

# Shiitake Mushrooms

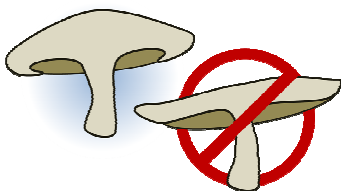
## HARVESTING & PROCESSING



**S**hiitake mushrooms can be processed in a variety of ways. The fresh mushrooms retain the best flavor and texture however, they can only be stored for a short period of time. By processing the mushrooms, either through drying, bottling, canning, pickling and freezing, you can make good use of extra mushrooms to extend your year-round sales.

### HARVESTING

Shiitakes are more marketable when the cap is still curled and somewhat closed. Wide, flattened mushroom caps indicate over-maturity and will not be as valuable as the fresher-looking forms.



Harvest mushroom with a sharp knife or by twisting the stem so it breaks free. Gently brush off any dirt or debris, without washing the mushroom under water, and place each mushroom into an open basket, paper sack, or other vented container.

### STORING FRESH SHIITAKE MUSHROOMS

For a high-quality mushroom, it is important to get the harvested mushrooms into refrigerated storage as soon as possible, certainly within one hour of picking. These mushrooms will remain fresh and marketable for several weeks if kept in a cool (41°F or 5°C), dry, and dark place. Do not seal them in an airtight container.

### FREEZING SHIITAKE MUSHROOMS

Mushrooms need to be treated to stop maturation before freezing, usually by steaming. Soak mushrooms in a mixture containing 1 teaspoon lemon juice or 1.5 teaspoons citric acid per pint of water for 5 minutes to reduce darkening. Steam whole mushrooms 5 minutes, buttons or quarters 3.5 minutes and slices 3 minutes. Cool promptly, drain and package, leaving 1/2-inch headspace. Place small packages in the freezer for fast cooling.

### MORE INFORMATION

For more information about the shiitake mushroom production and processing, visit the Northern Forest Mushroom Growers Network at <http://mushrooms.cals.cornell.edu/>.

### DIFFERENT WAYS TO DRY

*Drying can preserve large quantities of mushrooms up to a year. The dried mushroom has a moisture content of approximately 13% and weighs about 1/7 the original fresh weight.*

#### PREPARATION FOR DRYING

Separate mushrooms by size and grade. Remove stems completely, as they harden when they dry. Place mushrooms on trays with gills down. Avoid allowing the mushrooms to touch each other. You can also slice them vertically (tangentially) into approx. 1/4 inch pieces. They dry faster, rehydrate faster, and look more appealing when dried.

#### SUN DRYING / OUTDOOR DRYING

**Advantages:** Low cost, simple, increased flavor and vitamin D content in mushroom

**Disadvantages:** Variable quality product, depends on weather, insects damage

**Method:** Spread the shiitake on shelves so that the gills are directly exposed to sunlight. You can also string up them using thread or fishing line and then hang and dry them in a breezy, dry spot. Length of time required will vary depending on the weather conditions. Individual mushrooms dry at different rates depending on their exposure and size.

#### DEHYDRATOR / HOME FOOD DRYER

**Advantages:** Simple process, quick drying time

**Disadvantages:** Energy intensive, only handles small quantities (2-3 lbs fresh shiitakes)

**Method:** Follow the instructions that come with the dehydrator. You have to ensure that you dehydrate your mushrooms until they are light and dry, but not brittle. They should be slightly flexible.

#### OVEN / THERMAL DRYING

**Advantages:** Best quality, quick

**Disadvantages:** Requires special equipment and a fuel source

**Method:** Arrange the mushrooms on shelves with the gills facing upwards. The drying chamber should be maintained at 40-50°C for 24 hours. The mushrooms should then be cooled for one hour before being stored long-term. If drying the mushrooms in your oven, set the temperature to 200°F (95°C) and keep the door ajar.

#### STORAGE OF DRIED MUSHROOMS

Once dried, the shiitake should be put into polyethylene bags, sealed, and kept in a dry, cool, dark place.

