is especially useful on long days or when carrying a heavy pack.

Poles also improve balance on uneven ground, reducing the risk of slips and falls. They engage your upper body muscles too, which helps spread the workload, conserve energy, and support endurance over multi-day hikes.

When choosing poles, look for models with adjustable height settings so you can shorten them for climbs and lengthen them for descents. Lightweight poles reduce strain on the upper body and make a noticeable difference in energy use across long distances.



Nutrition for Muscle and Joint Repair

The right nutrition plays a major role in repairing and strengthening muscles and joints during and after long hikes. What you eat affects recovery time, inflammation levels, and how resilient your body feels day after day.

Protein is the foundation of muscle repair. Foods like jerky, tuna packets, protein bars, or nut butters provide amino acids that rebuild the fibres stressed by long hours of walking.

Timing matters as much as intake: small amounts during the day help maintain steady energy, but the key window is within an hour of finishing your hike. Pairing protein with carbohydrates, like jerky with crackers or a protein bar with dried fruit, replenishes glycogen and kick-starts muscle repair. A protein-rich dinner then continues that recovery process overnight, when growth hormone peaks during deep sleep.

Omega-3 fatty acids, found in oily fish, chia seeds, flax seeds, and walnuts, help reduce inflammation around the joints. This is particularly valuable on multi-day hikes, where repeated strain can make knees and ankles feel stiff or swollen.

Magnesium is another key nutrient. The glycinate form is especially well absorbed and gentle on the stomach, making it a good choice for supplementation even on the trail. It’s involved in over 300 biochemical reactions in the body, including energy production, muscle contraction, and nerve transmission.

Magnesium helps prevent cramps, aids muscle recovery, and supports steady energy. Trail-friendly food sources include almonds, cashews, pumpkin seeds, and even dark chocolate.

Calcium and vitamin D also play a role in joint and bone health. Calcium helps maintain bone strength, while vitamin D assists with calcium absorption and supports immune function. Both are important when your body is under sustained stress outdoors.

Hikers can get calcium from foods like powdered milk, cheese, or almonds, while vitamin D mainly comes from sunlight or, when needed, supplements.

A simple mix of protein bars, nut-based trail mix, jerky, and seed blends covers most recovery needs and fits easily into any pack.

SAFETY

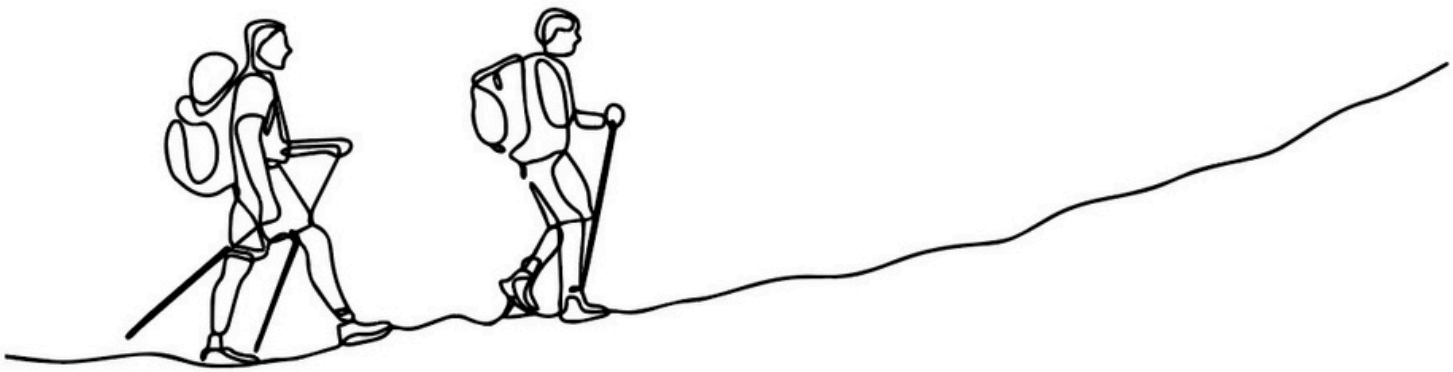
Quick Links: Route Planning | Alpine Thunderstorms | Maps and GPS | Communication Devices | First Aid | Snake Bites | Emergency Rescue

When venturing onto any trail, no matter what level it is, your safety is vital. Route planning, understanding the elevation, location of water sources, and staying informed about weather conditions are all essential.

We'll look at equipping yourself with gear like maps, GPS, and first aid kits so you are ready for any emergency that comes your way.

Let's also find out why effective communication of your plans and the importance of first aid and navigational training can make all the difference if something goes wrong on the trail.

Let's dive in!



Trail Preparation

Good preparation makes the difference between a straightforward hike and one that quickly goes south. Before you set foot on the trail, take time to understand the route, check where your water is coming from, and keep an eye on the weather. These basics sound simple, but they’re what keep you safe when the day doesn’t go as planned.

Route Planning

If you’re hiking somewhere new, or going back to a track you haven’t done in a long time, it’s worth studying the route in advance.

Take time to understand the distance and elevation yourself. Don't rely on a mate to tell you that “it's easy”. Firstly, what's easy for some, might not be for others, and secondly, does your mate even know what they're talking about?

Looking at the elevation profile helps you decide which direction to walk, and sometimes that choice means avoiding a steep uphill slog in the hottest part of the day. Profiles show the big picture — how steep the climbs and descents will be and where the effort is likely to spike.

Guide notes, GPS apps, or comments from other hikers can also flag important details like switchbacks, rocky sections, or exposed ridge lines that won't always be obvious from a map alone.

Pulling those details together gives you a clearer picture of the track and helps you step onto it knowing what to expect. That way, you begin the hike prepared rather than reacting to surprises along the way.

Water Sources

Water is the lifeline of any hike, and planning for it is essential. A map will often mark streams and springs, however they're not always evenly spread out.

In some regions, all the water may be clustered at one end of the trail, leaving you with a long dry stretch to manage. On other routes you may need to carry extra capacity for a dry camp, filling a **hydrapak** or water bladder to see you through until the next source.

Look for topographic clues on your map, such as valleys, shaded gullies, and pastoral land, which are more likely to hold streams, while ridge lines and exposed plateaus often stay dry.

If you're hiking overseas, conditions can be very different from home. In alpine Europe, streams may suddenly turn into raging rivers from snow melt. In Australia, a creek that's flowing one day can vanish the next.

On the Larapinta Trail, for example, I carried six litres because I was dry camping and knew there would be no tank or creek nearby. Two weeks later, a dry river bed I had camped on was flooded beyond crossing.

