

Oh Deer!



Preserving the Fall Harvest

Kathryn Feuerhelm

Associate Lecturer, Family Living Educator

UW-Extension, Pierce County

So you got a deer...



For many people in Wisconsin, fall means deer season, this can be bow season or gun-deer season. The University of Wisconsin Extension has several resources to help you safely handle your harvest of wild game, especially deer.

Beef, pork, lamb, poultry and fish can all be safely canned at home with good results, provided you start with properly handled meat and follow the processing guidelines and recipe.

Safely Prepare the Meat for Preservation

- ❧ Fall weather can be variable, from mild to freezing temperatures, bare ground to snow.
- ❧ Some good resources for handling your deer after the kill, out in the field:

http://www.foodsafety.wisc.edu/assets/pdf_Files/So_you_got_a_deer-G1598.pdf

http://www.foodsafety.wisc.edu/assets/pdf_Files/Pocket_Guide.pdf

Safely Prepare the Meat for Preparation

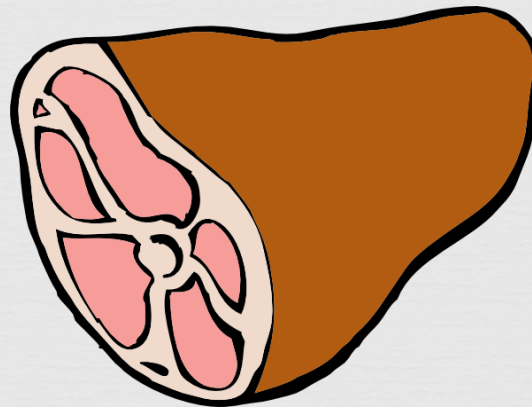
- ❧ Unsafe handling can lead to contamination with food poisoning bacteria such as Salmonella, Listeria, and E.Coli.
- ❧ CWD (Chronic Wasting Disease) is a neurological disease of deer and elk. CWD was first noted in deer in southern Wisconsin during the 2001 hunting season.
- ❧ For your latest venison precautions. Contact your local office of the Wisconsin DNR, or visit their website at www.dnr.state.wi.us/org

Methods of Preservation



Venison adds variety and flavor to the fall and winter table. When handled properly it can make an excellent meat.

It can be *frozen* as meat cuts or sausage. It can also be preserved by *canning, curing, or drying*.



Freezing Venison



- ❧ Select only high quality, fresh meats to freeze.
- ❧ Depending on individual preferences for the number of servings and cooking methods, the meat can be cut into roasts, rolled roasts, steaks, chops, stew meat, ground meat, etc., before freezing.
- ❧ Package the meat in freezer paper or wrap. Freezer bags or containers can be used for ground beef, stew beef or other meats frozen in small portions.
- ❧ Be sure to thoroughly label the meat with contents and date.

Drying Venison for Flavor and Safety

- ❧ Homemade jerky can be a flavorful, easy-to-make snack. But as with any meat product, food safety must be considered so that your product is both tasty and healthy.
- ❧ In a dehydrator, dry at 145°F, or higher. Do not use a dehydrator that lacks temperature control or a fan to aid in air circulation. Dry at 145-155°F for 6 to 8 hours. The only home-style dehydrators known to produce safe jerky are the Garden Master Pro home dehydrator from Nesco and the Excalibur home dehydrator from Excalibur.
- ❧ Jerky Recipe No. 1
- ❧ For 2 lbs. of lean beef or venison strips**:
- ❧ Mix together to prepare brine:
 - ❧ 1/2 gallon water
 - ❧ 1/4 cup + 2 Tbsp. salt*
 - ❧ 1/4 cup sugar
 - ❧ 3 Tbsp. liquid smoke
 - ❧ 1/2 tsp. black pepper
- ❧ Cut thin meat strips, 1/4-inch thick. Freezing the meat slightly before slicing will make this process easier, or ask your local butcher to slice the meat for you. Place meat strips in brine in a refrigerator overnight. Pour off brine and soak in cold tap water for 1 hour. Drain and pat dry. *Morton's Tender Quick Salt (containing nitrate and nitrite) may be used instead of regular salt. This curing agent will help the meat retain a deep red color even when dried. If using regular salt, expect the meat to be a darker brown-black color when dried.

