

Basic ingredients for make-at-home dehydrated backpacking meals

THE FOLLOWING DEHYDRATED ingredients will serve as great basic additions to make-at-home dehydrated backpacking meals. Here's how you can get started:



Ground Beef

Work a half-cup of finely ground breadcrumbs into one pound of lean ground beef before cooking. (The breadcrumbs will help it rehydrate better.) Then brown the meat on a stovetop. After cooked, dry the beef in at 145 degrees for approximately six hours.

Canned Chicken

Dehydrated *canned* chicken rehydrates much better than home-cooked chicken, which tends to stay hard. Dry at 145° F for approximately eight hours.



Beans

Home-cooked and dried beans (black, red, kidney and others) often remain hard when you try to rehydrate them. Canned beans require no cooking and rehydrate much better. Simply drain and dehydrate at 125° for six to eight hours. The beans will split open when dried. This helps when you rehydrate them in a meal.



Vegetables

Dehydrate fresh vegetables like peppers, onions, tomatoes, zucchini and mushrooms without precooking. Vegetables such as corn, peas, green beans, carrots and broccoli rehydrate better if you steam them for eight minutes before drying.

A fast way to get started dehydrating vegetables is to use frozen vegetables. Thaw and steam before drying. Avoid lima beans because they stay hard in meals. Peas shrink a lot when dried, so dry larger peas, not the petite size.

Dry most vegetables at 135 degrees for approximately eight hours. Onions and tomatoes take longer. Some vegetables, like peppers and tomatoes, are pliable when dry and others like broccoli and green beans are brittle.



Tomato Sauce Leather

Avoid drying sauce with cheese as an ingredient. The cheese can spoil. Spread canned or home-cooked tomato sauce thinly on dehydrator trays covered with non-stick sheets and dry at 135 degrees for approximately eight hours. Peel and flip the leather over about three-quarters of the way through the drying process.

Instant Rice

Store-bought instant rice can be used in backpacking meals, but you can make your own rice, which tastes more flavorful. Cook long-grain rice in fat-free vegetable, beef or chicken broth instead of water and then dry at 125 degrees for approximately five hours.

How to make dehydrated fruit snacks for hiking or backpacking treks

THREE SMALL APPLES add a pound to your load, but weigh only two ounces when dried. With the weight savings, you can pack lots of dried fruit for the trail — enough to share with fellow Scouts or Scouters. Plus, home-dried fruit supplies energy, vitamins and fiber that candy bars often leave out. Learn more about how to make several easy dried-fruit snacks below.



Apples can be dried into pieces or made into apple sauce leather.

Ways to Enjoy Dried Fruit on the Trail:

- Snack on it by itself
- Combine with granola, M&Ms and nuts to make a healthy and delicious trail mix
- Add to oatmeal
- Make fruit cocktail and applesauce

Five fruits that are easy to dry are apples, pears, bananas, peaches and pineapples. Dried strawberries, blueberries, blackberries, raspberries and oranges make poor snacks by themselves, but can be blended with other fruits into fruit leather.

How to Dry Sliced Fruit

If drying fruit with the skin on, wash the fruit in a water-and-vinegar solution to remove pesticides and waxy coatings. Otherwise, you may wish to peel the fruit. Remove cores and seeds.

Slice fruit about one-eighth-inch thick and spread in a single layer on dehydrator trays. Most fruit will be dry in eight to 12 hours when dried at 135 degrees. Drying times vary with the humidity in the air and the juiciness of the fruit. Pineapple takes up to twice as long to dry.

Dried fruit is pliable, not brittle. It retains between 10 to 20 percent of its original moisture. When the fruit looks dry, tear a piece in half and check for moisture. If it feels moist, put it back in the dehydrator. Once the fruit is dry, let it cool before storing in jars or Ziploc bags.

Tip: Purchase a dehydrator that has a fan or fruit will take too long to dry.



Drying apples and making applesauce leather.

Applesauce Leather Recipe

- 8 medium apples
- 1 cup apple juice
- Pinch of salt
- $\frac{1}{8}$ tsp. cinnamon

Peel, core and cut up apples. Combine with apple juice, salt and cinnamon in pot. Bring to boil for five minutes and then reduce heat to simmer for thirty minutes.

Let the mixture cool and then blend the apple mixture in a blender or food processor until smooth. Spread the blended mixture about one-eighth-inch thick on dehydrator trays covered with non-stick sheet or the fruit-leather inserts that came with your dehydrator.