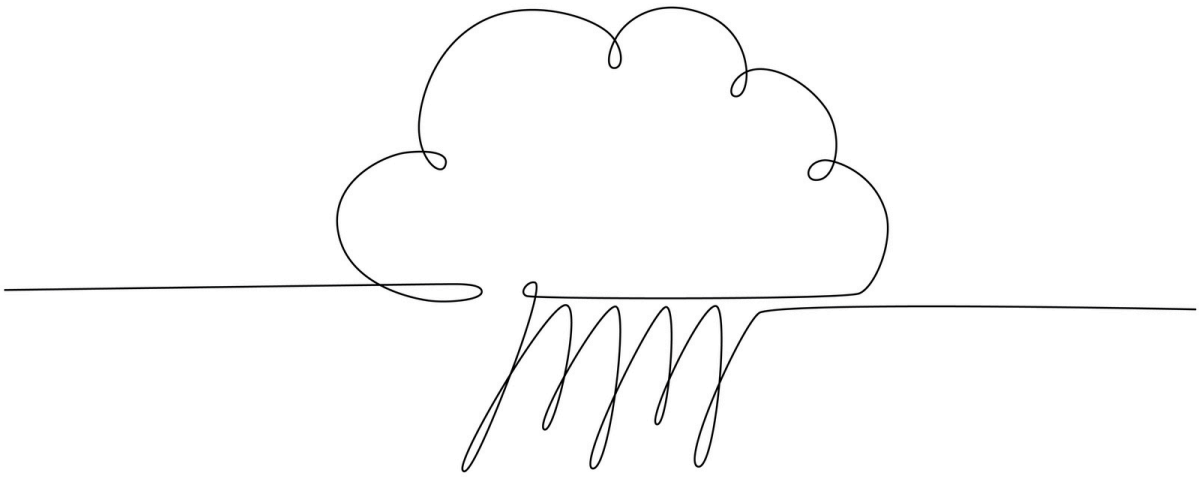
Knowing where water is available shapes more than just when you refill. It can influence your direction of travel, the length of your days, or whether you need to cache water.

Weather

Weather reports are and have always been one of the most accessible resources out there, but always prepare for the unexpected. A sudden cold snap or unexpected heatwave can change the entire nature of a hike.

Always check an official weather app the night before and again in the morning. If forecasts show extreme heat, reconsider your plan or switch to a safer route.

The same goes for high winds in exposed areas. On multi-day hikes, build in flexibility so you can adjust if conditions change. With this is mind, it’s good practice to take an extra day of meals with you - just in case!



Alpine Thunderstorms

When hiking in alpine regions, storms can and do develop quickly and with little warning. The thin alpine air and isolation can heighten the risks associated with lightning strikes, which are extremely dangerous.

Afternoon storms are especially common in summer, and here's why. As the sun warms the ground, the air above it also heats and begins to rise. When that warm air is forced higher over ridges and peaks it cools, condenses, and builds into storm clouds. By midday or early afternoon, the conditions are often unstable enough for thunderstorms to form quickly.

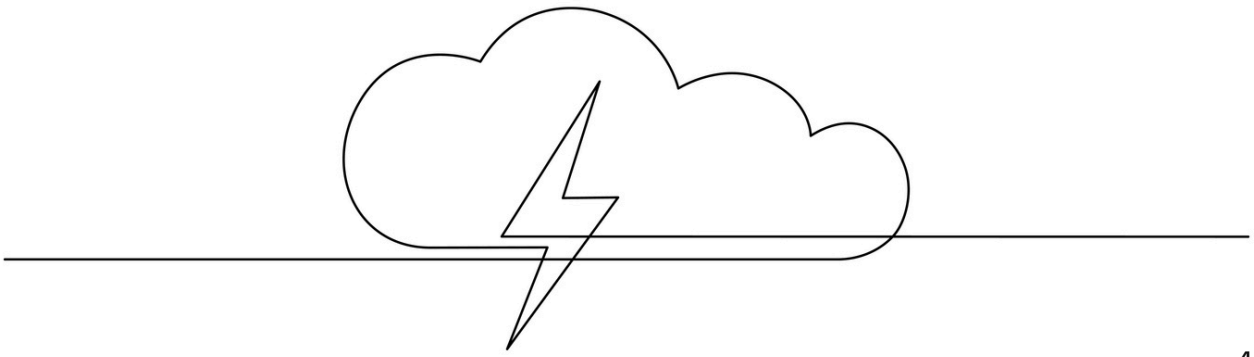
It's important to keep an eye on the sky, and if you notice the signs of a storm brewing, be ready to take safety measures.

- **Descend quickly:** If a storm builds while you're above the tree line, make your way down to lower elevations as soon as possible.
- **Find cover:** Avoid standing under isolated tall trees. A cluster of smaller trees provides better protection.
- **Think about your tent site:** Because storms often roll through at night, avoid pitching near the tallest trees in the area.
- **Manage metal gear:** Keep trekking poles, fishing rods, and metal-framed packs away from where you're sheltering.
- **Plan ahead:** In alpine areas, aim to be off exposed ridges by midday. Mid-afternoon storms are common, and an early start reduces your risk.

Caught in an Open Field

Being caught in an exposed place during a thunderstorm is one of the most dangerous situations for a hiker. If you can't reach cover, the goal is to make yourself a smaller target and reduce your contact with the ground. Here's how:

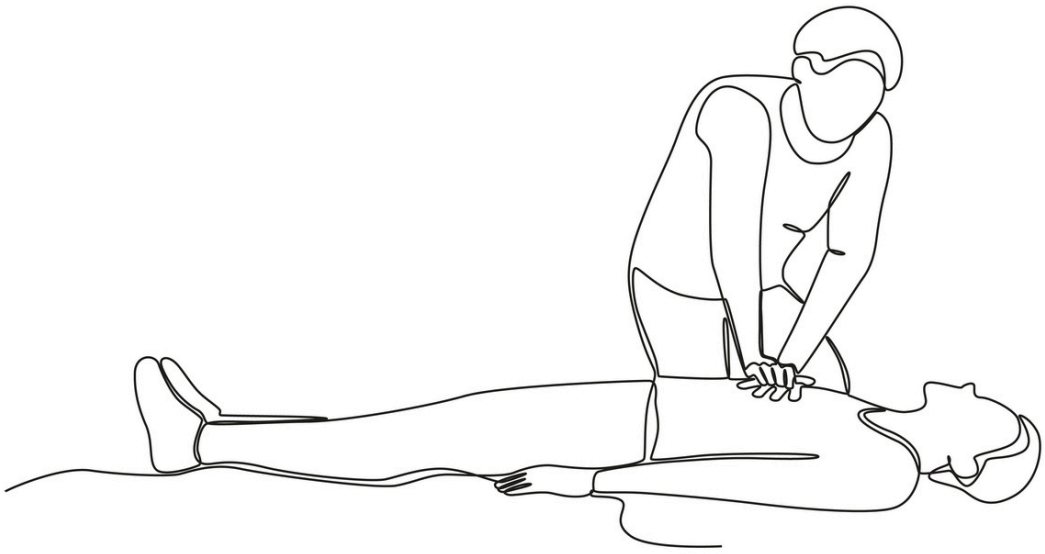
- **Move to lower ground:** Seek out a hollow or dip and crouch down with your feet together and head low.
- **Limit contact with the ground:** Don't sit or lie down. The more of your body touching the ground, the greater the path for lightning to follow. Balance on the balls of your feet, knees together, and head tucked to reduce contact with the ground.
- **Keep your distance:** In a group, spread out at least five metres apart. If lightning strikes the ground, it's less likely to affect everyone.
- **Wait it out:** Don't assume you're safe as soon as the thunder passes. Lightning can strike from the upper edges of a storm cloud, travelling into seemingly clear skies and hitting the ground far from the storm itself.



If Someone Is Struck By Lightning

People who have been hit by lightning carry no electric charge and can be safely tended to. Even those who appear dead can often be revived.