Curing and Smoking



- ❧ Curing is defined as adding salt, salt, brine, nitrites, and sometimes sugar, spices, and other ingredients to a meat, poultry, or fish product.
- ❧ The flavor of cured meats is thought to be a composite of the flavors of the curing agents and those developed by bacterial and enzymatic action.
- ❧ Smoking is cooking food indirectly in the presence of a fire.
- ❧ Smoking is much slower than grilling, so less tender meats benefit from this method, and a natural smoke flavoring permeates the meat.

Curing and Smoking



❧ There is no substitute for keeping the tables, utensils and ingredients clean and free from dirt and contamination. Use plenty of hot water and soap before and after processing sausages. Always keep your hands clean. These measures prevent spoilage and foodborne illness.

❧ Different sausages have different amounts of fat. Avoid making the formula too lean as the sausage will be too dry and hard. Fresh pork sausage contains 30 to 45 percent fat. Smoked or roasted sausage contains 20 to 30 percent fat. Formulate the fat content just as you would the other ingredients in a sausage.

Curing and Smoking



Venison or Game Sausage

25 lbs. lean venison or trimmings

25 lbs. fat pork (jowls or fresh bellies)

(2 cups) 1 lb. salt

(15 Tbs.) 3 oz. black pepper

(5 Tbs.) 1 oz. ginger

(8 Tbs.) 1 oz. rubbed sage

(5 Tbs.) 1 oz. crushed red pepper (optional)

(5 Tbs.) 1 oz. ground red pepper (optional)

Cut lean venison and pork into small pieces, add spices and mix. Grind twice through 1/8-inch or 3/16-inch plate. Sausage may be stuffed, pattied, smoked or used in bulk form.

This document was extracted from "Sausage and Smoked Meat Formulation and Processing", 1982. Bulletin 865, Cooperative Extension Service, The University of Georgia, Athens. By A. Estes Reynolds, Jr. and George A. Schuler, Extension Food Scientists.

Canning Venison Safely



- ❧ Be sure to start with high quality ingredients.
- ❧ Know that your venison has been handled under sanitary conditions.
- ❧ Careless handling can result in spoilage or food poisoning such as Salmonella, Listeria and E.Coli.
- ❧ Familiarize yourself with a pressure canner. Meats and wild game are low-acid foods and must be processed in a pressure canner.
- ❧ To learn more about using a pressure canner:
- ❧ http://nchfp.uga.edu/publications/uga/using_press_canners.html



Equipment You Will Need

- ❧ Pressure canner with lid
- ❧ Standard home canning jars
- ❧ Standard two-piece vacuum-seal canning lids
- ❧ Sharp knives
- ❧ Cutting board
- ❧ Large kettle or roasting pan
- ❧ Pot holders, wire rack, and labeling supplies.
- ❧ Lid and jar lifters are nice to have but not necessary.



Equipment & Preparation



- ❧ Wash all equipment in warm soapy water, rinse, then drain. Jars should be kept hot until filled.
- ❧ When done working with a piece of equipment, it should be washed, rinsed, then sanitized with a dilute bleach solution.
- ❧ (1T bleach in 1 gallon water)



Hot Pack Venison Cubes



- ❧ Cut meat into cubes, chunks or strips.
- ❧ Precook to 135 degrees by roasting, stewing or browning in a small amount of fat.
- ❧ Add 1 tsp per quart jar (as desired)
- ❧ Loosely fill clean, hot jars with meat.
- ❧ Cover meat with boiling broth, drippings, tomato juice or water.
- ❧ Leave 1" headspace.
- ❧ Remove air bubbles, wipe jar rims clean, and adjust lids.

