Drying Fruits and Vegetables
Drying Fruits and Vegetables

INEZ M. ECKBLAD, Extension Nutritionist, and
W. M. CASE, District Extension Agent

These are days when the thrifty homemaker has her eye on the extras from the garden, the surplus fruits and vegetables. Some of the surplus will be canned, some will be frozen, and other products will be stored. Still others can very profitably be dried.

Drying is a simple and practical method of preserving fruits and vegetables for winter use. This is especially true in Colorado because of its plentiful sunshine and dry air. Drying is simple and requires so little outlay for equipment.

Fruits and vegetables lose some vitamin A, much thiamin or B1, and most of the ascorbic acid or vitamin C, and if the dehydration period is prolonged these losses may be serious. Sun drying has been found more destructive than artificial dehydration. Though some vitamin values are lost during drying, the product is still valuable as a source of food.

The aim in drying any food is to remove enough moisture to insure keeping, and to preserve the food value with as much of the natural flavor and cooking quality as possible.

Selection and Harvesting

Good-quality, dried fruit depends on the use of ripe, firm, good-quality, fresh food. Vegetables for drying should be fresh, young, and tender.

Apples, pears, peaches, apricots, cherries, plums, and berries are the best fruits for drying. Corn, mature beans and peas, celery, squash, pumpkin, okra and greens, such as spinach, vegetable-soup mixtures, and green beans are some of the most popular vegetable products for drying. See time and temperature chart for further directions.

Preparation for Drying

1. Sort and clean products carefully. One poor fruit or vegetable may give off flavors to the entire lot. Keep cutting knives and boards clean.

2. Quick handling and drying is desirable.
3. Peel, slice or cut product for quick drying. Uniformity and thin slices make for quick and even drying.

4. Scald or steam vegetables to retain color and flavor. Some foods change color and flavor considerably during drying. To decrease this, steam or scald before they are dried. This preserves their natural color, softens the tissue and prevents further ripening. The material may be placed on a sack or piece of cheesecloth and suspended in steam above boiling water in a closed vessel, or plunged into boiling water for about 5 minutes. It should then be drained well, dried with a towel, and spread out to dry. Vegetables that require steaming or scalding are green beans, peas, sweet corn and any of the root crops.

The pressure cooker, with petcock open, is an excellent device for steaming. A thin layer of prepared food in a wire basket suspended over briskly boiling water for the desired time is recommended.

5. Sulphuring. One teaspoon of sulphur to 1 gallon of fruit. Wrap sulphur in paper, place in dish in bottom of barrel and light paper. Suspend fruit (prepared for drying) in a basket inside the barrel, cover barrel with heavy sack. Leave required length of time.

Sulphuring helps protect vitamins during drying and it also is an aid in preserving color and flavor.

Methods of Drying

Food is dried by the heat of the sun or a stove or a rapid air current.

Drying in the Sun.—The oldest and simplest method of drying is to place the material in the sun. Bright, hot, sunny days with a slight breeze are best. A screen door or window screen can be taken from the house and placed upon chairs in the yard. The screen should be covered with cheesecloth and the food spread out in a thin layer on the cloth. Cheesecloth or mosquito bar should be spread over the material to be dried to protect it from flies and other insects. The material should be stirred several times during the day. It should be taken into the house at night and placed in the sun again the next day.

Beans, peas, corn, squash, pumpkins, tomatoes, peppers, apples, apricots, peaches, and berries may be dried in this manner. Before storing, sun-dried products should be placed in a warm oven for 20 minutes. Keep oven below scorching temperature. This is done to complete drying by artificial heat and
destroy any germs that may have collected during the drying period.

Drying in the Oven.—Care must be taken to keep the heat low and even, and to stir often to insure even drying. The oven door must be left open to allow the moisture to escape. Simple racks or trays may be made to set on or hang above the stove so as to use the heat when cooking or baking.

Storage and Care

1. After product is dried, place in shallow containers and inspect each day for several days.
2. Reheat in oven and then pack for storage.
3. Store in heavy, paper sacks, sealed; or tin cans with tight lids.

Preparation for Table Use

1. Wash the pieces of dried fruit or vegetables.
2. Soak the product in water. A long soaking is desirable, especially for beans. In general, over-night soaking is recommended. Greens, dried, and powdered, are in a very concentrated form. To each cup of puree, allow 1/2 teaspoon of the powder. Soak in cold water for 1/2 hour or longer before adding to the other ingredients.
3. Cook in the water used for soaking. Simmer. Do not boil. As soon as tender, cease cooking, as like fresh products, they become over-cooked and both texture and flavor are destroyed.