If the person is not breathing, begin mouth-to-mouth resuscitation. If no pulse is found, and you know CPR (cardiopulmonary resuscitation) begin it immediately. Stay with the victim until help arrives.



Navigation

GPS Enabled Hiking Apps

GPS Hiking Maps have changed the way we navigate trails. They're incredibly useful tools, however each one comes with its own quirks. I've listed 3 that I have used extensively, however there are a lot more on the market now.

FarOut has grown well beyond just the big-name thru-hikes. While it does still cover every major long-distance trail across the US, Europe, and New Zealand's Te Araroa, it's now adding new hikes each year, including shorter routes and section hikes.

One of its standout features is the in-app comments, real-time updates from other hikers about water sources, camp spots, hazards, and resupply points.

Pros: Purpose-built for hikers, extremely reliable on established trails, low battery usage, and real-time info from other walkers.
Cons: Not suitable for off-route navigation or custom mapping as it's built around predefined trails only.

Pro Tip:
When using GPS enabled apps, turn off the GPS and close the app when not in use. The GPS use drains battery!

Gaia GPS is a favourite among off-track hikers and those doing more involved trip planning. It pulls from a wide range of government and commercial map sources, including USGS, IGN, and LINZ.

The app very cleverly lets you layer maps as needed. Gaia is ideal for building custom routes, especially in remote, back-country terrain.

Pros: Strong for topo maps, detailed overlays, and planning in wilderness areas. Great for offline use when pre-loaded properly.
Cons: Heavier on battery, steeper learning curve, and some of the most useful features are behind a paywall.

AllTrails is best for casual hikes, weekend walkers, and well-defined trails. It has a huge database of hikes with reviews, photos, and elevation profiles, but because the routes are crowd-sourced, GPS tracks can be messy. If a previous hiker went off-route, that detour is often reflected in the map, which can cause confusion.

Pros: Good for finding hikes in your area, simple interface, and helpful reviews.
Cons: Can be unreliable in remote areas, and track accuracy isn't always dependable.

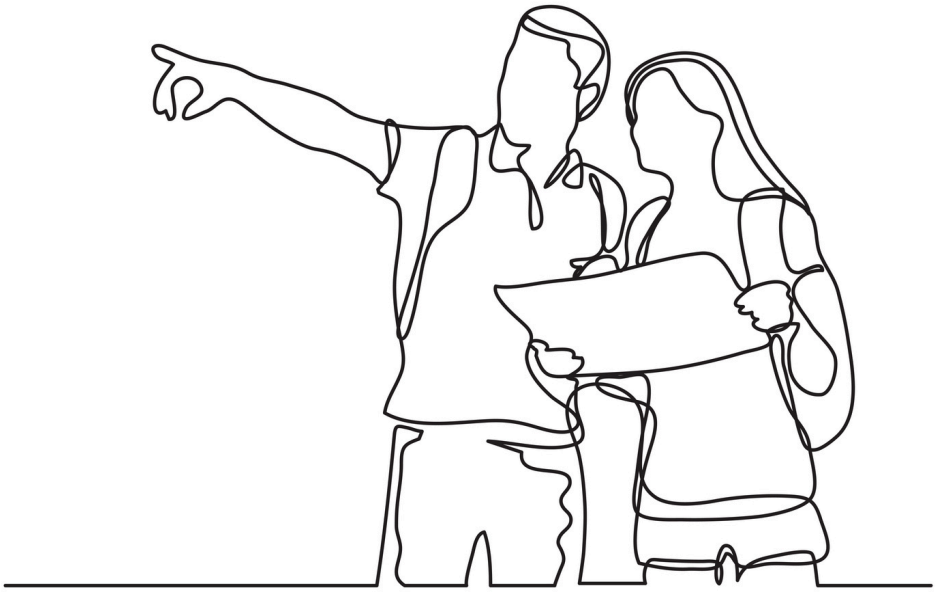
All three apps I have mentioned have a place depending on the type of hike, but none of them are foolproof. As I mention later, always carry a backup map, and know how to use it. Batteries die, screens crack, and trails don't always follow the app.

Paper Maps and Compasses

A good understanding of map-reading and compass skills gives you a navigation method that functions independent of technology.

Navigation skills become especially important when the weather closes in, visibility drops, or the trail isn't obvious. A good navigator can still stay oriented and make safe choices, even with only a paper map.

I recommend taking a navigational course. You can attend in-person training sessions in your area, but if you can't get to any of these or need to brush up on your skills, then *The Columbia River Orienteering Club* has excellent tutorials on YouTube.



Communication & Rescue

Let Someone Know

Communicating your plans before heading out is one of the simplest and most effective safety measures. Letting a trusted person know your route, your intended campsites, and your expected return time can literally save your life if everything turns to custard.

If you're overdue, they can alert search and rescue with accurate details, saving precious hours in an emergency.

Many trailheads and national parks have logbooks where you can record your route. These are not just formality, they provide a starting point for search teams if you fail to return, or to locate you in the event of a fire or flood.

Yet every year, hikers still go missing. From the Larapinta Trail in Australia to Peru's Salkantay and even the Appalachian Mountains, accidents happen, and not everyone makes it home.

These aren't distant headlines, they're sobering reminders often discussed in hiking groups by people who knew the trail or even the victim.

For solo hikers in particular, carrying a Personal Locator Beacon or satellite messenger adds another layer of protection. I'll talk more about these devices in the next section.

Satellite Communication Systems

Two forms of satellite communication systems which are widely available are the **Personal Locator Beacon (PLB)**, which submits a one-way signal to a government system and the Two- Way **Satellite Emergency Notification Devices (SEND)** which allow you to transmit and receive messages as well as request emergency rescue.

Let's look at each of these in detail.

Personal Locator Beacons (PLBs)

Personal Locator Beacons (PLBs) are one-way emergency communication devices that operate on the 406 megahertz frequency. I use the RescueMe PLB unit.

The 406 megahertz distress frequency emitted from PLBs is detected by the international COSPAS-SARSAT satellite system for initiating search and rescue efforts.

PLBs require no subscription fees because the service is funded and provided by governments around the world as a public safety feature to assist in search and rescue operations.

The device is small, compact, and lightweight, making it suitable for various environments. To activate it, simply erect the antenna to a vertical position and press the designated ‘on' or activation button.

Once activated, your registered PLB contacts the nearest Rescue Control Centre relative to your location, and utilising Global Navigation Satellite System (GNSS) technology, it can pinpoint your position with an accuracy of up to 120 metres.

As of 2024, some models of PLBs now include a Return Link Service, which notifies you when your distress signal has been successfully received.

While the PLB, such as the RescueMe PLB, offers precise location tracking in emergencies, it can be complemented by Satellite Communication Devices, which allow for two-way messaging and additional communication capabilities.

Satellite Emergency Notification Devices

Two-Way Satellite Emergency Notification Devices (SEND), such as the Garmin inReach Mini, allow both sending and receiving messages in areas without cell coverage.

Unlike PLBs, which operate on the international Cospas-Sarsat system run by governments, SEND devices connect through commercial satellite constellations.

Access requires a paid subscription, which covers both two-way messaging and SOS functions. Many hikers pause their plan when not travelling, but the device is useless until it's reactivated which is something that's easy to overlook before heading out.

