

# **Fruit Leather**

## **Flavor-Packed and Nutritious**

Fruit leather is a dried-fruit treat, chewy and flavorful. High in fiber and carbohydrates, fruit leather is naturally low in fat. When the water is removed from fruit during the drying process, the remaining sugars, acids, vitamins and minerals become concentrated in the remaining solid part of the fruit, making fruit leather a nutritious snack.

COOPERATIVE

EXTENSION

## **Antioxidant Rich**

Current research in measuring antioxidant levels in Alaska wild berries has found that when different home processing methods were used in preserving wild berries, such as canning in syrup and making jams and sauces, antioxidant levels were highest in both dried fruit and fruit leathers. Antioxidants are a group of biochemicals that work to absorb electrons from free radicals that damage healthy cells. Although research is ongoing, experts have reported that free radical damage may contribute to aging, rheumatoid arthritis, Alzheimer's disease, high blood pressure, schizophrenia, memory loss, Parkinson's disease, atherosclerosis and emphysema, among others. Thereby, antioxidants have been shown to be an important part of the human diet.

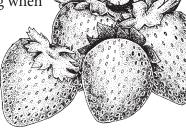
## **Great for Gifts!**

Pick and freeze berries when they are ripe. When the winter holiday season rolls around, you can make a variety of fruit leathers. You might put an assortment into gift boxes for those hard-to-shopfor friends and family members.

## Lightweight for Lunches and Camping

Because fruit leathers are lightweight, they store and pack easily. You might make several varieties to pack in the lunch box or for that mid-morning or afternoon snack. Think about packing them in backpacks to take along when hiking, camping and fishing.

# Making Fruit Leather



#### Making the Puree

Here are some examples of how to make purees for fruit leather. For additional recipes using Alaska wild berries, refer to the Cooperative Extension Service publication FNH-00120, *Using Alaska's Wild Berries and Other Wild Edibles*.

*Note:* The desired consistency of puree that is most suitable for drying into leather is that of applesauce.

#### **Basic Berry Puree**

To make the berry purees listed in this publication, rinse berries, drain, put in a blender and blend until the consistency of a thick puree. Most berries do not need to be cooked.

For making puree from salmonberries, raspberries, lingonberries (lowbush cranberries), highbush cranberries and similar berries that have large seeds, do not use a blender. These berries should be pressed through a sieve or food mill. This process will remove seeds and skins prior to blending.

## **Rose Hip Puree**

Use soft, ripe rose hips (the riper they are the sweeter they are). It takes about 4 cups of rose hips to make 3 cups of puree. Remove stems and blossom ends. Rinse rose hips in cold water. Put them into a pan and add enough water to almost cover. Bring to a boil and simmer 10 to 15 minutes. Press through a sieve or strainer. All that does not go through the sieve is placed in the pan again. Add a little water, enough to almost cover; if you want a thicker puree, add slightly less. This time heat but do not boil so vigorously. This will dissolve a little more of the fruit so that it will go through the sieve. Press again and then repeat the process one more time. By now, most of the fruit should have gone through the sieve leaving only seeds and skin.

## **Rhubarb Puree**

Wash and cut about 1 quart of rhubarb into small <sup>1</sup>/<sub>2</sub>-inch pieces. Put <sup>1</sup>/<sub>4</sub> cup water in a saucepan and add the rhubarb. Cook only until the rhubarb starts to soften. Let cool slightly; put in blender and make into puree. It should make about 2 cups puree.

## **Drying Instructions**

## **Food Dehydrators**

Home model food dehydrators are popular, efficient and quite effective. The major components of an electric food dehydrator include

- a source of heat,
- air flow to circulate the dry air,
- trays to hold the food during the drying process and
- accessory mesh and solid leather sheets to ensure successful drying.

Some models offer thermostat controls and automatic on/off features. Thermostats may be preset at the factory, between 130° and 140°F. However, actual temperature in the unit can vary as much as 10 degrees. Wattage for food dehydrators ranges from 115 to 1,000 watts. The cost to operate a food dehydrator ranges from <sup>3</sup>/<sub>4</sub> to 2 cents per hour. The average is approximately 1<sup>1</sup>/<sub>2</sub> cents per hour.

