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KANSAS STATE AGRICULTURAL COLLEGE

DEPARTMENT OF ANIMAL HUSBANDRY

HOME PREPARATION OF PORK

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The cost of meat cured on the farm is much less than that purchased from the retailer. An average 200-pound hog should dress 160 pounds. For the past 10 years this 160 pounds of meat could have been produced, slaughtered, and cured on the farm for 35 percent less than it would have cost the farmer at his local market.

BUTCHERING

Only hogs that are healthy, fat, and gaining in weight should be selected for slaughter. Meat from such animals is more palatable and will keep longer whether fresh or cured. Animals in poor health when slaughtered may be affected with some disease that is injurious when the meat is used as food. Meat from unhealthy animals is also likely to spoil quickly, and may be difficult to keep after curing.

The meat from a fat animal is much more palatable than that from a thin animal. If an animal is losing in flesh at the time of slaughter the carcass will contain a larger percent of water and a less palatable meat will be the result.

Hogs should be kept off feed for about 15 hours before slaughtering. Such animals will bleed better and the meat will be of better quality. It is also essential that hogs be kept as quiet as possible before butchering and not chased or beaten. Rough treatment will bruise the animal or cause a rise in temperature.

Bleeding.—Do not shoot or stun a hog before sticking as stunning in any way is liable to retard the bleeding.

The hog should be thrown squarely on its back with one man standing astride the animal, holding it firmly by the front legs.

(Fig. 1.) The man who does the sticking should grasp the animal by the jaw so as to hold the head firmly. An incision should be made about three inches from the point of the breast bone forward to the jaw. The breast bone may be located with the thumb and the knife inserted under it at an angle of 40 degrees with the tailhead. The knife should be inserted four or five inches, depending on the size of the hog, the object being to cut the veins and arteries where they branch in front



PHOTO FROM UNIV. OF MINN.

FIG. 1.—Proper method of holding and sticking a hog

of the heart. Care should be taken not to stick the shoulder, as this will cause it to be bloody, wasty, and unsightly.

Scalding.—A vat or barrel is usually necessary for the scalding of hogs. If the animals are large, blankets or sacks may be thrown over them and kept moist with hot water until the hair is loosened. When a barrel or tank is used, the water should be heated to 165° F. A good test is to pass the fingers through the water three times and if it smarts the third time the water is about right. Some lye or wood ashes may be added to aid in loosening the hair and dirt. When the hog is put in the water it should be kept in motion to prevent the

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water from burning the skin. As soon as the hair is loose the hog should be removed from the water and the feet and head cleaned first, then the rest of the body. When the carcass is clean the tendons in the hind legs should be loosened and the carcass hung up. It should then be washed with warm water

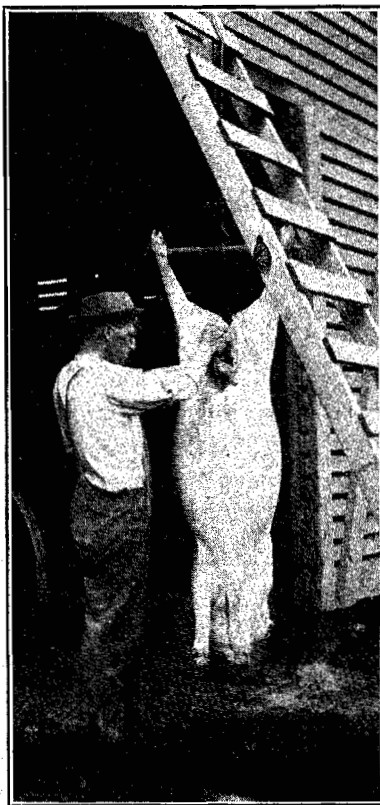


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FIG. 2.—Proper method of holding
knife in removing entrails

and shaved with a sharp knife, then washed with cold water and wiped dry.

Gutting.—To remove the entrails cut down the midline beginning at the top and cut down to the head. Next, cut through the pelvic bones, then around the rectum. Place the knife between the first and second fingers of the left hand, inserting

the fingers where the opening has been made, and with the right hand force the knife down to the breast bone. (Fig. 2.) This will eliminate all danger of cutting the intestines. Remove stomach, intestines, and liver, or everything above the diaphragm, cut through the breast bone, around the diaphragm and across the aorta, pull out the pluck, which consists of the heart and lungs. Wash out any dirt or blood and let the carcass hang in a cool, well-ventilated place.

The liver and heart should be saved for food and the intestinal fat removed for lard.