In an emergency, triggering an SOS links you to a 24/7 monitoring centre. They can communicate with you directly, gather details about your condition, and coordinate the appropriate local rescue response. An obvious advantage over PLBs, which only send a one-way distress alert.

Depending on the model, SEND devices also provide extras such as location sharing, live tracking, weather forecasts, and basic GPS navigation.

These features are not essential for rescue, but they can make planning and decision-making on a long trip easier, and they give family at home a way to follow your progress.

Take the
Map, GPS and Hiking
Safety Quiz

Emergency Rescue

When you are overseas, Emergency Rescue may not be free. In fact, it varies from state to state in the USA alone. Emergency Rescue services in Asia, South America, and many countries in Europe are also not free, and will need to be covered by insurance.

Nowadays as more and more people venture out into the wild and everything seems to cost a lot more, emergency rescue is not always covered on a travel insurance policy. And even if it is, often you or your loved ones will need to fork out the cash before those helicopter blades start rotating.

And also crucially important, check to make sure that your activity is covered. For some policies, hiking over a certain elevation can void your coverage for hospital care.

This is where Emergency Rescue comes in. Essentially it's getting you from the point of injury to a hospital. Think of it like a wilderness air-ambulance with specialised teams.

Emergency Assistance which is almost always offered in travel policies is different all together. It's a very broad term, but typically includes staff in a call centre who help orchestrate repatriation or medical assistance for you. However more often than not, it does not include the cost of the helicopter, rescue, or repatriation and can be likened to fancy customer service.

Having worked for an Emergency Assistance company that outsourced services to travel insurance companies many moons ago, I can't stress enough how important it is to be covered if the unexpected happens.

It's always a good idea to call your travel insurance company and run a few scenarios past them - just to make sure you are covered.

I recommend **Overwatch x Rescue**, a comprehensive Emergency SOS Subscription Service providing 24/7 incident, accident, and emergency assistance coordination for all outdoor enthusiasts.

They provide field rescue from remote areas to your nearest medical facility and beyond, to your home or your home hospital of choice. Having this kind of cover means you know in advance how those costs would be handled if you ever needed assistance.

Take the
Emergency Rescue &
First Aid Quiz

First Aid

My hiking First Aid Kit accompanies me on every hike, regardless if it's an overnight, week-long or day hike. Taking a hiking first aid kit with you is like having insurance. You might never use it, but in a crisis, you'll be mighty thankful it's there.

I love the solitude of solo hiking, but it comes with the responsibility of being solely accountable for my well-being. This means being ready to ‘bandage myself up' if needed and having the confidence to do so.

The Importance of Taking a First Aid Course

It's one thing to have a triangular bandage in your kit, but knowing what to do with it is another matter. Did you know how versatile a triangular bandage can be?

Completing a first aid course in Australia is quite common. As part of our labour laws, at least one person in every workplace needs to have a current first aid certificate. As well, many industries which involve any form of people care, require every employee to be certified.

For hikers trekking into the wilderness in a group or on a solo hike, first aid know-how is essential. Out there, it's all on you. There's no quick ambulance call away.

Whether it's a twisted ankle on a remote trail or a surprise encounter with a snake, knowing how to handle an injury until professional help can be reached (or can reach you) is vital.

The Red Cross is one global organisation that has *First Aid Courses*. Nationals of Commonwealth countries may turn to *St John Ambulance*, which has been teaching first aid since 1887.

While these well-known institutes may not teach Wilderness First Aid, they teach up-to-date, solid first aid skills that you can adapt to the wilderness.

For those unable to attend a first aid course in person, *Mountain Man Medical* (based in the USA), has a ton of free first aid courses available, plus supplies for your first aid kit.

Some great additional resources include books; *Wilderness Medicine: Beyond First Aid* and *Medicine for the Outdoors*.

Your First Aid Kit Contents:

The following are a list of essentials for a hiking first aid kit. Taking a first aid course will teach you what do actually do with some of the items you may not be familiar with, like the Triangular Bandage for example.

Triangular Bandage – A triangular bandage is a multi-purpose first aid essential, used for many things including slings, pressure applications, donut bandages, and even tourniquets. Beyond first aid, it can also serve as a water pre-filter, dust mask, sweat rag, pot holder, trail marker or signal flag, and even an improvised shade cloth for an injured person.

Elastic Bandage – Provides compression and support for sprains or joint injuries. Also useful for securing splints and large wound dressings.

Blister Cushion Bandages – Hydrocolloid plasters protect stage 4 blisters, maintain moisture, reduce pain, and promote healing. Can stay in place for several days.

Urals – Effervescent powder that alkalises urine, relieving burning and discomfort from cystitis or early urinary tract infections.

Betadine - Povidone-iodine antiseptic for disinfecting wounds. Leaves a brown stain that fades as iodine is depleted.

Antiseptic Wipes (Alcohol-Based) – Lightweight wipes for disinfecting skin, minor cuts, or hands when water isn't available. Not suitable for deep wounds. May sting when applied to broken skin.

First Aid Kit Contents continued:

Antibiotic Ointment – Combats infection in minor cuts, scrapes, or burns. Common in North America; not always available elsewhere.

Imodium – Used to treat short-term diarrhoea by slowing down intestinal movement, giving the body time to absorb more water.

Saline Solution – For irrigating wounds and flushing foreign particles from eyes. Non-stinging and safe for mucous membranes

Butterfly Bandages **(Steri-Strips)** – Used to hold the edges of moderate cuts together when stitches aren't possible.

Small Tweezers – For removing splinters, stingers, or debris from skin.

Band-Aids – For minor cuts. Elastoplast or similar high-stick brands are more durable and stay put during sweaty hikes.

Sterile Dressing Pads or Island Bandages – An island dressing has a non-stick pad in the centre with an adhesive border around it.

CPR Mask – Protects both you and the patient when performing mouth-to-mouth (CPR).

Nitrile Gloves – Non-latex, as allergies to latex is quite common. Use to avoid contamination and protect from bloodborne pathogens or bodily fluids.

First Aid Kit Contents continued:

Pain Relief: Paracetamol/Tylenol | Ibuprofen/Advil | Aspirin
Paracetamol to reduce pain and fever. Ibuprofen and aspirin are anti-inflammatories that help with pain and swelling. Aspirin also thins the blood, making it less suitable for cuts or trauma where there is bleeding

Antihistamine: To reduce allergic reactions such as itching, swelling, and hayfever. Non-drowsy types like Loratadine or Cetirizine are ideal for daytime use.

Hand Sanitiser – Separate small hand sanitiser sachets. Your regular hand sanitiser bottle you carry is regularly handled by you after toileting etc. This method prevents any cross-contamination when addressing first-aid care.

Personal Information Card
A small card listing your name, medical conditions, emergency contacts, and any allergies.

First Aid Bag – A bright colour such as red will help you identify your first aid kit quickly in the case of an emergency.

Ready Made First Aid Kit – Check your kit against a First Aid Kit for Hiking Checklist to make sure it has all the necessities.

Emergency Blanket: Retains body heat and is useful in treating hypothermia. Can also be used to reflect light as a beacon to emergency services.

Purchasing a Ready Made First Aid Kit

In the early days, I started off with a readymade *First Aid Kit* and just added a few more items of my own. There is absolutely nothing wrong with that. Now I have curated my own from scratch, but you might find it easier to start with a small store-bought First Aid Kit.

