Game meat can provide a nutritious, tasty, and sometimes less expensive alternative to the traditional meat products sold in grocery stores. Nevertheless, you need to handle and store game meat properly to keep it from spoiling or allowing the growth of disease-causing organisms (pathogens) that can cause foodborne illness.

Game meat is defined as the meat of any animal that is hunted for food or sport instead of being raised on a farm. Examples are deer, elk, wild hogs, and game birds such as quail, pheasants, or turkeys.

To keep your game meat safe to eat, field dress the carcass with the right equipment and under the proper conditions. Although the techniques for field dressing vary by the type of game animal, some important basic tools are common to all:

- Rubber gloves
- Clean, sanitary knives
- Coolers that are sanitized, insulated, and large enough to contain both meat and ice
- Ice from potable water
- A plan for transporting the carcass from the field into an insulated cooler or another cold-storage unit as quickly as possible

To enable the meat to cool more quickly, trim large muscle cuts into small pieces, and package them individually before moving them to a refrigerator or freezer. Do not package, chill, or freeze large cuts of meat because they require more energy and time to cool and freeze completely than do smaller cuts. Freezing smaller cuts also helps maintain overall meat quality longer by minimizing exposure to air and re-sealing, which can result in off-odors.

Maximize the airflow in the cooler to make sure that the meat cools adequately. After the carcass has been properly field dressed, cut, and cooled to below 40°F, it is ready to be packaged (Fig. 1) for storage in the freezer.

Freezing is the easiest way to preserve wild game. Freeze meat at 0°F or below as quickly as possible to reduce or inactivate pathogen growth and other chemical changes that can affect its quality. Done properly, freezing causes little to no loss in the nutrient content of wild game meats.

**Freezing game meat**

By following basic guidelines for freezing, you can help ensure a safe, high-quality product.

Use packaging material such as butcher/freezer paper, flexible freezer bags, or a vacuum sealer and compatible packaging for small cuts of meat. All of these materials work well if used correctly.

If you use a vacuum sealer, follow the manufacturer recommendations for selection of packaging materials and vacuum conditions. Do not try to vacuum-seal using films or packaging materials not recommended by device manufacturer, because the heat sealer may
not be rated to melt the plastic enough to create a strong, airtight seal.

Vacuum-sealing meat also helps prevent potential freezer burn and spoilage. When using freezer bags, press each package to expel as much air as possible before closing it.

For paper packages, follow the steps below and label them with the date and contents.

Preserving meat quality

Two common problems to avoid in meat freezing are rancidity and freezer burn.

**Rancidity** is a chemical change that can produce an off-flavor when fat from the meat is exposed to air for too long. To control rancidity, use packaging materials that prevent air from reaching the meat, and remove as much air as possible from the packages before freezing. Vacuum packaging also can help prevent rancidity.

**Freezer burn** is a discolored, grainy spot where the meat appears to be dry and tough. It is caused by excess moisture loss that results in formation of ice crystals. Although freezer burns can reduce the quality of the meat by causing off flavors, it does not cause illness.

To prevent freezer burn, package the meat properly and cool it quickly.

---

**Step 1**
Wrap the meat in plastic cling wrap.

**Step 2**
Place the wrapped meat in the center of freezer paper.

**Step 3**
Bring the opposite sides of the paper together and fold down the edges about 1 inch deep.

**Step 4**
While folding down the edges, push out the air.

**Step 5**
Fold the ends tightly to form a V.

**Step 6**
Flip the package so that the seam is down. Fold the ends over each other.

**Step 7**
Seal the edges with freezer tape.

**Step 8**
Label the package with its contents and the date.

---

Figure 1. Steps for packaging meat in paper for freezing
Keep your freezer in a cool, dry, ventilated place. Never put it in direct sun or next to a stove or water heater, which makes it difficult for the freezer to remain at 0°F or lower.

Also, be sure the freezer sits level, and avoid over-loading it. Overloading can slow down the freezing rate and could reduce the meat quality.

Instead of stacking the packages in one area of the freezer, spread them out to allow air circulate among the packages more easily, which helps the product freezer faster.

For best quality, the U.S. Department of Agriculture recommends consuming frozen wild game within 8 months to a year. If you store meats in the refrigerator, keep them at 40°F or below, and eat or freeze them within 2 or 3 days. Use an appliance thermometer to make sure that your refrigerator stays at the proper temperatures.

To keep the meats from contaminating other foods in the refrigerator, store them separately from the other foods.

For more information


Hunting access information: Local Texas Parks and Wildlife biologist (http://tpwd.texas.gov/landwater/land/technical_guidance/biologists/) or county Extension agent at (https://agrilifepeople.tamu.edu/extensionLists/counties)

Acknowledgment

The photographs were taken at Bernhard’s Meat Processing of Kerrville, Texas.