Chapter 10





Understanding Meats and Game

eat is muscle tissue. It is the flesh of domestic animals (cattle, hogs, and lambs) and of wild game animals (such as deer). As a cook, chef, or food-service operator, you will spend more of your time and money on meats than on any other food.

It is important, then, to understand meats thoroughly in order to cook them well and profitably. Why are some meats tender and some tough? How can you tell one cut from another when there are so many? How do you determine the best way to cook each cut?

In order to answer questions like these, it is helpful to start at the most basic level of composition and structure. We then proceed to discuss grading and inspection, basic cuts, and appropriate cooking and storage methods. In addition, we discuss the characteristics of variety meats and of popular game meats. Only then can we best approach the individual cooking methods and recipes presented in the following chapters.

After reading this chapter, you should be able to

- Describe the composition and structure of meat, and explain how they relate to meat selection and cooking methods.
- 2. Explain the use of the federal meat inspection and grading system in selecting and purchasing meats.
- **3.** Explain the effect of aging on meat, and identify the two primary aging methods.
- **4.** Identify the primal cuts of beef, lamb, veal, and pork, and list the major fabricated cuts obtained from each of them.
- Select appropriate cooking methods for the most important meat cuts, based on the meat's tenderness and other characteristics.
- **6.** Prepare variety meats.
- **7.** Identify the characteristics of game meats, and select the appropriate cooking methods for them.
- **8.** Determine doneness in cooked meat.
- **9.** Store fresh meat and frozen meat to gain the maximum shelf life.

COMPOSITION, STRUCTURE, AND BASIC QUALITY FACTORS

Composition

Muscle tissue consists of three major components: water, protein, and fat.

Water

Water is about 75 percent of muscle tissue. With such a high percentage of water, you can see why *shrinkage* can be a big problem in cooking meat. Too much moisture loss means dry meat, loss of weight, and loss of profit.

Protein

Protein is an important nutrient and the most abundant solid material in meat. About 20 percent of muscle tissue is protein.

As we learned in Chapter 4, protein *coagulates* when it is heated. This means it becomes firmer and loses moisture. *Coagulation* is related to doneness. When protein has coagulated to the desired degree, the meat is said to be "done." Doneness is discussed later in this chapter.

After protein has coagulated, applying higher heat toughens it.

Fat

Fat accounts for up to 5 percent of muscle tissue. Of course, more fat may surround the muscles. A beef carcass can be as much as 30 percent fat.

Because of health and dietary concerns, many meat animals are being bred and raised with a lower fat content than in past years. Nevertheless, a certain amount of fat is desirable for three reasons:

1. Juiciness.

Marbling is fat deposited within the muscle tissue. The juiciness we enjoy in well-marbled beef is due more to fat than to moisture.

Surface fat protects the meat—especially roasts—from drying out during cooking as well as in storage. Adding surface fats where they are lacking is called *barding*.

2. Tenderness.

Marbling separates muscle fibers, making them easier to chew.

3. Flavor.

Fat is perhaps the main source of flavor in meat. A well-marbled Prime (top grade) steak tastes "beefier" than the same cut of a lower grade.

Carbohydrate

Meat contains a very small amount of carbohydrate. From the standpoint of nutrition, its quantity is so small that it is insignificant. It is important, however, because it plays a necessary part in the complex reaction, called the *Maillard reaction* (see p. 65), that takes place when meats are browned by roasting, broiling, or sautéing. Without these carbohydrates, the desirable flavor and appearance of browned meats would not be achieved.



Muscle Fibers

Lean meat is composed of long, thin muscle fibers bound together in bundles. These determine the texture or grain of a piece of meat. Fine-grained meat is composed of small fibers bound in small bundles. Coarse-textured meat has large fibers.

Feel the cut surface of a tenderloin steak, and compare its smooth texture to the rough cut surface of brisket or bottom round.

Connective Tissue

Muscle fibers are bound together in a network of proteins called connective tissue. Each muscle fiber also is covered in a sheath of connective tissue.

It is important for the cook to understand connective tissue for one basic reason: Connective tissue is tough. To cook meats successfully, you should know

- Which meats are high in connective tissue and which are low.
- What are the best ways to make tough meats tender.

1. Meats are highest in connective tissue if

- They come from muscles that are more exercised. Muscles in the legs, for example, have more connective tissue than muscles in the back.
- They come from older animals. Veal is more tender than meat from a young steer, which, in turn, is more tender than meat from an old bull or cow. (Young animals have connective tissue, too, but it becomes harder to break down as the animal ages.)

2. Meats high in connective tissue can be made more tender by using proper cooking techniques.

There are two kinds of connective tissue: collagen, which is white in color, and elastin, which is yellow.

· Collagen.

Long, slow cooking in the presence of moisture breaks down or dissolves collagen by turning it into gelatin and water. Of course, muscle tissue is about 75 percent water, so moisture is always present when meats are cooked. Except for very large roasts, however, long cooking by a dry-heat method has the danger of evaporating too much moisture and drying out the meat. Therefore, moist-heat cooking methods at low temperatures are most effective for turning a meat high in connective tissue into a tender, juicy finished product.

Other factors also help tenderize collagen:

Acid helps dissolve collagen. Marinating meat in an acid mixture, or adding an acid such as tomato or wine to the cooking liquid, helps tenderize it.

Enzymes are naturally present in meats. They break down some connective tissue and other proteins as meat ages (see "Aging," pp. 278-280). These enzymes are inactive at freezing temperatures, slow-acting under refrigeration, active at room temperature, and destroyed by heat above 140°F (60°C).

Tenderizers are enzymes such as papain (extracted from papaya) that are added to meats by the cook or injected into the animal before slaughter. Exercise care when using enzyme tenderizers. Too long an exposure at room temperature can make the meat undesirably mushy.

• Elastin.

Older animals have a higher proportion of elastin than younger animals.

Elastin is not broken down in cooking. Tenderizing can be accomplished only by *removing the elastin* (cutting away any tendons) and by mechanically breaking up the fibers, as in

Pounding and cubing (cubed steaks)

Grinding (hamburger)

Slicing the cooked meat very thin against the grain (as in London broil)

Inspection and Grading

Cooks and food-service operators in the United States are assisted in their evaluation of meats by a federal inspection and grading system.

Figure 10.1
USDA inspection stamp for meat



Figure 10.2 USDA grade stamp for meat



Inspection

- **1.** *Inspection* is a *guarantee of wholesomeness*, not of quality or tenderness. It means the animal was not diseased and the meat is clean and fit for human consumption.
- 2. That the meat passed inspection is indicated by a round stamp (Figure 10.1).
- 3. Inspection is required by U.S. federal law. All meat must be inspected.

Quality Grading

- 1. Grading is a quality designation.
- 2. The grade is indicated by a shield stamp (Figure 10.2).
- **3.** Grading is not required by U.S. law. (Some packers use a private grading system and give different brand names to different grades. Reliability of private grades depends on the integrity of the packer.)

Quality grading is based on the texture, firmness, and color of the lean meat, the age or maturity of the animal, and the marbling (the fat within the lean).

All these factors must be considered together. For example, old, tough meat can still have marbling, but it would rate a low grade because of the other factors. Table 10.1 summarizes USDA meat grades.

Yield Grading

In addition to quality grading, beef and lamb are graded according to how much usable meat in proportion to fat they have. This is called *yield grading*. The meatiest grade is Yield Grade 1. Poorest yield (much exterior fat) is Yield Grade 5.

Pork is yield-graded from 1 to 4, but most pork is sold already cut and trimmed. Veal, which has little fat, is not yield-graded.



Green Meat

Soon after slaughter, an animal's muscles stiffen due to chemical changes in the flesh. This stiffness, called *rigor mortis*, gradually disappears. Softening takes three to four days for beef, less time for smaller carcasses like veal, lamb, and pork. This softening is caused by enzymes in the flesh.

Table 10.1 USDA Meat Grade	es			
CHARACTERISTICS	BEEF	VEAL	LAMB	Pork
Highest quality, highest price, limited supply.	Prime	Prime	Prime	Pork used in food service is consistent in quality and is not quality-graded. It is inspected for whole-someness and graded for yield.
High in quality, generally tender and juicy. Abundant supply. Widely used in food service as well as in retail.	Choice	Choice	Choice	
Lean meat, not as fine or tender. Economical. Can be tender and flavorful if cooked carefully. Used in many institutional food- service operations.	Select	Good	Good	
Least frequently used in food service. Highest of these grades are sometimes used in institutional food service. Lowest of these grades are used by canners and processors.	Standard Commercial Utility Cutter Canner	Standard Utility Cull	Utility Cull	

Note: Quality varies within grades. For example, the best Choice beef is close to Prime, while the lowest Choice beef is close to Select.

Green meat is meat that has not had enough time to soften. It is tough and relatively flavorless. Because it takes several days for meats to reach the kitchen from the slaughterhouse, green meat is seldom a problem with commercially available meats, except when meat is frozen while still green. The problem is sometimes encountered with game killed for home consumption, if the hunter cuts and freezes the meat when it is too fresh.

Aged Meat

Enzyme action continues in muscle tissue even after meat is no longer green. This tenderizes the flesh even more and develops more flavor. Holding meats in coolers under controlled conditions to provide time for this natural tenderizing is called *aging*.

Beef and lamb can be aged because high-quality carcasses have enough fat cover to protect them from bacteria and from drying. Veal has no fat cover, so it is not aged. Pork does not require aging.

Aging does not mean just storing meat in the refrigerator. *There is a difference between aged meat and old meat.* Conditions must be carefully controlled so the meat becomes naturally tender without spoiling. There are two primary methods used for aging.

1. Wet aging.

Today, most wholesale meat carcasses are broken down into smaller cuts and enclosed in plastic vacuum packs. These packs are usually known by the trade name *Cryovac*. The air- and moistureproof packaging protects the meat from bacteria and mold, and it prevents weight loss due to drying. (However, Cryovac-aged meats often lose more weight in cooking than do dry-aged meats.) Vacuum-pack meats must be refrigerated.

KEY POINTS TO REVIEW

- What are the three main components of meat?
- What is connective tissue? How does it affect our choice of cooking techniques for meat?
- What is the difference between inspection and grading?
- What are the best two grades of beef? of lamb? of pork? of veal?
- What are the two types of aging? What effect does aging have on meat?

2. Dry aging.

Dry aging is the process of storing meats, usually large cuts, under carefully controlled conditions. The meat is not packaged or wrapped, and it is exposed to air on all sides. Temperature, humidity, and air circulation are precisely controlled to prevent spoilage. Ultraviolet lights are sometimes used in aging coolers to kill bacteria.

Dry-aged meat can lose up to 20 percent of its weight through moisture loss, depending on the size of the cut and how long it is aged. Consequently, dry aging is a more expensive process than wet aging. Dry-aged meats are usually available from specialty purveyors only, and at a higher price than wet-aged meats. Many customers are willing to pay a premium for fine dry-aged steaks because they are considered the best for flavor and texture.

Aging increases tenderness and flavor. An off taste is not characteristic of aged meat. *If a meat smells or tastes spoiled, it probably is.* Sometimes meats in vacuum packs have a musty aroma when first opened, but this disappears quickly.

Aging costs money. Storage costs, weight loss due to drying, and heavier trimming due to dried and discolored surfaces all add to the price of aged meat (although wet aging costs less than dry aging). As a meat purchaser, you must decide how much quality is worth how much cost for your particular establishment.

UNDERSTANDING THE BASIC CUTS

The following discussion of meat cuts focuses on the four primary meat categories in the wholesale and retail markets: beef, lamb, veal, and pork. Keep in mind, however, that game animals, discussed later in the chapter, have the same bone and muscle structure and are generally divided into the same or similar cuts as nongame animals.

Meat cuts are based on two factors:

- 1. The muscle and bone structure of the meat.
- 2. Uses of and appropriate cooking methods for various parts of the animal.

Food-service suppliers in the United States may follow a set of specifications called *Institution Meat Purchase Specifications* (IMPS). (IMPS, including numbers and names of cuts, are the same as the North American Meat Processors Association, or NAMP, specifications.) All cuts are described in detail and listed by number. This simplifies purchasing, as you can order by number exactly the cut you want.

Available Forms: Carcasses, Partial Carcasses, Primals, and Fabricated Cuts

Beef, lamb, veal, and pork may be purchased in some or all of these forms. Mutton and goat are also given NAMP classification numbers, as indicated in Table 10.2, but they have minimal importance in North American food service and are not covered here.

Carcasses

The carcass is the whole animal, minus the entrails, head, feet, and hide (except pork, from which only the entrails and head are removed). Whole carcasses are rarely purchased by food-service operators because of the skill and labor required in cutting and because of the problem of total utilization.

IMPS/NAMP CLASSIFICATIONS

The IMPS/NAMP system assigns a series of numbers to each major category of meat, as detailed in Table 10.2. Beef, for example, is the 100 series. This means all large beef cuts, from whole carcass to primals and prepared roasts, are assigned a three-digit number from 100 to 199. Portion-size and smaller cuts of beef, such as steaks and stew meat, are assigned a four-digit number, also beginning with 1. For example, a whole beef rib, roast-ready, has the number 109; a beef rib steak, bone in, is 1103.

Note that variety meats and processed meat products, such as cured and smoked meats and sausages, are also categorized (see Table 10.2).

Sides, Quarters, Foresaddles, Hindsaddles

These represent the first step in breaking down a carcass.

Again, these larger cuts are no longer frequently used in food service. Fewer establishments cut their own meats.

- 1. Beef is split first through the backbone into sides. Sides are divided between the 12th and 13th ribs into forequarter and hindquarter.
- 2. Veal and lamb are not split into sides but are divided in half into foresaddle and hindsaddle. For yeal, the cut is made between the 11th and 12th ribs. Lamb, on the other hand, is split either between the 12th and 13th rib or after the 13th rib, depending on the cutting style. For more information, see the charts on pages 286–287.
- 3. Pork carcasses are not divided in this way. They are cut directly into primal cuts (see below).

Primal or Wholesale Cuts

These are the primary divisions of quarters, foresaddles, hindsaddles, and carcasses. These cuts, called *primal cuts*, are still used, to some extent, in food service, because they

- 1. Are small enough to be manageable in many food-service kitchens.
- 2. Are still large enough to allow a variety of cuts for different uses or needs.
- 3. Are easier to utilize completely than guarters or halves.

Each primal may be *fabricated*, or cut up and trimmed, in several ways. Primal cuts are always the starting point for smaller cuts. For this reason, it will benefit you to be able to identify each one. Study the charts and photos in Figures 10.3 through 10.6. (Please note the lamb chart in Figure 10.5 shows the traditional cuts, not the alternative cuts mentioned in the preceding section.) Learn the names of the primals, their location on the carcass, and the most important cuts that come from each. Then, whenever you work with a piece of meat, try to identify it exactly and match it with its primal cut.

