

PickYourOwn.org

Where you can find a pick-your-own farm near you!

Click on the printer icon that looks like this:  (at the top left, to the right of "save a copy") to print!
See www.pickyourown.org/allaboutcanning.htm for many other canning directions and recipes

Food Dehydration - How to Dry Foods Instead of Canning or Freezing

Dry your own fruits, vegetables and other foods

Dehydration is an alternative to canning (called "bottling" in the UK) and freezing fruits and vegetables. If you have a surplus of fruits or vegetables from your garden, but lack the canning equipment or freezer space, drying may be the right method for you!

Dehydrated foods have a number of advantages: Dehydration is a low-cost way to preserve food that is free from concerns about botulism, the dried foods require less storage space than canned goods, and there's no freezer to keep running.

Food Drying Principles

Dehydrating your own produce does require time and some knowledge of food drying principles. The following procedure was developed by food scientists at USDA and associated universities.

Preparation

- 1. Select the best fruit and vegetables!**
As with canning and freezing, dehydrated foods are only as good as the fresh fruit or vegetables. When selecting fruits and vegetables for dehydration, choose ones that are ripe, unbruised and at peak-eating quality.
- 2. Prepare foods to be dehydrated as you want them to be served.** Apples, for example, may be sliced, cut into rings, or pureed for fruit leather.
- 3. Keep pieces uniform in size and thickness for even drying .** Slices cut 1/8 to 1/4-inch in thickness will dry more quickly than thicker pieces.
- 4. Some foods should be washed before drying.** Foods such as herbs, berries and seedless grapes need only be washed before dehydrating.
- 5. To prevent browning:** try steaming, sulfuring or coating light-colored fruits and vegetables with acids such as lemon juice or ascorbic acid (FruitFresh) before drying. Steaming or blanching also is recommended for vegetables to inactivate enzymes that cause vegetables to mature, or toughen during drying.
- 6. Choose the right containers:** Glass jars, metal cans or boxes with tight fitted lids or moisture-vapor resistant freezer cartons make good containers for storing dried foods. Heavy-duty plastic bags are acceptable, but keep in mind that they are not insect and rodent proof. Plastic bags with a 3/8-inch seal are best to keep out moisture. Recommended containers also include moisture-proof freezer containers or Ziploc type bags, or scalded (sanitized) glass canning or other glass jars. Vacuum food sealers are an excellent option for storing
- 7. Thoroughly clean storage containers:** for example, run glass jars through the dishwasher on the "sanitize" or "high heat" cycle and heated dry. Wash and dry the lids by hand.

During Drying

1. **Select the drying method and equipment that is right for you.** Foods can be dried in a conventional oven, a commercial dehydrator, or in the sun. Drying times vary with the method and foods chosen. Be sure to read the instructions with your dehydrator.
2. **Maintain 130F to 140F with circulating air:**
Remove enough moisture as quickly as possible to prevent spoilage. A drying temperature of 130 degrees F to 140 degrees F allows moisture to be removed quickly without adversely affecting food's texture, color, flavor and nutritive value. If the initial temperature is lower, or air circulation is insufficient, foods may undergo undesirable microbiological changes before drying adequately. If the temperature is higher, or humidity too low, nutrients can be lost or moisture may be removed too quickly from the product's outer surface. This causes the outer surface to harden and prevents moisture in the inner tissues from escaping. When testing for sufficient dryness, cool foods before testing.
3. **Know when your food is dry:** Some foods are more pliable when cool than warm. Foods should be pliable and leathery, or hard and brittle when sufficiently dried. Some vegetables actually shatter if hit with a hammer. At this stage, they should contain about 10 percent moisture. Because they are so dry, vegetables do not need conditioning like fruits.

