11-1949

EC9983 Facts about Meat

Mabel Doremus

Follow this and additional works at: http://digitalcommons.unl.edu/extensionhist


This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
FACTS ABOUT MEAT

Mabel Doremus

Meat is one of the most universally liked foods, and generally is the article of diet around which the meal is planned, prepared and served. Research has proved that meat supplies a good proportion of the food nutrients essential to good health.

Food Value

For really good meals, we should plan the daily menus to include the foods that please the family, suit our pocketbook and nourish the body adequately. It is important that we learn to cook these foods to save all of their food value and make them appetizing. We want to serve them in the most attractive and appetite-provoking way so that the family will enjoy every mouthful.

All meat is a good source of important food elements. The thriftier cuts are just as nutritious as the more expensive ones and by proper cooking can be made tender and delicious. The term meat commonly includes beef, veal, lamb, mutton and pork, which are the flesh of the larger animals commonly used as food. The glandular organs are also included in the term meat.

Nutritionists agree generally that at least one four-ounce serving of protein should be eaten daily along with the rest of the foods of the "Basic 7," and meat is classed as one of the proteins of high quality.

From experiences with animals and humans, it has been found that meat is of value for growth, reproduction and lactation. Recent studies have been made on the use of strained meat in the diets of infants. The added protein and iron of meat gave evidence of improvement in the health of bottle-fed babies.

Meat is valued chiefly for its protein, fat, minerals and vitamins. contains from 15% to 20% protein. Proteins are not all alike. They are built up of amino acids, some having all the kinds of amino acids we need. Meat is one protein that supplies all of the essential amino acids. These amino acids are necessary for building and repairing muscle tissue and blood, as well as for resistance to infections. The fat and protein of meat furnish heat and energy. The energy value of meat varies with the fatness, and the amounts of fat one eats vary with the method of cooking. For example, in a breadcrumbed pork chop, the fat sinks into the coating and we eat it; in roast pork, the fat drains into the drippings and some of it may be poured off before making gravy, thus altering the number of calories that we eat.

Meat contains fair amounts of iron and phosphorous. Recently, meat has been cited as an important source of copper. This element has been found to be valuable along with iron in the building of good red blood and in the treatment of certain types of anemia. Heart, kidney and liver contain more iron than does muscle meat.

Meat is valued for certain vitamins, especially some of the B-complex (thiamine, niacin and riboflavin). Vitamin A is found in comparatively large amounts in liver. Vitamin losses in cooking are increased with long-time cooking and with high temperatures. Therefore, it is desirable to cook meat at low to moderate temperatures. Vitamin A is known as a fat-soluble vitamin. It has been found to be of importance to the mucous membranes of the body. Vitamin A is necessary for healthy eyes and protects against night blindness. Liver is especially high in vitamin A. Very little vitamin A is lost in properly cooked meat.
HOW TO CARVE A STAND UP ROAST

1. Ask meat retailer to remove short ribs (for braising) and separate back bone from the ribs. Remove back bone in kitchen after roasting. Only ribs remain on serving platter.

2. Beginning at outer fat edge (see 1), cut slices towards the ribs. Several slices can be made at once and separated by cutting close along the ribs with the knife.

HOW TO CARVE

1. Place shank end to carver's right. Insert fork and cut several slices parallel to length of ham on side opposite cushion side (biggest curve).

2. Turn ham so it rests on this cut surface. Remove small wedge from the cushion near shank end. Start slicing from that end towards butt end of ham, cutting each slice clear to bone.

HOW TO CARVE

1. Place roast so thick meaty section is on far side of platter away from carver. Insert fork and remove a few slices from side nearest carver.

2. Turn lamb on this cut side. Use fork to hold onto shank bone with fingers. Remove small wedge of meat near shank end. Cut slices at right angles to the bone and clear to the bone.
ANDING BEEF RIB ROAST

3. Lift off slices, cut more. Servings may be made any desired thickness.

4. Remove slices same way, by cutting meat along bone. Use this procedure for entire roast.

A WHOLE HAM

3. Insert knife where small wedge was removed and cut along bone to loosen all slices at once.

4. Cut portion needed and serve. For more servings, turn ham back to original position and slice at right angles to the bone.

A LEG OF LAMB

3. Insert blade of knife where small wedge as removed and release slices by cutting long bone. This is a duplication of the ham method.

4. Arrange cut slices on platter and serve with mint jelly in pear halves.
Selection of Meat

The homemaker who is able to recognize the different retail cuts of meat by appearance as well as by name will be a more intelligent meat buyer. The less tender sections are those where the meat muscles have received the most exercise, such as the leg, shoulder and neck; and the tender cuts are made up of the muscles that have received little exercise. These include the cuts that lie along the supporting muscles of the backbone. A homemaker who knows the location of the cut will know whether it is one of the tender or less tender cuts and will select the cooking method accordingly.

Good quality beef has a smooth covering of brittle, creamy fat over most of the exterior and a much thinner covering over the interior surface of the ribs. There will be deposits of fat between the larger muscles and some along the connective tissue and between the muscle fibers. In meat this is called marbling. The lean is firm, velvety in appearance and fine grained. In young beef the bones are porous and red; in older animals, white and brittle.

Veal is the flesh of calves three to twelve weeks of age, weighing 40 to 300 pounds. The veal considered most desirable is from milk-fed calves six to eight weeks of age and weighing about 125 pounds. The lean of veal is light grayish pink in color. The meat is fine in grain, fairly firm, and velvety in texture. It has no marbling and very little fat. The bones are porous and red.

