Harvesting, Handling, and Storing Nuts from the Home Orchard

Hazelnuts, Walnuts, and Chestnuts

J. Olsen and C. Raab

Harvesting

Gather hazelnuts after they have fallen from the tree. You can shake branches lightly to encourage nuts to fall. Gather all fallen nuts before the onset of autumn rains if possible.

Walnuts are mature as soon as the husk will cut free from the nut, but they usually are not harvested until rains have cracked the husk to the point of letting the nut drop to the ground. This usually happens in October. You can shake the limbs of the tree to loosen the nuts, so long as the bark is not damaged. A long plastic pole with a hook on the end can be used to grab a limb and shake it.

Mature walnuts lose quality rapidly after they have fallen, so gather fallen nuts frequently 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. The ripe hull contains compounds that stain and sometimes irritate sensitive skin, so use gloves when handling the hulls.

Chestnuts are mature when they fall naturally from the tree. The nuts ripen in September and October over a period of 2 to 4 weeks, with some nuts taking as long as the entire crop to mature. Chestnuts gain half of their final weight in the final 2 weeks before falling; therefore, do not knock the nuts from the tree. Gather the fallen nuts every few days in order to preserve quality.

The hull or bur often splits open and releases the nut inside. If the bur has not split, the nut inside usually is a blank. Use leather gloves when handling the burs.

Handling after harvest

Walnuts and hazelnuts: Walnuts and hazelnuts should be dried before eating or storage. Begin the drying process within 24 hours of harvest, especially in the case of walnuts. Nuts usually are dried in the shell, but you can save a considerable amount of drying time and use less heat if you shell the nuts before drying.

Air circulation is at least as important as temperature during drying. Lay the nuts on a screen-bottomed tray, in an onion sack, or in any other container that will permit free air passage. Optimum drying temperatures are 95 to 105°F. If the temperature exceeds 110°F, nut quality will be poorer.

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. Walnuts may require 3 to 4 days drying time and hazelnuts about 2 to 3 days. Nuts can be dried at lower temperatures, but more time is required.

Drying in a conventional oven is difficult because the lowest temperature setting is around 200°F and air circulation over the nuts is limited. Opening the oven door to lower the temperature is not energy-efficient.

Walnuts are dry enough for storage when the divider between the nut halves breaks with a snap. If the divider is still rubbery, the nut is not dry enough.

Hazelnut kernels are firm at first 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.

Caution! Know your chestnuts

Take care not to confuse horse-chestnuts with edible chestnuts. Horse-chestnuts are poisonous. Horse-chestnuts are covered with a leathery, sometimes spiny capsule, which contains two to three glossy seeds or nuts. The leaves originate from the same point and are divided like a fan into 5 to 7 large toothed leaflets, which are 4 to 10 inches long. Edible chestnuts have a husk that is covered with sharp, stiff bristles. The husk splits to reveal two or three nuts. The leaves are 3 to 7 inches long, with sharply toothed edges. The origins of the leaves alternate along the stem.

Edible chestnut

Horse-chestnut

Do not eat!

Jeff Olsen, Extension horticulturist, Yamhill County, and Carolyn Raab, Extension foods and nutrition specialist; Oregon State University.
When the color reaches the center of the kernel, the nut is dry. Carefully check both the color and texture to determine when the nuts are dry enough.

**Chestnuts:** Chestnuts are a fairly perishable product, unlike hazelnuts and walnuts. They are a high-starch, low-fat food more like an apple or potato than a tree nut. Clean and refrigerate soon after harvest to prevent problems with mold and decay.

For short-term storage (no more than 3 months), refrigerate or freeze fresh chestnuts. To prepare chestnuts for long-term storage, dry them following the instructions above for walnuts and hazelnuts. Nuts will be rock-hard when dry.

Some people suggest “curing” chestnuts after harvest to make them sweeter. This involves leaving them for a few days at room temperature, which speeds the conversion of the starch in the nut to sugar. This same conversion will take place slowly under the lower temperatures of refrigeration, however, so curing is not necessary for nuts that will be stored in the refrigerator.

**Storing**

Whether storing dried nuts (walnuts, hazelnuts, or chestnuts) or fresh chestnuts, the best choice is to store them in a freezer or refrigerator.

**Refrigeration or freezing:** Nuts can be refrigerated or frozen in the shell or as kernels. Store shelled nuts in plastic freezer bags or jars to minimize absorption of external flavors and moisture.

Dried hazelnuts, walnuts, and chestnuts will maintain optimal quality for up to a year in the refrigerator. If frozen at 0°F, storage can extend to 2 years.

Fresh chestnuts in the shell will last 1 month in the refrigerator. Frozen fresh chestnuts will last 2 to 3 months at 32°F and 1 year at 0°F.

**Cool storage:** If refrigeration or freezing is not possible, store hazelnuts and walnuts in as cool a room as possible. The air temperature should be 55°F or lower, and the air should be as dry as possible. Nuts stored in these conditions will not maintain quality as long as those kept in a refrigerator or freezer.

The greatest losses in storage come from rancidity, mold, and Indian meal moth infestations. If leaving hazelnuts and walnuts in the shell, keep them in a closed container. Otherwise, the Indian meal moth will cause nuts to become wormy in one season.

Storing chestnuts outside of a freezer or refrigerator is not practical. They will lose moisture in the kernel and usually mold within 2 weeks.

**Canning:** To store walnuts and hazelnuts in jars on the shelf, you must heat them first and then process them.

To heat, spread dry meats in shallow layers in a roasting pan, place in a slow oven (250°F) until the nuts are dry, but not brown. Watch the nuts carefully and stir them from time to time so they do not burn. Pack hot nuts into half-pint or pint canning jars, leaving 0.5 inch space at the top of the jar. Wipe the jar rims, add lids, and process in a boiling water canner or pressure canner following the recommendations below.

**Boiling water canner:** Place the filled jars in a boiling water canner with 1 to 2 inches below the tops of the jars (to keep the moisture out). Bring water back to a boil and process for 30 minutes.

**Pressure canner:** Place filled jars in 1 to 2 inches of hot water. Process for 10 minutes at 6 pounds pressure in a dial-gauge canner or 5 pounds pressure in a weighted-gauge canner.

**Preparing nuts for consumption**

**Hazelnuts and walnuts:** Roast dried hazelnuts to bring out their flavor. Roast in a shallow pan in the oven at 275°F for about 20 to 30 minutes until the skins crack. The roasted skins can be removed easily by rubbing the warm nuts with a rough cloth. Roasted nuts will not store as long as unroasted nuts, so consume them within a few months of roasting.

**Chestnuts:** Undried chestnut can be prepared by boiling or roasting. To boil, place the chestnuts in a large saucepan and cover them with water. Bring the water to a boil, reduce the heat, and let the nuts simmer for 30 minutes. Drain the water and let the chestnuts cool to the touch. The shell and skin should come off easily after this treatment.

Dried chestnuts also can be roasted to bring out their flavors. First, make a cut in the outer shell (either a slice or an X cut) to expose the nuts. Place the chestnuts in a pan at 375°F to 400°F for 20 to 25 minutes or roast them on the stove over moderate heat in a wok or large fry pan. If roasting on the stove, stir frequently. The shells and skin can be removed easily following roasting.

Dried chestnuts are rock-hard. They can be ground into flour with a flour mill (grain mill) or rehydrated by soaking in water.

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