Dry at 135 degrees for approximately ten hours. After six hours, peel leather off sheets and flip it over to better dry the underside. Fruit leather dries pliable, not brittle. Dry it so that it is not sticky on the surface and there is no moisture hiding in thicker parts of the leather.

Yield: Eight medium apples yield about two cups of applesauce leather.

How to Make Applesauce on the Trail

Combine $\frac{3}{4}$ cup applesauce leather with an equal quantity of water. Soak ten to fifteen minutes and

stir vigorously. Or enjoy hot applesauce by gently heating for ten



minutes.

Combine one cup of any combination of dried fruit with one cup of water. Soak ten minutes and then heat slowly for ten more minutes. Try $\frac{1}{2}$ cup pears, $\frac{1}{4}$ cup bananas, $\frac{1}{8}$ cup pineapple and $\frac{1}{8}$ cup peaches. The water takes on sweetness from the fruit and is healthier than the corn syrup in canned fruit cocktails.

How to create a dehydrated meal plan for your next backpacking trek

MAKING YOUR OWN dehydrated snacks and meals require a little advance planning and preparation, but the reward of enjoying great-tasting and nutritious food on the trail makes it all



worthwhile.

For weekend backpacking trips, you can dehydrate and pack all your food during the week before the trip. For a weeklong trip, start drying the food two weeks before you depart. You can't leave it to the last minute! Getting it done early will give you peace of mind knowing your food supply is all set.

Most of the action involved in dehydrating food takes place inside the dehydrator. It takes less than an hour to cut up fruits and steam vegetables. Once you put the food in the dehydrator, the machine will quietly do the work while you sleep or go to work or school. A timer that automatically shuts off the machine after the programmed amount of time is a valuable feature to look for in a dehydrator. Appliance-grade timers can also be purchased separately if your dehydrator doesn't have one.

Start with a Menu

Write up a menu for each day of your trip. This will include breakfast, lunch, dinner, four to five snacks and a dessert for dinner. Plain water is the easiest beverage to consume on the trail, but if you want flavored drinks there are plenty of powdered drink mix products available. Pack these in individual servings.

Snacks

Snacks might include individual servings of trail mix, nuts, Goldfish and dried fruit. Make a list of the dried fruits you would like to eat. Apples, pears and bananas are three favorites. A good serving size is a half-cup of dried fruit, which is close to eating one and a half fresh apples, pears or bananas.

Break the Recipes Down Into Ingredients

Tally up all the ingredients from the recipes you plan to use to determine how much of each dried food you will need. Some items like macaroni, rice and oats you will simply purchase.

Dehydrate the Food

As you become more experienced with drying food, you will learn the quantity any type of food will yield when dried. To get you started, here is a list of the drying yields of common foods mentioned in this series.

FOOD-DRYING YIELD ESTIMATOR

Food / Starting Quantity / Approx. Yield Dry

Apples / 1 pound (2-3 medium apples) / 1 cup

Bananas / 1 ½ pounds (5 large bananas) / 2 cups

Pears / 1 ¼ pounds (4 medium pears) / 1 ½ cups

Pineapple / 4 pounds (1 large pineapple) / 3 cups

Peaches / 1 pound (3 medium peaches) / 1 cup

Frozen vegetables / 1 pound (any kind) / $\frac{3}{4}$ cup–1 cup

Tomatoes, diced / 9 medium tomatoes / 1 cup

Onions / 1 $\frac{1}{2}$ pounds (2 large onions) / 1 cup

Bell peppers / 2 pounds (4 medium to large peppers) / 1 cup

Mushrooms / 1 pound / 1–1 $\frac{1}{2}$ cups

Tomato sauce / 16-ounce jar / 1 cup

Ground beef / 1 pound mixed with bread crumbs / 2 cups

Chicken / 12.5-ounce can / $\frac{3}{4}$ cup–1 cup

Beans / 15-ounce can / 1 cup



Pack the Meals

After your food ingredients are dried, refer back to your menu and recipes to combine the dried foods into bagged meals. Sandwich-size Ziploc bags work well for meals and snack-size Ziploc bags work well for single servings of snacks and any ingredients like powders that get packed in their own bag. Packing snacks as individual servings makes it easy to put a day's worth in your pockets for quick access. For meals, write the amount of water required to rehydrate and cook the meal on the bag with a permanent marker.



