

Camping and Hiking Food Safety Guide

Written by [Staff Writer](#)



Heading out into the wilderness with your family or scout troop is an incredible way to build skills, bond and experience the beauty of nature. Whether you are trekking up a steep mountain trail for a quick afternoon hike or setting up a multi-day basecamp in the woods, outdoor adventures require plenty of fuel.

However, cooking and storing food safely without the convenience of a modern kitchen requires careful preparation. Without a refrigerator, running water or a temperature-controlled environment, harmful bacteria can multiply rapidly, potentially turning a fun camping trip into a miserable ordeal with foodborne illness.

By following a few simple but crucial guidelines, you can ensure that every meal on the trail is both delicious and safe for your entire crew.

General Rules for Outdoor Food Safety

Plan Ahead

Before you leave, decide exactly what you will eat and how you will prepare it, then determine which specific cooking equipment you will need. Taking the time to meal prep at home reduces the amount of raw food you have to [handle](#) at the campsite.

Pack Safely

Always use a well-insulated cooler for perishable items, or pack your food frozen with a reliable cold source.

Keep Hands clean

Whether you are deep in the wild or at a local state park, protect yourself and your family by thoroughly washing your hands with soap and safe water. If water is scarce, bring hand sanitizer that contains at least 60% [alcohol](#) to use before and after handling any food.

Prevent Cross-Contamination

Raw meats may contain harmful bacteria, so keep raw foods entirely separate from other ready-to-eat foods.

Maintain Proper Temperatures

Do not bring perishable [meat or poultry](#) products unless you have an adequate cold source to keep them safe.

Bring Cleaning Supplies

Pack plenty of disposable wipes, alcohol-based hand sanitizer or biodegradable soap for proper handwashing and dishwashing.

Manage Leftovers Carefully

If you are using a cooler, leftover food is safe to keep only if the cooler still has solid ice. Otherwise, you must discard leftover food to avoid getting sick.

Food Safety While Hiking & Camping

As you venture out to enjoy the sights and sounds of nature, it's important to plan your snacks and meals based on whether you will be out for a few hours or several days. One single meal and some high-energy snacks are likely all you need for a short hike, but planning meals for a longer hike or an extended camping trip requires significantly more thought.

Backpack weight is often top of mind for hikers and campers, who choose foods and supplies that are light enough to carry over long distances. But even expert outdoors enthusiasts and seasoned scout leaders may accidentally forget about [vital food safety](#) precautions for outdoor adventures as they plan their trip.

Choosing What Foods to Bring

The first foundational principle of outdoor [food safety](#) is keeping foods either properly hot or properly cold. Because it is incredibly difficult to keep food consistently hot without a continuous heat source while hiking, it is almost always best to plan on transporting chilled food.

Your menu depends entirely on how you are traveling. If you are backpacking, every ounce counts, making shelf-stable, lightweight foods your best bet. Heavy cans and cold packs aren't practical when you're carrying everything on your back. Instead, focus on items that don't require refrigeration and eliminate the risk of spoilage.

For car camping, you can bring fresh ingredients, but you still need to prioritize items that hold up well in cooler storage. Hard cheeses like cheddar or Parmesan last much longer than soft cheeses. Whole fruits like apples and oranges survive the bumps of a trail much better than delicate berries or bananas.

If you plan to bring raw meat, buy it fresh and cook it on your very first night so it spends minimal time in a cooler.

Understanding the "Danger Zone"

Most bacteria grow rapidly between 40 °F and 140 °F. This specific temperature range is universally known by food safety experts as the "Danger Zone." Bacteria can reach dangerous, illness-causing levels after just 2 hours - or a mere 1 hour if the outside temperature is 90 °F or above. Your primary goal is to keep your food completely out of that danger zone.

The Ultimate Safety Check: Use a Food Thermometer

You cannot tell if meat is safely cooked just by looking at it, especially in dim light, such as a campfire or under a headlamp. Charcoal or wood smoke can turn meat pink even if it's fully done, while a roaring flame can brown the outside of a burger or chicken breast before the inside reaches a safe temperature.

The only definitive way to know your food is safe is to pack a digital food thermometer. Before serving, insert the probe into the thickest part of the meat. Ground beef needs to reach 160°F, poultry must reach 165°F and fresh steaks or pork chops must reach at least 145°F. It takes up virtually no space in your pack, but it is the single most effective tool you have to prevent food poisoning at camp.

Packing for a Day Hike

For a short day hike, you can bring almost anything as long as you can fit it securely in your backpack and keep it cold. To keep things safe and simple:

Freeze Ahead

Refrigerate or freeze the food overnight before you depart.

Dual-Purpose Cooling

Bring frozen gel-packs or freeze some boxed drinks. The drinks will slowly thaw as you hike, providing refreshment while keeping your meal cold.

Choose Safe Snacks

Sandwiches, fried chicken, bread and cheese are great if kept cold. Alternatively, choose non-perishable, shelf-stable foods like trail mix, peanut butter and beef jerky that do not require refrigeration.