Vegetable powders.—To make a cream soup, scald milk, add vegetable powder (soaked) and enough flour and butter rubbed together to thicken slightly. Season and let heat thoroughly.

Fruit.—Use dried fruit in sauces, in salads, shortcakes, filled cookies, puddings, breakfast cereals, and gelatin desserts.
Homemade Evaporators

A solar drier may be constructed as in the illustration and covered with glass top to intensify heat. Sides should be screened. Window panes or hotbed sashes may be used. Green vegetables as spinach, can be successfully dried out-of-doors under glass.

Home Evaporator for Fruits and Vegetables
<table>
<thead>
<tr>
<th>Fruit or Vegetable</th>
<th>Selection</th>
<th>Preparation</th>
<th>Treatment</th>
<th>Time for Drying</th>
<th>Test for Dryness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berries</td>
<td>Wash and dry carefully. Cut large strawberries in half.</td>
<td>Fill trays in thin layers. Do not turn while berries are in the soft stage.</td>
<td></td>
<td>160°F—increase gradually to 150°F</td>
<td>When berries rattle on trays and no longer show moisture when crushed between the fingers.</td>
</tr>
<tr>
<td>Cherries</td>
<td>Wash, stem, dry without or without pitting. May be pitted when partly dried.</td>
<td>Blanch cherries until thoroughly heated.</td>
<td></td>
<td>120°F. 150°F</td>
<td>Same as apples.</td>
</tr>
<tr>
<td>Apricots</td>
<td>Ripe, but not soft.</td>
<td>Do not peel. Halve and pit.</td>
<td>Sulphur 1½ to 2 hrs.</td>
<td>2 days</td>
<td>125°F. 150°F</td>
</tr>
<tr>
<td>Apples</td>
<td>Ripe, but not soft.</td>
<td>Peel, trim, slice evenly ¼ in. thick.</td>
<td>Hold in salt water,* or sulphur 20 min.</td>
<td>12 hrs.</td>
<td>125°F. 150°F</td>
</tr>
<tr>
<td>Peaches</td>
<td>Ripe, but not soft. Handle carefully.</td>
<td>Peel if desired and slice; or halve and pit.</td>
<td>Sulphur 15 minutes if peeled; 1½ to 2 hrs. if unpeeled.</td>
<td>12 hrs. 2 or 3 days</td>
<td>125°F. 150°F</td>
</tr>
<tr>
<td>Pumpkins and squash</td>
<td>Ripe</td>
<td>Cut in strips 2 in. wide, peel, cut in slices ½ in. thick.</td>
<td>Steam 5 to 10 min.</td>
<td>2 days</td>
<td>125°F. 150°F</td>
</tr>
<tr>
<td>Sweet Corn</td>
<td>Gather in milk stage.</td>
<td>a. Use immediately. Husk and silk. b. Cut from cob.</td>
<td>a. Blanch 8 to 12 min. Drain, cool and cut from cob. b. Heat in oven until milk sets.</td>
<td>12 hrs.</td>
<td>125°F. 150°F</td>
</tr>
<tr>
<td>String Beans</td>
<td>Right for table use.</td>
<td>Cut in half-inch lengths.</td>
<td>Steam or blanch 10 min.</td>
<td>2 days</td>
<td>115°F. 140°F</td>
</tr>
<tr>
<td>Peas</td>
<td>Right for table use.</td>
<td>Shell</td>
<td>Steam or blanch 3 to 5 min.</td>
<td>2 days</td>
<td>116°F. 140°F</td>
</tr>
<tr>
<td>Greens</td>
<td>Right for table use.</td>
<td>Wash thoroughly. Cut out heavy ribs.</td>
<td>Dry off all water. Avoid much overlapping on trays.</td>
<td>Under glass 1 day</td>
<td>110°F. 130°F</td>
</tr>
<tr>
<td>Soup Mixture</td>
<td>Use any early maturing root vegetables; also celery, peppers, corn, asparagus, etc. Dry separately, mix later.</td>
<td>Shred into fine strips.</td>
<td>Steam 5 to 10 min.</td>
<td>1 day</td>
<td>115°F. 140°F</td>
</tr>
</tbody>
</table>

*Use 6 tablespoons salt to a gallon of water.