Using Dried Foods

Dried fruits can be eaten as-is or reconstituted. Mix dried fruits with nuts and seeds for a healthy snack. Use chopped dried fruit or dried berries or cranberries instead of raisins or nuts in cakes, quick breads and cookies. Fresh leathers and meat jerky are eaten as-is.

Dried vegetables are usually reconstituted and are best used as ingredients for hot dishes, sauces or stuffing. If you are adding dried vegetables to a soup or stew, don’t worry about rehydrating; just toss them in.

To reconstitute or rehydrate, cook leafy or tender vegetables (e.g. spinach, kale, cabbage, tomatoes) by covering with hot water and simmering to desired tenderness. Soak root and seed vegetables (e.g. carrots, green beans, peas, corn) before cooking. Cover with cold water and soak 30-90 minutes, or cover with boiling water and soak 20-60 minutes. After soaking, simmer until tender. CAUTION: If soaking takes more than 2 hours, refrigerate the product for the remainder of the time.

One cup of dried vegetables equals about 2 cups of reconstituted vegetables. Once reconstituted, dried fruits or vegetables are treated as fresh.

Storing Dried Foods

After drying fruit, it’s important to “condition” before final storage. To “condition”, place dried fruit loosely in a plastic or glass container. Cover the jars and store in a dry location for 4-10 days. Shake the container daily to prevent sticking. If moisture forms, return the food to the dehydrator for additional drying. After conditioning, package the dried fruit for long-term storage.

Package dried foods in glass jars, food-grade plastic storage containers, plastic food-storage bags or heat-sealed plastic bags. Make sure the package has an airtight seal. It is a good idea to package dried foods in small amounts. Some people prefer to store dried food in the freezer as it takes up little space and there are no problems with mold or insects.

For the best nutritional value and best quality, try to use dried foods in less than 12 months. It is very important to keep moisture from the dried foods or the food could mold. If you notice any mold, throw the food away.
Shopping for a Dehydrator

Look for dehydrators in discount stores, mail-order catalogs, small appliance sections of department or hardware stores, natural food stores, and camping or hunting supply stores. The cost of a dehydrator depends on features. For best results when drying food, consider the following features:

- **Heat source should be internal and enclosed for safety.**

- **Thermostat should be adjustable with a range from 85°F to 160°F because different foods and herbs require a variety of temperatures for proper drying. Controls should be located on the front of the dehydrator. A timer and/or automatic shut-off is nice to have if the product finishes drying in the middle of the night!**

- **Fan is needed in order to blow the heated air evenly over all the food to be dried. The best type of fan is one that blows air horizontally across the top and bottom of food vs. a vertical blower. If the instructions indicate that trays need to be rotated frequently, this may mean uneven heat in the dehydrator.**

- **Drying trays should be made of safe, food-grade material, such as stainless steel, nylon, Teflon® coated fiberglass or plastic. The mesh size should be large enough to allow air to circulate but small enough to prevent food from falling through. Trays should be spaced adequately for air circulation and it’s very helpful if they are easy to load/unload and clean. Some dehydrators are expandable and additional trays can be purchased later.**

Drying Herbs

Pick herbs for drying just before flowers open when the leaves contain the highest concentration of oils. For best quality, harvest herbs on a sunny morning after dew has evaporated. Harvest herb seeds when the seeds change in color from green to brown or gray.

Less Tender Herbs: Sturdy herbs (e.g. rosemary, sage, thyme and parsley) are the easiest to dry without a dehydrator. Tie them into small bundles and hang them to air dry indoors for better color and flavor retention.

Tender-Leaf Herbs: Basil, oregano, tarragon, lemon balm and mint have high moisture content and will mold if not dried quickly. Try hanging tender-leaf herbs or those with seeds inside paper bags to dry. Tear holes in the sides of the bag. Hang a small bunch (large amounts will mold) of herbs in a bag and close with a rubber band. Place where air currents will circulate through the bag.

Especially nice for mint, sage or bay leaf, is to dry the leaves separately. Remove the best leaves from the stems. Lay leaves on a paper towel without touching. Cover with another towel and layer of leaves. Dry in a very cool oven. The oven light of an electric range or the pilot light of a gas range furnishes enough heat for overnight drying. Leaves dry flat and retain a good color.

Microwave ovens are a fast way to dry a small amount of herbs. Follow your microwave directions.

When the leaves are crispy dry and crumple easily between the fingers, herbs are ready to be stored. Dried leaves may be left whole and crumpled as used, or coarsely crumpled before storage. Store herbs in airtight containers in a cool, dry, dark area to protect color and fragrance.
Dried herbs are usually 3 to 4 times stronger than the fresh herbs. To substitute dried herbs for fresh herbs in a recipe, use 1/4 to 1/3 of the amount listed in the recipe.

**Drying Tomatoes**

Even if we can’t “sun-dry” tomatoes in Minnesota’s humid summers, we can dry tomatoes in a food dehydrator to add a wonderful concentrated tomato flavor to pasta dishes, soups, salads, breads, or pizza.