CUTTING UP PORK

Pork should be cut as soon as the animal heat is all out of the carcass and the muscles are firmly set. A sharp knife, a saw, and a firm, solid block or table are necessary for the best

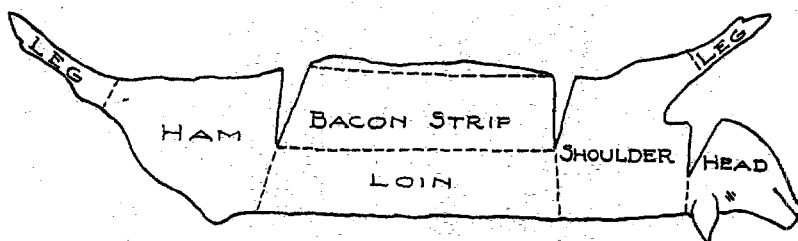


FIG. 3.—Diagram showing method of cutting a hog carcass

results in cutting. The cuts should always be across the grain of the meat made straight and clean. (Fig. 3.)

Head.—The head should be removed at the atlas point (fig. 3), or about one inch back of the ears. The jowl can be cut off, cured, smoked, and used for cooking with beans, etc. The remainder of the head can be made into lard, sausage, and headcheese.

Shoulders.—The shoulders should be removed between the fourth and fifth ribs (fig. 3), counting from the front, or if a larger piece is desired the cut may be made farther back. After the shoulder has been removed cut out the ribs and that part of the back bone to which they are attached. The shoulder should be trimmed smooth (fig. 4), cutting off all excess fat and ragged edges which are wasted in curing and cooking. Remove the foot about an inch above the knee joint. This cut may be cured, used fresh, or made into sausage and lard. (Fig. 4.)



FIG. 4.—Shoulder, trimmed and untrimmed

Middle.—The point where the middle is to be cut from the ham will depend on the size of the ham desired. Three or four inches from the pelvic bones is a good point to make the cut. (Fig. 3.)

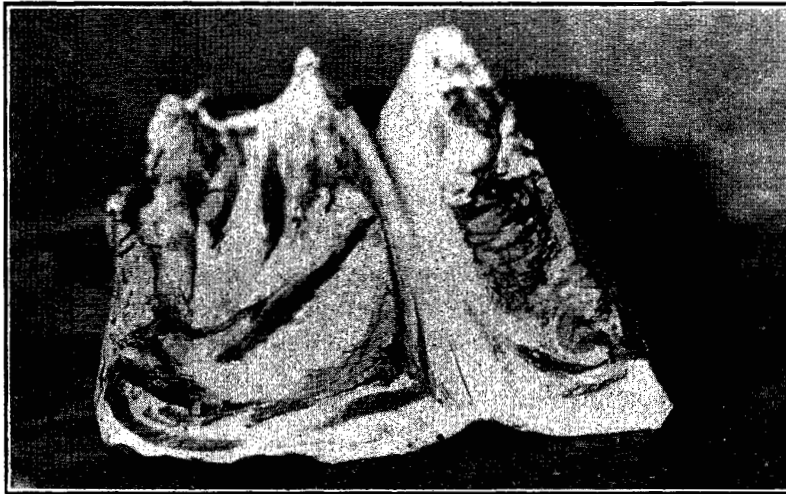


FIG. 5.—Where loin and back fat is removed from spare ribs and bacon

The middle is divided into the loin, spare ribs, bacon, and back fat. Remove the loin and back fat parallel to the back bone below the tenderloin. (Fig. 6.)

Cut off the back fat from the loin leaving a layer of fat about one-fourth of an inch thick over the lean meat. (Fig. 6.)

The loin may be used for roasts or chops and the back fat rendered for lard.

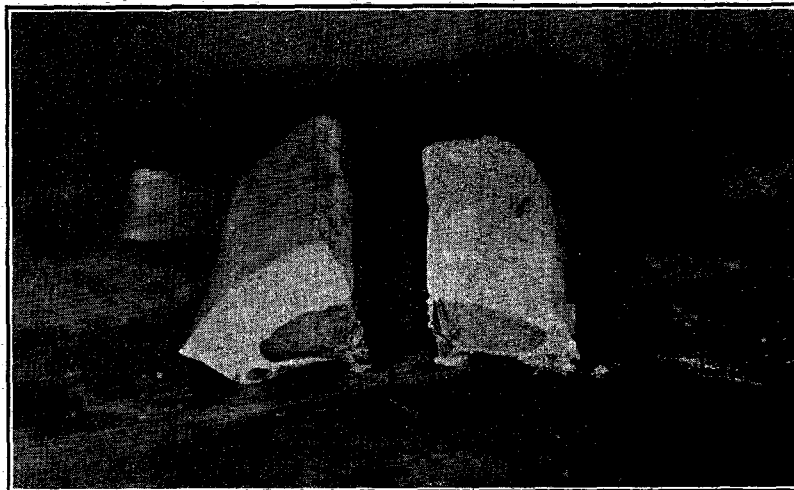


FIG. 6.—Loin, untrimmed and trimmed

Next remove the ribs from the bacon leaving as much lean as possible in the bacon as it makes a much higher class of bacon. With a cleaver or ax, straighten out the side of bacon by pounding on the surface. Trim off all edges square and smooth. It may be left in one piece or cut in two. (Fig. 7.)