Look for a waterproof outer case and one that contains the essentials, without a ton of stuff you don't need.

Check your kit against a *First Aid Kit for Hiking* Checklist to make sure it has all the necessities.

Snake Bites

In Australia, most venomous snakes belong to the Elapidae family. Their venom can affect the body in various ways, including neurotoxic effects that impact the nervous system, cytotoxic effects that cause cell damage, myotoxic effects that affect muscles, and coagulotoxic effects that disrupt blood clotting.

In contrast, North American and European venomous snakes belong to the Viperidae family, and their venom is primarily hemotoxic, meaning it affects blood and tissue.

Understanding the type of snake and its venom is critical, as the management of snake bites differs significantly between the Elapidae and Viperidae families.

Bites from Elapidae snakes, such as those found in Australia, require the Pressure Immobilisation Technique (PIT). This method helps slow the spread of venom through the lymphatic system, buying critical time for the victim to reach medical help.

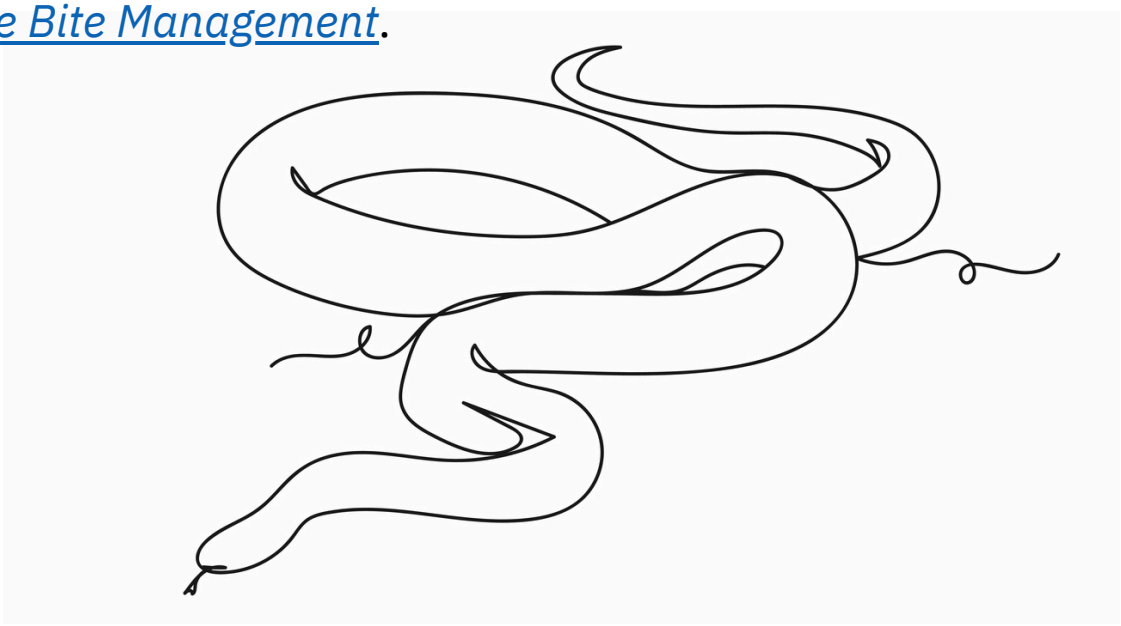
As a result, hikers in Australia should always carry a Snake Bandage to apply this technique correctly.

For vipers in North America and Europe, such as rattlesnakes, copperheads, cottonmouths, and adders, bite management involves immobilising the patient and the affected limb, and keeping it at or slightly below heart level.

Medical attention and antivenom treatment are urgent if bitten, as hemotoxic venom can cause significant damage to tissue and blood.

It's important to note that coral snakes, which are found in the southern United States, belong to the Elapidae family, despite their location in North America. Coral snakes are easily identified by their distinctive black, red, and yellow (or white) bands. Bites from coral snakes require the same Pressure Immobilisation Technique used for Australian venomous snakes.

For more detailed information, visit our comprehensive article on *The Differences Between USA and Australian Snakes and Snake Bite Management*.



HYGIENE

Quick Links: Hand Sanitiser | Toilet Paper | Toileting | Hiking with your Period | Personal Hygiene

Hygiene on the trail is one of the three pillars of health and safety during a multi-day hike. It's not that hikers are generally dirty people; rather, the lack of facilities requires a higher level of vigilance to avoid both yourself and other falling ill.

Often on multi-day hikes, there can be outbreaks of gastroenteritis due to poor hygiene practices. This condition can be debilitating and completely ruin your hike. One of my own toughest experiences with gastroenteritis occurred on the famous Overland Track in Tasmania, Australia.

The challenge is heightened without access to easily available facilities like basins with soap for handwashing after toileting.

Poor hygiene practices can also lead to issues such as chafing, which occurs when sweat and grime accumulate on your skin, making it uncomfortable and even painful to walk.

We will also look at toileting in the wild in detail. We will cover the options when urinating, how to use a Female Urination Device, how to “do Number Twos” (aka – take a dump, poop etc), how to avoid stomach upsets or diarrhoea and options for if you have your period.

Hand Sanitiser

There's a hiker's code of conduct which is to never shake hands - unlikely you will be offered a hand to shake anyway! The absence of soap and running water is one of the fastest ways to spread germs between hikers, particularly on long-distance trails or group treks where shared food and facilities are common.

That's where alcohol-based hand sanitiser comes in. And it's not just for after toileting; it's essential before eating, after handling gear, and anytime your hands are likely to carry bacteria.

Sanitiser works by using alcohol (usually isopropyl or ethyl alcohol at a concentration of 60% or more) to break down and neutralise many viruses and bacteria.

The way it works is, alcohol disrupts the lipid membranes and protein structures that protect these pathogens, effectively inactivating them. The alcohol also cuts through the natural oils and grime on your hands, which can otherwise protect germs from exposure.

But to work properly, it needs to be used correctly.

After applying enough sanitiser to coat all surfaces of your hands, including between fingers and around your thumbs, you need to rub thoroughly - for at least 20 seconds, or until your hands feel completely dry.

The alcohol is only active while your hands are wet. Don’t wipe it off, and don’t blow on your hands to speed it up. Rushing the process can reduce its effectiveness and leave bacteria behind.

That said, it's important to know that sanitisers may not eliminate all types of bacteria and viruses, such as certain spores and some parasites. So when you do get the opportunity to properly wash your hands, it's good practice.

One of the best places to keep your hand sanitizer is on the outside of your pack, or in an outside pocket. Many small hand sanitisers come with a clip or the ability to secure to your pack using a carabiner.

I always keep spare sachets of sanitiser in my first aid kit, so if I need to disinfect my hands in a medical situation, there is no cross contamination with my everyday hand sanitiser.

Pro Tip: *Never offer food in a bag for someone to dip their hand in. Encourage them to hold out their hand and then you pour your peanuts, candy, or whatever into their hand.*

Hand Sanitiser - Choose an alcohol-based hand sanitiser with at least 60% alcohol content to effectively cut through germs.