After Drying (for fruit only)

1. **Allow dried FRUIT (not vegetables) time to "condition":** When dry, allow fruit to "condition" for four to 10 days before packaging for storage. The moisture content of home dried fruit should be about 20 percent. When the fruit is taken from the dehydrator, the remaining moisture may not be distributed equally among the pieces because of their size or their location in the dehydrator. Conditioning is the process used to equalize the moisture. It reduces the risk of mold growth.
2. **To condition the fruit,** take the dried fruit that has cooled and:
 - o **Pack it loosely** in plastic or glass jars.
 - o **Seal the containers and let them stand for 7 to 10 days.** The excess moisture in some pieces will be absorbed by the drier pieces.
 - o **Shake the jars daily to separate the pieces and check the moisture condensation.** If condensation develops in the jar, return the fruit to the dehydrator for more drying.
3. **After conditioning, package and store the fruit as described below.**

Packaging the dried foods

1. **Seal the dried food:** Dried foods are susceptible to insect contamination and re-adsorption of moisture and must be properly packaged and stored immediately.
First, cool completely. Warm food causes sweating which could provide enough moisture for mold to grow.
Package dehydrated foods in tightly sealed containers.
2. **Fruit that has been sulfured should not touch metal.** Place the fruit in a plastic bag before storing it in a metal can. Sulfur fumes will react with the metal and cause color changes in the fruit.
3. **Pack as tightly as possible without crushing.**
4. **Pack food in amounts that will be used in a recipe.** Every time a package is re-opened, the food is exposed to air and moisture that will lower the quality of the food.

Storing the dried foods

1. **Store in a cool, dark, dry place.** Food quality is affected by heat. The storage temperature helps determine the length of storage; the higher the temperature, the shorter the storage time. Most dried fruits can be stored for 1 year at 60 F, 6 months at 80 F. Vegetables have about half the shelf-life of fruits.
2. **Use foods within six to 12 months for best quality.**
3. **Check dried foods frequently during storage to see if they are still dry.** Foods that are packaged seemingly "bone dry" can spoil if moisture is reabsorbed during storage. Glass containers are excellent for storage because any moisture that collects on the inside can be seen easily. Foods affected by moisture, but not spoiled, should be used immediately or redried and repackaged. Moldy foods should be discarded.

To see [more information about spoilage and how to prevent it, see this page](#).

First, cool completely. Warm food causes sweating which could provide enough moisture for mold to grow. Pack foods into clean, dry insect-proof containers as tightly as possible without crushing.

Store dried foods in clean, dry home canning jars, plastic freezer containers with tight-fitting lids or in plastic freezer bags. Vacuum packaging is also a good option. Pack foods in amounts that can be used all at once. Each time a package is re-opened, the food is exposed to air and moisture that can lower the quality of the food and result in spoilage.

Pack food in amounts that will be used in a recipe. Every time a package is re-opened, the food is exposed to air and moisture that lower the quality of the food.

Fruit that has been sulfured should not touch metal. Place the fruit in a plastic bag before storing it in a metal can. Sulfur fumes will react with the metal and cause color changes in the fruit.

Dried foods should be stored in cool, dry, dark areas. Recommended storage times for dried foods range from 4 months to 1 year. Because food quality is affected by heat, the storage temperature helps determine the length of storage; the higher the temperature, the shorter the storage time. Most dried fruits can be stored for 1 year at 60°F, 6 months at 80°F. Vegetables have about half the shelf-life of fruits.

Here's the food dehydrator I use!:

How to dry various foods, fruits and vegetables

- [Food Dehydrators](#)
- [Fruit Leathers](#)
- [Fruits](#) (Colorado State University) pdf
- [Fruits and Vegetables](#) (University of Georgia) pdf
- [Herbs](#)
- [Jerky](#)
- [Leathers and Jerkies](#) (Colorado State University) pdf
- [Mango Leather](#)
- [Packaging and Storing Dry Foods](#)
- [Peanuts](#)
- [Popcorn](#)
- [Pumpkin Seeds](#)
- [Sun Drying](#)
- [Sunflower Seeds](#)
- [Vegetable Leathers](#)
- [Vegetables](#) (Colorado State University) pdf
- [Vine Drying](#)