

# Home Drying of Prunes, Filberts, and Walnuts

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# When to pick

**Prunes** are ripe when the last traces of green have disappeared and the flesh is all yellow in color. They will feel fairly soft, taste sweet, and some will have fallen to the ground. The following table shows the approximate dates of ripening of the common varieties in western Oregon.

| Variety | Harvest date                  |
|---------|-------------------------------|
| Italian | Sept. 5-15<br>Sept. 25-Oct. 5 |

**Filberts** may be picked when all of the nuts have fallen. They do not lose quality very quickly on the ground.

Walnuts are mature as soon as the husk will cut free from the nut, but they are usually not harvested until rains have cracked the husk to the point of letting the nut drop to the ground. Walnuts lose quality rapidly after they have fallen, and several harvestings should be made to prevent mold, discoloration, and decay. If nuts are blown off by wind before the hulls crack, the hulls will ripen on the ground and usually can be removed after a week or two.

## **Drying prunes**

Prunes require no preliminary treatment for drying except thorough washing and sorting. They will dry faster if they are first halved and pitted. Spread the fruit out in a single layer on a screen or rack which permits circulation of warm air around all sides of the prune. Drying temperatures in commercial operations usually run from 140° to 165° F. Without good air circulation, use the lower temperature to avoid scorching. About 24 hours of drying with good air circulation at these temperatures is generally required to reduce the moisture content to 18-20%. Prunes will dry at somewhat lower temperatures, but more time is required. Higher temperatures ruin flavor. If the prunes are not dried sufficiently, they will mold in storage. Overdrying

ruins quality. Usually about  $3\frac{1}{2}$  pounds of fresh Italian prunes give one pound of dried prunes. Small lots can be dried on a tray suspended above a furnace if the air is hot enough.

Prunes can be dried in an electric or gas oven, using care not to cook or scorch the fruit. First, build two screen-bottomed trays to fit the oven. Wire or plastic screening, hardware cloth, or wooden slats can be used for the bottom of the drying trays. For drying only small quantities of prunes, cake cooling racks or cookie sheets serve effectively. Make each tray frame with outside dimensions  $1\frac{1}{2}$  inches smaller than the oven's inside length and width. This amount of space is needed for air to circulate. Cut wooden blocks  $1\frac{1}{4}$  by  $1\frac{1}{4}$  by 3 inches to use in tray stacking. Set one oven rack about 3 inches from the oven floor and the other, if there are two, just far enough above for two trays to be stacked in between. Do not turn on the top unit in an electric oven. If necessary, remove it.

Turn on the current or light the gas burner 15 minutes before drying time. If there is a regulator, set it at 150° to 200° F, or the lowest setting on your oven. If a gas stove has no regulator, turn the flame very low. Be careful throughout drying that the flame does not go out unnoticed.

While warming an electric oven, keep the door closed. In a gas oven, prop the door open at the top corner with an 8-inch stick.

Stack two loaded trays together, using a wood block at each corner, so air can circulate between the trays. Place one stack on each oven rack; if there is only one rack, use extra blocks and stack three or four trays together.

Number the trays from "1" to "4" and mark the front and back to help keep track of tray positions.

Put the thermometer on the top tray. Temperature should stay about 150° to 165° F. Prop an electric oven door open by tucking a folded pot holder in the top corner to make about a half-inch crack. Prop a gas oven door open 8 inches at the top. The right opening helps control heat and lets out moist air.

If you cannot keep the oven heat down to 160° F, prop the door a little wider; on a gas range, reduce the flame by turning the oven-valve handle toward "off" position. As you turn the handle, be certain the flame does not go out.



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Temperature and air flow are not the same everywhere in an oven. Trays nearest the oven ceiling and floor dry fastest.

Every two or three hours reverse trays in each stack, making upper tray serve as lower. If the oven has only one rack, treat four trays as two stacks when you shift and turn. If there are three trays, shift bottom tray to top, top to middle, middle to bottom.

Prunes that are overheated near the end of drying will scorch easily. If prunes around the tray edges dry first, remove them.

When dry, prunes should have a pliable and leathery texture. Underdried prunes will seem too soft. Overdried ones will be hard and have a dull cast.

If you plan to do much home drying of prunes or nuts, you might want to build a small dryer. Oregon Extension Bulletin 818 contains plans for a home-built food dehydrator.

## Drying filberts and walnuts

Especially with walnuts, the drying process should start within 24 hours of harvest. Nuts are usually dried in the shell, but a considerable amount of drying time can be saved and less heat will be needed if the nuts are shelled before drying. Optimum drying temperatures are 95 to 105° F. Air circulation is as much or more important than temperature, so it is desirable to dry the nuts on a screen-bottomed tray, in an onion sack, or in any other container that will permit free air passage. Small lots can be dried in the warm air stream above a furnace or radiator as long as the temperature does not exceed 105° F. This may require three to four days drying time for walnuts and about two days for filberts. Nuts can be dried at lower temperatures, but more time is required. If the temperature exceeds 110° F, nut quality will be impaired.

Walnuts are dry enough for storage when bending the divider between the nut halves causes it to break with a snap. If the divider is still rubbery, the nut is not dry enough.

Filbert kernels are firm at the start and become spongy during the drying process; as they approach dryness, they become firm again. The internal color gradually changes from white to a creamy color, starting at the outside. When the color change reaches the center of the kernel, the nut is dry. Careful checking of both of these indices will help you to determine when the nuts are dry enough.

Bleaching nuts: Filberts usually are not bleached at home, as this process requires a closed chamber in which sulfur can be burned.

Often walnuts are bleached to improve the appearance of their shells. Walnuts should be thoroughly dried before bleaching. Bleach will neither remove dirt that has been dried on nor change the so-called red nut shell caused by premature harvest.

Use regular household laundry liquid bleaches. To make up the proper solution using chlorine bleach of different strengths, refer to the following table for the exact amount of the product to use. Most chlorine bleaches on the market are labeled with the exact amount of chlorine available.

| Chlorine content of bleaching agent | Amount to use for each gallon of lukewarm water |
|-------------------------------------|---|
| Percent                             | Fluid oz.                                       |
| 5                                   | 28  |
| 10                                  | 14  |
| 12                                  | 12  |
| 14                                  | 10  |
| 16                                  | 9   |
| 18                                  | 8   |
| 20                                  | 7   |
|                                     |   |

Place the nuts in bleach solution and stir for three to four minutes. If bleach action is too slow, vinegar can be added at the rate of one tablespoon per gallon of bleach solution to speed up chemical action. When bleaching time is over, remove the nuts, drain, and dry. Bleach action will continue at a reduced rate for a day or two. Solution can be re-used for several batches, the exact number depending on the amount of bleaching action necessary on each batch. If there are no openings between the shell halves for the bleach to enter, no harmful effects will result.

### Storage

Prunes. Store dried prunes in closed plastic bags to prevent loss or absorption of moisture. Inspect them periodically for mold. If mold starts to grow, sterilize the prunes with steam and repack. Temperature of the fruit during steaming should reach 170° F for proper sterilization. Fruit which has been dried to a sufficiently low moisture content will not mold.

Nuts. If left in the shell, nuts should be placed in a cool place in a closed container. Otherwise, the Indianmeal moth will cause walnuts to become wormy in one season. Shelled nuts may be kept in the home freezer either in plastic bags or fruit jars.