

HYDRATION AND NUTRITION

Hydration:

We're made of approximately 65% water and our blood is almost 90% so hydration is the single most important element for life. Natural bodily processes use up about 2 quarts of water per day without any kind of exertion so, as a backpacker, it is crucial to understand how much more you need.

What a backpacker needs:

More than one gallon per day, often more in hot weather. If it's very hot out you can sweat more than one quart per hour and, if it's windy, you won't notice how much you are sweating. This also happens when it's cold. Hiking causes us to lose water through respiration, as well, with heavy breathing through open mouths.

What happens when you are dehydrated?

Headache, nausea, cramps, fatigue

Why these symptoms?

Your cells need oxygen to work and your blood carries this to your cells. Blood has to flow freely to get to your lungs, then back to your tissues and staying hydrated helps keep blood flowing to where it's needed. It helps keep your joints lubricated and your body temperature regulated, cooling or warming you as necessary. It is also a part of the digestive process and, without enough, you will become constipated and nauseated.

Staying hydrated

Your body can be a little slow letting you know when you're dehydrated. The best way to make sure you are drinking enough fluids is to WATCH YOUR URINE output. It needs to be clear and copious. Drink regularly, whether you feel thirsty or not. It takes an hour or more for water to process through to your tissues, so drink small amounts frequently. *Make sure your water is where you can reach it easily and often.* Fill your water supply whenever you have a chance and avoid alcohol consumption and excessive caffeine.

Nutrition:

20 Universal Backpacking Ingredients

Most of the ingredients on this list occur in recipes suitable for camping and backpacking. If you keep some or all of them on hand, you can cut down on last minute shopping and have delicious choices available on short notice. Bag or store items you eat often (like gorp, jerky or granola) in trail size portions. Save last minute packing hassles by packaging a few breakfasts, snacks and dinners ahead of time and storing in your freezer.

Be sure to store powdered eggs, powdered dairy products, dried or freeze-dried meats or seafood, and anything with a high fat content in the refrigerator or freezer. Store other supplies in a cool, dry place.

1. "Quick" grains: Instant rice, couscous, small-grained bulgar, "quick" oats. Make your own instant oatmeal by running one-minute oats through a food processor until they are the consistency of "instant" oatmeal packets. Pack in ziplock bags (3/4 cup per serving) with powdered milk (1/3 cup p/s), dried fruit and brown sugar. On the trail, put the mix into a mug, add boiling water, stir, and let stand.

2. Powdered milk: Supplies calcium, protein, and flavor. Use about 1/3 cup milk powder to one cup water. Put an individual portion of Raisin Bran or just raisins and granola into a ziplock bag, add 1/3 cup of powdered milk and, when ready to eat, just add water to the bag, stir and eat.

3. Coffee, teas, instant soup packets, hot chocolate, and electrolytes: Nothing is better to help you relax while your meal cooks and it helps to take the chill off when your energy is depleted.