Packing for Car Camping

If you are "car camping" (staying at a campsite with vehicle access and parking), you can bring a heavy-duty cooler. Keep these rules in mind for cooler safety:

Choose the Right Cooler

Foam chests are lightweight and low-cost, but plastic, fiberglass or steel coolers are much more durable and can take a lot of outdoor wear and tear.

Use Block Ice

A solid block of ice keeps food colder for a much longer period than standard ice cubes. Before leaving home, freeze clean, empty milk cartons filled with water to make ice blocks.

Pack Strategically

Fill the cooler with cold or frozen foods, and always pack your foods in reverse order so that the first foods packed at the bottom are the last foods used.

Separate Raw Meats

Ideally, you should review [guidelines for properly packing a cooler](#) and pack your raw meat or poultry in a completely separate cooler. If you only have one cooler, pack raw meats securely in sealed containers below all ready-to-eat foods to prevent juices from dripping.

Insulate at Camp

At the campsite, insulate the cooler with a heavy blanket, a tarp or a poncho, and always keep it tucked in a shaded area out of direct sunlight.

When the camping trip is over, always discard all perishable foods if there is no longer solid ice in the cooler or if the gel-pack is no longer frozen.

Campsite Cooking Practicalities

Cooking in the woods means dealing with wind, uneven heat sources and limited prep space. Whether you are using a lightweight backpacking stove, a two-burner propane camp stove or an open campfire, keeping a steady temperature is tough. Wind can drastically slow down cooking times, leaving the middle of your food raw while the outside looks done.

Always use a windscreen for your stove, or wait until a campfire burns down to hot coals, rather than cooking over wild, open flames, which can scorch food unevenly. Make sure your cooking station is set up on a flat, stable surface away from high-traffic areas where dirt or leaves could blow into your pots. Prep your ingredients before you turn on the stove so you aren't scrambling to chop veggies while your meat burns.

Separate and Cleanup

Cross-contamination is a major risk when cooking outdoors on a picnic table or a makeshift camp kitchen. When transporting raw meat or poultry, double-wrap the items or place them in sturdy plastic bags to prevent juices from dripping onto your fresh produce or cheese.

Never use the same cutting board, platter or utensils for raw meat and cooked food without washing them thoroughly in between. After cutting raw meats, wash your cutting board, your knife and your preparation surfaces with hot, soapy water.

By [preventing cross-contamination outdoors](#), you dramatically lower the risk of illness. Finally, always clean up your campsite immediately after eating.

Keep Everything Clean

The next principle is to keep everything as clean as possible. Bacteria present on raw meat and poultry products can easily spread to other foods through juices that drip from packages, unwashed hands or shared utensils.

Always wash your hands vigorously before and after handling any food. Soap and water are absolutely essential to cleanliness, so if you are going somewhere that will not have access to running water, you must bring it with you.

Pack clean, wet, disposable cloths or moist towelettes and paper towels for quickly wiping down hands and surfaces, and ensure you use [safe handwashing practices](#) for campers throughout your trip.

Wash your dishes away from natural water sources using biodegradable soap, and dispose of your dishwasher and food scraps properly according to local wildlife regulations so you do not attract bears or other scavengers to your camp.

Safe Drinking Water

Never assume that a sparkling, clear mountain stream is safe to drink. Stream, river and lake water can easily contain microscopic pathogens and parasites, such as Giardia and Cryptosporidium, that can cause severe gastrointestinal illness.

Unless you are drawing water from a tested, designated potable water source at an established campground, you must treat your water. Boiling is the most reliable way to kill disease-causing organisms. Bring the water to a rolling boil for at least one full minute.

If boiling is not an option, use a highly rated water filtration system or chemical purification tablets, following [water purification guidelines](#) exactly as directed to ensure your family's hydration stays safe.

Enjoying a Safe and Healthy Adventure

Taking a family camping trip or leading a scout hike should be remembered for the stunning views and the time spent together, not for an unexpected bout of foodborne illness. By meticulously packing your cooler, rigorously keeping raw and cooked foods separated, bringing adequate cleaning supplies and ensuring your drinking water is fully purified, you completely stack the odds in your favor.

Treating outdoor food safety with the same respect you give to wilderness navigation or fire safety ensures your crew stays energized, healthy and ready to tackle whatever the trail throws at them.

Additional Food Safety Resources

- [NIH Food Poisoning Symptoms and Causes](#)
- [National Park Service Bear Safety and Food Storage](#)
- [CDC Guide to Drinking Water Treatment on the Trail](#)
- [Meat and Poultry Roasting Guidelines](#)
- [University of Maine Extension Food Safety for Camping and Hiking](#)
- [North Dakota State University Extension Keep Food Safe when Camping](#)
- [Michigan State University Extension Adventures in Keeping Food Safe Outdoors](#)
- [Clemson University Extension Food Safety for Camping](#)
- [University of Utah Health Camping and Outdoor Poison Dangers](#)
- [USDA Keeping Food Safe During an Emergency](#)
- [Leave No Trace Principles for Campfire Cooking](#)
- [EPA Emergency Disinfection of Drinking Water](#)
- [Tailgating and Outdoor Event Food Safety](#)
- [Backcountry Sanitation](#)
- [West Virginia DHHR Camper Food Safety Guidelines](#)