## **Oven Drying**

#### Test the Oven

Oven drying can be used, but it is difficult to maintain an oven at 140 to 150°F. If the oven temperature is higher than this, case hardening can be an issue. Case hardening is a dried crust that forms on the outside of the food, preventing the inner moisture from escaping. Before using the oven for making fruit leather, test the oven temperature to make certain the oven can hold at 140° F or lower:

- Set the oven temperature at 140° F.
- Open the oven door 2 to 6 inches to increase air circulation.

• Place a fan outside the open oven door to help increase air circulation inside the oven. **Note:** This is not a safe procedure to use when small children and pets are present.

- Place an oven thermometer on a rack near where the food would be placed.
- Adjust the oven dial to maintain a 140° F temperature.

If the oven cannot maintain these low temperatures, another form of drying should be considered. Accurate temperatures are key to successful drying in the oven.

## **Steps for Oven Drying**

Line a cookie sheet with parchment paper. A 12 x 17-inch cookie sheet holds approximately 2 cups of puree. Spread the puree evenly over the paper, about  $\frac{1}{4}$  to  $\frac{1}{8}$  inches thick. Do not push the puree completely to the sides. Leave a bit of paper showing for easy removal. Place the cookie sheet on an oven rack. Use the oven thermometer near the food to ensure accurate internal temperatures. It can take 6 to 24 hours to dry fruit leather in the oven. The length of time depends on sugar content and room humidity. Always test for dryness before storing.

#### **Check for Dryness**

Leather dries from the outside edge toward the center. There are several ways to check for dryness. Dark spots that are visible on the top of the leather is a sure sign that the fruit is not completely dry. Another way to check for dryness is to press the leather with your finger. If no indention is visible, the leather is dry. Or, test by trying to pull the leather from the parchment paper or the dehydrator trays. If the leather peels easily, comes off in one piece and holds its shape, it is dry. The leather should be pliable. If it becomes too dry it will crack and crumble and won't roll. However, it is still edible and good to eat.

## Storage

It is important for the fruit to be completely dry or it will mold during storage. Place a length of clean plastic wrap on the counter or table. Lay the leather flat on top of the plastic wrap. Begin at one end and roll the leather with the plastic. The plastic will separate the layers of the fruit leather and keep them from sticking together. The rolled fruit leather can be stored in a food grade plastic bag or a clean, dry, insect-proof container such as a glass jar or metal can with a lid. The leather may be stored in a cupboard for four months to one year. The cooler the storage area, the longer the shelf-life of the leather. For instance, in the refrigerator or freezer the product will keep for more than one year.

## Fruit Leather Recipes

Honey is the recommended sweetener for fruit leather. When adding honey, keep in mind that the dried product will be sweeter than the puree. Start with 2 tablespoons, adding additional tablespoons until the preferred sweetness is reached. Corn syrup is a suitable alternative to honey. However, granulated sugar is not a good option as it may crystallize during storage, making the leather brittle.

Be creative. Invent your own leather specialties. Combine fruit purees for different flavors; add spices or flavorings, such as cinnamon or mint; sprinkle nuts, seeds, raisins or coconut over still moist leather and then continue drying.

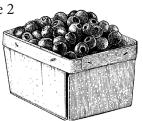
# **Rose Hip-Blueberry Fruit Leather**

Combine 1 cup rose hip puree and 1 cup blueberry puree. Add honey (2 tablespoons or to taste) and spread on parchment paper or dehydrator tray. Dry as for fruit leather. The dominant flavor in this fruit leather is rose hips; if you wish you may change the proportions to have more blueberry flavor.

## Salmonberry Fruit Leather

Four cups of rinsed salmonberries will make

about 2 cups of puree. Combine 2 cups salmonberry puree and honey (2 tablespoons or to taste). Spread on parchment paper or dehydrator tray and dry as for fruit leather.



# **Raspberry Fruit Leather**

Four cups of rinsed raspberries will make about 2 cups of puree. Combine 2 cups raspberry puree and honey (2 tablespoons or to taste). Spread on parchment paper or dehydrator tray and dry as for fruit leather.

