

GUIDE

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Home Slaughter and Processing of Lamb

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A lamb selected for slaughter should be healthy and increasing in weight. Withhold feed 18 to 24 hours before slaughter, but provide access to water. Keep its activity to a minimum during this time to avoid a fiery or bloody appearance to the outside of the carcass.

When you plan to depend on natural refrigeration to chill the carcass, the night time temperature should be about 32 degrees F or lower and where the temperature does not rise above 40 to 45 degrees F during the day. During extremely cold weather, protect the carcass from freezing.

Preparation for slaughter. Slaughter lambs in a dry, clean, dust-free area. A well drained, grassy area or a concrete floor is best.

Take precautions during slaughter, chilling, and processing to keep the carcass clean and cool.

If the carcass is to be chilled and aged without mechanical refrigeration, hang it in a dry, clean, well ventilated building free of odors (paints, chemicals, and fuels).

Equipment

- Stunning device: a 22 caliber rifle
- Hand meat saw
- Skinning knife
- Boning knife
- Breaking knife
- 10-inch steel
- Freezer wrapping paper
- Freezer tape
- Grease pencil or China marker

Stunning the lamb. Aim a 22 caliber rifle so the bullet will strike the middle of the head between the eyes and poll. (See figure 1.)

Bleeding the carcass. As soon as the lamb is stunned, bleed it without delay. Lift the head, pull back until the point of the jawbone is readily exposed, and insert the knife through the throat area to sever the carotid artery. (Try not to sever the windpipe.)

Pelting the Carcass. Place the lamb carcass on its

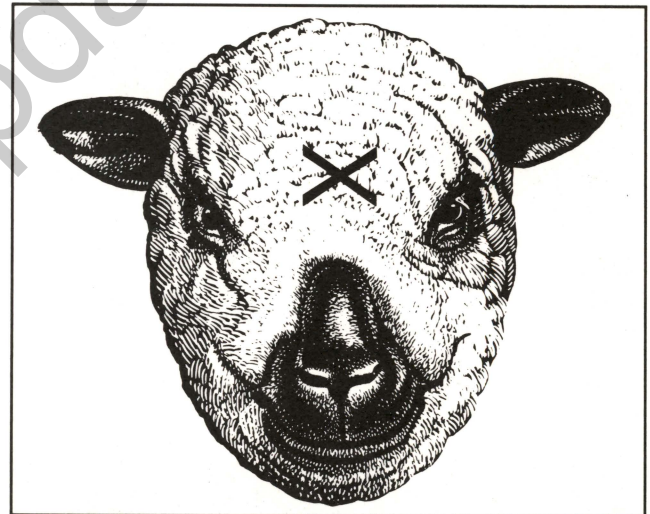


Figure 1. Aim so the bullet will strike the middle of the head.

back, and hold in place with either two pieces of 4x4x15-inch blocks or a rack stand.

A thin, colorless, connective tissue membrane called the *fell* separates the pelt and the carcass. Leave this membrane intact on the carcass to prevent dehydration during chilling and also to help hold the shape of the carcass.

Cutting out a narrow strip of pelt permits you to open the pelt without damaging the fell. Pulling the strip of pelt helps separate it from the fell. (See figure 2.) Open the pelt by cutting out a narrow strip of skin from one knee down and across the breast (close to the neck) and up to the other knee. Continue this cut up to the dew claws on each front leg. Open the pelt on the hind legs by cutting a narrow strip of skin from one hock down to the crotch and up to the other hock. (See figure 3.) Continue cutting the strip of skin under the dew claws and on to the foot. Remove the hind feet at the joint close to the hoof.

The pelt should be removed by a technique called *fisting*.

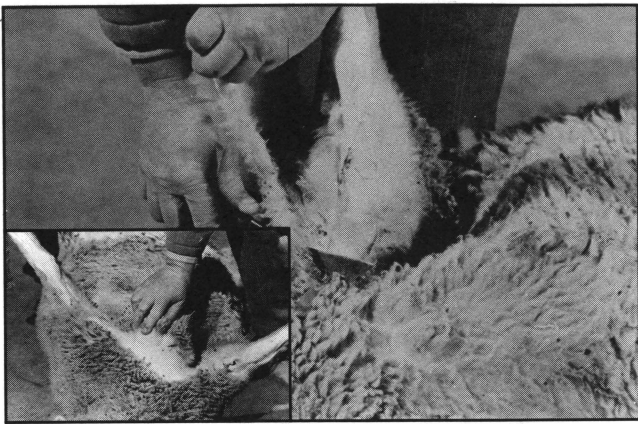


Figure 2. Pulling the strip of pelt helps separate it from the fell.

