Leathers and jerkies—dried food specialties

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Quick Facts

Fruit leather is made by drying thin layers of pureed fruit in the oven, sun or dehydrator.
Fruit leather dries at 140° to 150° F in 4 to 10 hours.
Properly dried fruit leather is translucent and slightly tacky to the touch, but easily peeled from the pan.

Jerky is made by drying thin strips of lean meat in the oven, dehydrator or sun.
The meat strips may be seasoned by rubbing in salt and other seasonings, or by marinating in a sauce 2 hours or longer.
Meat reduces to about one-fourth its original weight at 140° to 150° F in 8 to 11 hours.
Properly dried jerky is chewy and leathery.

Fruit Leather

Fruit leather is made by drying thin layers of pureed fruit in the oven, sun or dehydrator. Sometimes called fruit rolls or taffies, fruit leathers make delicious, wholesome and nutritious high-energy snacks for sack lunches, backpackers, campers and active children. They are relatively light in weight, easy to prepare and a good way to use ripe to slightly over-ripe fresh fruit and leftover canned fruit.

Fruit leathers can be eaten as is, or made into a beverage by combining 5 parts water with 1 part leather in a food blender. They also can be used in pie fillings, in cooking and as a dessert topping.

Most fruit or combination of fruits can be used including apricots, apples, grapes, berries, bananas, pineapples, oranges, pears, peaches, tomatoes, plums, tropical fruits and others. Grapefruit and lemons are not recommended because they turn bitter when dried.

Drying is one of the least exact ways to preserve foods. The method selected depends on climate, available equipment, amount of food dried, desirable storage life and personal preferences. Some references suggest heating the fruit (cooked method) before drying to stop enzyme action, help preserve the fruit's natural color and speed the drying process. Other references simply say to blend the fresh fruit and dry the puree as is (uncooked method).

Preparation

Uncooked method. Select ripe or slightly over-ripe fruit. Sort and wash the fruit. Remove and discard blemishes or defective parts. Peel tough-skinned fruit such as winter apples, oranges, peaches, pears and tomatoes, if desired. Pit and core fruit as needed. Remove seeds from grapes if desired. Hull strawberries. Cut fruit into chunks and place in food chopper or blender.

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Add 1/2 to 1 tablespoon of lemon juice or 1/4 teaspoon pure ascorbic acid to each 2 cups of light-colored fruit to help preserve natural color. Ascorbic acid mixtures also may be used according to label directions.

Chop, grind or blend the fruit until a thick puree is formed. One to 2 tablespoons water may be added to help blend some fruits. Sugar does not need to be added for preservation purposes; however, if desired, add 1 tablespoon of sugar, corn syrup or honey to each 2 cups of tart fruit, such as pineapples or oranges. Additional sugar is not needed for non-tart fruits. A small amount of spice (1/4 teaspoon cinnamon or a dash of nutmeg) or 1/4 cup sesame, pumpkin or sunflower seeds also may be added per 2 cups puree, for taste variety.

**Cooked method.** Select, wash, peel, pit and core fruit as described for uncooked method above. Cut the fruit into slices or chunks and place in the top of a double boiler. Add water to the bottom of the double boiler. Cover and steam for 15 minutes or until soft. (If a double boiler is not available, a small pan containing the fruit can be placed in a larger pan that is partially filled with boiling water.) Crush the fruit in a blender or food grinder. Add 1 tablespoon of sugar, corn syrup or honey to each 2 cups puree, if desired. Spices also may be added.

**Shortcut canned method.** Substitute canned fruit or strained baby food fruit without tapioca for the cooked fruit above. Canned applesauce and strained baby fruit will not need to be pureed. Other canned fruits will need to be drained and pureed in a blender, food grinder or by hand. Since canned fruits already are processed enough to stop enzyme action, the addition of ascorbic acid is not necessary.

Canned fruits, such as applesauce, can be mixed with more expensive fresh fruits to help stretch the fruit concentrate and soften the flavor of sharp-tasting fruits, such as cranberries. The addition of applesauce to juicy fruits eases drying.

