Recommendations

Hunter-taken deer need to be properly handled to ensure the safety of the venison. The meat can be used to feed the family of the hunter but cannot be sold or donated. Deer carcasses can be taken to processors for cutting or making processed meat products. Processors can refuse to take a carcass that has too much contamination or was not handled properly. One should ask if the processor has a venison variance from the Michigan Department of Agriculture and if he/she is properly licensed.

Food Safety and Storage

- Use care when field-dressing the deer. Contaminating the carcass with fecal material from the gutting process or environmental contaminants like dirt are the most common errors that hunters make.
- Cool the carcass to 40 degrees F or below as soon as possible. If the outside temperature is warm, pack the internal cavity of the carcass with ice as soon as possible if it cannot be stored in a refrigerator.
- Raw meat should be stored in a bowl or on a platter in the bottom of the refrigerator. Your refrigerator temperature should be at 40 degrees F or lower.
- Always wash cutting boards, utensils and surfaces that have touched raw meat with hot, soapy water and then sanitize with 1 teaspoon of regular bleach in 1 quart of warm water.
- Store fresh raw venison in the refrigerator for no longer than three to five days (USDA Food Safety and Inspection Service, 2011, May).
- Use cooked venison that has been safely refrigerated within three to four days. (USDA Food Safety and Inspection Service, 2011, May).

Thawing:
Always thaw meats in the refrigerator, microwave or cold water. Never thaw meat on the counter.
- It is best to allow plenty of time for slow, safe thawing in the refrigerator. Small pieces of meat should defrost within one to two days. Large items will take longer — approximately one day for every 5 pounds of weight.
• After defrosting meat in the microwave, cook it immediately after thawing — some areas may become warm and even begin to cook during microwaving.

• For fast thawing, place meat in a leakproof plastic bag and immerse it in cold water. Change the water every 30 minutes to be sure it stays cold. After thawing, cook the meat immediately.

• Venison can be cooked from the frozen state, but it may take 1.5 times longer than normal.

**Marinating:**
Always marinate meat in the refrigerator. If some of the marinade is to be used as a sauce on the cooked food, set some aside before adding the raw meat. Do not save marinade for future use, and discard marinade after cooking the meat.

**Cooking:**
Research indicates that color and texture are not safe ways of determining the doneness of venison. Use a food thermometer to make sure the meat reaches the correct temperature. The USDA (Game from Farm to Table) recommends cooking venison products to a minimum internal temperature of 160 degrees F.

Most wild game is less tender than domestically raised meat. Cookery methods involving low, moist heat and long time periods are recommended. Most cuts should be cooked with some type of liquid, as in braising or stewing.

### How to Preserve

#### Canning

**Strips, Cubes or Chunks of Venison**

Venison must be canned in a pressure canner for a safe food product.

Choose quality chilled venison. Remove excess fat. Soak strong-flavored wild meats for 1 hour in brine water (1 tablespoon of salt per quart). Rinse. Remove large bones.

**Hot pack** — Precook meat until rare by roasting, stewing or browning in a small amount of fat. Add 1 teaspoon of salt per quart to the jar, if desired. Fill jars with pieces and add boiling broth, meat drippings, water or tomato juice (especially with wild game), leaving 1-inch headspace.

**Raw pack** — Add 2 teaspoons of salt per quart to the jar, if desired. Fill jars with raw meat pieces, leaving 1-inch headspace. Do not add liquid.

**Table 1. Recommended processing time for strips, cubes or chunks of venison in a dial-gauge pressure canner.**

<table>
<thead>
<tr>
<th>Style of Pack</th>
<th>Jar Size</th>
<th>Process Time (min)</th>
<th>Canner Pressure (PSI) in pounds at altitudes of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 - 2,000 ft (lb)</td>
</tr>
<tr>
<td>Hot and Raw</td>
<td>Pints</td>
<td>75</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Quarts</td>
<td>90</td>
<td>11</td>
</tr>
</tbody>
</table>

**Table 2. Recommended processing time for strips, cubes or chunks of venison in a weighted-gauge pressure canner.**

<table>
<thead>
<tr>
<th>Style of Pack</th>
<th>Jar Size</th>
<th>Process Time (min)</th>
<th>Canner Pressure (PSI) in pounds at altitudes of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 - 1,000 ft (lb)</td>
</tr>
<tr>
<td>Hot and Raw</td>
<td>Pints</td>
<td>75</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Quarts</td>
<td>90</td>
<td>10</td>
</tr>
</tbody>
</table>

Information on canning was adapted from the National Center for Home Food Preservation website at [http://nchfp.uga.edu/how/can_05/strips_cubes_chunks.html#TBL2](http://nchfp.uga.edu/how/can_05/strips_cubes_chunks.html#TBL2). The National Center for Home Food Preservation adapted their information from the “Complete Guide to Home Canning,” Agriculture Information Bulletin No. 539, USDA, revised 2009.
Adjust lids and process following the recommendations in Table 1 or Table 2 according to the canning method used. Let jars stand undisturbed for 24 hours, remove rings, wash jars, label, date and store. If a jar does not seal, reprocess within 24 hours using the same processing time. Store between 50 degrees and 70 degrees F in a clean, cool, dark, dry place.

Freezing
When cutting the meat, trim fat and clean cuts so they are ready for end use. Fat will go rancid quickly and often has a very undesirable “gamey” flavor.

Package the meat in meal-size portions. Place one layer of freezer paper or wrap between slices or patties of meat so they are easy to separate and to help speed thawing. Wrap the meat in freezer paper, freezer bags or aluminum foil. Seal the packaging well to keep air out and moisture in the package. Freezer containers can also be used for meat frozen in small portions.

Freeze quickly at 0 degrees F or below. Although frozen meat is safe as long as it stays frozen, meat quality and flavor will deteriorate in the freezer over time. Store ground venison in a freezer at 0 degrees F or colder for no longer than three months for best quality. Venison roasts and steaks can be stored six to nine months at this temperature. Proper dressing, handling, packaging, quick freezing and freezer temperatures at or below 0 degrees F will help maintain meat quality for the longest period of time.

Seal, label, date and freeze the meat packages. For best quality, preserve only the amount of venison that you and your family can consume in one year.

References

Resources
Michigan Department of Natural Resources. How to field-dress a white-tailed deer: http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/deer_field-dressing.pdf
Pennsylvania State University. (2010). Field dressing deer pocket guide: http://pubs.cas.psu.edu/freepubs/pdfs/uk100.pdf
University of Georgia Cooperative Extension. (2006). So easy to preserve (5th ed.). Athens, GA.: http://setp.uga.edu/

Find out more about Michigan Fresh at msue.anr.msu.edu/program/info/mi_fresh.