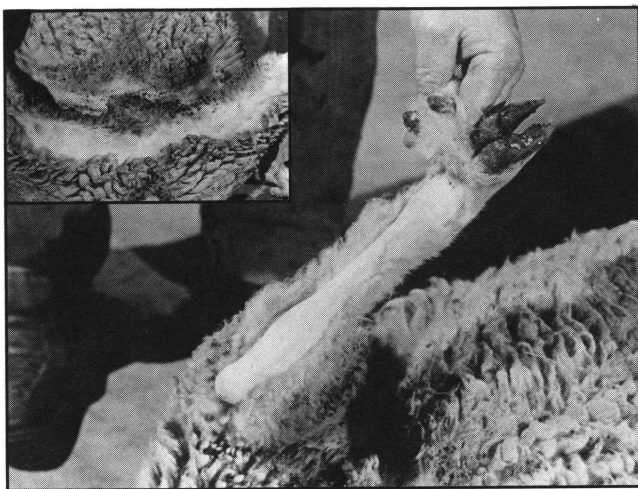


Figure 3. Open the pelt on the hind legs by cutting a narrow strip of skin from one hock down to the crotch and up the other hock.



Figure 4. Using the fisting technique, you can remove the pelt but leave the fell intact.

The fisting technique allows the pelt to be removed but leaves the fell intact on the carcass. (See figure 4.)

Fisting the pelt from the breast, flanks, and shanks is best done by beginning at the point of the breast. (See figure 5.)



Figure 5. Begin fisting the breast, flanks, and shanks at the point of the breast.



Figure 6. Starting at the mid-point on the sides, fist the pelt loose by working around and up.

Pull the pelt loose over the breast bone (keep the fisting hand wet with clean water at all times) and fist across each side of the rib cage to the hind leg. Then, work back toward the middle. With this method, you will avoid fisting under the flank muscle and possibly damage the fell. Fist the cod area from the rear, but do not fist beyond the cod area toward the front.

Now you are ready to hang the lamb carcass by its back legs, so you can do the rest of the pelting. Separate the tendons from the bone between the hock and ankle joints on each back leg. Using several plies of strong cotton cord, tie the tendons together, hang over a hook and hoist. Remember to get all the tendons tied because they have to hold the weight of the lamb carcass plus the pressure applied during the remainder of the pelting process.

While the lamb carcass is hanging, open the pelt down the middle of the abdomen and expose the area already pelted. (See figure 6.) Follow these steps for the rest of the pelting process:

1. Starting at the mid-point on the sides, fist the pelt loose by working around and up.
2. Leave the pelt attached to the tail until the lower half of the carcass is pelted around the shoulder.



Figure 7. Remove the head at the atlas joint.



Figure 8. Remove the front feet at the break joint just above the ankle joint.

3. Remove the pelt from the bottom half by fisting down and around each shoulder.

4. Cut the pelt loose around the bung and fist the remaining pelt from the tail.

5. Cut the skin from the breast down to the throat and fist the remaining pelt off of the neck.

6. Remove the head at the atlas joint (at the base of the skull). (See figure 7.)

7. Remove the front feet at the break joint, just above the ankle joint. (It is a prominent blue line on the enlarged portion of the cannon bone.) This break joint distinguishes lamb from mutton. (See figure 8.)

If the fell has not been torn, the lamb carcass may be sprayed with cool, low-pressure water to remove soil or blood. If the fell is broken, sponge soil off with a damp cloth.

When the outside is clean, open the carcass by splitting the flank open between the hind legs and by first inserting the knife handle and your fist. Continue opening down the middle of the sternum. (See figure 9.) Use the knife handle and your fist to push the viscera out of the way of the knife edge. Remove the bung by cutting the tissue surrounding it, and tie it off before dropping it inside the body cavity. Pull the bung down and outside the body cavity, and eviscerate the carcass by cutting the tissue which holds it to the backbone.