Fabricated Cuts

Primal cuts are fabricated into smaller cuts for roasts, steaks, chops, cutlets, stewing meat, ground meat, and so forth, according to individual customer requirements and, if applicable, IMPS/NAMP specifications.

The amount of trim and exact specifications can have many variations. For example, a beef primal rib can be trimmed and prepared for roasting at least nine ways.

Portion-controlled cuts are ready-to-cook meats cut according to customer's specifications. Steaks and chops are ordered either by weight per steak or by thickness. Portioncontrolled cuts require the least work for the cook of all meat cuts. They are also the most expensive per pound of all categories of cuts.

Bone Structure

Knowing the bone structure of meat animals is essential for:

1. Identifying meat cuts.

The distinctive shapes of the bones are often the best clue to the identification of a cut. Note how the shapes of the bones in the photographs in Figures 10.3 through 10.6 help your recognition.

2. Boning and cutting meats.

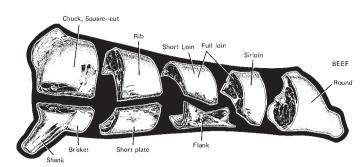
Bones are often surrounded by flesh. You need to know where they are even if you can't see them.

3. Carving cooked meats.

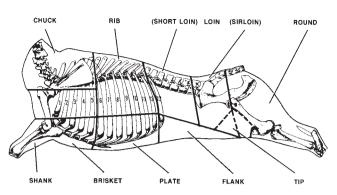
Same reason as number 2.

Table 10.2 IMPS/NAMPS Meat Categories				
SERIES Number	SERIES Name			
100	Fresh Beef			
200	Fresh Lamb and Mutton			
300	Fresh Veal and Calf			
400	Fresh Pork			
500	Cured, Cure and Smoked, and Cooked Pork Products			
600	Cured, Dried, and Smoked Beef Products			
700	Variety Meats and Edible Byproducts			
800	Sausage Products			
11	Fresh Goat			

Figure 10.3 Beef.



(a) Primal (wholesale) beef meat cuts Courtesy National Livestock and Meat Board



(b) Primal (wholesale) beef cuts and their bone structure Courtesy National Livestock and Meat Board



Beef chuck, boneless, separated into blade, clod, and arm (IMPS/NAMPS 115)



Beef rib, roast ready
(IMPS/NAMPS 109)
(Reprinted with permission of John Wiley & Sons, Inc.)



Beef rib steak
(IMPS/NAMPS 1103)



Beef loin (IMPS/NAMPS 172) (Reprinted with permission of John Wiley & Sons, Inc.)



Beef short loin (IMPS/NAMPS 174) (Reprinted with permission of John Wiley & Sons, Inc.)



Beef porterhouse steak (IMPS/NAMPS 1173)



Beef T-bone steak (IMPS/NAMPS 1174)



Beef tenderloin, trimmed (IMPS/NAMPS 189A)



Beef strip loin (IMPS/NAMPS 175) (Reprinted with permission of John Wiley & Sons, Inc.)



Beef outside (bottom) round (IMPS/NAMPS 170)



Beef round steak (IMPS/NAMPS 1170)

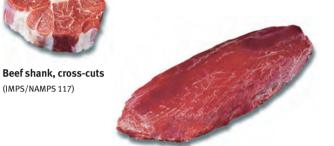


Beef inside (top) round (IMPS/NAMPS 168)



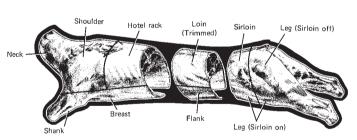
Beef knuckle, untrimmed (IMPS/NAMPS 167) (Reprinted with permission of John Wiley & Sons, Inc.)

(IMPS/NAMPS 117)

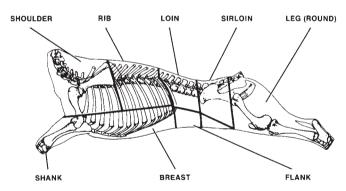


Beef flank steak (IMPS/NAMPS 193)

Figure 10.4 Veal



(a) Primal (wholesale) veal meat cuts Courtesy National Livestock and Meat Board



(b) Primal (wholesale) veal cuts and their bone structure Courtesy National Livestock and Meat Board



Veal rib roast (IMPS/NAMPS 306)



Veal breast (IMPS/NAMPS 313)

(IMPS/NAMPS 410)

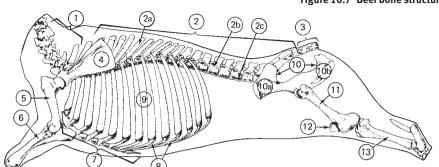
SHOULDER NECK LOIN SIRLOIN LEG Figure 10.5 Lamb. Hotel rack Shoulde Leg (Sirloin off) (a) Primal (wholesale) lamb meat cuts FORE SHANK BREAST FLANK HIND SHANK Courtesy National Livestock and Meat Board (b) Primal (wholesale) lamb cuts and their bone structure Courtesy National Livestock and Meat Board Lamb loin roast Lamb arm chop Lamb shoulder blade chop Lamb rib chop Lamb loin chop (IMPS/NAMPS 232A) (IMPS/NAMPS 1207) (IMPS/NAMPS 1207) (IMPS/NAMPS 1204) (IMPS/NAMPS 1232A) Lamb, square-cut shoulder, whole Lamb, whole leg Lamb, boneless shoulder, rolled and tied Lamb foreshank (IMPS/NAMPS 207) (IMPS/NAMPS 233) (IMPS/NAMPS 208) (IMPS/NAMPS 210) Figure 10.6 Pork. **BLADE BOSTON** CLEAR PLATE FAT BACK LEG (FRESH OR SMOKED HAM) LOIN SHOULDER SPARERIBS PICNIC SHOULDER BACON (SIDE PORK) (a) Primal (wholesale) pork meat cuts Courtesy National Livestock and Meat Board (b) Primal (wholesale) pork cuts and their bone structure Courtesy National Livestock and Meat Board Pork shoulder butt Pork tenderloin (IMPS/NAMPS 415) (IMPS/NAMPS 406) Full pork loin (includes ribs) Pork loin chops Pork rib half and loin half roasts

(IMPS/NAMPS 1410)

(IMPS/NAMPS 410)

Study the chart of the beef skeleton in Figure 10.7 and learn the names of the major bones. Then compare the charts in Figures 10.3 through 10.6. You will see the bone structures for all the animals are identical (except for pork, which has more than 13 ribs). Even the names are the same.

Figure 10.7 Beef bone structure



MEAT-CUTTING TERMINOLOGY

Although the public refers to retail meat cutters as *butchers*, the meat industry uses this term another way. To *butcher* means to kill and dress a meat animal. To *fabricate* means to cut raw meat into smaller pieces.

A third term, *carve*, also means to cut meat, but this always refers to cooked meat.

Neck bone
 Backbone
 Feather bone
 Finger bone

2c. Chine bone

3. Tailbone 4. Blade bone 5. Arm bone 6. Foreshank bone 7. Breastbone

8. Rib cartilage 9. Ribs 10. Pelvis

10a. Hip bone 10b. Rump or aitch bone 11. Leg or round bone

12. Kneecap

13. Hindshank bone

The photographs in Figures 10.3 through 10.6 depict typical primal and fabricated cuts of beef, lamb, veal, and pork (courtesy National Livestock and Meat Board and National Pork Producers Council).

Beef, Lamb, Veal, and Pork Cuts

Beel Primat Cut	s and Fabricated Cuts		
PRIMAL	MAJOR BONES	COMMON FABRICATED CUTS	PRIMARY COOKING METHODS
Forequarter			
Chuck (square cut)	Ribs 1–5	Shoulder clod	Moist heat
	Blade bone	Triangle	
	Backbone (including chine	Boneless inside chuck	
	and feather bones)	Chuck tender	
	Neck bones	Chuck short ribs	
	Arm bone	Cubed steaks	
		Stew meat	
		Ground chuck	
Brisket	Rib bones	Boneless brisket and	Moist heat
	Rib cartilage	corned beef brisket	
	Breastbone	Ground beef	
Shank	Shankbone	Stew meat	Moist heat
		Ground beef	
Note: Square-cut chuck, I	orisket, and shank, in one piece, are calle	d cross-cut chuck.	
Rib	Ribs 6–12	Rib roasts (prime rib)	Dry heat
	Backbone (chine and	Rib steaks	·
	feather bones)	Short ribs	Moist heat
Short plate	Rib bones	Short ribs	Moist heat
	Tip of breastbone	Stew meat	
	Rib cartilage	Ground beef	

Beef Primal C	uts and Fabricated Cuts (cont	inued)	
PRIMAL	MAJOR BONES	COMMON FABRICATED CUTS	PRIMARY COOKING METHODS
Hindquarter (Full loin)		Full tenderloin (to have tenderloin in one piece, it must be stripped out of loin before loin is split into short loin and sirloin)	Dry heat
Short loin	Rib 13 Backbone (chine, feather bones, finger bones; see Note 1)	Club steaks T-bone steaks Porterhouse steaks Strip loin Strip loin steaks Short tenderloin	Dry heat
Sirloin	Backbone Hip bone (part of pelvis)	Top sirloin butt Bottom sirloin butt Butt tenderloin	Dry heat
Flank	Tip of rib 13	Flank steak Ground beef	Moist heat (exception: flank steak cooked as London broil)
Round	Round (leg) bone Aitch bone (part of pelvis) Shankbone Tailbone	Knuckle (sirloin tip) Inside (top) round Outside (bottom) round Eye of round (part of outside round) Rump Hind shank	Moist heat and dry heat

Note 1: Finger bones are the short horizontal bones attached to those chine bones that have no ribs attached. They are stems of the 7s in T-bones.

Lamb Primal Cuts and Fabricated Cuts					
PRIMAL	MAJOR BONES	Common	FABRICATED C	Cuts	PRIMARY COOKING METHODS
Foresaddle					
Shoulder	Ribs 1–4 or 1–5 (see Note 2) Arm Blade Backbone (chine and feather bones) Neck bones		Shoulder roasts Shoulder chops Stew meat Ground lamb		Moist heat and dry heat
Breast and shank	Rib bones Rib cartilage Breastbone Shankbone		Riblets Breast Stew meat Ground lamb		Moist heat
Hotel rack	Ribs 5–12 or 6–13 (see Note 2) Backbone		Rib roasts (rack) Crown roast Ribs, chops		Dry heat
Note: Hotel rack plus co	nnecting portions of breast is called a <i>bracelet</i> .				
Hindsaddle					
Loin (with or without flank)	Rib 13 (optional; see Note 2) Backbone (chine, feather bones, finge	er bones)	Loin roast Loin chops		Dry heat
Leg	Backbone Tailbone Pelvis		Leg roast Leg chops Sirloin chops		Dry heat
	Round bone Hindshank		Shank		Moist heat
<i>Note:</i> Hotel rack and loir	n attached are called <i>lamb back</i> ; used mostly fo	r chops.			

Note 2: There are two cutting styles for lamb carcasses. In style A, the carcass is divided between the 4th and 5th ribs and again between the 12th and 13th ribs. In style B, the cuts are made between the 5th and 6th ribs and again behind the 13th rib. Both styles yield 8-rib racks. Style B produces a rack with a more uniform eye muscle through the length of the rack.

Veal Primal Cu	ts and Fabricated Cuts		
PRIMAL	Major Bones C	COMMON FABRICATED CUTS	PRIMARY COOKING METHODS
Foresaddle			
Shoulder (square cut)	Ribs 1–4 or 1–5 (see Note 3) Blade bone Backbone (chine and feather bones) Neck bones Arm bone	Shoulder roasts Shoulder chops Shoulder clod steaks Cubed steaks Stew meat Ground veal	Moist heat and dry heat
Breast	Rib bones Rib cartilage Breastbone	Boneless breast Cubed steaks Ground veal	Moist heat
Shank	Shankbone	Shank cross-cut (osso buco)	Moist heat
Hotel rack	Ribs 5–11 or 6–11 (see Note 3) Backbone (chine and feather bones)	Rib roast Rib chops	Dry heat and moist heat
Note: Hotel rack plus co	onnecting portions of breast is called a bracelet.		
Hindsaddle			
Loin (with or without flank)	Ribs 12 and 13 Backbone (chine, feather bones, finger	Saddle (loin roast) bones) Loin chops	Dry heat and moist heat
Leg	Backbone Tailbone	Leg roast Scaloppine or cutlets	Dry heat
	Pelvis (hip bone, aitch bone) Round bone Hindshank	Shank cross-cut (osso buco)	Moist heat
Note: Hotel rack and lo	in attached are called <i>veal back</i> ; used mostly for ch	nops.	

Note 3: The shoulder may be separated from the rack between the 4th and 5th ribs to yield a 7-rib rack, or between the 5th and 6th ribs to yield a 6-rib rack.

Pork Primal C	uts and Fabricated Cuts			
PRIMAL	MAJOR BONES C	оммон Ғав	RICATED CUTS	PRIMARY COOKING METHODS
Shoulder picnic	Shoulder (arm) bone Shankbone	Hock Grou	n and smoked picnic ks Ind pork Bage meat	Moist heat
Boston butt	Blade bone (rib bones, back and neck bo are removed)	Shou Dais Grou	steaks Ilder roasts y (smoked) Ind pork sage meat	Dry heat and moist heat
Loin	Rib bones (see Note 4) Backbone (chine, feather bones, finger b Hip bone	ones) Loin Bone Cour Cana	roast and rib chops eless loin ntry-style ribs adian-style bacon moked)	Dry heat and moist heat
Ham	Aitch bone Leg bone Hindshank bone	Smo	h ham ked ham steaks	Dry heat and moist heat
Belly	None	Baco	n	Dry heat and moist heat
Spare ribs	Rib bones Breastbone	Spar	reribs	Moist heat
Fatback and clear plate	None	Fresh Salt Lard	n and salt fatback pork	(Used as cooking fats)
Jowl	None	Jowl	bacon	Moist heat
Feet	Foot bones			Moist heat

Selecting Meats for Your Operation

Deciding Which Forms to Purchase

Whether you buy whole carcasses, fabricated cuts, or anything in between depends on four factors:

- 1. How much meat-cutting skill you or your staff has.
- 2. How much work and storage space you have.
- 3. Whether or not you can use all cuts and lean trim on your menu.
- 4. Which form gives you the best cost per portion after figuring in labor costs.

Meat purveyors can usually cut meat more economically than food-service operators can because they deal in large volume. Carcasses or primal cuts cost less per pound than fabricated cuts, but they have more waste (fat and bone) and require more labor (which costs money). However, some operators still do some of their own cutting, depending on how they answer the four questions above. They feel cutting their own meat gives them greater control over quality.