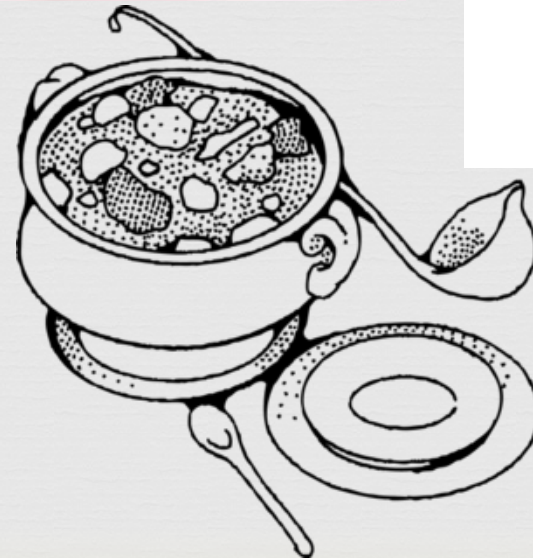
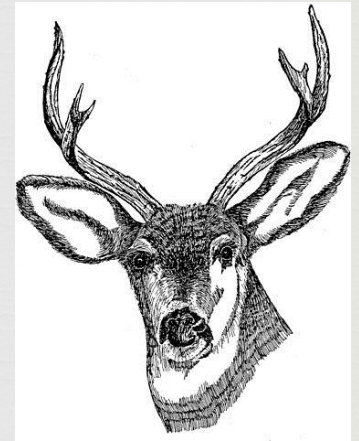
Process in a pressure canner at recommended pressure.

75 minutes for quarts, 90 minutes for quarts.

Raw Pack Venison Cubes



- ❧ Fill clean, hot jars loosely with raw meat pieces, leaving 1-inch headspace. Do not add liquid.
- ❧ Remove air bubbles, wipe jar rims clean, and adjust lids.



Process in a pressure canner at recommended pressure. 75 minutes for quarts, 90 minutes for quarts.

Processing Steps



1. Put 2-3" water in canner and heat to simmer. Use enough water that canner does not boil dry.

2. Set filled jars on a rack in the canner. Leave room for steam to flow freely around jars.

3. Fasten canner cover securely and heat until you see a funnel of steam escape from the open vent pipe. Do this for a full 10 minutes!

4. Place pressure regulator on the vent pipe. Let pressure rise to correct processing pressure, then start to count processing time.

5. When processing time is complete, turn off the heat. Remove canner from burner and let pressure drop on its own.

6. When pressure reaches zero, wait 2-3 minutes and carefully remove the cover.

Finishing Up



- ❧ Remove jars from canner, place them on a protected surface (rack or towel) and cool at room temperature.
- ❧ When completely cool, check seals. (Often at 2-4 hours)
- ❧ Unsealed jars can be used immediately, refrigerated for 3 days, or frozen for 6 months.
- ❧ Remove metal screw bands. Wipe jars clean, label and date. For best quality, use within 1 year. (Safe for many years, but quality begins to suffer)
- ❧ Store jars in a cool, dry place. Discard any jars that become damaged or become unsealed.

Storing of Canned Products

- ❧ Sulfur compounds in meat often cause metal lids to darken. This does not affect meat safety.
- ❧ Liquid lost during processing will not cause meat to spoil. Do not try to open jars to replace liquid.
- ❧ Carefully inspect jars before use for spoilage. If any of the following are present, discard:
 - ❧ Unsealed or bulging lids
 - ❧ Liquid spurts when the jar is opened
 - ❧ Contents appear foamy or have an off-odor.

Final Notes and Reminders



- ❧ UW Extension has resources that are free and readily available.
- ❧ Only use tested recipes for canning. If other recipes are desired, freeze the foods.
- ❧ Safe and happy preserving! Have fun!
- ❧ Resources:
 - ❧ <http://www.uwex.edu/>
 - ❧ http://nchfp.uga.edu/publications/uga/using_press_canners.html
 - ❧ Canning Meat, Wild Game, Poultry & Fish Safely. Barbara H. Ingham and Steven C. Ingham (UW-Extension)
 - ❧ Pierce County Extension Office (715) 273-6663