Hams.—Cut off the rear part of the back bone. Cut off all loose, ragged edges, being careful not to expose too much of the lean meat. By leaving a layer of fat on the outside the hams will be of a higher quality. (Fig. 8.) Cut the leg off about one inch above the hock joint. Hams are generally cured and smoked. However, they make good cuts for frying or roasting.

CURING PORK

If meat is to be cured and kept through the summer, the carcass should be quickly and thoroughly cooled. If it is salted before the animal heat is out of the carcass the shrinkage of the muscles may cause a retention of injurious gases, giving it an offensive taste and odor. The meat should never be frozen when salted as the action of the frost is likely to pre-

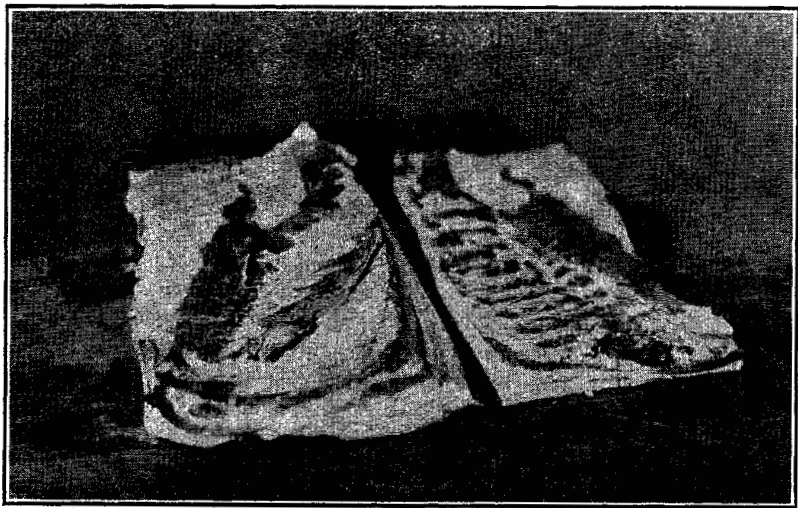


FIG. 7.—Bacon, untrimmed and trimmed

vent the proper penetration of the salt and uneven curing will result. It is important also that meat be cured as soon as cooled. While tainted meat can be cured so that it will keep, there is no preservative that will bring back the natural flavor when it is once lost. The safest rule to follow is to salt meat as soon as the animal heat is out, and before it freezes or starts to decay. Ordinarily 12 to 24 hours after slaughtering will allow sufficient time to cool.

Equipment for Curing.—A clean hard-wood barrel is a suitable vessel in which to cure meat. A barrel made for the purpose is best, but where it cannot be had a vinegar, molasses, or sirup barrel will answer. The important point is to have it clean and tight enough to prevent leakage. A large stone jar is the best vessel that can be had. One holding 25 to 30 gallons is expensive, however, and must be carefully handled to

prevent breakage. A jar is more easily cleaned than a barrel and is in every way preferable if the first cost is not too great. A barrel or jar that has once held meat may be used again and again unless meat has spoiled in it. If reused it will be necessary to scald it out thoroughly each time before packing it with meat.

Preservatives.—Salt, saltpetre, and sugar or molasses are the most commonly used preservatives, and are the only ones necessary for perfect curing and the finest quality of cured meats. Borax, boracic acid, formalin, salycilic acid, and other



FIG. 8.—Ham, trimmed and untrimmed

chemicals are sometimes used, but they are considered by many authorities to be harmful to the health of the consumer and their use should be avoided. The proprietary preparations put on the market are also likely to be dangerous to health if used in large quantities. They are more active than salt and saltpetre, and the chief reason for their use is to hasten the curing process.

Salt is an astringent and when applied alone to meat renders it hard and dry. Its action is first to draw out the meat juices. In a few days it will contract and harden the muscle fibers, thus shrinking the volume of meat. Saltpetre is even more astringent than salt. Its use aids in retaining the natural color of the flesh. In large quantities it is harmful to

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the health of the consumer. Four to six ounces of saltpetre per 100 pounds of meat is as much as it is well to use. Sugar is not an astringent and its presence in the pickle softens the muscle fibers and improves the flavor of the meat. Salaratus (baking powder) is used in small quantities to sweeten the brine. In warm weather a small quantity will aid in preventing the brine from spoiling.