**Drying**

Spray a cookie sheet or similar flat tray with vegetable spray or line with plastic wrap. Make sure the cookie sheet or tray has an edge to prevent spillage of the puree. Spread the fruit concentrate evenly over the pan surface to a depth of no more than 1/4 inch. Two cups of puree is enough to cover a 12- x 17-inch cookie sheet.

Dry the concentrate in an oven, the sun or a dehydrator.

**Oven drying.** Set oven at the lowest setting (140° to 150° F). Place the trays of puree on the racks in the oven and leave the door open 2 to 6 inches, depending on the oven door. Check the oven temperature periodically with a thermometer to be sure it is correct. If necessary, turn off the oven for a short time to reduce temperature. The fruit concentrate should dry in 4 to 10 hours. Test frequently for dryness (see test for dryness).

**Sun drying.** Place the tray of puree on a table in the sun, in a dry place. Protect the fruit from insects by placing cheese cloth or a pane of glass over, but not touching the fruit. The pane of glass should be raised at least 1/2 inch above the tray of puree to allow air to circulate. The puree should be tested frequently for dryness.

Sun drying will take from 1 to 3 days, depending upon temperature and humidity. Bring the drying fruit concentrate inside at night if the nighttime temperatures vary more than 20° F from the daytime temperatures, or if fog and humidity are common at night. Sun drying may be combined with oven drying, either by starting in the sun and finishing in the oven or vice versa.

**Dehydrator drying.** Place sheets or trays of fruit concentrate in the dehydrator. Set temperature control at 140° to 150° F or follow manufacturer’s directions. Test frequently for dryness. Drying time will be 4 to 10 hours.

**Test for dryness.** Properly dried fruit leather will be translucent and slightly tacky to the touch, but easily peeled from the pan or plastic wrap. Lift the edge of the leather, which will adhere tightly to the surface, and peel it back about 1 inch. If it peels readily, it is properly dried. If the leather has cooled, it may need to be warmed in an oven at 150° F for a few minutes to help it peel away more easily. If it cracks or chips, it has dried too long but still is edible.

**Storage.** After loosening the edge of the leather from the paper or pan, loosely roll the leather in plastic wrap or waxed paper in one piece. Store the roll in one piece or cut into 1-inch strips. Place the strips or rolls of leather in a plastic bag, glass container, paper bag or other container. The container lid should not be tightened nor the bag opening twisted tightly until the leather is completely dry. If the leather has not dried completely, it may become sticky or develop mold growth during airtight storage.

Store fruit leather in a cool, dry, dark place. It will retain good quality up to one year or more in
the freezer, several months in the refrigerator, or approximately 30 weeks at room temperature (70° F).

Nutritional food values become concentrated in dried fruit, but so do calories. Since moisture is gone, the residue is concentrated. A 1- x 17-inch strip of applesauce leather provides approximately 40 calories, assuming 2 cups of canned sweetened applesauce were dried on a 12- x 17-inch pan.

**Meat Jerky**

Jerky is made by drying thin strips of lean meat to about one-fourth its original weight in the sun, oven or dehydrator. Traditionally used as a staple among American Indians and wandering pioneers, jerky has regained popularity in recent years as a nutritious snack for backpackers, campers, skiers and sack lunchers.

A number of lean meats can be used to make jerky, including round steak, flank steak, sirloin tip, rump roast or cross rib. Lean venison and elk muscles, smoked meat and cooked turkey, chicken and pork also may be used. Raw pork or bear should never be used because drying does not destroy parasites that cause trichinosis. The use of raw turkey and chicken is not recommended because drying does not destroy salmonella bacteria, if present.

**Preparation**

Remove any thick connective tissue and gristle from fresh meat. Trim off visible fat with a sharp knife: Fat can become rancid or cause the development of off-flavors during drying or storage. Freeze meat in original plastic wrapping if purchased or in moisture-proof paper until firm, but not solid.

Slice the meat into long, thin strips, ¼ to ½ inch thick, 1 to 1⅛ inches wide and 4 to 12 inches long. Most references recommend cutting with, rather than across, the meat grain. Lay the strips out in a single layer on a smooth, clean surface. (Use a cutting board, counter top, bread board or cookie sheet. Wash the surface thoroughly after use.) Flatten the strips with the heel of the hand or a rolling pin so they are fairly uniform in thickness.