The Hikers Toilet

“The hiker’s toilet has no walls, or basin,
just a floor, Yet it offers views so grand,
like none you've ever seen before”

I get asked “How do you go to the toilet when hiking?” so often. And depending on whether or not I'm at the dinner table, I'm happy to elaborate.

If back country camping, toileting is part of the experience; just like cooking your food or stashing your food away from bears or possums, or striking camp. It becomes second nature and, if I might add, quite enjoyable. As long as you feel safe and comfortable, then watching the scenery and listening to the birds sing is rather nice when doing your business.

However, for many embarking on a multi-day walk or hike , even if it is hut-to-hut or inn-to-inn, the need to go to the toilet on the trail can cause anxiety and stress. Especially if there are no stops along the way and many of the long distance hikes in Europe fall into this category. And if you're like me, the need to go isn't like clockwork. It can happen after your body starts moving – say 2km in.

Ok – Let's check this all out.

Toilet Paper

The old practice of burying toilet paper has been replaced with “pack-it out”. Toilet paper takes a very long time to biodegrade and especially in arid climates (such as Southern Europe, the USA Sierras, or Patagonia in South America), it may never biodegrade.

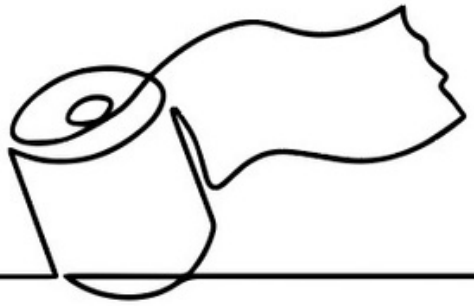
Regular toilet paper is also full of chemicals and bleach, another reason to not leave it in or on the ground.

Pack it Out

To “Pack it Out” means taking everything you bring into the wild back out with you—this includes your rubbish, leftover food, and may even mean your human waste, depending on local guidelines. It's the 3rd principle of *Leave No Trace* - Dispose of Waste Properly.

The best way to handle toilet paper is to carry a small plastic bag and put your soiled toilet paper in as you go. When you get to a toilet or bin, you can then empty or dispose of the bag.

Some back-country toilets can handle compostable doggie poop bags. These are also great to carry your used toilet paper. Check with the local park ranger or authority to see if this is the case



Toilet Paper Options:

Due to the environmental issues with toilet paper, and with hikers around the world trying to carry less by streamlining the weight and bulk of their packs, several alternatives have emerged in recent years. Starting with my favourite: the Kula Cloth.

Kula Cloth (or pee-cloth)

A Kula Cloth (pee-cloth) is for wiping after urinating and designed specifically for front-end cleanliness. It is not untended to wipe your backend after pooping due to the absorbent properties of the fabric.

A Kula Cloth or pee-cloth is a reusable, antimicrobial cloth with a waterproof layer and an absorbent side. The specialised antimicrobial fabric is treated to harness UV rays, which sanitise the cloth by breaking down microbes' DNA, drying the fabric, and preventing pathogen growth.

You will often see hikers with a Kula Cloth swinging from the back of their pack, as they allow the sun to sanitise the cloth.

To use, hold onto the waterproof side and wipe yourself with the absorbent side.

The Kula Cloth or any Pee-Cloth typically weighs only 14 g (0.5 oz) and has a small strap to attach to your backpack. It also folds in half, should the absorbent side become soiled. Rinse nightly to clean. Quick drying.

Portable Bidet (aka Backcountry Bidet)

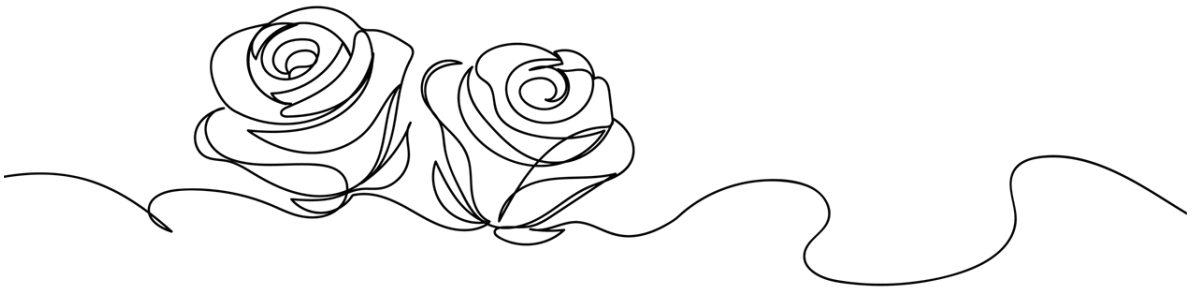
There are many portable (aka backcountry) bidets on the market now, and essentially they all work the same way.

Portable bidets squirt a steady stream of water over your genitals, cleansing after toileting or to freshen up to prevent chafing.

Some backcountry bidets are small caps which screw onto a small plastic water bottle, while some brands include the water bottle as part of the design.

I prefer the small cap variery and my favourite brand is Culo Clean. Weighing just 11g (0.42oz), It's compatible with most plastic bottles and fits in the two most common diameters. You can easily regulate water intensity by exerting more or less pressure to the bottle.

It’s important to ensure that you squirt from front to back, not the other way around, as contaminants in the water may enter your urethra and potentially cause a UTI.



Female Urination Devices (FUDs)

A Female Urination Device (FUD) is an innovative product for individuals who traditionally sit or squat to urinate, enabling them to do so while standing up.

The FUD design includes a spout that directs urine away from the feet, so you can stand up when using public toilets or when urinating outdoors.

To use an FUD, simply push your underwear to one side, place the device securely against your body, and urinate. There's no need to remove clothing, which is a great advantage in cold or constrained environments. After use, most devices can be easily rinsed with water or wiped clean.

Mastering the art of standing urination with an FUD does require practice, since anatomically it can be challenging to relax and ‘let go.' As well, on a personal level, I've struggled to fully empty my bladder this way, which can lead to complications like cystitis or a UTI (Urinary Tract Infection).

If you find you're not emptying completely while standing, it might be worth reconsidering if a FUD is the right choice for you.

Pro-Tip: *Practise using your Female Urination Device in the shower. It does take a little practice, and with the water running, any mishaps just go down the drain.*

The Art of Number Twos

OK! Now the hard stuff. And if it's not hard, then you might like to read the next section.

"Number Twos" (aka Poop, Feces or Faeces) is the brown solid waste you produce. And almost all walkers or hikers have needed to go when on the trail. So, how do you do this correctly?

Many park and recreation area by-laws world wide require you to bury your waste. And to do this, you need to carry a small trowel in your kit.

There are many trowels on the market especially for this use. They are usually made from titanium, are extremely strong and sharp and can cut through grass roots easily to dig a hole.
Use your trowel to dig a small hole, known as a cat hole, about 20 cm (8 inches) deep.

The hole should be at least 60 metres (200 feet) away from any water sources. The reason being is that the soil acts as a natural filter over that distance, breaking down most harmful substances.

Your trowel is used to dig the hole and then cover the hole with dirt. Your trowel should never come in contact with your faeces. You can either try and aim for the hole, or move your waste into the hole using a stick, or leaves that can also be buried.

After you are done, cover the hole and disguise it so it blends back in with its surroundings. Many hikers place a stick upright near the refilled hole to indicate to others not to dig in the same spot.