RECIPES FOR CURING PORK

Plain Salt Pork.—Each piece of meat should be rubbed with fine common salt and packed closely in a barrel and allowed to stand over night. The next day 10 pounds of salt and 3 ounces of saltpetre to each 100 pounds of meat should be weighed out and dissolved in 4 gallons of boiling water. When this brine is cold it should be poured over the meat and the latter covered and weighted down. This pork should be kept in the brine until it is used.

Sugar-Cured Hams and Bacon.—Each piece of meat should be rubbed with salt and allowed to drain over night, then packed closely in a barrel, hams and shoulders in the bottom, using the strips of bacon to fill the top. To each 100 pounds of meat there should be added 8 pounds of salt, 3 pounds of brown sugar, and 3 ounces of saltpetre dissolved in 4 gallons of water. The meat should then be covered with this brine. For summer use it is best to boil the brine, allowing it to become thoroughly cooled before using. For winter use it is not necessary to boil the brine. The bacon strips should remain in the brine from four to six weeks and the hams six to eight weeks.

Dry-Cured Pork.—For each 100 pounds of meat should be weighed out 5 pounds of salt, 2 pounds of sugar and 2 ounces of saltpetre. These should be mixed thoroughly. Each piece of meat should then be rubbed with the mixture once a day for three days, using one-third of the mixture each day.

The recipe for sugar-cured hams and bacon is the most satisfactory under ordinary farm conditions. Pork cured by this method and smoked will keep through the summer. The meat will be sweet and palatable and the flavor good if properly smoked.

Headcheese.—The head should be split in four pieces, and after the eyes and brains are removed, allowed to soak over night in cold water. It should then be allowed to cook slowly

until the meat will fall from the bones. After removing from the Are, all the bones should be picked out and the liquor drained off, the latter being saved for future use. The meat should be chopped finely with a chopping knife, returned to the kettle, pouring on enough of the liquor to cover, and boiled slowly for 15 to 30 minutes. It should be seasoned to taste with salt and pepper just before removing from the fire, after which it is turned into a shallow pan or dish. It is then covered with a piece of cheesecloth and a weighted board put on to make the mass solid, When cold it should be sliced thin and served without further cooking.

Scrapple.—This article of food is made just as headcheese until the bones are removed and the meat chopped. All the liquor is then added and the dish returned to the stove to boil. Cornmeal is then stirred in until the contents are as thick as cornmeal mush. It should be stirred constantly for the first 15 minutes, after which it is set back on the stove to boil slowly for an hour. When done, it is poured into a shallow dish to mold. When cold it is sliced thin and fried.

Pickled Pig's Feet.—The pig's feet should be soaked for 12 hours in cold water, then scraped clean and the toes removed. They are then boiled until soft (four to five hours will usually be required). They should be salted when partially done. When they are done they should be packed in a stone jar and covered with hot spiced vinegar. They may be served cold, or split or fired in a batter of eggs, flour, milk, and butter.

Frying Out Lard.—Only the best of fat should be used for choice lard. Leaf fat is best. The back strip of the side, the shoulder, and the neck trimmings also make good lard. Gut fat should never be mixed with the leaf and back fat. It makes a strong-smelling lard and should be kept separate. All the scraps of lean meat should be cut out of the fat before frying out, as they are likely to stick to the kettle and get scorched, giving an unpleasant flavor to the lard.

In preparing the fat for frying out, it should be cut into pieces from 1 to 1½ inches in size. They should be nearly equal in size so that they will fry out in about the same time. A clean kettle should be filled about three-fourths full, and a quart of hot lard or water poured in. One or the other is necessary to prevent the fat from burning before the heat is sufficient to bring out the grease. The kettle should be kept

over a moderate fire until the cracklings are brown and light enough to float. Frequent stirring will be necessary to prevent burning. When done it should be removed from the stove, allowed to cool slightly, and strained through a muslin cloth into a large jar. It should be stirred occasionally until it is cool enough to solidify. If pails or smaller jars are to be filled, the lard should be dipped out while just warm enough to remain liquid. Stirring while the lard is cooling tends to whiten it and make it smoother. A quarter of a pound of saleratus added to each 100 pounds of fat has a similar effect.