Take precautions to cut the urethra cords to the kidneys, in order to leave the kidney knobs in the carcass. The liver is

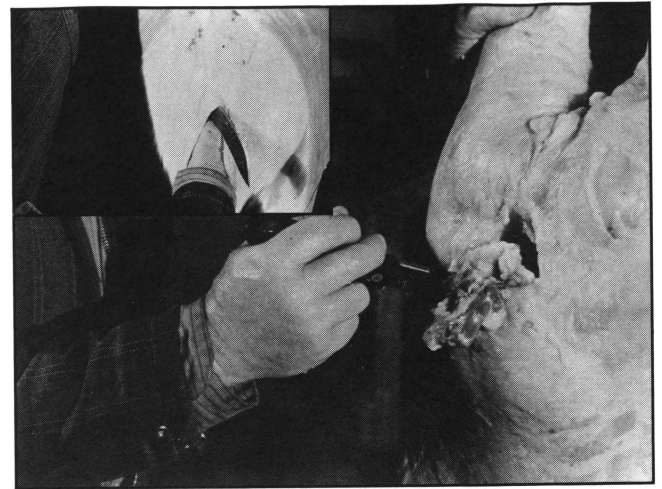


Figure 9. Open the carcass by splitting the flank open between the hind legs.

in this section of the body cavity, so make sure it is saved. The liver is a nutritious variety meat. Remove the gall bladder from the liver, wash with cool water, and allow it to chill.

Next, open the breast bone with a meat saw or knife, and remove the pluck (the heart, lungs, and esophagus.) Do this by cutting the diaphragm membrane. Leave the diaphragm muscle inside the carcass. By alternating on each side and applying pressure, cut to remove the tissue which holds the esophagus in place. Save the heart as variety meat.

Rinse the inside of the carcass to remove any remaining blood. Then, it is ready to be chilled.

Chill in a well ventilated room or building free of outside odors or in a cooler at 34 degrees F. After chilling for about 24 hours, the carcass is ready to be processed. If desired, the lamb carcass can be aged for five to seven days.

Processing the Lamb Carcass

Wholesale cuts. The wholesale cuts of lamb are the neck, shoulder, rib, foreshank, breast, flank, loin, and leg.

Place the chilled lamb carcass on a solid cutting table, and remove the breast, flank, and shank by cutting where the foreshank and shoulder come together. (See figure 7.) Cut across the ribs to the flank area so that the lamb carcass will lay in an upright position on the table when both sides of the breast, flank, and shank are removed.

Remove the neck where it starts to bend into the shoulder. Separate the wholesale shoulder from the rib between the fourth and fifth ribs and perpendicular to the back. Separate the rib or rack from the loin behind the last rib. Remove the loin from the leg by cutting in the middle of the last lumbar vertebrae. (See figure 10.) To make retail cuts, split each wholesale cut at the middle of the backbone.

Retail cuts. (See figure 11.) Trim the neck and leave it either as a roast, make it into neck slices about 1-inch thick, or bone it for lamb patties. The shoulder makes excellent chops for broiling or grilling when they are cut about 1-inch thick. You should make the shoulder chops by cutting across the forearm to the point of the shoulder joint. Then, cut the

Figure 10.