Toileting away from water sources is extremely important.

Firstly, these are often the same spots where hikers source their drinking water, and a contaminated water source can lead to cholera, a very serious disease.

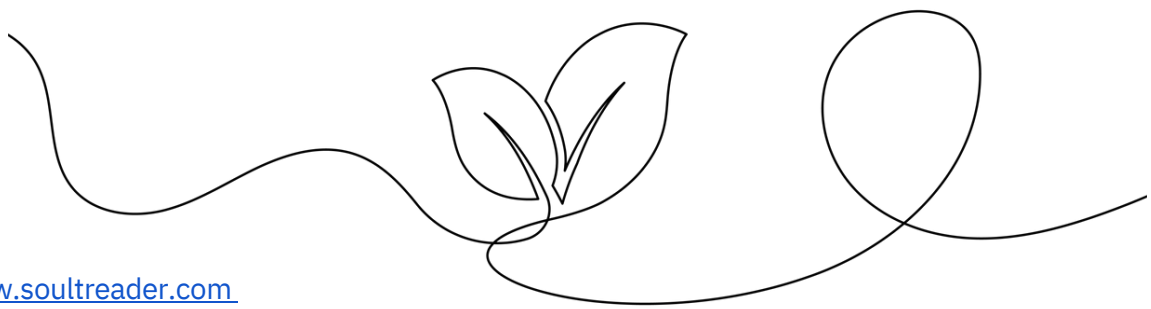
Secondly, wildlife relies on water sources for survival and habitat, and human waste can wreak havoc on their environments.

Packing it Out NASA Style

There are times when it is not possible to bury your waste. It may be due to a fragile ecosystem or the aridity of the land.

In dry, arid conditions, the lack of moisture slows down the biodegradation of human waste. Microorganisms, essential for breaking down organic material, are less active and less abundant in such environments.

Often, these arid conditions also mean hard or rocky ground, which can make digging a cat hole extremely difficult.

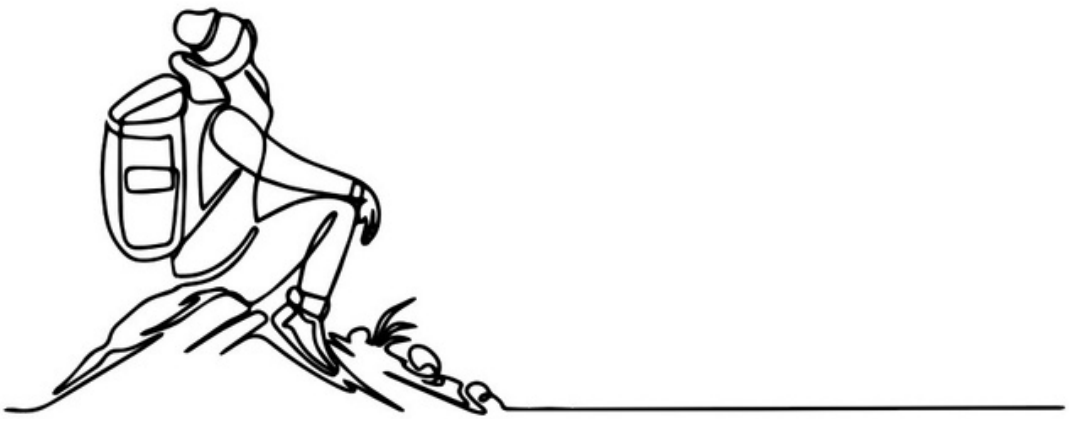


National Parks are starting to require hikers, climbers and adventurers to Pack it Out. The ideal way to do this is to use commercial portable human waste bags such as the Wag Bag or Restop. Many parks in arid regions are actually handing these out to hikers and campers.

Sometimes it might just not be possible to bury your waste - you might be on the Camino or walking through private property on one of the many walks in Europe. If this is the case, a portable human waste bag such as a Restop of Wag Bag may just be the ticket.

How do Portable Human Waste Bags work? Quite clever actually! They use a NASA-developed gelling agent:are designed to transform the waste into a spill-proof, odourless, solid state. Each biodegradable kit includes a multi-use waste bag, zip-close puncture-resistant storage bag, toilet paper, and a hand sanitiser.

Restop 2 or Wag Bags are lightweight, compact, and easy to pack. Once used, the outer bag can be carried for several days until you reach a garbage bin, where it can be disposed of. On walks in Europe, you'll typically only need to carry the (odourless) bag for 1 day.



Squatting

It's true that the loss of the ability to squat is a common problem for many hikers, particularly those from Western cultures where the squatting posture is not a regular part of daily life.

For hikers, squatting is more than just a technique, it's an important skill for many activities out on the trails. Given the lack of toilet access in the wilderness, squatting becomes the default position when toileting..

It's about staying balanced on your feet when the ground's all bumpy and keeping things clean without any fancy facilities.

Petra Fisher Movement has a free one-month course on her website to remove your squatting barriers and increase your mobility.

If you find it difficult to squat, find a tree and hold on for support. And quite often, the ground at the base of the tree will be soft for you to dig your cat-hole, due to all of the organic litter the tree provides.

Hiking with Your Period

You have a few options when hiking with your period. Traditional methods like tampons or pads are commonly used, but these must be carried out with you; not buried or left behind, to preserve the environment.

Cups and Disks

Menstrual cups and disks are sustainable period care options and perfect for hikers and walkers on multi-day hikes.

Generally made from medical-grade silicone, menstrual cups are designed to be inserted into the vagina during menstruation, collecting rather than absorbing blood.

Cups come in various sizes for different anatomies and are a long-lasting, eco-friendly alternative to pads and tampons, and safe for up to 12 hours of use.

Menstrual cups are typically about the size and shape of an eggcup, and are folded before inserting. Once inside, they "pop" open and form a seal inside the vaginal canal.

Menstrual discs, on the other hand, are flat, flexible rings with a catch pouch. Discs are also inserted into the vagina, but instead of forming a suction seal, they tuck behind the pubic bone, sitting at the base of the cervix, in the vaginal fornix.

External Period Care

There are various personal and medical considerations that may lead someone to seek alternatives to menstrual cups or other internal menstrual products. For those who cannot or prefer not to use internal period products, external menstrual products such as reusable cloth pads or period underwear can be more suitable.

In the context of hiking, particularly long thru-hikes, managing reusable cloth pads or period underwear between resupply stops and laundry days can be done with careful planning.

Use wet bags for storage between cleanings to help reduce odour, and wash the items whenever you can, making sure to follow *Leave No Trace Principles*.

Just make sure the items are thoroughly dry before storing back into your luggage, as the absorbent fabric within these items are just that, absorbent. And they will retain moisture.

Take the
Hikers Hygiene Quiz

Do You Have These Toileting Essentials?

Back Country Bidet - A bidet can be used instead of toilet paper and also helps keep you feeling fresh.

Kula Cloth (Pee Cloth) - Made from antimicrobial fabric, this cloth replaces toilet paper.

Trowel - Lightweight and made of strong titanium, it can cut through roots and hard ground for the perfect cat hole.

Pact Toilet - A readymade toilet kit that includes all the essentials.

Menstrual Cup - Easy to use and environmentally friendly, it provides perfect period care for hiking.