Some compromises are available. If you want the quality of freshly cut steaks, for example, you might buy boneless strip loins and cut your own steaks to order. You need not buy primal loins.

Specifications

When buying meat, you must indicate the following specifications:

1. Item name.

Include IMPS/NAMPS number, if applicable. Example: 173 Beef Short Loin, Regular

2. Grade.

Example: U.S. Choice

(You may also want to specify division of grade, such as the upper half or lower half of U.S. Choice.)

3. Weight range for roasts and large cuts.

Portion weight or thickness (not both) for steaks and chops.

4. State of refrigeration.

Chilled or frozen.

5. Fat limitations, or average thickness of surface fat.

Example: ¾ inch average, 1 inch maximum. (This does not apply to veal.)

Meat purchasers may also have to choose whether or not to purchase irradiated meat. *Irradiation* is the process of exposing foods to radiation in order to kill bacteria, parasites, and other potentially harmful organisms. Irradiation does not harm the meat, make it radioactive, or change its structure, flavor, or nutritional value. Foods treated with radiation must be labeled as such. In the United States, for example, the Food and Drug Administration (FDA) requires that irradiated foods include labeling with either the statement "treated with radiation" or "treated by irradiation" and the international symbol for irradiation, the radura (Figure 10.8).

Figure 10.8
The radura is the international symbol for irradiation.



Some operators refuse to purchase irradiated foods because they or their customers have concerns about their health effects. The procedure has generated much controversy for other reasons as well. For example, some see the availability of the process as an excuse to avoid normal sanitation procedures. Nevertheless, there is so far no evidence that these foods are harmful for human beings to eat.

Fabricating Meat

Even though few operations today purchase large cuts, such as primals, and break them down in-house, you still need to know a number of trimming and fabricating techniques to finish or modify the fabricated cuts you purchase. The illustrations in this section demonstrate important procedures. These procedures are used for recipes in Chapter 11.

One term you will encounter often when trimming meat is *silverskin*, a thin layer or membrane of connective tissue that often covers the surface of a muscle. For braised meats, it is not always necessary to remove silverskin, unless it is very heavy, because slow cooking breaks down the collagen of the tissue. However, for roasts, sautés, and grills of tender meats, it should be removed for two reasons: (1) It is tough and would be unpleasantly chewy in the cooked product; (2) It usually shrinks when cooked, making the meat deform or curl.

To remove silverskin:

- 1. Hold the blade of the knife parallel to the silverskin and perpendicular to the grain of
- 2. Insert the tip of the blade just under the silverskin.
- 3. Hold the knife so the edge of the blade angles slightly upward. Carefully slip the blade under the silverskin in the direction of the grain of the meat while holding the meat steady with your other hand. (Angling the blade upward keeps it from digging into the meat.)
- 4. Repeat until all silverskin is removed.

This technique is illustrated in Figures 10.9, 10.15, and 10.16.

Figure 10.9 Preparing beef tenderloin.



(a) A whole, untrimmed beef tenderloin.



(b) Pull off the heavy fat from the outside of the tenderloin, freeing it with a knife as necessary.



(c) Separate the strip of gristly meat, or chain, from the side of the tenderloin. Use this piece for ground meat.



(d) Carefully remove the silverskin.



(e) The fully trimmed tenderloin before cutting.



(f) Cut into steaks of the desired size.



(g) This tenderloin has been cut into a variety of steaks as a demonstration. From left to right: four fillet steaks, two large pieces for Châteaubriand, two tournedos, four fillets mignons. In front: trimmings from both ends.



Figure 10.10 Shaping medallions.

Figure 10.11 Preparing a leg of lamb for roasting.



(a) Begin by removing the hip and tail bones.



(b) With a sharp-pointed boning knife, cut along the hip bone to separate bone from meat. Always cut against the bone.



(c) Continue until the hip bone and tailbone are completely removed. Note the round ball joint at the end of the leg bone in the center of the meat.



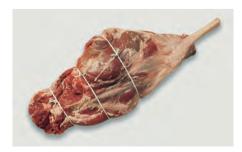
(d) Trim off excess external fat, leaving a thin covering.



(e) Pull off the skin or fell on the outside of the leg.



(f) Full leg of lamb, ready for roasting. The end of the shankbone and part of the shank meat have been removed.



(g) The leg may be tied into a more compact shape.



(h) The sirloin portion may be cut off and used for another purpose, such as shish kebabs.

Figure 10.12 Preparing a rack of lamb for roasting.



(a) Begin by cutting down on both sides of the feather bones all the way to the chine bone.



(b) If a meat saw is available, turn the rack over and cut through the rib bones where they attach to the chine bone.



(c) If a meat saw is not available, use a cleaver. Stand the roast on end and cut through the rib bones where they join the chine bone. This separates one rack.



(d) Repeat the procedure on the other side of the chine.



(e) The two halves are separated from the chine.



(f) Trim excess fat from the top of the meat, leaving a thin protective covering. During this step, you should also remove the shoulder blade cartilage, which is embedded in the layers of fat.



(g) To trim the fat and meat from the ends of the bones (called frenching the bones), first cut through the fat in a straight line down to the bone, keeping the cut about 1 in. (2.5 cm) from the tip of the eye muscle.

Figure 10.13 Butterflying and stuffing a pork loin.



(h) Score the membrane covering the rib bones. Pull and cut the layer of fat from the bones.



(i) The roast is trimmed and ready to cook.



(a) To butterfly, hold the knife blade parallel to the table and cut through the center of the loin as shown. Do not cut all the way through, but leave the meat attached at one edge.



(b) Open the cut meat and spread the filling on the bottom half.



(c) Fold the top half over the filling to reform the loin.

Figure 10.14 Tying a roast.



(a) Tie a length of butcher's twine tightly around one end of the roast. After tying the knot securely, twist the length of twine into a loop as shown.



(b) Pass the loop over the end of the roast.



(c) Position the loop an inch or two (2.5-5 cm) from the first loop and pull the loose end to tighten.



(d) Continue making loops and tightening them until the whole length of meat is tied.



(e) Turn the meat upside down. Pass the loose end of the twine under the last loop and wind it once around as shown.

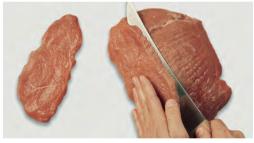


(f) Repeat step e with each of the loops. When you reach the end of the roast, tie it off securely to the short length of twine from the knot made in the first step.

Figure 10.15 Trimming, cutting, and pounding yeal for scaloppine.



(a) Remove all tendons and connective tissue (silverskin) from the veal. Slip the point of a thin boning knife under the skin. Angle the edge of the blade upward against the skin and cut it away carefully without cutting through the meat.



(b) Holding the blade of the knife at an angle if necessary to get a broader slice, cut *across* the grain of the meat as shown to make thin slices.



(c) Broader slices can be cut from narrower pieces of meat by butterflying. Cut the slice almost through the meat but...



(d) . . . leave it attached.



(e) Then cut a second slice the same way, but cut all the way through.



(f) A butterflied scaloppine is twice as large as a single slice. Unfortunately, it has a seam in the center that often detracts from the appearance of the finished dish, unless the veal is breaded or covered with a topping.



(g) If desired, pound the cutlet to an even thickness with a cutlet mallet. This helps disguise the seam in a butterflied cutlet.



Figure 10.16 Trimming a pork tenderloin.



Figure 10.17 For stuffed pork chops, cut a pocket in the chops as shown.

Figure 10.18 Larding meat using a larding needle.



(a) Cut a strip of fatback to fit inside the needle.



(b) Insert the needle through the meat. Pull out the needle, holding the strip of fat so it stays inside the meat.

COOKING AND HANDLING MEATS

Tenderness and Appropriate Cooking Methods

The heat of cooking affects tenderness in two ways:

- 1. It tenderizes connective tissue if moisture is present and cooking is slow.
- **2.** It toughens protein. Even meats low in connective tissue can be tough and dry if cooked at excessively high heats for too long.

The Principles of Low-Heat Cooking

- **1.** High heat toughens and shrinks protein and results in excessive moisture loss. Therefore, low-heat cooking should be the general practice for most meat cooking methods.
- 2. Broiling seems to be a contradiction to this rule. The reason carefully broiled meat stays tender is that it is done quickly. It takes time for the heat to be conducted to the interior of the meat, so the inside never gets very hot. Meat broiled to the point of being well done, however, is likely to be dry.

- 3. Roasts cooked at low temperatures have better yields than those roasted at high heat—that is, they shrink less and lose less moisture.
- **4.** Because both liquid and steam are better conductors of heat than air, moist heat penetrates meat quickly. Therefore, to avoid overcooking, meat should be simmered, never boiled.

Breaking Down Connective Tissue

Remember that connective tissue is highest in muscles that are frequently exercised and in mature animals.

Look again at the primary cooking methods (column 4) in the table of meat cuts (p. 285). You should detect a pattern of tender cuts, cooked primarily by dry heat; slightly less tender cuts, cooked sometimes by dry and sometimes by moist heat; and least tender cuts, cooked almost always by moist heat.

The concept of moist-heat cooking needs further explanation as it applies to breaking down connective tissue in meat. The usual explanation of the effect of moist heat on connective tissue is that heat breaks down collagen in the presence of moisture. But meat is about 75 percent water, so *moisture is always present*. Collagen breaks down because of long, slow cooking, no matter what cooking method is used.

The catch is that, for small cuts of meat, dry-heat cooking methods are usually short, quick methods. Cooking must be short, in part because too long an exposure to dry heat results in excessive moisture loss from the product. The terms *moist-heat cooking method* and *dry-heat cooking method* refer to the way in which heat is transferred from the heat source to the food, whether by dry means, like hot air or radiation, or moist means, like steam or simmering liquid. Because the product is surrounded by moisture when it is simmered, steamed, or braised, moist-heat cooking methods promote moisture retention, not moisture loss, so cooking time can be as long as desired.

A tough steak on the grill or in the oven doesn't have enough time to become tender before it is dried out. On the other hand, large cuts of less tender meat can be roasted successfully because they are too large to dry out during a long roasting time. A 40-pound (18-kg) roast steamship round of beef can be tender because it takes hours to cook even to the rare stage. A grilled steak cut from the same round, however, is likely to be tough.

To summarize: Long, slow cooking tenderizes collagen. Moist-heat methods are most suitable for long, slow cooking. Dry-heat methods usually are short, quick cooking methods, suitable only for tender cuts, except when larger items are roasted for a relatively long time. The following list summarizes the cooking characteristics of the major cuts.

1. Rib and loin cuts.

Always the most tender cuts, used mostly for roasts, steaks, and chops.

Beef and lamb. Because these meats are often eaten rare or medium done, the rib and loin are used almost exclusively for roasting, broiling, and grilling.

Veal and pork. Pork is generally eaten well done, and veal is most often eaten well done, although many people prefer it slightly pink in the center. Therefore, these meats are occasionally braised, not to develop tenderness but to help preserve juices. Veal chops, which are very low in fat, may be broiled if great care is taken not to overcook them and dry them out. A safer approach is to use a method with fat, such as sautéing or pan-frying, or to use moist heat.

2. Leg or round.

Beef. The cuts of the round are less tender and are used mostly for braising.

Top grades, such as U.S. Prime, U.S. Choice, Canada Prime, and Canada AAA, can also be roasted. The roasts are so large that, roasted at low temperatures for a long time, the beef's own moisture helps dissolve collagen. Inside round (top round) is favored for roasts because of its size and relative tenderness.

Beef round is very lean. It is best roasted rare. Lack of fat makes well-done round taste dry.

MILK-FED, GRAIN-FED, OR GRASS-FED

The properties of meats are determined, in part, by the diet of the animals. Most of the beef on the market in North America is grain-fed, even though grass, not grain, is the natural diet of cattle. Feeding cattle grain enables producers to raise and fatten them for market more quickly than letting them browse on grass does. Grain-fed beef is tender and has more marbling than grass-fed beef, and it is preferred by most North American consumers. Grass-fed or pastured beef is usually perceived as less tender and less juicy, although it is lower in saturated fat and may have more health benefits. Its flavor is often described as "beefier" than that of grain-fed beef. Grass-fed beef is common in some other countries, such as the beef-eating and beefproducing nation of Argentina. In North America, producers of pastured beef are campaigning for more consumer recognition.

(continues next page)

Veal, lamb, and pork. These meats are from young animals and therefore tender enough to roast.

Legs make excellent roasts because large muscles with few seams and uniform grain allow easy slicing and attractive portions.

Figure 10.19 shows the muscle structure of the round in cross section. A center-cut steak from a whole round of beef, lamb, veal, or pork has this same basic structure.

Knuc or tip

3. Chuck or shoulder.

Beef. Beef chuck is a tougher cut that is usually braised. Although chuck is not the ideal choice for braising if uniform slices are desired, it makes braised dishes of excellent eating quality. Its connective tissue is easily broken down by moist cooking, yielding moist, tender meat with abundant gelatin content.

Veal, lamb, and pork. These are most often braised but are young enough to be roasted or cut into chops for broiling. Shoulder roasts are not the most desirable because they consist of many small muscles running in several directions. Therefore, they do not produce attractive, solid slices.

animals and therefore tender Inside (top) round S with few seams tions. Find the seams tions and therefore tender Knuckle or tip Inside (top) round Eye round Outside (bottom) round

Figure 10.19 Location of the muscles in a whole center-cut round steak of beef, veal, lamb, or pork.

4. Shanks, breast, brisket, and flank.

These are the least tender cuts, even on young animals, and are almost always cooked by moist heat.

Shanks are desirable for braising and simmering because their high collagen content is converted into gelatin that gives body to braising liquids and good eating quality to the meat.

Beef flank steaks can be broiled (as London broil) if they are cooked rare and cut across the grain into thin slices. This cuts the connective tissue into chewable pieces (see mechanical tenderization, p. 278).

5. Ground meat, cubed steaks, and stew meat.

These can come from any primal cut. They are usually made from trimmings, although whole chucks are sometimes ground into chopped meat. Ground meat and cubed steaks can be cooked by dry or moist heat because they are mechanically tenderized. Stew meat is, of course, cooked by moist heat.

Other Factors Influencing Choice of Cooking Methods

1. Fat content.

Meats high in fat, such as Prime beef or lamb, are generally cooked without added fat, such as by roasting or broiling.

Meats low in fat, such as veal, are often cooked with added fat to prevent dryness. Sautéing, pan-frying, or braising is generally preferable to broiling for veal chops that are cooked well done.

Fat can be added to lean meats in two ways:

- Barding. Tying slices of fat, such as pork fatback, over meats with no natural fat cover to protect them while roasting.
- Larding. Inserting strips of fat with a larding needle into meats low in marbling.