Organize the meals and snacks into daily rations (shown at right), which can be bagged together in a large plastic bag or vacuum-sealed for maximum food security, good organization and tight packing. Write your menu for the day on a paper towel and enclose with your daily rations.

Tips and tricks to consider when investing in a food dehydrator

NOT ALL DEHYDRATORS are created equal. As with any appliance, you get what you pay for. If your family, troop or crew is considering purchasing a food dehydrator, don't waste your money on a cheap dehydrator that doesn't have a fan or adjustable temperature settings. Efficient dehydration depends on air circulation and the appropriate temperature for the food being dried.



Here are the important features to consider when purchasing a dehydrator:

Fan

The fan carries moist air away from the food and replaces it with drier air. Without a fan, food will dry slowly and at different rates between the top and bottom trays. Fruit leather is nearly impossible to make without a fan. Look for a food dehydrator with a top- or side-mounted fan and heating element. Bottom-mounted fans require more care to clean. Liquid and food particles may get into the fan motor.

Adjustable Temperature Settings

Different foods require different drying temperatures. Avoid dehydrators that have only one preset temperature. They may dry vegetables too crispy while under-drying fruit.

Recommended Food Drying Temperatures:

- **Meat:** 145 degrees to 155 degrees
- **Fruit:** 135 degrees to 145 degrees
- **Vegetables:** 125 degrees to 135 degrees
- **Herbs:** 95 degrees

Capacity

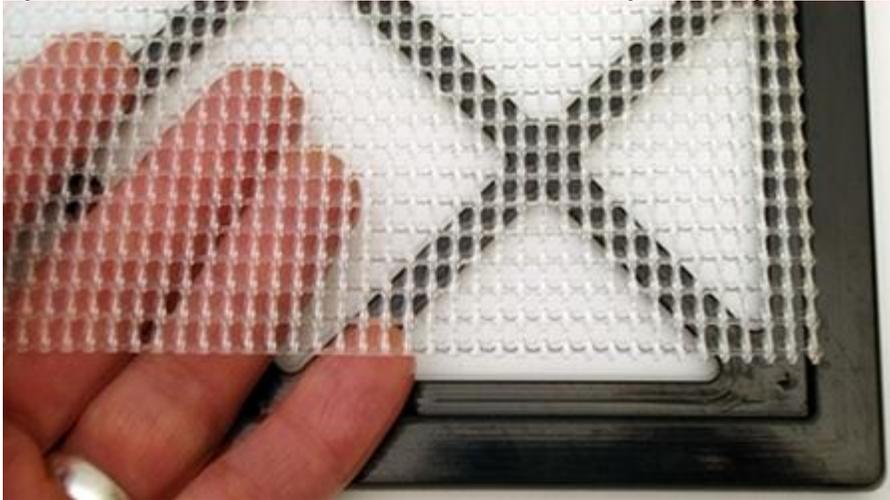
Most dehydrator trays are round with a hole in the middle. The hole in the middle and round shape reduces capacity per tray by 20 percent to 45 percent per tray, compared to a square tray with no hole in the middle. See below for more information about how the round vs. square trays perform.



Ease of Use

You can spread more blended foods when making bark or fruit leather on trays with no hole in the middle.

Most dehydrators have stacking trays, so if you want to check the food on a tray you have to lift off the trays above it. It's easier to check on food if the dehydrator trays slide in and



out.

Mesh screens and non-stick sheets or inserts might be included with the dehydrator or may need to be ordered separately. Mesh screens keep small dried foods from falling through. Because they are flexible, it is easier to pop off dried food like bananas, which tend to stick to hard plastic. The non-stick sheets are excellent for making fruit and sauce leathers.

Timer With an Automatic Shut-off

A timer with an automatic shut off lets you load up the dehydrator and go to bed or work. The dehydrator shuts off when you tell it to. If drying different foods at the same time, such as broccoli and apples, you can set the timer to shut the dehydrator off when you expect the broccoli to be dry, and then turn it back on to finish the apples once you get home and remove the broccoli.



Only the more expensive dehydrators come with a timer. You can purchase a timer separately, but because dehydrators pull a lot of power, you'll need to purchase a timer that is recommended for use with appliances.

Price vs. Features

Dehydrators in the \$40 to \$100 range may have no fan or run at one pre-set temperature. Dehydrators in the \$100 to \$200 range will usually have fans and adjustable temperature settings. As you climb the price ladder to dehydrators costing more than \$200, the appliance will offer higher capacity, better ease of use and optional timers with an automatic shut-off.