LAMB CHART

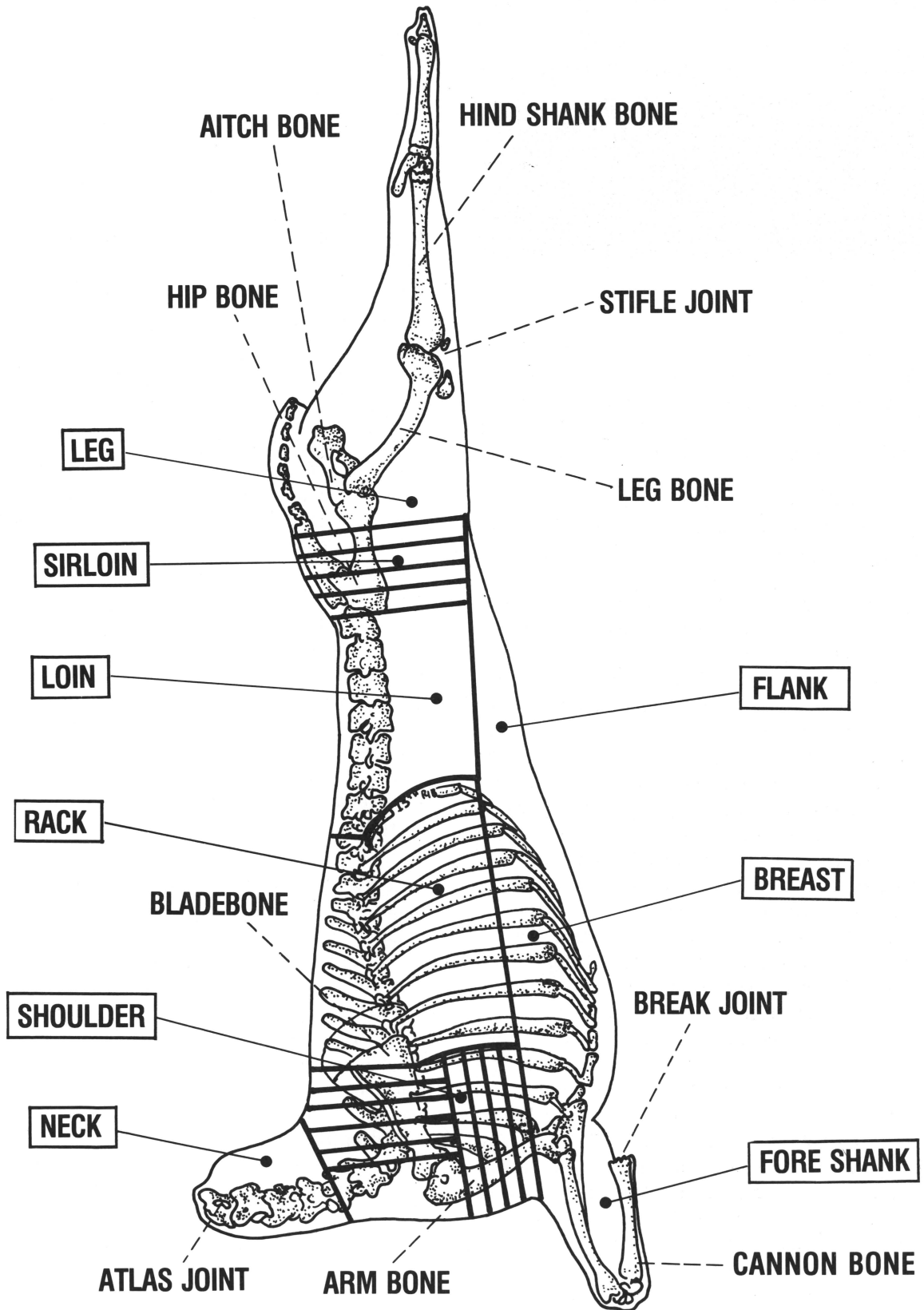




Figure 11. Retail cuts.

blade chops across the blade perpendicular to the way the shoulder chops were cut. As an alternative, you can bone the shoulder and roll it as a roast. The rib may be made into rib, chops about 1-inch thick or a roast. The thin rib portion may be used as lamb riblets or boned for ground lamb.

You can trim the foreshank and remove the cannon bone portion at the break joint just above the knee joint. The breast may be boned for ground lamb or trimmed for a pocket breast. The flank is best used as ground lamb or stew.

The loin may be used as loin chops about 1-inch thick or as a loin roast. It may also be boned and rolled as a boneless roast or cut into boneless chops.

The wholesale leg consists of the sirloin portion and leg portion. The sirloin portion is best used for broiling or for grilled chops cut about 1-inch thick. The leg portion is tender enough to slice into leg slices about 1-inch thick for broiling or grilling, or it may be boned and rolled. It also may be partially boned into an American leg of lamb. Make a French leg of lamb by leaving the shank bone on and trimming about 1½ inches up from the break joint.

Lamb cookery. The method selected for cooking lamb cuts depends on: 1) the tenderness and 2) the size and thickness of the cut. All cuts can be cooked easily so that the meat is tender, juicy and attractive. The fell (thin paper-like covering) should not be removed from the lamb leg or shoulder since it helps them retain their shape.