These two techniques were developed in Europe when meats were much leaner and not as tender. They are not often used with today's tender, grain-fed meats. These techniques are useful, however, when cooking lean game, such as venison.

The effect of diet can be seen in other meat animals. Traditionally, the highest-quality veal is considered to be so-called milk-fed veal, more properly called formula-fed. The meat is light pink in color and mild and delicate in flavor. Calves fed solid food or allowed into a pasture have darker, more reddish meat with a somewhat beefier flavor. Ethical objections exist about the raising of formula-fed veal because the animals are penned and not allowed much movement. As for the flavor of milk-fed versus pastured veal, this is a matter of personal preference.

The youngest lamb is called *spring lamb*. It is slaughtered before it begins a diet of solid food, and its meat is light in color and delicate in flavor. Older lamb is darker in color and has a more pronounced flavor. After the age of one year, this meat is no longer called lamb but *mutton*, and it has a still darker color and stronger flavor. Little mutton is sold in North America. (In some markets the name *mutton* may also be used for goat meat, although this is not traditional English usage.)

2. Developing tenderness is not the only goal of cooking.

Other goals are

- Developing flavor.
- Preventing excessive shrinkage and nutrient loss.
- Developing appearance.

You must often compromise to get a balanced result. For example, preliminary browning of a roast at high heat increases shrinkage but may be desirable for some roasts to develop flavor and appearance.

Searing and "Sealing"

SEARING

Searing meats at high heat creates desirable flavor and color by browning the surfaces. It was long believed that searing the surface of meat "seals the pores," keeping in juices.

This does not actually happen. Meat does not have pores but rather an open network of fibers. Think of the surface of a steak as resembling the cut end of a thick rope. There are no pores to seal. It is true that heavy browning creates a kind of crust on the surface of the meat, but this crust is no more waterproof than an unbrowned surface.

You can easily demonstrate this. Place a steak or chop on a hot griddle or grill and sear it well. Turn it over and continue cooking. As it cooks, you will see meat juices driven up through the seared top surface. You will continue to hear a sizzling sound, which is the sound of moisture escaping from the meat and quickly vaporizing. Remove the finished steak from the grill and let it set on a plate for a few minutes, and you will see a small pool of juices collect. Everyone who has cooked a steak has seen this demonstration that searing doesn't seal.

Roasts cooked from the start at a low temperature retain more juices than roasts that are seared at high heat first.

Steaks, chops, and cutlets cooked quickly at high heat retain more moisture at first because the intense heat instantly evaporates the juices from the surface of the meat and forces internal juices further into the meat. This permits browning, because moisture creates steam and inhibits browning. However, overcooked steaks are dry whether or not they were seared.

BLANCHING AND "SEALING"

Dropping meat into boiling water doesn't seal the pores either. What actually happens is this: Many proteins dissolve in cold water. When heated, these proteins coagulate and become froth or scum on the surface of the water. When meat is placed into boiling water, some of the protein coagulates inside that meat, and not as much is carried out of the meat with the lost moisture. Prolonged cooking shrinks meat as much if started in boiling water as if started in cold water.

Cooking Frozen Meats

Some sources recommend cooking some meats from the frozen state, without thawing, in order to eliminate drip loss that occurs during defrosting. However, it is usually better to thaw before cooking because of the following reasons:

- 1. Frozen meats lose no moisture from defrosting but lose more during cooking. The total loss is about the same as for thawed meats. Besides, the perception of juiciness depends as much or more on fat content than on moisture content.
- 2. Cooking frozen meats complicates the cooking process and requires adjustments in procedure. It is possible for roasts to be cooked on the outside but still frozen in the center. Frozen steaks, too, are more difficult to cook evenly than thawed steaks. Thawed meats, on the other hand, are handled like fresh meats.
- Cooking frozen meats requires extra energy, and energy is expensive. A hard-frozen roast may take 3 times as long to cook as a thawed roast.

Doneness

Definitions

The meaning of the term *doneness* depends on whether the cooking method uses dry heat or moist heat.

1. Dry heat.

Meat is "done" when the proteins have reached the desired degree of coagulation (see p. 65), as indicated by internal temperature.

2. Moist heat.

Meat is "done" when connective tissues have broken down enough for the meat to be palatable. With a few exceptions, meat cooked by moist heat is always well done.

Dry-Heat Cooking

The object of dry-heat cooking is to achieve the desired degree of doneness (protein coagulation) while preserving natural tenderness and juiciness.

DEGREE OF DONENESS

As meat cooks, its pigments change color. These color changes indicate degrees of doneness.

Red meat (beef and lamb) changes from red to pink to gray or gray-brown.

- Rare: browned surface; thin layer of cooked (gray) meat; red interior
- Medium: thicker layer of gray; pink interior
- · Well done: gray throughout

(Of course, there are stages in between.)

White meat (veal and pork) changes from pink or gray-pink to white or off-white. It is generally cooked well done, although many cuts of veal may be considered done when still slightly pink in the center.

As explained on page 23, trichinosis is a disease caused by a parasite that lives in the muscle tissue of hogs and some wild animals. In countries in which this disease is a problem, pork must be cooked long enough to eliminate this danger. This parasite is killed at 137°F (58°C), but, to be safe, pork should be cooked to at least 150° to 155°F (66° to 68°C). At this stage, pork is only medium to medium-well done. Some people are happy to eat pork that is still pink in the center, but most people prefer it to be cooked slightly more than this. On the other hand, it is not necessary to cook pork to 185°F (85°C), as older guidelines said. At this temperature, pork is overcooked and dry. For diners who avoid any trace of pink in pork, perhaps the best doneness range is 160° to 170°F (71° to 77°C).

TESTING DONENESS

Determining doneness is one of the most difficult and critical aspects of meat cooking. Anyone can put a steak on the grill or a roast in the oven. But it takes experience and skill to take it off the fire at the right time.

Color change cannot be used to test doneness because it would be necessary to cut the meat. Piercing the meat and examining the color of the juices is not a reliable method.

INTERNAL TEMPERATURE

Testing the interior of meat with a meat thermometer is the most accurate method of testing doneness. Thermometers are of two types: *standard*, which are inserted before roasting and left in the roast; and *instant-read*, which are inserted at any time, read as soon as the needle stops moving, and pulled out. Whatever thermometer you use, make sure it is *clean and sanitary* before inserting it in the meat.

The tip of the thermometer should be inserted into the center of the thickest part of the flesh, not touching fat or bone. Table 10.3 gives internal temperatures of meats at various degrees of doneness.

In general, regional traditions of eating well-done or overcooked meats are decreasing, and more people are eating meat cooked rare. For decades, meats cooked to an internal temperature of 140°F (60°C) were called *rare*, but by today's standards, this is more like medium. Current preferences are reflected in the temperatures given in Table 10.3.

It should be stated that the USDA and other agencies caution that meats may contain harmful bacteria and parasites. Although studies are still being done, these agencies

Table 10.3 Interior Temperatures of Cooked Meats				
MEAT	RARE	MEDIUM	WELL DONE	
Beef	130°F (54°C)	140°-145°F (60°-63°C)	160°F (71°C)	
Lamb	130°F (54°C)	145°F (63°C)	160°F (71°C)	
Veal	-	145°-150°F (63°-66°C)	160°F (71°C)	
Pork	_	_	160°-170°F (71°-77°C)	

suggest meats be cooked to at least 145°F (63°C) in order to be completely safe. The USDA requires that beef precooked for foodservice sale (such as precooked roast beef for sandwiches) be heated to an internal temperature of at least 145°F (63°C) when it is processed.

You may recall from Chapter 2 that cooking foods to lower temperatures can make them safe. Note, however, that according to Table 2.5 on page 30, the lower the final internal temperature, the longer the product

must be held at that temperature. Thus, for example, a roast may be brought to an internal temperature of only 130°F (54°C), but it can be considered safe only if it is held at that temperature at least 112 minutes.

Clearly, it is not possible to keep a rare steak at its final temperature for 112 minutes before serving it. According to safety standards, then, rare steaks are not considered safe. Those who prefer their steaks rare, however, are not likely to be swayed by this argument and will continue to request meat done to their liking. Each food-service operator must decide whether to please these customers or to follow food safety guidelines.

In any case, whether or not 145°F (63°C) is the lowest safe temperature for cooking most meats, it is not really accurate to call it *rare*.

CARRYOVER COOKING

Internal temperature continues to rise even after the meat is removed from the oven. This is because the outside of roasting meat is hotter than the inside. This heat continues to be conducted into the meat until the heat is equalized throughout the roast.

Carryover cooking can raise internal temperatures from $5^{\circ}F$ ($3^{\circ}C$) for small cuts to as much as $25^{\circ}F$ ($14^{\circ}C$) for very large roasts, such as a steamship round. The usual range is 10° to $15^{\circ}F$ (6° to $8^{\circ}C$) for average roasts. Exact temperature change depends on the size of the cut and on the oven temperature.

Remove roasts from the oven when internal temperature is 10° to 15° F (6° to 8° C) below the desired reading. Let the roast stand 15 to 30 minutes before slicing. For example, a beef rib roast cooked rare should be removed from the oven when the thermometer reads 115° to 120° F (46° to 49° C). Carryover cooking will bring the temperature to 130° F (54° C) after the roast has stood for 30 minutes.

TOUCH

The small size of steaks and chops makes using a thermometer impractical. The cook must depend on his or her sense of touch.

Meat gets firmer as it cooks. Pressing it lightly with the finger indicates its doneness. Press the center of the lean part, not the fat.

Rare. Feels soft, gives to pressure, though not as soft and jellylike as raw meat.

Medium. Feels moderately firm and resilient, springs back readily when pressed.

Well done. Feels firm, does not give to pressure.

TIME-WEIGHT RATIO

Many charts give roasting times per pound of meat. However, these can be approximate only and should be used in estimating and planning cooking times, not in determining doneness.

Many factors other than weight and oven temperature determine cooking time:

- 1. Temperature of the meat before roasting.
- 2. Amount of fat cover (fat acts as an insulator).
- **3.** Bones (bones conduct heat faster than flesh, so boneless roasts cook more slowly than bone-in roasts of the same weight).
- 4. Size, type, and contents of the oven.
- 5. Number of times the oven door is opened.
- **6.** Shape of the cut (a flat or a long, thin cut cooks more quickly per pound than a round, compact cut).

You can see why roasting requires experience and judgment. To be really accurate and useful, a complete roasting chart that took all variables into consideration, including all meat cuts, sizes, oven temperatures, and so on, would be the size of a small book.

Point 6 above is a key point. It is the *thickness* of a cut, not its *weight*, that determines cooking time—the time needed for the heat to penetrate to the center. Half a pork loin roasts in about the same time as a whole pork loin, even though it weighs half as much. The thickness is the same.

Perhaps the most useful roasting time charts are those you make yourself. When you regularly roast the same cuts in the same way with the same equipment and find they always take the same length of time, you may use those times as indicators of doneness. Many food-service operators have developed charts based on their own practices, and the correct times are indicated on their individual recipe cards.

Moist-Heat Cooking

Meat cooked by moist heat is cooked well done and actually beyond well done. Doneness is indicated by tenderness, not by temperature.

Piercing with a meat fork is the usual test for doneness. When the prongs of the fork go in and slide out easily, the meat is done.

Low temperatures—no higher than simmering—are essential to avoid toughening protein in moist-cooked meats. Oven temperatures of 250° to 300°F (120° to 150°C) are usually sufficient to maintain a simmer.

Juiciness

Three main factors determine the juiciness—or, more accurately, the perception of juiciness—in cooked meat. Despite the myths about basting with stock and about searing meat to "seal in the juices," the following are the only factors that have any significant effect on juiciness.

1. Internal fat.

Fat makes meat taste juicy. This is why well-marbled meats taste juicier than lean meats. We understand the health effects of too much fat in the diet, but there is no getting around the fact that high fat content makes meat taste juicier. When lean meats are cooked, other measures (such as using sauces and, especially, avoiding overcooking) are used to increase palatability.

2. Gelatin.

This factor is most important in braised meats. Gelatin, converted from connective tissue, helps bind water molecules and hold them in the meat. Also, the texture of the gelatin improves the texture of the meat in the mouth. This is why braised beef shank tastes so much juicier than braised outside round.

3. Protein coagulation.

As you know, as protein coagulates or is cooked, it breaks down and begins to lose water. The more it is cooked, the more it contracts and forces out moisture. No matter how much you try to sear to "seal in the juices," this moisture will be lost. The only way to minimize the loss is to avoid overcooking.

KEY POINTS TO REVIEW

- What are the primal cuts of beef? of lamb? of veal? of pork? What are the main fabricated cuts from each of these primal cuts?
- How do you determine the most appropriate cooking methods for the various fabricated cuts of meat?
- How can you tell when meat is done?

Cooking Variety Meats

Variety meats, also known as *offal*, include the organs, glands, and other meats that don't form a part of the dressed carcass of the animal.

For cooking purposes, we can divide the most popular variety meats into two groups:

Glandular Meats	Muscle Meats
Liver	Heart
Kidneys	Tongue
Sweetbreads	Tripe
Brains	Oxtails

Glandular meats do not consist of muscle tissue like regular meats but instead are internal organs or glands. This fact is important for two reasons.

First, because they do not consist of bundles of muscle fibers, the texture of glandular meats is unlike that of regular meats. Because they are not muscle tissue, they are naturally tender and do not need long, slow cooking like muscular variety meats do. If organ meats are dry and tough, it is usually because they have been overcooked.

Second, glandular meats are much more perishable than muscle meats. While some muscle meats, especially beef, benefit from aging, organ meats must be very fresh to be of the best quality. Liver, sweetbreads, and brains must be used within a day or two after purchase. If brains or sweetbreads must be kept longer, they should be blanched as described below so they will keep another day or two.

Heart, tongue, oxtails, and tripe are made of muscle tissue, just like other meats from the carcass. They are all tough, however, and must be cooked for a long time by simmering or braising in order to be made tender.

Liver

Calf's liver is the most prized because it is tender and delicate in flavor. It is easily recognized by its pale, pinkish color. Most calf's liver is served pan-fried, sautéed, or broiled.

Beef liver is darker in color (see accompanying photo), stronger in flavor, and tougher than calf's liver. It is also pan-fried or broiled, and it is frequently braised.

Pork liver is also available, but it is used mostly in pâtés and sausages.



- Remove outer skin.
- Slice on the bias about 1/4 inch (0.5 cm) thick. Slicing is easier if the liver is partially frozen.
- · Remove tough membranes.



COOKING

Cook to order. Do not cook ahead.

- To broil: Brush with (or dip in) oil or melted butter. Broil according to basic procedure for meats.
- To pan-fry, griddle, or sauté: Dredge in seasoned flour. Cook in desired fat over moderately high heat.
- Do not overcook, unless customer requests well done. To be moist, liver must be slightly pink inside. Liver cooked well done is very dry.
- Serve with bacon, French-fried or smothered onions, or seasoned butter.