Waterproof Bag - This bag is the ideal size for transporting soiled period underwear or reusable pads.

Wag Bag - Used when burying human waste is not possible due to environmentally sensitive areas or arid conditions.

Female Urination Device (FUD) - This portable device enables women to urinate while standing, ensuring convenience and hygiene during outdoor adventures.

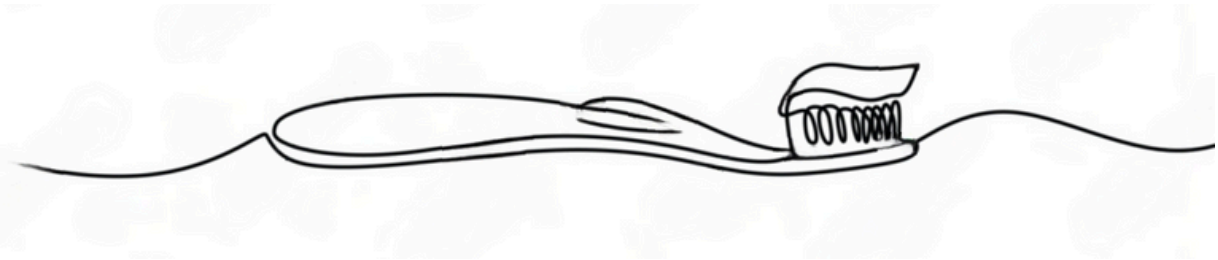
Personal Hygiene

When it comes to brushing your teeth, what you do with the toothpaste afterwards matters. Spitting it out isn't ideal as not only does it create unsightly white marks, it can also be harmful to wildlife.

A good solution is to use toothpaste tabs that can safely be swallowed, or transfer a natural toothpaste into a reusable toothpaste tube or lip gloss tube purchased from Amazon. For those used to washing their hair daily, you may need to resort to dry shampoo.

A natural alternative to dry shampoo is cornflour or baking soda. Adding a couple of drops of essential oils to the cornflour can make it smell rather nice, and it naturally absorbs oils from your hair.

When you do get a chance to wash your hair, remember the Leave No Trace principles and wash at least 100 feet or 60 metres away from any water source or campsite. The reason not to wash your hair near a campsite is to avoid attracting wildlife, such as bears, which can be drawn to the scents.



For washing my body, I have a wash kit consisting of a collapsible dog bowl and a small bottle of biodegradable washing liquid.

Using a quick-dry microfibre washcloth, I start cleaning from the top – my face and armpits – working my way down, and finally, clean sensitive areas last to maintain hygiene.

You can use this method just using 1 litre of water, and this operation can also be done inside your tent whilst sitting.

Laundry

My evening routine includes a washing my socks and underwear, ensuring I'm fresh from head to toe. I use an ultra- lightweight collapsible dog bowl as a washbasin to first clean myself—details on this process can be found in the 'Personal Hygiene' section.

Afterwards, I wash the day's socks and underwear, along with my kula cloth, and hang them out to dry.

My underwear doubles as bikini top and bottoms and they dry very quickly, within 30 minutes. If someone happens to see my underwear drying, I'm honestly not bothered. And unlikely anyone lingers around a remote campsite fixated on women's underwear.

With three pairs of both underwear and socks, I have enough to rotate them, and skipping an evening of laundry isn't a disaster.

Recommended Personal Hygiene Items

Toothpaste Tabs – Small, light and convenient

Natural Toothpaste – If the concept of toothpaste tabs doesn't appeal. Make sure you use a quality natural toothpaste that you can swallow.

Reusable Toothpaste Tube You will use these time and time again for travel.

Foldable Wash Bowl Yes, it's actually a dog bowl. However it's sturdy so you can clean up in your tent and not worry about water spilling.

Wilderness Wash Biodegradable – however, do not use near any water sources

WELLBEING ON THE TRAIL

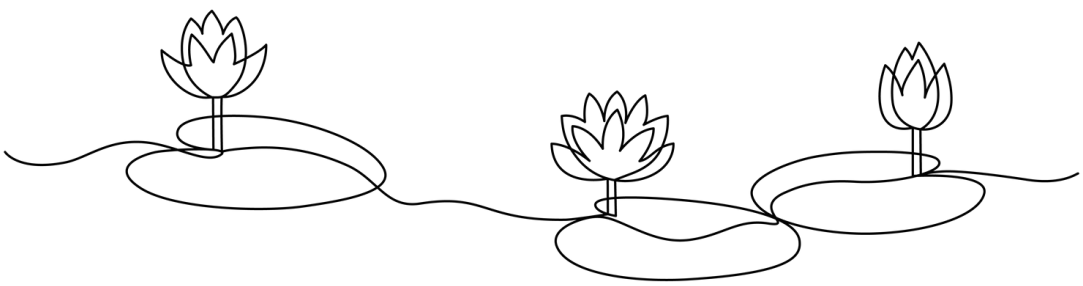
Mental Health

Mental well-being plays an important role in your hiking experience. Maintaining a positive mental state can enhance your enjoyment and support your resilience and decision- making abilities on the trail.

It’s important to recognise and address mental health needs just as you would physical ones. I've often thought of going on a hike like a huge sponge that absorbs all anxieties or concerns. Hiking is my happy place, where I find peace and solace.

Mindfulness and Relaxation

Hiking or being outdoors can nurture relaxation and mindfulness. Observing the sights and sounds of nature, focusing on your breathing, or being in the present moment can bring valuable benefits.



Also viewing a picturesque vista can activate brain regions linked to pleasure and reward, like the medial prefrontal cortex (mPFC) and orbitofrontal cortex (OFC), which aids in mood enhancement and stress reduction.

Research has also revealed that walking in nature diminishes activity in the amygdala, the brain region associated with stress processing. This decline in amygdala activity can alleviate feelings of anxiety and uplift overall mood.

Furthermore, spending time outdoors has been shown to enhance cognitive function, boost memory, and decrease stress levels (*Psychology Today*).

Self-Care

Take time to enjoy small comforts that lift your spirits. This might be a warm cup of cocoa at the end of a long day, quiet time with your Kindle, or listening to your favourite music.

These simple rituals create a sense of comfort and familiarity, helping your mind to unwind. Setting realistic goals for each day also keeps motivation steady and gives you a sense of accomplishment.

Remember to celebrate small victories along the way, and stay flexible with your plans. Adjusting when needed can ease pressure and help you avoid unnecessary stress.

Thank You for Reading Hike It Right

If you've made it to the end of this guide, thank you. It means a lot to me that you've taken the time to invest in your own safety, health, and wellbeing out on the trail.

This book was never about fear-mongering or ticking boxes — it was about giving hikers like you the tools to make smart decisions, to hike with confidence, and to stay safe when things don't go to plan.

Whether you're heading out solo, hiking with mates, or introducing others to the outdoors, I hope Hike It Right helps you feel better prepared and more aware of what matters most out there.

I'd also like to thank every hiker who's crossed paths with me over the years, those who shared their mistakes as openly as their triumphs. Many of the tips in this book come not just from my own experience, but from that collective knowledge we build by talking to each other honestly.

If this guide helped you, even in a small way, I'd love to hear from you. And if you think others would benefit from it too, please pass it on.

Stay safe. Tread lightly. And keep getting out there.

Belinda xx


SOUL TREADER