4. Instant hash browns: Look for the kind that rehydrates with boiling water.

5. Dried fruit: Your favorite grocery store will have an abundant variety. Many dried fruits will supply the carbohydrates necessary for a good hike. Try mango, papaya, pineapple, raisins or cherries in your cereals, nut mixes, curries and desserts. Fruit leather is convenient, too. Roll it up with cream cheese and a tortilla for an amazing snack.
6. Powdered eggs: Not as good as the real thing, but lighter and more convenient on the trail. Usually available by mail order and at sporting goods stores. *Use 2 tblsp egg powder plus 3 tblsp water to make the equivalent of one egg.*
7. “Bready” stuff: Bagels, tortillas, flat bread, muffins, crackers, pretzels and bread sticks work well on the trail
8. Instant Ramen noodles: Add fresh or dried vegetables, nuts, canned or dried meat, or instant soup mixes to pre-cooked ramen noodles for a great trail meal.
9. Pasta: Small shells and elbows are easier to drain and eat than long strands. Angel hair pasta and spaghetti noodles do not do well at high altitude. Add a pasta mix, powdered milk, fresh or dehydrated veggies, butter and toasted nuts for a delicious trail meal.
10. Lentils: Use in stews, chili, burritos, etc. Put dried lentils in a bottle with water. Let them steep while you are hiking and they will be ready to cook in 5 minutes by dinner time. *Use 1/2 lentils plus 1 cup water.*
11. Dried Vegetables: Even if you own a dehydrator, some items are worth buying by mail if you have a few trips coming up. Dehydrated carrots, cabbage, bell peppers, mushrooms, onions, and tomatoes are available through places like Mary Janes Farm, Mountain House and Alpine Aire. For tomato flakes and dried tomatoes, try Spices, Etc™. Many items are also available at health food stores and supermarkets. Avoid mixes that have large chunks of dried vegetables – these take forever to rehydrate.
12. Freeze-dried corn, peas, beans and lentils: These are great for dinners and lunches (chili, trail salads, burritos, etc.) and reconstitute faster than their dried cousins. These items taste good and are a wonderful convenience on longer trips. Order through AlpineAire or Spices, Etc. Also, don’t overlook the Just Veggies line of freeze-dried fruits and vegetables, available at many health food stores. Expensive, but good!
13. Canned turkey, chicken, shrimp, tuna: Buy the water-packed kind (not packed in oil). These items should be used sparingly because they are not lightweight. One can usually weighs about 7 1/2 ounces. Tuna is also available at some grocery stores in foil packets instead of cans. Freeze-dried meat is an alternative, but it is expensive.
14. Dried ground beef: Make this yourself at home for soups, stews, burritos, chili, etc. *Crumble extra-lean ground beef into very small pieces as you cook it, being careful not to leave any rare meat. Rinse the meat in a colander with hot water to remove leftover fat. Dry the cooked meat at 130 to 140 degrees, leaving the oven door open an inch or two to circulate the air. Dry two to four hours, or until the meat is dry and hard to the touch. Store in a plastic bag in the refrigerator or freezer.*
15. No-Cook Soups: Find soups at the grocery store that “cook” in five minutes with the addition of boiling water (some have a very high salt content). Instant miso soup is one of my favorites. These soups help you rehydrate and make good appetizers. Add a quick-cooking grain and extra seasoning for a simple dinner.
16. Nuts and seeds: Peanuts, cashews, almonds and other nuts add flavor, texture and lots of fat calories. Use bigger pieces for GORP, smaller chopped nuts for cereal and other meals. Shelled pumpkin or sunflower seeds can perk up a bland dinner or soup. Toast the nuts in an oven set at 350 degrees for 10 minutes to enrich their flavor.
17. Cheese: Cheese is loaded with the calories you need on a strenuous trip, but it is also high in fat. To avoid a complaining stomach, eat in moderation. Shredded (not grated) Parmesan keeps well on the trail. So does mozzarella (try “string cheese” which is wrapped in single-serving portions. A little extra fat helps keep your muscles warm; too much will upset your digestive system and make your body less efficient.

18. Single-Serving Condiments: When you eat fast food (don't say you never do), ask for trail-size portions of: catsup, mustard, sweet and sour sauce, mayonnaise, margarine, lemon juice, relish, salsa, soy sauce, honey, jam. None of these need refrigeration as long as the seal is not broken.

19. Seasonings: OK, dinner's almost ready... but it needs a touch of something. Spices could include: wasabi (powdered horseradish), bouillon, salt, pepper, etc.

20. Comfort Food: Buy a food you love and make sure it is a quality product. Chocolate, miso, tapioca pudding, animal crackers, Gummi Bears, oysters, toffee peanuts, Fig Newtons, gourmet jelly beans, sardines.

<https://www.backpackerspantry.com>

<https://www.packitgourmet.com>

<http://www.maryjanesfarm.org>

<https://www.mountainhouse.com>

Adventure Foods, 481 Banjo Lane, Whittier, NC 28789 704-497-4113

<http://adventurefood.com/en/>

AlpineAire Foods, P.O. Box 926, Nevada City, CA 95959 800-322-6325

<https://www.alpineaire.com/us/us>

Spices, Etc., P.O. Box 2088, Savannah, GA 31402-2088 800-827-6373

<http://www.spicesetc.com>

The Baker's Catalogue, P.O. Box 876, Norwich, VT 05055-0876 800-827-6836

<http://www.kingarthurfour.com>

(Reference Source: "The Backcountry Cupboard," by Dorcas Miller, Backpacker Magazine, May 1998)

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Good review of freeze dried backpacking food offered by these companies

<https://www.cleverhiker.com/blog/best-freeze-dried-backpacking-meals>