Kidneys

Veal and lamb kidneys are the most popular, especially in the more upscale restaurants. They are usually prepared by sautéing and broiling. Beef kidneys are tougher and more strongly



Top: calf's-liver slice. Bottom: beef-liver slice.

flavored. They are often cooked by braising and served in specialty items, like steak and kidney pie. Pork livers are not often used.

Veal kidneys weigh 8 to 12 oz (225 to 350 g) each. Lamb kidneys are very small, $1\frac{1}{2}$ to 3 oz (40 to 85 g) each. If you purchase whole lamb or veal carcasses, you will find a pair of kidneys inside the cavity, attached to the small of the back in the region of the tenderloin and surrounded by a heavy layer of fat or suet.

PREPARATION

If the kidney is encased in fat, pull the fat away with your hands and use a knife to cut it away from the core area where the ducts emerge from inside the kidney.

Lamb kidneys are usually broiled and served two or three per portion, or as part of a mixed grill. Butterfly them by splitting them almost in half, starting at the curved or convex side. Spread them open and skewer them to hold them open during cooking.

Veal kidneys can be broiled like lamb kidneys, but they are most often cut up, sautéed, and served in a sauce. To prepare them for sautéing, first split them in half. Remove the white ducts from the center. Then cut into large dice or thick slices.

COOKING

There are two main pitfalls to cooking kidneys. First, they become tough and rubbery if over-cooked. Properly cooked, they are pink in the middle and still tender and juicy. Cooking time is very short.

Second, they have a high moisture content, which can interfere with proper sautéing. Make sure the pan is very hot before adding the kidneys, and do not overcrowd the pan. Failure to do this results in kidneys that are boiled in their juices rather than sautéed.

To avoid overcooking when sautéing over high heat, do not try to brown the kidneys too heavily. Brown them only lightly and remove them from the pan when they are still somewhat rare. Set them aside while you deglaze the pan and prepare the sauce. During this time, some juices will be released from the kidneys. Drain this juice and add it to the sauce if desired, or discard it if you feel the flavor is too strong. Finally, add the kidneys to the sauce and warm them gently. Do not let them simmer long. Serve at once.

Sweetbreads

Sweetbreads are the thymus glands of calves and young beef animals. (The gland gradually disappears as the animal matures.) They are considered a delicacy and are often expensive. Sweetbreads are mild in flavor and delicate in texture. They are usually braised or breaded and sautéed in butter.

Before cooking, sweetbreads should be prepared according to the following procedure (see Figure 10.20):

- 1. Soak in several changes of cold water for several hours or overnight. This removes blood, which would darken the meat when cooked.
- **2.** Blanch in simmering salted water for 10 minutes. Some chefs like to add a little lemon juice or vinegar to the water to preserve whiteness and make the meat firmer.
- 3. Refresh under cold water and peel off membranes and connective tissue.
- **4.** Press between two trays, with a light weight on top, and refrigerate for several hours. If desired, wrap in cheesecloth before pressing, as shown in Figure 10.20.
- **5.** Prepare for cooking:
 - For braising, leave whole or cut into large dice.
 - For breading and sautéing, split in half horizontally. Pass through Standard Breading Procedure (p. 153) or dredge in flour.

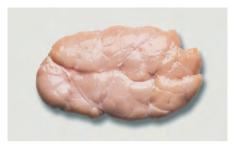
Brains

Brains are not a popular item, but they are delicate in both flavor and texture. Calf's brains are the most frequently used.



Left: lamb kidney. Right: veal kidney.

Figure 10.20 Preparing sweetbreads.



(a) Raw sweetbreads.



(b) After the sweetbread has been blanched, peel off the membrane.



(c) Wrap the sweetbreads in clean cheesecloth.



(d) Tie the ends securely.



(e) Place in a hotel pan or other flat pan and top with another pan.



(f) Place weights in the top pan and refrigerate for several hours.

Brains are very perishable and should be cooked as soon as possible. They are also fragile and must be handled carefully.

Brains must be pre-prepared according to the following procedure. They may then be served hot with black butter (p. 192) or cooled and then dipped in batter, deep-fried, and served with tomato sauce.

- 1. Soak in fresh water, as for sweetbreads.
- 2. Peel off outer membrane (this may be done before or after poaching).
- **3.** Poach 20 minutes in court bouillon made of 1 oz (25 mL) lemon juice or vinegar per pint (500 mL) of salted water, plus a bouquet garni.
- 4. Drain and serve immediately, or cool in fresh, cold water.

Heart

Heart, usually from veal or beef, is very tough and lean. It can be braised or simmered, or it may be ground and added to chopped meat for casserole dishes and meatloaf.

Before cooking, trim coarse fibers and veins inside and at top.

Tongue

Cooked beef tongue is popular as a cold, sliced meat for sandwiches. It may be fresh, cured, or smoked. Veal and lamb tongues are also available.

Tongue is almost always cooked by simmering. After simmering, remove the skin and trim the gristle at the base of the tongue before slicing.

Oxtails

Oxtails contain flavorful meat and a rich gelatin content, making them highly desirable for soups and stews.

To disjoint oxtails, cut into sections at the joints with a French knife or butcher knife. Do not use a cleaver, or you may splinter the bones.

Tripe

Tripe is the muscular stomach lining of meat animals. Although lamb and pork tripe are sometimes available, beef tripe is by far the most widely used. Because cattle have four stomachs, there are four kinds of beef tripe. Honeycomb tripe, from the second stomach, is the kind most widely available. Other kinds, however, can be substituted in recipes that call for honeycomb tripe. In France, another type of beef tripe, known as *gras-double*, is popular; it is smooth rather than honeycombed.

Most tripe that comes from the market has been partially cooked, but it still requires several hours of simmering to be made tender. Undercooked tripe is chewy and somewhat rubbery, but tripe that has simmered long enough is tender, with a pleasant gelatinous texture.

To prepare, first remove any lumps of fat by pulling or cutting them off. Next, blanch the tripe, if desired. Although it is already partially cooked when purchased, blanching freshens it. Place it in a pot with cold, salted water. Bring to a boil, simmer 5 to 10 minutes, drain, and rinse under cold water.



Tripe

Other Variety Meats

INTESTINES

The most common use for intestines is to make sausage casings. These are discussed in Chapter 26.

Chitterlings are pork intestines that are treated like tripe. They are blanched or simmered, and then braised or fried. Chitterlings are generally available in 10-pound (4.5-kg) pails. Because they shrink a great deal when simmered, this quantity yields only 3 pounds (1.3 kg) or less of finished product.

CAUL

Pig's *caul* is a fatty membrane covering the animal's stomach. It looks somewhat like a delicate piece of lace. Its main uses are to line terrines and to wrap forcemeats and other foods so they hold their shape during cooking and do not dry out. Sausage patties wrapped in caul are called *crépinettes* (see p. 867). The advantage of using caul instead of fatback to line terrines is that the caul is so thin it melts away almost completely during cooking.

FEET

Feet are exceptionally rich in gelatin. For this reason, they are added to soups, stews, and stocks to add richness and body. Indeed, some stews made with feet, such as Tripes à la Mode de Caen, may be so rich in gelatin that not only do they solidify when cold but they can even be unmolded and sliced like cold cuts.

Pig's feet are readily available in most markets. Calf's feet and ox's feet are also available, but often only on the wholesale market. The feet from older animals have less gelatin. If a recipe calls for a calf's foot but none is available, in most cases you can substitute two pig's feet.

KEY POINTS TO REVIEW

- What is the difference between glandular variety meats and muscular variety meats? List the most important types of each.
- Muscular variety meats are nearly always cooked by what cooking methods? Why?
- What are the most appropriate cooking methods for liver?
- How are sweetbreads prepared for cooking?

Game and Specialty Meats

The term *game* is used to refer to poultry and meat animals normally found in the wild. However, most of the "wild" game that has become so popular on restaurant menus is actually from farm-raised animals. Venison farms, in particular, have become numerous and productive, supplying a growing demand.

Farm-raised game birds are discussed along with other poultry in Chapter 12. This section is concerned with furred game.

Although a great variety of game, large and small, can be found on hunters' tables, the supply of game for the restaurant and retail markets is more limited. Venison, the most popular game item, is the main subject of this section. Other products, such as boar and hare, are occasionally available as well. In addition, domestic rabbit is considered here, although its meat has little in common with true game.

BONE STRUCTURE OF GAME

The bone and muscle structure of furred game such as venison and elk is the same as that of familiar meats such as beef and lamb. The carcasses are also broken down and fabricated in the same ways. After you have become familiar with the charts and diagrams on pages 282–285, you can apply the same cuts to venison and other large game.

Unlike those larger game animals, however, rabbit is cut differently, so separate illustrations are provided in this section beginning on page 306.

Note that the term *venison* is sometimes used in a broader sense to mean meat from deer, elk, moose, caribou, antelope, and pronghorn. However, when any of these meats is offered for sale, the name of the animal must appear on the packaging.

The French terms for game meats are often used on menus and in cooking manuals and references. To clarify these terms, a list of those most commonly used follows:

Chevreuil: often translated as "venison" but refers specifically to the roe deer, the most prized European variety

Cerf: red deer; often farm raised

Daim: fallow deer; often farm raised

Marcassin: young boar, especially under six months of age

Sanglier: boar

Lapin: rabbit
Lapereau: young rabbit
Lièvre: hare
Levraut: young hare

Venaison: usually translated as "venison," the term in fact refers to the meat of any

game animal

Venison

Several varieties of deer are raised on farms for use as meat, including the red deer and the smaller fallow deer. Deer meat is typically called *venison*. An important advantage of farm-raised venison, besides its year-round availability, is that the cook can be assured it is from young, tender animals. In the wild, young animals less than two years old are likely to have tender meat, but the meat rapidly becomes tough as the animal matures and ages. The tradition of marinating game for several days in strong wine marinades originates, in large part, from efforts to tenderize hunted game enough to make it palatable.

MARINATION, FLAVOR, AND TENDERNESS

The first thing to be said about farm-raised venison is that it is milder in flavor than venison hunted in the wild. It has little, if any, of the strong, gamy flavor usually associated with wild game. In fact, a farm-raised venison steak tastes rather like an especially flavorful lean cut of beef. Those who enjoy strong, gamy flavors may even find farmed venison a little bland. Although it does have some tenderizing effect, marination is not necessary for commercially raised venison because the meat is already tender. Nevertheless, marinating is widely used as a flavoring technique. Much of the flavor traditionally associated with venison, in fact, is due less to its gaminess than to the red wine marinades that were invariably used.

To retain more of the natural flavor of the meat, cook it without marination, or let it marinate for only a short period (30 minutes to 3 or 4 hours) with the desired seasonings and flavoring ingredients. Modern quick marinades are often simple and may contain only a few ingredients.

FAT CONTENT

Venison, like other game, is very low in fat. This makes it especially popular with health-conscious diners. The meat is likely to become dry unless the cook takes great care.

The loin and leg, being tender, are best cooked by dry-heat methods and served rare or medium done. If cooked longer, they will dry out. Roast these cuts whole, either bone-in or deboned, or cut them into steaks, cutlets, and medallions, and sauté, pan-fry, or broil them, taking care not to overcook.

Whole leg of venison, completely boned, seamed, and vacuum packed, is available. Weights range from 5 to 10 pounds (2 to 4.5 kg). Whole bone-in saddle weighs 5 to 20 pounds (2.3 to 9 kg), while the loin muscle weighs about half that after boning and trimming.

Tougher cuts, chiefly the shoulder, neck, and breast, are braised, stewed, or made into ground meat or sausage. These cuts are also lean, but because they are higher in connective tissue and gelatin, they take more readily to stewing and braising.

To generalize, farm-raised venison can be treated like very lean beef. Take care not to cook it to the point of dryness.

Boar

Boar is a type of wild pig. Its meat is somewhat similar to pork, except it is leaner and its flavor fuller and richer. Boar is now raised commercially on a few farms and is available in limited quantities.

Boar is somewhat more difficult to cook than venison and other game because, like pork, it must be cooked until well done. At the same time, it is leaner and less tender than domestic pork, so it tends to be somewhat dry and chewy. Special care must be taken to cook it adequately without overcooking. Because boar is usually tougher than farm-raised venison, its legs or hams are better suited for braising or slow roasting, while the loins can be used for roasts or cut into medallions and sautéed.

Traditionally, boar is handled much like venison, and typical recipes call for red wine marinades. Although marinating a white meat in red wine may seem strange at first, this treatment actually works very well with boar. The red wine accentuates the more pronounced flavor of boar (as compared to pork) and makes it taste more like game.

Other Large Game

Other meats are sometimes found in food service kitchens. *Elk, caribou, moose*, and *antelope* are all similar to venison and are handled in much the same way. The first three of these, especially moose, are larger than deer, so it may be necessary to allow for longer cooking times when using venison recipes for them.

Buffalo, or *American bison*, is raised on ranches in the western United States and Canada and handled like beef. Flavor and cooking characteristics are similar to those of beef, but the meat is somewhat richer in flavor and has less fat and cholesterol than beef.

Rabbit

Domestic rabbit is a versatile meat that can be cooked in most of the same ways as chicken. In fact, in some countries it is classified as poultry. Some typical recipes for rabbit are included in Chapter 11, but nearly any chicken recipe can be used for domestic rabbit as well. In addition, many recipes for veal or pork are adaptable to rabbit.

Rabbit's light, delicate meat is often compared to chicken, but there are differences. It is somewhat more flavorful than chicken, with a mild but distinctive taste that is not exactly like that of other poultry or meat. Also, it is very lean (more like chicken or turkey breast than legs) and can become dry if overcooked.

Rabbit takes well to marination; it can also be cooked without prior marination. Either way, it can be cooked by long, slow simmering, braising, or stewing, or it can be quickly cooked by sautéing, grilling, or roasting.

The structure of rabbit, of course, is like that of other land mammals rather than like that of poultry. Cutting methods divide the meaty hind legs, the bonier forelegs, and the choice saddle or back section (*râble* in French). The whole carcass, cut up, is used for stews and sautés, while the saddle alone is often roasted. It may be boned or bone-in. (See Figure 10.21.)

Small rabbits, 3 pounds (1.5 kg) or less, are the best for cooking. Mature rabbits, weighing 4 to 5 pounds (about 2 kg), tend to be tougher and drier.

Hare

Hare is a wild cousin of the rabbit. (Please note that rabbits and hares are different animals. The American jackrabbit, for example, is actually a hare, not a rabbit.) Unlike domestic rabbit, with its light-colored, delicate meat, hare has flesh that is dark reddish-brown and gamy.

