Handling venison safely

Venison is a nutritious game meat that can be served in a variety of ways. It can be ground or made into roasts or steaks and is also used as an ingredient in sausages. No matter how it is served, it is essential to handle venison properly as soon as the deer is down to ensure the safety and quality of the final product.

“The key points when handling venison are: 1) keep it clean; 2) keep it dry; and 3) keep it cold,” says Barbara Ingham, food science specialist with the University of Wisconsin-Extension. These tasks aren’t always easy to accomplish, but Ingham offers some tips.

You do not need to further ‘bleed’ a harvested deer, says Ingham. Remove the viscera from the body cavity as soon as possible, especially if the deer was hit in the gut area. This will help cool the carcass more quickly and limit bacterial spreading and growth.

Take your time. Be careful not to cut into the intestines, stomach or bladder while removing organs since these commonly contain bacteria (some potentially dangerous). This is also a good time to cut around the entrance and exit holes to remove any dirty or potentially contaminated material.

If intestinal contents do happen to spill into the body cavity or the cavity is very bloody, take special care to minimize the spread of potential contamination. You might carefully use a clean cloth or towel to clean up any spill.

Rinsing out the cavity with cold water soon after the deer has been killed can help by removing any bacteria that is a part of the spilled material. Spraying the internal cavity of the deer with a simple 50/50 solution of water and vinegar is a great option to help destroy some of the bacteria that may be present.

In most cases, leaving the hide on the deer keeps the meat surface clean (prevents bacterial contamination) and prevents the outside of the carcass from drying out.

Once you have removed the deer’s internal organs, you should focus on cooling the carcass as soon as possible. “This will slow bacterial growth, improving food safety and improve the quality of your venison meat,” says Ingham.

Although this can sometimes be difficult, cooling the carcass quickly is critical to limit bacterial growth, as well as improving the eating quality of your venison.

The cooling process should begin within a couple hours of harvesting the deer. Propping open the body cavity, keeping the carcass in the shade and exposing it to air movement are all ways to improve cooling. By suspending the deer from an overhead object, you can greatly speed up the cooling process since the air reaching the carcass will carry away any heat and provide a cooling effect. Be careful to not allow the carcass to freeze within the first six hours after harvest since this can result in the meat becoming tough.

If you are having the deer processed at a meat plant, arrive there as soon as possible to place the carcass under controlled cold temperature conditions.
‘Aging’ refers to holding carcasses at 35-45°F to allow natural enzymes to tenderize the meat. Tenderizing will not occur if the carcass is frozen. It can take from 7 to 10 days of aging to result in a noticeable eating difference in your venison steaks. If you choose to age your venison, you must weigh the benefits of aging against the drying out of exposed surfaces (dehydration) and possible bacterial spoilage. In warm weather, it is not advised to age venison, since bacteria can grow quickly and to dangerous levels.

Don't use black garbage bags for storing venison trimmings destined for sausage making. These bags are often made from recycled plastics and are not intended, or approved, for food use. Instead, use clear or white food-grade plastic bags, or rigid plastic containers.

The Wisconsin Department of Natural Resources and the Department of Health Services have issued health advisories related to lead in venison. Deer harvested with lead bullets have been shown to result in greater occurrences of bullet fragmentation which can spread great distances from the bullet wound, leaving tiny pieces and fragments of the bullet in the tissues of the deer. If not detected during processing, these fragments could remain in the steaks and roasts. This hazard can potentially be even greater hazard in ground venison. Children under the age of 6 and pregnant women are at the greatest risk from lead exposure.

To provide your family with safe, high-quality venison, Ingham recommends some food safety precautions for every hunter this year.

To help protect against lead contamination:

--Consider alternative expanding, non-lead ammunition such as cooper or other high-weight retention lead bullets, such as bonded bullets.

--Practice good hunting skills, aiming for the vitals behind the shoulder, or the neck or the head. Do not shoot a running deer.

--Avoid consuming internal organs such as the heart which may contain extra lead from heart-lung shots.

--Take care to avoid processing any meat with excessive shot damage. Trim a generous distance away from the wound channel and discard any meat that is bruised, discolored or contains hair, dirt, bone fragments or grass.

If you have questions or concerns related to venison, please contact your county UW-Extension office. The following UW-Extension publications are also available for more information: So You Got a Deer (G1598) and Canning Meat, Wild Game, Poultry and Fish Safely (B3345). These publications can be viewed and ordered from Cooperative Extension Publications online at http://learningstore.uwex.edu/.

For more information on existing health advisories, visit: dnr.wi.gov/org/land/wildlife/hunt/deer/