Season the meat strips by rubbing in no more than 1 teaspoon salt per pound of fresh meat. Add pepper, garlic powder, onion powder, favorite herbs or other seasonings to taste.

Jerky also may be seasoned by marinating for several hours. A recipe for seasoning with Liquid Smoke and two recipes for seasoning with marinades are given below:

**Liquid Smoke Seasoning**

(Seasons 2 pounds lean meat)
1 ½ Tablespoons water
½ teaspoon Liquid Smoke (Amounts can be doubled.)
Salt and pepper

Combine water and Liquid Smoke. Brush mixture on both sides of meat strips. Lightly sprinkle with salt and pepper. Place the meat strips, layer on layer, in a large bowl. Cover with a plate and put a weight on top. Refrigerate for at least 2 hours or overnight.

**Spicy Marinade**

(Seasons 2 pounds lean meat)
1 ½ tsp. seasoned salt
1 ½ tsp. onion powder
½ tsp. black pepper
1 ½ tsp. garlic powder
1/4 cup soy sauce
1/3 cup Worcestershire sauce

Combine the seasonings, pour over meat strips (in a large bowl) and mix gently. Cover and refrigerate for at least 2 hours or overnight. Stir occasionally while refrigerating.

**Teriyaki Marinade**

(Seasons 2 pounds lean meat)
1/4 cup soy sauce
2 cloves garlic, crushed
3 tsps. sugar
1 ½ tsp. MSG or 1 tsp. salt
2 tsps. sugar
2 tsps. fresh grated ginger
½ tsp. fresh grated ginger
1/3 tsp. ground ginger

Combine seasonings, pour over meat strips in a large bowl and mix gently. Cover and refrigerate for at least 2 hours or overnight. Stir occasionally while refrigerating.

**Drying**

Remove meat strips from marinade, if used and pat dry with paper towels. Dry the strips in the oven, dehydrator or sun as discussed below.

**Oven drying.** Stretch strips across clean oven racks or other drying trays. If any strips are too short, fasten several together with wooden toothpicks. Allow edges of the meat strips to touch, but not overlap. Leave enough open space on the racks for air to circulate around the strips.

Arrange racks so that the top one is at least inches below the top heat source and the bottom rack is at least 4 inches above the bottom heat source.

Set oven temperature at 140° to 150° F and let strips dry for about 11 hours, or until they are chewy and leathery. Check the strips early in the drying process for excessive drip. This drip can be caught on aluminum foil placed on the rack nearest the bottom of the oven.
To facilitate drying, keep the oven door cracked open, use the ventilating fan above the oven or an electric fan placed in front of the open oven door. Dehydrator drying. Follow manufacturer’s or oven-drying instructions.

Several methods of sun drying may be used. Place single layers of meat strips in cheesecloth sacks and hang in the hot sun over clotheslines or other lines strung high above the ground. Or use a screened box on legs placed on a balcony or roof.

A barbeque grill also can be used. Line the bottom of the grill with aluminum foil to help reflect sunlight. Stretch the meat strips over the grill and allow to dry in the sun. If nights are cool, place the barbeque grill under cover (for example in the garage) to reduce condensation of moisture on the meat. If the barbeque has a cover, this may be used. Sun drying may take 1 to 3 days, depending on temperature and humidity, and can be combined with oven or dehydrator drying.

Test for dryness. Properly dried jerky is chewy and leathery. It will be as brittle as a green stick, but won’t snap like a dry stick. Be sure to test for dryness after cooling. Warm jerky will be pliable, even though enough moisture may be removed.

When jerky is sufficiently dry, remove from drying area. Use paper towels to blot drops of oil that have accumulated from marbled fat. Cool. Serve, or store in an airtight container. Pack jerky with the least possible amount of air trapped in the container. Too much air causes off-flavors and rancidity.

Store containers of jerky in a cool, dry, dark place or the refrigerator or freezer. Check occasionally to be sure no mold is forming. Dried jerky may be stored up to one year.

Air or sun drying. For sanitation reasons, many resources do not recommend drying jerky in the sun. Select this method only if your air source is clean, dry, hot but not roasting, free of insects or other animals and slightly breezy.