Hares 7 to 8 months old and weighing about 6 pounds (2.7 kg) make the best eating. Larger ones, over 8 pounds (3.6 kg), are likely to be tough and stringy.

Because its structure is the same, hare is cut the same way as rabbit.

ROAST SADDLE OF HARE

Like other game, hare is very lean and therefore becomes dry if overcooked. If roasted, it should be removed from the oven while rare or at least still pink. Rare roast hare has an attractive, deep red color. A typical classic preparation of saddle of hare is as follows. Note that this is also the classic treatment for roast venison.

 Marinate the saddle of hare in a red wine marinade (such as the venison marinade on p. 324).

HANGING GAME

Much of the strong flavor associated with game comes from the practice of hanging. Hunters, processing game for their own use, often allow a dressed carcass to hang much longer than necessary to soften the meat (see "green meat," p. 279), or long enough for it to become high, or actually near spoilage.

The farm-raised game discussed here and used in commercial kitchens is not hung. Thus, its flavor is milder.

INSPECTION OF GAME

In the United States, wild game that can be hunted legally under federal or state authority may not be sold. Farm-raised game species, if raised under the appropriate regulations, may be sold. Some animals are inspected by the USDA and others by the FDA. Imported game must meet the same standards of wholesomeness as domestically produced game.

In Canada, the Canadian Food Inspection Agency (CFIA) oversees inspection of game offered for sale. Just as for domesticated meats, federal and provincial inspection of farm-raised game for wholesomeness is mandatory. Game may be imported only from countries that have approved inspection systems. As in the United States, hunted game may not be sold.

Figure 10.21 Cutting rabbit for stews and sautés.



(a) Cut off the hind legs, separating them at the hip joint.



(b) Cut off the forelegs by cutting under the shoulder blade.



(c) Cut off the hip bone.



(d) Cut through the backbone to separate the bony rib section from the meaty loin or saddle.



(e) Carefully separate the remaining rib bones from the loin and remove them. The saddle can then be cut crosswise through the backbone into pieces if desired.



(f) This is the cut-up rabbit, with the forelegs and rib section on the left, the saddle in the center, and the hind legs and hip bone on the right.

- 2. Brown it on top of the stove and roast it rare or medium done, about 15 minutes at 425°F (220°C).
- **3.** Remove the loin muscles from the bone and cut lengthwise into thin slices. Remove the tenderloins from the underside of the saddle and leave whole or slice as desired.
- 4. Serve with a poîvrade sauce (p. 189).

Storage of Meats

The quality of a finished meat product depends not only on proper selection and cooking of the meat but also on its proper storage. Fresh meat is highly perishable. The high cost of meat makes it essential to avoid spoilage.

Fresh Meats

- 1. Check purchases on arrival to ensure the purchased meat is of good quality.
- Do not wrap tightly. Bacteria and mold thrive in moist, stagnant places. Air circulation inhibits their growth. Store meat loosely arranged on pans or racks to allow air circulation between pieces, but cover cut surfaces to prevent excessive drying.
- 3. Do not open vacuum-packed meats until ready to use.
- 4. Store at 32° to 36°F (0° to 2°C). Meat does not freeze until about 28°F (-2°C).
- Keep meats separated in the cooler (or, even better, in separate coolers) and on the worktable to avoid cross-contamination.
- 6. Use as soon as possible. Fresh meats keep well only two to four days. Ground meats keep even less well because so much surface area is exposed to bacteria. Cured and smoked products may keep up to one week. For these reasons, frequent deliveries are better than long storage.

- 7. Do not try to rescue meats that are going bad by freezing them. Freezing will not improve the quality of spoiling meat.
- 8. Keep coolers clean.

FROZEN MEATS

- 1. Wrap frozen meats well to prevent freezer burn.
- 2. Store at 0°F (-18°C) or colder.
- 3. Rotate stock—first in, first out. Frozen meats do not keep indefinitely. Recommended shelf life at 0°F (-18°C) for beef, veal, and lamb: 6 months; for pork: 4 months (pork fat turns rancid easily in the freezer).
- **4.** Defrost carefully. Tempering in the refrigerator is best. Defrosting at room temperature encourages bacterial growth.
- 5. Do not refreeze thawed meats. Refreezing increases loss of quality.
- 6. Keep freezers clean.

KEY POINTS TO REVIEW

- What are the most important kinds of game used in food service?
- How does the fat content of game meats affect its cooking qualities?

gras-double

caul

game

boar

hare

venison

• What are the proper ways to store fresh meats? frozen meats?

TERMS FOR REVIEW

irradiation coagulation aging marbling Cryovac silverskin connective tissue barding dry aging collagen primal cuts larding elastin fabricated (cuts) doneness portion-controlled cuts inspection carryover cooking grading butcher variety meats fabricate sweetbreads yield grade green meat tripe carve

QUESTIONS FOR DISCUSSION

- 1. Many people assume that the leaner a meat is, the better it is. Do you agree? Explain.
- 2. What is connective tissue? Why is it important for the cook to understand connective tissue?
- 3. Flank steak (beef) is high in connective tissue, yet it is often broiled and served in thin slices as London broil. How is this possible?
- 4. Why are portion-controlled meats so widely used in food service, even though their per-pound cost is higher?
- 5. Can you explain why veal loin, a tender cut, is sometimes braised, while veal shoulder, a less tender cut, is sometimes roasted?
- 6. Which of the following cuts are you more likely to braise? Which might you roast?

Beef chuckGround porkBeef ribCorned beefVeal ribLamb legbrisketBeef strip loinPork shoulder

Lamb shanks

- 7. You wish to cook a roast rib of beef to a final internal temperature of 145°F (63°C). Why, then, would you remove the roast from the oven when the temperature on the meat thermometer reads 130°F (54°C)?
- 8. Why are weight-time roasting charts inadequate for determining the doneness of roast meats?
- 9. Describe the fat content of game meats such as venison, boar, and elk. Explain how the fat content affects how these meats are handled and cooked.
- 10. How does farm-raised venison differ from wild venison?

Chapter 11





Cooking Meats and Game

his chapter presents basic cooking methods as they apply to beef, lamb, veal, pork, and game such as venison. It is important that you have read and understood the basic material in Chapter 10, especially the sections on matching particular cuts to appropriate cooking methods and on testing for doneness. If necessary, please review those sections as well as the discussion of basic cooking methods in Chapter 4.

The procedures given here are general. Be aware they may be modified slightly in specific recipes. Nevertheless, the basic principles still hold. In addition, your instructors may wish to show you variations or methods that differ from those presented here.

The recipes that follow each of the procedures—for roasting, sautéing, braising, and so on—are intended to illustrate the basic techniques. Each time you prepare one of these recipes, you should be thinking not just about the product you are making but also about the techniques you are using and how they can be applied to other products. It is helpful to compare the recipes in each section, how they are alike and how they are different. This way you will be learning to cook, not just to follow recipes.

After reading this chapter, you should be able to

- **1.** Cook meats by roasting and baking.
- **2.** Cook meats by broiling, grilling, and pan-broiling.
- **3.** Cook meats by sautéing, pan-frying, and griddling.
- **4.** Cook meats by simmering.
- **5.** Cook meats by braising.
- **6.** Cook variety meats.

Roasting and Baking

Remember the definitions of *roast* and *bake* (Chapter 4): to cook foods by surrounding them with hot, dry air, usually in an oven. Roasting is a dry-heat method. No water is used, and the meat is not covered, so steam can escape. There is no real distinction between the terms *roast* and *bake*. Both terms are used for the same procedure, but the word *bake* is more likely to be used for small cuts of meat, vegetables, fish, breads, and pastries.

In principle, roasting meats is a simple procedure. The prepared cut of meat is placed in an oven at a selected temperature, and it is removed when done. What could be easier?

However, there are many variables, and chefs often disagree about proper roasting procedures, especially when it comes to the fine points. In this section, you will learn a roasting procedure you can apply to most meats. But first we discuss in more detail several of the points of disagreement and some of the possible variations.

Seasoning

Salt added to the surface of meat just before roasting penetrates the meat only a fraction of an inch during cooking. The same is true of the flavors of herbs, spices, and aromatics. In the case of smaller cuts of meat, such as beef tenderloin and rack of lamb, the seasoned, browned crust that forms during roasting is an important part of the flavor of the finished dish. Although opinions vary, many chefs advocate seasoning such roasts immediately before roasting so the salt doesn't have time to draw moisture to the surface, which inhibits browning.

In the case of large roasts, such as beef ribs and steamship rounds, there is so little crust in proportion to meat that seasoning before roasting has little effect. Also, if the surface of the roast is mostly fat covering or bone, the seasoned fat and bones may not even be served, so the seasoning has little effect.

With roasts of any size, two alternatives to seasoning just before roasting are often used:

- Marinate the meat or apply seasonings in advance, to give the time for flavors to penetrate. See pages 150–151 for a discussion of marinades and dry seasoning rubs. See also the discussion of brining on page 151. Brining is most suitable for pork. It is not often used for red meats.
- Serve the meat with a flavorful sauce, gravy, or jus. The sauce serves as a seasoning and flavoring for the meat.

Another way to add flavor to roasted meats is to smoke-roast them. Commercial smoker ovens roast meats in the same way as conventional ovens, except they also have a smokegenerating unit that passes smoke through the oven chamber, flavoring foods as they cook. The flavor of wood smoke in cooked meats is so popular that some restaurants have even installed wood-burning hearth ovens to bake and roast meats, pizza, and other items.

Stovetop smoke-roasting is an alternative to smoker ovens. The procedure is explained on page 73. Although there are no recipes for smoke-roasted meats in this chapter, examples of smoke-roasted fish and poultry can be found on pages 394 and 476.

Temperature

LOW-TEMPERATURE ROASTING

As we discussed on page 296, it was once thought that starting the roast at a high temperature "seals the pores" by searing the surface, thus keeping in more juices.

We now know this is not the case. Repeated tests have shown that *continuous roasting* at a low temperature gives a superior product with

- 1. Less shrinkage.
- 2. More flavor, juiciness, and tenderness.
- 3. More even doneness from outside to inside.
- 4. Greater ease in carving.

Low roasting temperatures generally range from 250° to 325°F (120° to 160°C), depending on

- 1. The size of the cut. The larger the cut, the lower the temperature. This ensures the outer portion is not overcooked before the inside is done.
- 2. The operation's production schedule. Lower temperatures require longer roasting times, which may or may not be convenient for a particular operation.

SEARING

If a well-browned, crusted surface is desired for appearance, as when the roast is to be carved in the dining room, a roast may be started at high temperature (400°-450°F/200°-230°C) until it is browned. The temperature should then be lowered to the desired roasting temperature and the meat roasted until done, as for low-temperature roasting.

HIGH-TEMPERATURE ROASTING

Very small pieces of meat that are to be roasted rare may be cooked at a high temperature, from 375° to 450°F (190° to 230°C). The effect is similar to that of broiling: a well-browned, crusted exterior and a rare interior. The meat is in the oven for so short a time that shrinkage is minor. Examples of cuts that may be roasted at a high temperature are rack of lamb and beef tenderloin.

CONVECTION OVENS

If a convection oven is used for roasting, the temperature should be reduced about 50°F (25°C). Many chefs prefer not to use convection ovens for large roasts because the drying effect of the forced air seems to cause greater shrinkage. On the other hand, convection ovens are effective in browning and are good for high-temperature roasting.

Fat Side Up or Fat Side Down

Roasting meats fat side up provides continuous basting as the fat melts and runs down the sides. This method is preferred by perhaps the majority of chefs, although there is not complete agreement.

In this book, we use the fat-side-up method. In the classroom, you should be guided by the advice of your instructor.

Basting

Basting is unnecessary if the meat has a natural fat covering and is roasted fat side up. For lean meats, barding has the same effect. Barding is covering the surface of the meat with a thin layer of fat, such as sliced pork fatback or bacon.

If a roast is basted by spooning pan drippings over it, use only the fat. Fat protects the roast from drying, while moisture washes away protective fat and allows drying. Juices used in basting will not soak into the meat.

Basting with drippings or juices may be used to increase the appetite appeal of the roast because it enhances browning. Gelatin and other solids dissolved in the juices are deposited on the surface of the meat, helping form a flavorful brown crust. This does not increase juiciness, however. Some cookbooks claim basting forms a waterproof coating that seals in juices, but this is not the case.

Basting sometimes produces more tender roasts for an unexpected reason: Frequent basting interrupts and slows the cooking. Every time the oven door is opened, the temperature in the oven drops considerably, so the roasting time is longer and more connective tissue breaks down. Thus, it is not the basting but the lower temperature that increases tenderness.

Use of Mirepoix

Mirepoix is often added during the last part of the roasting time to flavor the roast and to add extra flavor to the pan juices.

Many chefs feel, however, that mirepoix adds little flavor, if any, to the roast and that it is actually harmful because the moisture of the vegetables creates steam around the roast.

Mirepoix can be more easily added when the gravy is being made. If no gravy or juice is to be served, mirepoix may not be needed at all.

The use of mirepoix is more important for white meats—veal and pork—which, because they are usually cooked well done, lose more juices and need a good gravy or jus to give them moistness and flavor.

Gravy and Jus

The general procedures for making pan gravy are given in Chapter 8 (p. 198). Read or review this section if necessary. The procedure for making jus, given here in the recipe for roast prime rib of beef au jus, is the same, except no roux or other thickening agents are used. In other words, use the methods for making pan gravy (p. 199), but eliminate steps 5 and 6 from Method 1 and step 3 from Method 2.

Basic Procedure for Roasting Meats

- 1. Collect all equipment and food supplies. Select roasting pans that have low sides (so moisture vapor does not collect around the roast) and that are just large enough to hold the roast. If pans are too large, drippings will spread out too thin and burn.
- **2.** Prepare or trim the meat for roasting. Heavy fat coverings should be trimmed to about ½ inch (1 cm) thick.
- **3.** If desired, season the meat several hours ahead or the day before.
- **4.** Place the meat fat side up on a rack in the roasting pan. The rack holds the roast out of the drippings. Bones may be used if no rack is available. Bone-in rib roasts need no rack because the bones act as a natural rack.
- **5.** Insert a meat thermometer (clean and sanitary) so the bulb is in the center of the meat, not touching bone or fat. (Omit this step if you are using an instant-read thermometer.)
- **6.** Do not cover or add water to the pan. Roasting is a dry-heat cooking method.
- **7.** Place the meat in a preheated oven.
- **8.** Roast to desired doneness, allowing for carryover cooking.
- **9.** If desired, add mirepoix to the pan during the last half of the cooking period.
- **10.** Remove the roast from the oven and let stand in a warm place 15 to 30 minutes. This allows the juices to be reabsorbed through the meat so less juice is lost when the meat is sliced. Also, resting the meat makes slicing easier.
- **11.** If the meat must be held, place it in an oven or warmer set no higher than the desired internal temperature of the roast.
- **12.** While the roast is resting, prepare jus or pan gravy from the drippings. Mirepoix may be added to the drippings now if it was not added in step 8.
- **13.** Slice the roast as close as possible to serving time. In almost all cases, slice the meat against the grain for tenderness.