Sausage.—Pork sausage should be made only from clean, fresh pork. For each 3 pounds of lean pork there should be about 1 pound of fat. As the pork usually used for sausage is the shoulder, neck, and lean trimmings, the sausage is quite likely to be too fat unless part of the fat is removed and used for lard. The fat and lean are mixed in chopping. Where a rotary cutter is used it is best to cut the meat twice. After it is cut the first time it should be spread out thinly and seasoned. To each 4 pounds of meat are added 1 ounce of pure fine salt, $\frac{1}{2}$ ounce of ground black pepper, and $\frac{1}{2}$ ounce of pure, finely rubbed leaf sage. The seasoning should be sprinkled thinly over the cut meat and the meat again run through the cutter to mix the seasoning thoroughly. This method will give a more even mixing of the spices than can be obtained by working it with the hands. For immediate use the sausage may be packed away in stone jars or crocks, to be sliced for frying. Many people stuff it into casings made from the small intestines of the hog. When this is done the intestines must be turned inside out and carefully cleaned.

Casings for sausage can be bought at a small cost which makes it hardly worth while to bother cleaning them for home use. The purchased casings are more uniform in size and strength and will usually give better satisfaction. A good substitute for casings may be had in narrow muslin bags. When filled these should be $2\frac{1}{2}$ or 3 inches in diameter and 18 to 24 inches long. The sausage is stuffed in tight by hand and hung in a cool place. If the sausage is to be kept for some time, melted lard should be rubbed over the outside of the bag to exclude the air. Sausage may be kept for some time in a large jar if a thin coat of lard is put over the top.

Mixed sausage may be made from a mixture of pork and beef in almost any proportion. It is the custom of many farmers to kill three or four hogs and a beef during the winter for the year's supply. When this plan is followed a nice supply of sausage can be made from the trimmings. Sausage should not contain too much fat. A good proportion is 2 pounds of lean pork, 1 pound of fat pork, and 1 pound of lean beef. These are chopped finely together, seasoned the same as pork sausage and packed in jars, muslin bags, or casings. Many people prefer this to clear pork sausage as it does not seem so fat.

Cooking.—Meat can be kept fresh for sometime by frying the pieces until about two-thirds done, then packing the slices close together in a stone jar and covering with hot lard. It is more satisfactory to use several small jars, than one large one. These jars should be placed in a cool, dark place.

When meat is to be kept fresh for a few days a thin coat of fine salt applied to the surface will be sufficient if the meat is kept in a cool, well-ventilated place.

SMOKING MEAT

Cured meat is smoked to give it palatability and flavor. Smoking also increases the keeping qualities of meat as the creosote formed on the meat tends to close the pores and give the meat a peculiar odor which is objectionable to vermin.

The Smokehouse.—The smokehouse should be constructed so as to give proper ventilation and carry off the warm air in order to prevent overheating. A firepot outside of the house with a flue to carry the smoke to the smokehouse is the best arrangement. When this cannot be arranged the fire may be built below the meat, but care should be taken to have ample space between the fire and the meat to avoid the danger of overheating. Eight feet should be sufficient for this purpose.

Brick or stone houses are better than those built of wood. Where not enough meat is smoked to make it practical to build a house, a large drygoods box will give fairly satisfactory results.

Fuel.—Green hickory or maple is the best wood to use in smoking meat. Any hard wood or corncobs may be used. Resinous woods should never be used as they are likely to give the meat a bad flavor. Fragrant woods as pine boughs are sometimes used to add flavor to the meat.

Putting Meat in the Smokehouse.—Meat to be smoked should be taken from the cure and soaked in fresh water over night; then the pieces should be hung up for about two days to dry. When hung in the smokehouse no two pieces should be allowed to touch. They should be hung below the ventilators as this insures a better circulation of smoke.

The Fire.—The fire should be started slowly, warming up the meat gradually, as this tends to open the pores and allow the smoke to penetrate. In cold weather the fire should be kept up continuously until the meat is smoked. If the meat becomes cold the smoke will not penetrate readily. In warm weather a fire may be built every other day until the meat is sufficiently smoked. The length of time to smoke meat will depend upon the taste of the persons who eat it. A rich brown color usually indicates that the meat has been smoked to satisfy the taste of most persons. Three days continuous smoking is usually sufficient. The smokehouse should be kept dark and well-ventilated at all times.

KEEPING SMOKED MEATS

A dry, cool basement or attic with free circulation of air makes a good place to store smoked meat if the room is kept dark and free from vermin. If the meat is to be kept for some time, however, it should be wrapped in heavy paper or burlap and buried in a grain bin where the temperature is about uniform at all times. A coat of pepper on each piece will tend to keep away insects.

Pork that is properly selected, slaughtered, cured, smoked, and stored should keep indefinitely and provide the housewife with a supply of wholesome meat at all times.