Lamb chops, however, will be more desirable if the fell is removed before cooking. Large cuts including leg, loin and shoulder should be roasted at 300 to 325 degrees F to the desired doneness. Lamb is roasted to rare (140 degrees F), medium (160 degrees F) or well done (170 degrees F) as determined by a roast meat thermometer. For easier carving and more attractive servings, it is desirable to allow a cooked roast to "set" 15 to 20 minutes. Meat continues to cook upon removal from the oven. If the roast is permitted to "set," it should be removed from the oven when the thermometer registers about 5 degrees lower than the desired doneness. Lamb should be served hot or cold, never lukewarm.

Rib, loin, shoulder, sirloin and leg chops cut 1 inch thick should be broiled. Chops cut less than 1 inch thick are usually panbroiled or panfried.

Less tender cuts including neck, shank and breast should be braised or cut into small pieces and cooked in liquid for stews. Cuts cooked by braising or in liquid should be cooked well done.

Ground lamb may be roasted (baked) as loaves, broiled, panbroiled or panfried as patties and prepared by a combination of methods in casserole and similar dishes.

Lamb Shoulder Kabobs

2 pounds lamb shoulder chop, cut 1 to 1½ inches thick
 ½ cup salad oil
 ¼ cup lemon juice
 2 teaspoons salt
 2 teaspoons dry mustard
 1 teaspoon salt
 ¼ teaspoon hot sauce
 1 teaspoon sugar
 1 medium onion, finely chopped
 1 clove garlic, finely chopped
 Cherry tomatoes, if desired

Cut shoulder chop into thin slices (¼ inch thick) and place in plastic bag or utility dish. Combine salad oil, lemon juice, salt, dry mustard, sugar and hot sauce. Stir in onion and garlic and pour over meat, mixing to coat strips. Tie bag securely or cover dish and marinate in refrigerator 4 to 6 hours (or overnight), turning at least once while marinating. Pour off marinade and reserve. Thread strips of lamb on metal skewers (weaving back and fourth). Thread cherry tomatoes on skewers, if desired. Place kabobs on grill and broil at moderate temperature 3 minutes, brushing with marinade occasionally. Turn and broil to desired doneness (3 to 4 minutes), brushing with marinade. 4 to 6 servings.

Packaging material and method. To preserve the quality of meat stored in home freezers, you will need a good quality freezer wrap with a moisture-vapor barrier material that is tough at low temperatures.

Ordinary kraft paper, wax paper, or fresh meat wrap does not provide adequate protection. They do not have moisture-vapor barrier properties. The most popular and economical wrap is plastic laminate. This type of paper provides the toughness at low temperatures and the plastic provides the moisture-vapor barrier.

Wrapping method. The drugstore fold is the best method for sealing the moisture in and the air out. To make the drugstore fold:

1. Place the meat in the center of the paper.
2. Bring the two horizontal ends together, and fold over until tight against the meat. At least one full fold is recommended.
3. Tightly fold one end and then the other. Turn each end underneath, and secure with tape.

For easier separation of chops when frozen, place a double thickness of waxed or freezer paper between each piece. Place the plastic sides next to the meat.

Before packaging, remove or cover sharp bone edges with a double thickness of freezer paper, so they will not puncture the wrapping paper. When packaging chops, place the bone into the middle to keep them from puncturing the paper.

Labeling. Label each package clearly with a grease pencil or permanent marker. Include the name of the cut, the quantity, and the packaging date.

Freezer storage time. The maximum recommended period of freezer storage for lamb is 12 months.

The home freezer is not the best freezer, therefore, take steps to freeze the meat as quickly as possible. Cold is conducted from the walls of the freezer to the meat inside. Place packages of meat around the walls and at eight to 12 hour intervals rotate packages from the center to the walls until the meat is frozen. This takes about 24 hours. If it takes longer, the home freezer is probably overloaded.

Meat is about 70 percent water, but will not freeze until it reaches 25 degrees F. The ideal inside temperature of the unit is 0 degrees F; however, the advantages of 0 degrees F temperature do not equal the added cost needed to get this ideal temperature. An adequate inside temperature is 6 to 8 degrees F.