Roast Rib of Beef au Jus

YIELD: 1	0 LB (4.5 KG) B	ONELESS, TRIMMED MEAT PORTION	NS: 25 PORTION SIZE: 6½ OZ (175 G), 1½ OZ (50 ML) JUS 20 8 OZ (225 G), 1½ OZ (50 ML) JUS
U.S.	METRIC	INGREDIENTS	PROCEDURE
20 lb	9 kg	Beef rib, roast ready, bone in	1. Place the meat fat side up in a roasting pan.
		(one average-size rib roast)	2. Insert a meat thermometer so the bulb is in the center of the meat, not touching bone or fat.
			3. Place meat in a preheated 300°F (150°C) oven. Roast until rare or medium done, as desired, allowing for carryover cooking.
			Thermometer readings:
			Rare: 120°F (49°C)
			Medium 130°F (54°C)
			(Outer slices will be cooked more than center.)
			Roasting time will be at least 3–4 hours.
			 Remove the meat from the pan and let stand in a warm place 30 minutes before carving.
8 oz 4 oz	250 g 125 g	Mirepoix: Onion Carrot	5. Drain off all but 3–4 oz (100 g) of the fat from the roasting pan. Be careful to retain any juices in the pan. Add the mirepoix to the pan (see Figure 11.1).
4 0Z	125 g	Celery	Set the pan over high heat and cook until mirepoix is brown and moisture has evaporated, leaving only fat, mirepoix, and browned drippings.
			7. Pour off any excess fat.
2 qt to taste	2 L to taste	Brown stock Salt	8. Pour about 1 pt (500 mL) stock into the roasting pan to deglaze it. Stir over heat until brown drippings are dissolved.
to taste	to taste	Pepper	 Pour the deglazing liquid and mirepoix into a saucepot with the remaining stock. Simmer until mirepoix is soft and liquid is reduced to about one-third.
Per serving: Calories, 810; Protein, 52 g; Fat, 65 g (74% cal.); Cholesterol, 180 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 150 mg.			10. Strain through a china cap lined with cheesecloth into a bain-marie. Skim fat carefully. Season to taste with salt and pepper.
VARIAT	••••••	W.T. D. J.	11. For service, stand the roast on its widest end. Cut down beside the bones to free the meat, and slice the meat across the grain.
Roast Rib-Eye Roll, Top Round, Sirloin, or Strip Loin			12. Serve each portion with $1\frac{1}{2}$ oz (50 mL) jus.

Sirloin, or Strip Loin

These cuts may be roasted by the same procedure; roast them on a rack.

Roast Beef with Gravy

Roast the desired cut of beef according to the basic recipe. Prepare gravy according to the following recipe.

Figure 11.1 Preparing pan jus.



(a) After removing the cooked meat from the roasting pan, degrease the pan. Add mirepoix to the pan and brown on the stovetop or in the oven.



(b) Deglaze with brown stock.



(c) Pour the mirepoix and deglazing liquid into a saucepan. Simmer for the desired time.



(d) Strain through a fine chinois or a china cap lined with cheesecloth.



Roast Beef Gravy 💖

YIELD: AB	OUT 1½ QT (1.	.5 L) PORTIONS: 25 PORTION SIZE	: 2 FL OZ (60 ML)
U.S.	METRIC	INGREDIENTS	PROCEDURE
as needed	as needed	Pan drippings from roast beef (previous recipe)	 After removing the roast, add the mirepoix to the drippings in the roasting pan.
8 oz 4 oz 4 oz	250 g 125 g 125 g	Mirepoix: Onion Carrot Celery	 Set the pan over high heat and cook until mirepoix is brown and moisture has evaporated, leaving only fat, mirepoix, and browned drippings (see Figure 11.1). Pour off and save the fat.
2 qt 4 oz	2 L 125 g	Brown stock Tomato purée	4. Deglaze the pan with some of the stock. Pour the deglazing liquid and mirepoix into a saucepot with the remaining stock. Add the tomato purée. Bring to a boil and reduce heat to a simmer.
4 oz to taste to taste to taste	125 g to taste to taste to taste	Flour Salt Pepper Worcestershire sauce	 5. Make a brown roux with the flour and 4 oz (125 g) of the reserved fat. Cool the roux slightly and beat it into the simmering stock to thicken it. 6. Simmer 15–20 minutes, or until all raw flour taste is cooked out and the liquid is reduced slightly. 7. Strain through a china cap into a bain-marie.
Per serving: Calories. 35; Protein, 1 g; Fat, 1.5 g (40% cal.); Cholesterol, 5 mg; Carbohydrates, 4 g; Fiber, 0 g; Sodium, 10 mg.			8. Season to taste with salt, pepper, and Worcestershire sauce.

VARIATION

Jus Lié

Omit tomato purée and roux. Thicken liquid with $1\frac{1}{2}$ oz (50 g) cornstarch or arrowroot blended with $\frac{1}{2}$ cup (100 mL) cold water or stock.

Roast Loin of Pork with Sage and Apples

PORTIONS: 25 PORTION SIZE: 1 CHOP, ABOUT 6 OZ (175 G) WITH BONE, 2 FL OZ (60 ML) GRAVY U.S. METRIC INGREDIENTS 14½ lb 6.6 kg Pork loins, center cut, bone in 5 mL 1 tsp ½ tsp 2 mL Pepper 1 tbsp 15 mL Dried sage Mirepoix: Onion 8 oz 250 g Carrot 4 oz 125 g 4 oz 125g Celerv 8 oz 250 g Apples, peeled, cored, and diced 2½ qt 2.5 L Chicken stock, veal stock, or pork stock 5 oz 150 g Flour Salt to taste to taste Skim well. Pepper to taste to taste 8 8 Tart apples 2 oz Butter 60 g 1 tbsp 15 mL Sugar

Per serving: Calories, 420; Protein, 40 g; Fat, 22 g (48% cal.); Cholesterol, 105 mg; Carbohydrates, 13 g; Fiber, 2 g; Sodium, 210 mg.

VARIATIONS

Other pork cuts may be roasted as in the basic recipe: full loin, loin ends, boneless loin, fresh ham, shoulder.

Roast Loin or Rack of Veal with Sage and Apples

Substitute loin or rack of yeal for pork in the basic recipe. Use brown stock instead of white stock.

- 1. With a meat saw, cut off the chine bones so the loins can be carved into chops after roasting.
- 2. Rub the pork with salt, pepper, and sage.
- 3. Place the chine bones in a roasting pan. Place the pork loins fat side up on top of the bones. Insert a meat thermometer into the thickest part of
- 4. Place in oven at 325°F (165°C) and roast for 1 hour.
- 5. Place the mirepoix and the apples in the bottom of the pan and continue to roast until the thermometer reads 160°F (71°C). Total cooking time is $2-2\frac{1}{2}$ hours.
- 6. Remove the roast from the pan and hold in a warm place.
- 7. Set the roasting pan over moderate heat and cook until moisture has evaporated and mirepoix is well browned. Drain off and reserve the fat.
- 8. Deglaze the pan with the stock and pour the contents into a saucepot.
- 9. Make a brown roux with the flour and 5 oz (150 g) of the pork fat. Thicken the gravy with the roux and simmer 15 minutes, or until thickened and slightly reduced.
- 10. While the gravy is simmering, core the apples. They may be peeled or not, as desired. Cut the apples crosswise into slices about % in. (1 cm) thick. Sauté the slices in a little butter over moderately high heat. Sprinkle them with sugar as they cook. Continue to sauté on both sides until browned and caramelized.
- 11. Strain the gravy and adjust the seasonings.
- 12. Cut the roast into chops between the rib bones. Serve each portion with 2 oz (60 mL) gravy. Garnish with caramelized apple slices.

Roast Stuffed Shoulder of Lamb

PORTIONS	: 10 PORTIC	ON SIZE: 5 OZ (150 G) MEAT AND STUP	FING, 2 FL OZ (60 ML) GRAVY
U.S.	METRIC	INGREDIENTS	PROCEDURE
		Stuffing:	1. Sauté the onion and garlic in oil until soft. Remove from heat and cool.
4 oz	125 g	Onion, fine dice	2. Combine onion and garlic with the remaining stuffing ingredients and
1 tsp	5 mL	Garlic, chopped fine	mix lightly.
2 fl oz	60 g	Olive oil, vegetable oil, or butter	
3 oz	100 g	Soft, fresh bread crumbs (about 2 cups)	
⅓ cup	80 mL	Chopped parsley	
½ tsp	2 mL	Dried rosemary	
¼ tsp	1 mL	Black pepper	
½ tsp	2 mL	Salt	
1	1	Egg, beaten	
1	1	Boneless lamb shoulder, about 4 lb (1.8 kg)	 Lay the lamb shoulder out flat, fat side down (see Figure 11.2). Spread the lamb with the stuffing and roll it up. Tie the roll tightly.
as needed	as needed	Oil	5. Rub the meat with oil, salt, pepper, and rosemary.
as needed	as needed	Salt	6. Place the meat on a rack in a roasting pan. Insert a meat thermometer
as needed	as needed	Pepper	into the thickest part of the meat (not into the stuffing).
as needed	as needed	Dried rosemary	7. Place in a 325°F (165°C) oven. Roast the meat about 1½ hours.
4 0Z 2 0Z 2 0Z	125 g 60 g 60 g	Mirepoix: Onion, chopped Carrot, chopped Celery, chopped	 8. Place the mirepoix in the bottom of the roasting pan. Baste the meat with fat and continue to roast until the thermometer reads 160°F (71°C). Total cooking time is about 2½ hours. 9. Remove the roast from the pan and let stand in a warm place.
2 oz	60 g	Flour	10. Set the roasting pan over high heat to clarify the fat and finish browning
1 qt	1 L	Brown beef stock or lamb stock	the mirepoix. Drain off about three-fourths of the fat.
4 oz	125 g	Tomatoes, canned	11. Add the flour to the pan to make a roux, cooking it until it is brown.
to taste	to taste	Salt	12. Stir in the stock and tomatoes and bring to a boil. Simmer, stirring, until
to taste	to taste	Pepper	the gravy is thickened and reduced to about 1½ pt (750 mL). 13 Strain and skim excess fat

Per serving: Calories, 390; Protein, 31 g; Fat, 25 g (57% cal.); Cholesterol, 120 mg; Carbohydrates, 11 g; Fiber, 1 g; Sodium, 275 mg.

VARIATIONS

Roast Boneless Shoulder of Lamb

Roast a tied, boneless lamb shoulder as in basic recipe, without stuffing.

Roast Leg of Lamb

Prepare leg of lamb for roasting as shown in **Figure 10.11**. Rub with oil, salt, pepper, rosemary, and garlic. Roast as in basic recipe (without stuffing) to rare, medium, or well-done stage. Leg of lamb may be served with natural juices (au jus) instead of thickened gravy, if desired. 8 lb (3.6 kg) AP leg of lamb yields about 3½ lb (1.6 kg) cooked meat. Yield is less if cooked well done. See **Figure 11.3** for carving technique.

Roast Leg of Lamb Boulangère

About 1½ hours before lamb is done, transfer the meat to a rack over a pan of Boulangère Potatoes (p. 618) and finish cooking.

- 13. Strain and skim excess fat.
- 14. Season to taste with salt and pepper.
- 15. Slice the roast crosswise, so each slice contains stuffing in the center. When slicing, be careful to keep the slices from falling apart. Serve each portion with 2 oz (60 mL) gravy.



Roast Stuffed Shoulder of Lamb

Figure 11.2 Stuffing a lamb shoulder.



(a) Bone out the shoulder. To remove the blade bone, slide the knife against the bone to separate it from the meat.



(b) Spread the boned shoulder with the stuffing.

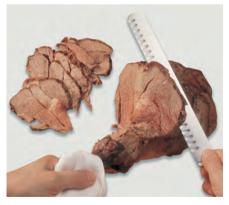


(c) Roll the shoulder and tie it securely. (See Figure 10.14 for tying procedure.)

Figure 11.3 Carving a leg of lamb. Hams and other leg roasts may be carved using the same basic technique shown here.



(a) Place the roast on a clean, sanitary cutting board. Begin by making a vertical cut through to the bone about 1 in. (2.5 cm) from the end of the shank meat. The small collar of shank meat forms a guard to protect the hand in case the knife slips.



(b) Using long, smooth strokes, cut thin slices on a slight bias as shown.



(c) When slices become too large, angle the knife. When the top of the roast is completely sliced, turn over and repeat the procedure on the bottom of the roast.

Roast Rack of Lamb

PORTIONS: 8 PORTION SIZE: 2 CHOPS, 1 FL OZ (30 ML) JUS U.S. METRIC INGREDIENTS 2 Racks of lamb, 8 ribs each 2 to taste Salt to taste to taste to taste Pepper to taste to taste Dried thyme

2 2 Garlic cloves, chopped 1 pt 500 mL White or brown yeal stock

Per serving: Calories, 280; Protein, 19 g; Fat, 22 g (72% cal.); Cholesterol, 75 mg; Carbohydrates, 0 g; Fiber 0 g; Sodium, 70 mg.

PROCEDURE

- 1. Prepare lamb for roasting as shown in Figure 10.12.
- 2. Place any trimmed-off bones in the bottom of a roasting pan. Place the meat fat side up on top of the bones. Season with salt, pepper, and thyme.
- 3. Place in a hot oven (450°F/230°C) and roast to desired doneness. Rack of lamb is usually roasted rare or medium. Test doneness with a meat thermometer or by the touch method, as for steaks. Total time is about 30 minutes
- 4. Remove the lamb from the roasting pan and hold in a warm place. Leave the bones in the pan.
- 5. Set the roasting pan over moderate heat to caramelize the juices and clarify the fat. Pour off the fat.

6.	Add	the ga	arlic to	the	pan	and	cook 1	minute.

- 7. Deglaze the pan with the stock and reduce by half. Strain, degrease, and season to taste.
- 8. Cut the meat between the ribs into chops. Serve 2 chops per portion with 1 oz (30 mL) jus.

VARIATIONS

Rack of Lamb aux Primeurs (with Spring Vegetables)

Place the racks on one or two heated serving platters. Garnish the platters with an assortment of spring vegetables, cooked separately: tournéed carrots, tournéed turnips, buttered peas, green beans, rissolé potatoes. Pour the jus into a warm gooseneck or sauceboat. Carve and serve the meat, vegetables, and jus in the dining room.