Lamb is the flesh of young sheep. Mutton is the flesh of mature sheep. Certain features are characteristic of each group. Redness in bones indicates a young animal; whiteness indicates age. The most reliable indication of age is the "break joint." In young lambs the forefeet are taken off at the break joint, which has four well-defined ridges that are smooth, moist and red. With age, the bones become harder and more porous. The color of the flesh of lamb varies from light to dark pink. As the animal grows older the color deepens. Lamb fat is creamy white or slightly pink in color.

Most pork comes from relatively young hogs seven to twelve months old. The color of young pork is a grayish pink, changing to a delicate rose in the older animal. The flesh is fairly firm and fine grained. The lean is well-intermingled with fat and covered with firm white fat.

Care of Meat in the Home

As soon as it arrives in the kitchen, fresh meat should be unwrapped and wiped with a damp cloth to remove bone dust and loose particles. It should not be washed, as some of the natural juices will be lost. It should be stored in a shallow dish, uncovered or lightly covered with waxed paper, in the coldest part of the refrigerator. Meat stored in the refrigerator is not closely covered because a little drying of the surface is desirable. This drying retards bacterial growth. Chopped meat, because it is finely divided, is especially susceptible to spoilage, so should not remain unfrozen or uncooked for any length of time.

Cooked meat should be covered because the surface has been dried out and further drying in the refrigerator will thus be prevented.

General Meat Cookery

It is easy to cook any cut of meat so that it will be tender, flavorful and appetizing. These three factors determine the method used to cook any kind of meat:
(1) The degree of tenderness of the meat.
(2) The size of the cut.
(3) The kind of meat, such as beef, veal, pork or lamb.

The method of cooking meat depends upon the cut. The tender cuts are cooked by dry heat because they contain little connective tissue. Less tender cuts must be cooked by moist heat because they contain much connective tissue.

The dry-heat methods include:

(1) Roasting
(2) Broiling
(3) Pan broiling

The moist-heat methods are:

(1) Braising
(2) Simmering in water

(These methods are discussed in detail in Circular 9984, entitled "Cooking Tender Cuts of Meat," and in Circular 9985, "Cooking Less Tender Cuts of Meat.")

It is important that shrinkage in cooking meat be kept to a minimum in order to have an attractive and palatable product and to obtain the maximum number of servings. Increased oven temperature increases cooking losses both by evaporation and by a larger quantity of drippings. It is wise to remember that the more thoroughly meat is cooked, the greater the shrinkage; and it is especially important, from the standpoint of economy and flavor, to avoid high temperatures and overcooking.

Meat thermometers aid in determining the internal temperature of meat when it is roasting so that it may be cooked rare, medium or well done. Meat thermometers also help to prevent overcooking. The thermometer is inserted in the roast so that the bulb reaches the center of the largest muscle and does not touch bone or fat. When the heat from the oven penetrates the meat, the temperature at the center gradually rises. When the thermometer registers the internal temperature that indicates the desired doneness, the roast is removed from the oven.

Frozen meat may be cooked with or without thawing. There is no difference in the flavor, although there may be some loss of meat juices during the defrosting period. Frozen meat after thawing spoils more rapidly than fresh meat that has not been frozen.

Carving Meat

Beef. Meat, except beefsteak, is cut across the grain. To carve beefsteak, separate the meat from the bone by cutting along the edges of the bone with the point of the knife. Beginning with the wide or bone end of a steak, it is cut into sections about an inch wide, depending on the number to be served. Serve a small piece of tenderloin and a small piece of the wide portion.

The standing rib roast is placed with the cut surface on the platter with the ribs protruding to the left of the carver. The carver either grasps the uppermost rib with the left hand or steadies the meat by thrusting the fork into the thick center of the roast. Very thin slices are then carved horizontally.
until the knife comes to the bone. When several slices have been cut, the point
of the knife is drawn along the edge of the bone to separate the slices from the
ribs.

The rolled rib roast is placed with the cut surface on the platter and is
held by inserting the fork just below the slice that is next to be cut. The
rolled roast is held in place by cords, and only one cord is cut at a time as it
is reached in carving. Loosen the cords with the fork. The slices are cut
horizontally and very thin.

Pork. A whole ham is seldom carved at the table. However, when this is
done, the ham is usually placed on the platter, fat side uppermost, with bone end
to the right of the carver. The center slices are the most desirable and are the
ones served. Make the first incision at the large end with the knife just ahead
of the aitch bone and cut down to the bone. Cut several slices, then run the
knife along the bone to release the several half slices. For the second serving,
turn the ham over and cut the same way.

At the time a loin roast is purchased at the market, the backbone should be
separated from the ribs. Thus, the backbone may be removed after the meat is
cooked and before it is taken to the table. It may then be sliced evenly.

Veal. The loin of veal is carved in much the same way as described for pork
loin roast.

Lamb. The method for carving a leg of lamb is much the same as for carving
a whole ham, but the slices of lamb are cut thicker.

Crown Roast of Lamb. The divisions between the chops are clearly indicated
so it is only necessary to cut the pieces of equal thickness. Care is taken to
serve portions of the dressing which fills the roast with each portion of meat
served.

Tongue. To carve a tongue, cut it across in wafer-like slices. The center
of the tongue is the choicest part.

Acknowledgment is made for assistance in preparation of the manuscript for this
circular to Dr. Josephine Brooks, Home Economics Department, and Charles Adams,
Animal Husbandry Department, University of Nebraska.