



4-H FOODS PRESERVATION FACT SHEET

Drying Fruit Leathers

Fruit leathers are homemade fruit rolls. They are a tasty, chewy, dried fruit product. Fruit leathers are made by pouring pureed fruit onto a flat surface for drying. When dried, the fruit is pulled from the surface and rolled. It gets the name "leather" from the fact that when the pureed fruit is dried, it is shiny and has the texture of leather.

The advantages of making your own fruit leathers are to use less sugar and to mix fruit flavors. Leftover fruit pulp from making jelly can be blended and made into fruit rolls.

For the diabetic adult or child, fruit leathers made without sugar are a healthy choice for snacks or desserts. Individual fruit leathers should contain the amount of fruit allowed for the fruit exchange.

Directions follow for making fruit leathers. Fresh, frozen or drained canned fruit can be used.

HOW DRYING PRESERVES FRUIT LEATHER

Drying removes the moisture from the fruit leather so that bacteria, yeasts and molds cannot grow and spoil the fruit leather. It also slows down the action of enzymes, but does not inactivate them. Because drying removes moisture, the food becomes smaller and lighter in weight.

The optimum temperature for drying food is 140° F. If higher temperatures are used, the fruit leather may "case harden"; that is cook and harden on the outside while trapping moisture on the inside. The fruit leather will eventually mold when moisture equilibrates during storage. Thus, the drying process should never be hurried by raising the drying temperature. (See Table 1 regarding the suitability of various fruits for making fruit leather.)

LEATHERS FROM FRESH FRUIT

1. Select ripe or slightly overripe fruit.
2. Wash fresh fruit or berries in cool water. Remove peel, seeds, stems and bruised or spoiled portions.
3. Cut fruit into chunks. Use two cups of fruit for each 13" X 15" fruit leather. Puree fruit until smooth. If thick, add liquid to bring to a pouring consistency.
4. Add two teaspoons lemon juice or 1/8 teaspoon ascorbic acid (375 mg) for each two cups of light colored fruit to prevent darkening.
5. Optional: To sweeten, add corn syrup, honey or sugar. Corn syrup or honey is best for longer storage because it prevents crystal formation. Sugar is fine for immediate use or short storage. Use 1/4 to 1/2 cup sugar, corn syrup or honey for each two cups of fruit. Saccharin-based sweeteners could also be used to reduce tartness without adding calories. Aspartame sweeteners may lose sweetness during drying.

TABLE 1
FRUITS AT A GLANCE

Fruit	Suitability for Fruit Leather	Fruit	Suitability for Fruit Leather
Apples	Excellent	Cranberries	Only in combination
Apricots	Excellent	Grapes	Fair to good
Avocados	Not recommended	Guavas	Only in combination
Bananas	Fair to good	Melons	Not recommended
Berries with seeds	Excellent	Nectarines	Excellent
Blueberries	Only in combination	Peaches	Excellent
Cherries	Excellent	Pears	Excellent
Citrus fruits	Only in combination	Pineapples	Excellent
Citrus peel	Only in combination	Plums	Good
Crabapples	Only in combination	Strawberries	Excellent

LEATHERS FROM CANNED OR FROZEN FRUIT

1. Home preserved or store-bought canned or frozen fruit can be used. Applesauce can be dried alone or added to any fresh fruit puree as an extender. It decreases tartness and makes the leather smoother and more pliable.
2. Drain fruit, save liquid.
3. Use one pint of fruit for each 13" X 15" leather.
4. Puree fruit until smooth. If thick, add liquid to bring to a pouring consistency.
5. Add two teaspoons of lemon juice or 1/8 teaspoon ascorbic acid (375 mg) for each two cups of light colored fruit to prevent darkening.

SPICES AND FLAVORINGS

To add interest to your fruit leathers add spices or flavorings.

Spices to Try - Allspice, cinnamon, cloves, coriander, ginger, mace, mint, nutmeg or pumpkin pie spice. Use sparingly, start with 1/8 teaspoon for each two cups of puree.

Flavorings to Try - Almond extract, lemon juice, lemon peel, lime juice, lime peel, orange extract, orange juice, orange peel or vanilla extract. Use sparingly, try 1/8 to 1/4 teaspoon for each two cups of puree.

PREPARING THE TRAYS

For drying in the oven, a 13" X 15" baking pan with edges works well. Line pan with plastic wrap being careful to smooth out wrinkles. Do not use waxed paper or aluminum foil.

To dry in a dehydrator, specially designed plastic sheets can be purchased or plastic trays can be lined with plastic wrap.

POURING THE LEATHER

Fruit leathers can be poured into a single large sheet (13" X 15") or into several smaller sizes. Spread puree evenly, about 1/8 to 1/4 inch thick, onto drying tray. Avoid pouring puree too close to the edge of the sheet; leave an inch or more of border to allow for spreading during drying. The larger fruit leathers take longer to dry.

DRYING THE LEATHER

Leather dries from the outside edge toward the center. Test for dryness by touching the center of the leather; no indentation or sticky spots should be evident. Dry until it is still pliable. While warm, peel from plastic and roll, allow to cool and rewrap the roll in plastic wrap or special plastic fruit leather sheets.

Dehydrator Drying

It takes approximately six to eight hours for fruit leather to dry in a dehydrator. Follow manufacturer's directions. In general, fruit leather should be dried at around 140^o F.

Oven Drying

An oven can be used for occasional drying of fruit leathers. Because the oven may also be needed for everyday cooking, it may not be satisfactory for preserving abundant fruit leather. Oven drying may take up to 18 hours for fruit leathers.

Oven drying is slower than dehydrators because the oven does not have a built-in fan for the air movement. (However, some convection ovens do have a fan.) It takes two to three times longer to dry fruit leather in an oven than in a dehydrator; thus, the oven is not as efficient as a dehydrator and uses more energy.

To Use Your Oven - First, check your dial and see if it has a reading as low as 140^o F. Check oven temperature on warm setting with an oven thermometer. If your oven does not go this low, then your food will cook instead of dry.

Low humidity aids the drying process. To dry fruit leather, the water must move from the fruit leather to the surrounding air. If the surrounding air is humid, then drying will be slowed down. Avoid drying fruit leather during rainy or humid weather.

Increasing the air current speeds up drying by moving the surrounding moist air away from the fruit leather. To speed the drying time, increase the air flow. For air circulation, leave the oven door propped open two to six inches. Circulation can be improved by placing a fan outside the

oven near the door. Change the position of the fan frequently during drying to vary the circulation of the air. **CAUTION:** This is not a safe practice for a home with small children.

Because the door is left open, the temperature will vary. Place an accurate and easy-to-read oven thermometer on the top tray toward the back. Adjust the temperature dial to achieve the needed 140° F.

Maintain the temperature at 140° F. It takes less heat to keep the temperature at 140° F as drying progresses, so watch the temperature carefully toward the end of drying.

STORING THE LEATHER

Place wrapped pieces in airtight, moisture proof containers such as freezer bags, glass jars or freezer storage containers. Fruit leather will keep about two to four weeks at room temperature when stored in a dark, cool place. For storage up to one year, store in the freezer.

Source: Adapted from So Easy to Preserve, Cooperative Extension, The University of Georgia, 1993.

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