# **Rhubarb-Strawberry Fruit Leather**

Combine 1 cup rhubarb puree and 1 cup strawberry puree. (Strawberries can be either fresh, frozen or frozen with sugar added.) Add honey (2 tablespoons or to taste), unless the commercially frozen strawberries already had sugar added. Spread on parchment paper or dehydrator tray and dry as for fruit leather.

# **Blueberry-Applesauce Fruit Leather**

Combine 1 cup blueberry puree and 1 cup unsweetened applesauce. Add honey (2 tablespoons or to taste) and spread on parchment paper or dehydrator tray. Dry as for fruit leather. This makes a tart fruit leather, so if you like it sweeter, add 1 more tablespoon honey.

# **Rose Hip Fruit Leather**

Combine 2 cups rose hip puree and 1 tablespoon lemon juice. If the rose hips were not extremely ripe, add honey (2 tablespoons or to taste). Spread on parchment paper or dehydrator tray and dry as for fruit leather.

# **Rhubarb Fruit Leather**

Combine 2 cups rhubarb puree and honey (2 tablespoons or to taste). Spread on parchment paper or dehydrator tray and dry as for fruit leather.

# **Rose Hip-Lowbush Cranberry Fruit Leather**

Combine 1 cup rose hip puree and 1 cup lowbush cranberry puree. Add honey (2 tablespoons or to taste) and spread on parchment paper or dehydrator tray. Dry as for fruit leather. You may add 1/2 tablespoon lemon juice for extra flavor.

## Rose Hip-Highbush Cranberry **Fruit Leather**

Combine 1 cup rose hip puree and 1 cup highbush cranberry puree. Add honey (2 tablespoons or to taste) and spread on parchment paper or dehydrator tray. Dry as for fruit leather.

# Rose Hip-Banana-Cranberry Fruit Leather

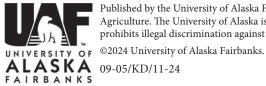
Puree about 3 ripe bananas and 1 tablespoon lemon juice in a food processor to make 1 cup banana puree. (The lemon juice helps keep the bananas from turning brown. This can be omitted if desired.)

Combine <sup>1</sup>/<sub>4</sub> cup rose hip puree, <sup>1</sup>/<sub>4</sub> cup highbush cranberry puree, <sup>1</sup>/<sub>2</sub> cup lowbush cranberry puree and honey (2 tablespoons or to taste). Spread on parchment paper or dehydrator tray and dry as for fruit leather.

## www.uaf.edu/ces or 1-877-520-5211/907-474-5211

Julie Cascio, Extension Faculty, Health, Home and Family Development. Originally prepared by Ellen Ayotte, former Extension Home Economist.

In accordance with Federal law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, disability, and reprisal or retaliation for prior civil rights activity. (Not all prohibited bases apply to all programs.) Program information may be made available in languages other than English. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, and American Sign Language) should contact the responsible State or local Agency that administers the program or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. To file a program discrimination complaint, a complainant should complete a Form AD- 3027, USDA Program Discrimination Complaint Form, which can be obtained online at https://www.ocio.usda.gov/document/ad-3027, from any USDA office, by calling (866) 632-9992, or by writing a letter addressed to USDA. The letter must contain the complainant's name, address, telephone number, and a written description of the alleged discriminatory action in sufficient detail to inform the Assistant Secretary for Civil Rights (ASCR) about the nature and date of an alleged civil rights violation. The completed AD- 3027 form or letter must be submitted to USDA by: (1) Mail: U.S. Department of Agriculture Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW Washington, D.C. 20250-9410; or (2) Fax: (833) 256-1665 or (202) 690-7442; or (3) Email: program.intake@usda.gov. This institution is an equal opportunity provider.



Published by the University of Alaska Fairbanks Cooperative Extension Service in cooperation with the United States Department of Agriculture. The University of Alaska is an Affirmative Action/Equal Opportuntity employer, educational institution and provider and prohibits illegal discrimination against any individual: www.alaska.edu/nondiscrimination.