“Plum or Paste” meaty tomato varieties like Roma, Viva Italian, or Amish Paste dry the best. Slice ripe tomatoes with no blemishes about ½ inch thick and dry until leathery but still pliable and not sticky. Tomatoes can be dried with skins on or removed.

Dried fruits, stored in a glass jar in a cool (60°F), dry, dark area can be stored for one year. Add flavorful dried tomatoes to a variety of winter dishes. [http://z.umn.edu/8py](http://z.umn.edu/8py)

**Veggie Chips**

Gather your favorite root vegetables—carrots, beets, sweet potatoes, parsnips—slice thinly, blanch and dry to make veggie chips. They are a nutritious low-calorie snack. Vegetable flakes and powders can be made by crushing dehydrated onions, green peppers, spinach and tomatoes. [http://z.umn.edu/8pz](http://z.umn.edu/8pz)

**Kale Chips are Popular!**

A reader shared this kale drying method (to not burn them!): Heat oven to 425°F. Prepare kale (wash, spin, strip stem), season with oil, salt or seasoned salt. Spread on baking sheet. Put into oven and turn the oven OFF. Leave the kale in the oven for 15-20 minutes. Result: evenly crisp kale chips.

**Fruit Leather**

Apple mango, tomato, and pizza fruit leather were entered at a county fair I recently judged. Fruit leather is homemade fruit rolls made by drying thin layers of pureed fruit in the dehydrator.

Make your own fruit leather to save money, use less or no sugar and mix fruit flavors to create a tasty chewy, healthy fruit snack.

Fresh, frozen or drained canned fruit can be used. Spices can be added such as cinnamon with apple or oregano with tomato (the pizza leather at the fair was tasty!)

Use within one month if stored in a cool, dry, dark place, refrigerate for several months, or freeze for up to one year. Fruit leather instructions and creative ideas are at: [http://bit.ly/16AryO4](http://bit.ly/16AryO4) and [http://bit.ly/11SgZGu](http://bit.ly/11SgZGu)

**Minnesota Methods for Drying**

New Mexico has ristras of chili peppers hanging in the sunshine. Californians’ create sundried tomatoes. In Minnesota we use a food dehydrator to dry fruits, vegetables, meat, and herbs!

Sun-drying (solar) is not recommended here due to our high humidity and cool night temperatures. Food may mold before it dries.

Herbs and hot peppers can be air dried indoors in a well-ventilated attic or room.

Oven drying takes longer, requires an oven temperature as low as 140°F, and is not as energy efficient as a dehydrator.

Microwave drying is a quick way to preserve herbs and some leaf vegetables, but is not successful for most foods.
Drying Apples

Dried apples may be peeled or unpeeled, but peeled fruit dries quicker. To preserve fruit color, soak freshly-cut slices for 15 minutes in a solution (2 teaspoons of ascorbic acid crystals per 2 cups of water), OR a solution of 1 part lemon juice to 1 part water.

Dry drained apple slices at 135-145°F for 6 to 12 hours. Apples will be leathery when dry. To test dryness, tear a cooled, dried slice apart and press between your fingers. If no beads of moisture form, the apples are dry.

Pack cooled, dried apples slices loosely into an air-tight glass or plastic container for several days. Shake the containers daily to separate the pieces and check for moisture. If moisture develops, return the apples to the dehydrator for more drying.


Frequently Asked Questions

Fruit and tomato slices stick to the dehydrator trays. How can I prevent this?

Gently lifting food with a spatula after one hour of drying helps. Or, lightly spray trays with cooking spray. With tomatoes, slicing the tomato just a little bit thicker may make removal of the dried slice easier.

What is the nutritional value of dried food?

When foods are dried, the nutritional value is changed only slightly. Vitamin A is retained if the dried food is stored in a dark place. Vegetables lose some vitamin C during blanching. If fruit is pre-treated with ascorbic acid or an acid juice, the vitamin C content increases!

Dried fruits and vegetables are healthy food choices because they are high in fiber and carbohydrates and low in fat.

When is it dry?

Judging when food is dry requires experience. It is better to over dry than to under dry. When in doubt, continue drying for an additional 15-30 minutes. Vegetables are dried when they are leathery or brittle. Dried fruits should be leathery and pliable, but not sticky. Dry berries rattle on the tray when shaken. [http://bit.ly/1eRwT8x](http://bit.ly/1eRwT8x)

Coming Soon-New Workshop!

**Taking Your Pickles to the Next Level – From Home Canning to Commercial Production**

**Tuesday, August 27, 2013 1:00-4:00pm**

**Cabella’s, Rogers, MN**

**Registration:** mfvgamsn.com or Marilyn Johnson, MFVGA at 763-434-0400.

**Cost** $20.00

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For more food safety information visit our website: [www1.extension.umn.edu/food-safety/](http://www1.extension.umn.edu/food-safety/).