Rack of Lamb Persillé

Prepare as in basic recipe. Combine the ingredients for Persillade, listed below. Before carving and serving, spread the top (fat side) of each rack with 1 tbsp (15 g) soft butter. Pack the persillade onto the top of the racks and brown under the salamander.

Persillade

- 4 cloves garlic, minced
- 2 oz (60 g) fresh bread crumbs (about 1 cup)
- 1/3 cup (80 mL) chopped parsley



Roast Rack of Lamb; White Beans Bretonne; Steamed Brussels Sprout Leaves

Roast Brined Pork Loin with Date and Gorgonzola Stuffing

FUNITIONS: 6	FUNITON SIZE: A		
U.S.	METRIC	INGREDIENTS	PROCEDURE
6 oz	180 g	Pitted dates, chopped	1. In a saucepan, brie
1 tsp	5 mL	Butter	softened.
⅓ tsp	0.5 mL	Dried rosemary	2. Add the rosemary a
3 fl oz	90 mL	Water	paste. Cool.
2 oz	60 g	Gorgonzola cheese	When the date mix and mix in well.
3 lb	1.5 kg	Pork loin, center cut, boneless	4. If the loin has a fat
2 qt,	2 L,	Brine (p. 151)	only a thin covering
or as needed	or as needed	•	covering, trim off a
to taste	to taste	Salt	5. Marinate in enough
to taste	to taste	Pepper	6. Stuff the meat. This
to taste	to taste	Ground coriander	a. Butterfly the me
			,

Per serving: Calories, 420; Protein, 38 g; Fat, 21 g (18% cal.); Cholesterol, 120 mg; Carbohydrates, 19 g; Fiber, 2 g; Sodium, 540 mg.



Roast Brined Pork Loin with Date and Gorgonzola Stuffing, Spaetzle, Glazed Carrots

- In a saucepan, briefly cook the dates in butter until slightly softened
- 2. Add the rosemary and water. Cook until the mixture forms a thick paste. Cool.
- 3. When the date mixture is completely cool, add the gorgonzola and mix in well.
- If the loin has a fat covering, trim the excess fat from it, leaving only a thin covering. If the loin was purchased without a fat covering, trim off all silverskin.
- 5. Marinate in enough brine to cover, refrigerated, 24 hours.
- 6. Stuff the meat. This can be done in either of two ways:
 - a. Butterfly the meat as shown in **Figure 10.13**. Spread the date mixture inside and refold the meat to enclose the stuffing. Tie the meat well **(Figure 10.14)**.
 - Poke a hole lengthwise through the center of the loin with a clean, sanitized spoon handle or similar rod-shaped item. Force the date mixture into the hole so it fills the hole completely.
- 7. If the loin has no fat covering and was trimmed of silverskin in step 4, oil the surface well. Season the surface of the meat lightly with salt, pepper, and ground coriander. Hold in the refrigerator until ready to cook.
- 8. Preheat the oven to 425°F (220°C). Place the roast in the oven. After 10 minutes, reduce the heat to 325°F (160°C). (The initial roasting at high heat is optional; its purpose is to help brown the roast.) Continue to roast until the internal temperature is 160°F (70°C).
- 9. Remove from the heat and let stand in a warm place at least 10 minutes before slicing.

Smoke-Roasted Pork Shoulder

YIELD: APPROX. 4 LB (2 KG) TRIMMED, BONELESS MEAT

U.S.	METRIC	INGREDIENTS
8 lb	4 kg	Pork shoulder or butt
2 oz,	60 g,	Spice Rub I (below)
or as needed	or as needed	

Per serving: Calories, 60; Protein, 7 g; Fat, 3 g (49% cal.); Cholesterol, 25 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 140 mg.

VARIATION

Smoke-Roasted Shoulder of Boar

Substitute shoulder of boar for the pork shoulder.

PROCEDURE

- 1. Trim excess external fat from the meat.
- 2. Rub the meat with the spice rub so it is completely coated with a thin layer.
- 3. Refrigerate the meat overnight.
- 4. Cook the meat on racks in a smoke roaster at 250°-275°F (120°-135°C) until very tender, about 6 hours. When done, the meat should be tender enough to pull apart with a fork.
- 5. The pork may be cut from the bones and sliced or cut into chunks and served with a barbecue sauce on the side, or it may be shredded, mixed with a little barbecue sauce, and used as a sandwich filling.

Spice Rub I

YIELD: APPROX. 6 OZ (180 G)

U.S.	METRIC	INGREDIENTS
1½ oz	45 g	Paprika
1 oz	30 g	New Mexico chili powder
2 tbsp	30 mL	Dried oregano
2 tbsp	20 mL	Dried thyme
4 tsp	20 mL	Ground coriander
4 tsp	20 mL	Ground cumin
2 oz	60 g	Salt
2 tbsp	30 mL	Black pepper

Per serving: Calories, 60; Protein, 7 g; Fat, 3 g (49% cal.); Cholesterol, 25 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 140 mg.

PROCEDURE

- 1. Combine all ingredients and mix well.
- 2. Store in a tightly sealed container in a dark place.

Spice Rub II

YIELD: APPROX. 7 OZ (200 G)

U.S.	METRIC	INGREDIENTS	
1½ oz	45 g	Paprika	
1½ oz	45 g	Chili powder	
2 tsp	10 mL	Dry mustard	
2 tbsp	30 mL	Onion powder	
1 tsp	5 mL	Celery seed	
2 tsp	10 mL	Dried thyme	
1 oz	30 g	Sugar	
2 oz	60 g	Salt	
2 tbsp	30 mL	Black pepper	

Per serving: Calories, 60; Protein, 7 g; Fat, 3 g (49% cal.); Cholesterol, 25 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 140 mg.

- 1. Combine all ingredients and mix well.
- 2. Store in a tightly sealed container in a dark place.

Barbecued Spareribs

PORTIONS: 24 PORTION SIZE: 10 OZ (300 G)

U.S.	METRIC	INGREDIENTS
18 lb	8.5 kg	Fresh pork spareribs
6 oz, or as needed	180 g, or as needed	Spice Rub I or II (p. 320)
2½ qt	2.5 L	Barbecue Sauce (p. 214) or
		Chili Barbecue Sauce (p. 215)

Per serving: Calories, 730; Protein, 47 g; Fat, 54 g (68% cal.); Cholesterol, 190 mg; Carbohydrates, 11 g; Fiber, 2 g; Sodium, 1010 mg.



Barbecued Spareribs

PROCEDURE

- 1. Weigh the spareribs and cut them into 12-oz (350 g) portions.
- 2. Rub the ribs with the spice rub so they are completely coated with a thin layer.
- 3. Refrigerate overnight.
- 4. Place the ribs in a roasting pan with the inside of the ribs down.
- Place the ribs in a smoker oven or a conventional oven at 300°F (150°C). Bake 1 hour.
- 6. Drain the fat from the pans.
- 7. Spoon about 1 pt (500 mL) barbecue sauce over the ribs to coat them with a thin layer. Turn them over and coat with more sauce.
- 8. Bake 45 minutes. Turn and coat the ribs with the remaining sauce.
- 9. Bake until tender, 30-60 minutes more.
- 10. Serve the portions whole, or cut into separate ribs for easier eating.

Roast Pork Tenderloin with Kalbi Marinade

PORTIONS: 10 PORTION SIZE: 5 OZ (150 G) U.S. METRIC INGREDIENTS 8 fl oz 250 mL Soy sauce, preferably Korean or Japanese 2 oz 60 g Brown sugar 1 tbsp 15 mL Garlic, crushed Scallions, sliced 2 fl oz 60 mL Sesame oil 1 mL ¼ tsp Black pepper 4 lb 2 kg Pork tenderloins 1 fl oz 30 mL Vegetable oil

Per serving: Calories, 240; Protein, 37 g; Fat, 8 g (32% cal.); Cholesterol, 105 mg; Carbohydrates, 1 g; Fiber, 0 g; Sodium, 250 mg.

KALBI

The word *kalbi* is Korean and refers to ribs, usually beef ribs. In Korean cuisine, the meat is sliced, marinated in a sweetened soy sauce mixture, and grilled. In Western kitchens, the marinade for the ribs has become popular and is adapted to a variety of dishes not typically Korean, such as the pork tenderloin recipe here.

- 1. In a nonreactive container large enough to hold the pork tenderloins, combine the soy sauce, brown sugar, garlic, scallions, sesame oil, and pepper to make a marinade.
- 2. Trim all fat and silverskin from the tenderloins (see **Figure 10.16**).
- 3. Add the tenderloins to the marinade, turning them so they are coated on all sides. Cover and refrigerate overnight.
- 4. Remove the tenderloins from the marinade. Blot them dry on clean towels, making sure no particles of scallion or garlic cling to them, as these can burn during cooking.
- 5. Heat the oil in a sauté pan over moderately high heat. Brown the meat lightly on all sides. Keep in mind the sugar in the marinade can burn easily, so watch the meat carefully as it browns.
- 6. Place the pan in a preheated 425°F (220°C) oven about 15 minutes, or until a meat thermometer indicates an interior temperature of 150°F (66°C) or desired doneness.
- 7. Remove the tenderloins from the oven. Let stand 10 minutes in a warm place, then slice across the grain into medallions.

Baked Pork Chops with Prune Stuffing

PORTIONS: 25 PORTION SIZE: 1 CHOP, 2 FL OZ (60 ML) GRAVY					
U.S. METRIC INGREDIENTS 25 25 Prunes, pitted 1½ lb 750 g Basic Bread Dressing (p. 439)	 PROCEDURE Soak the prunes in hot water for 15 minutes. Drain and cool. Prepare the dressing and add the prunes. Keep refrigerated until ready to use. 				
25 25 Pork chops, cut thick (at least ¾ in./2 cm) as needed as needed Oil to taste to taste Salt to taste to taste Pepper	 Cut a pocket in the pork chops as shown in Figure 10.17. Stuff the pockets with the prune dressing, using 1 prune per chop. Fasten the openings with picks or skewers. Oil a baking pan and place the chops in it. Brush them with oil and season with salt and pepper. Place the chops under the broiler just until lightly browned. Transfer the pan to a 350°F (175°C) oven and bake about ½ hour, until chops are cooked through. Remove the chops from the pan and place in a hotel pan for holding. Remove picks. 				
8 fl oz 250 mL Water or white wine 3½ pt 1.75 L Brown sauce or demi-glace 2 fl oz 60 mL Sherry (optional) Per serving: Calories, 500; Protein, 49 g; Fat, 26 g (47% cal.); Cholesterol, 125 mg; Carbohydrates, 16 g; Fiber, 1 g; Sodium, 290 mg.	 Deglaze the baking pan with the water or wine, degrease, and strain the liquid into the hot brown sauce. Bring to a boil and reduce the sauce slightly to bring to the proper consistency. Add the sherry (if using) and adjust seasoning. Serve 1 chop per portion with 2 oz (60 mL) gravy. 				

Glazed Ham with Cider Sauce

PORTIONS: 25	PORTION SIZE:	5 OZ (150 G) HAM, 2 FL OZ (6	0 ML) SAUCE
U.S. 15 lb	METRIC 7 kg	INGREDIENTS Smoked ham	 PROCEDURE Place the ham(s) in a stockpot with enough water to cover. Bring to a boil and reduce heat to a simmer. Simmer 1 hour. Drain. Cut off skin and excess fat. Leave fat covering about ½ in. (1 cm) thick. Score the fat with a knife.
3–4 tbsp 6 oz ½ tsp	45–60 mL 175 g 1 mL	Prepared mustard Brown sugar Ground cloves	 Place the ham fat side up in a roasting or baking pan. Spread with a thin layer of prepared mustard. Mix the sugar and cloves and sprinkle over the ham. Bake at 350°F (175°C) about 1 hour. (Caution: Sugar burns easily, so check ham after 30–45 minutes.)
1½ qt 8 oz 3 oz ⅓ tsp 1 tsp 6 tbsp to taste	1.5 L 250 g 100 g 2 mL 5 mL 50 g to taste	Apple cider Raisins, seedless (optional) Brown sugar Nutmeg Grated lemon rind Cornstarch Salt	 Place cider, raisins, sugar, nutmeg, and lemon rind in a saucepan and simmer 5 minutes. Mix cornstarch with a little cold water or cold cider and stir into the sauce. Simmer until thickened. Add salt to taste. Slice ham (as for leg of lamb, Figure 11.3). Serve 5-oz (150-g) portion with 2 oz (60 mL) sauce on the side.
			VARIATIONS

Per serving: Calories, 300; Protein, 32 g; Fat, 7 g (21% cal.); Cholesterol, 70 mg; Carbohydrates, 25 g; Fiber, 1 g; Sodium, 1680 mg.

Note: The amount of cooking required depends on the type of ham. Aged country hams must be soaked 24 hours in cold water, scrubbed, and simmered about 20 minutes per pound (500 g). Hams labeled *tenderized* or *ready to cook* may be baked without simmering (starting with step 2) or just blanched before baking (place in cold water, bring to a boil, and drain).

VARIATIONS

Ham with Brown Cider Sauce

When ham is baked, drain fat from pan and deglaze with $1\frac{1}{2}$ pt (750 mL) cider. Add $1\frac{1}{2}$ qt (1.5 L) demi-glace or espagnole and simmer until reduced and thickened. Flavor to taste with mustard and a little sugar.

Fruit-Glazed Ham

Omit mustard-sugar glaze. During last half of baking, spoon fruit preserves (apricot, pineapple, or peach) over ham to glaze.

Home-Style Meatloaf

	PORTIONS: 25 PORTION SIZE: 4 OZ (125 G)						
	U.S.	METRIC	INGREDIENTS	PROCEDURE			
	1 lb 8 oz 2 oz 12 oz 12 fl oz 2½ lb 2½ lb 5 1 tbsp	500 g 250 g 60 mL 375 g 375 mL 1.25 kg 1.25 kg 1.25 kg	Onions, fine dice Celery, fine dice Oil Soft bread crumbs Tomato juice, stock, or milk Ground beef Ground pork Ground veal Eggs, beaten slightly Salt	 Sauté the onions and celery in oil until tender. Remove from pan and cool thoroughly. In a large bowl, soak the bread crumbs in the juice, stock, or milk. Add the sautéed vegetables and the meat, eggs, salt, and pepper. Mix gently until evenly combined. Do not overmix. Form the mixture into 2 or 3 loaves in a baking pan, or fill loaf pans with the mixture. Bake at 350°F (175°C) 1–1½ hours, or until done. Test with a meat thermometer for an internal temperature of 165°F (74°C). 			
•	½ tsp 3 pt	2 mL 1.5 L	Black pepper Tomato sauce, Spanish sauce, Creole sauce, or sour cream sauce	6. For service, cut the loaves into 4-oz (125 g) slices. Serve with 2 oz (60 mL) sauce per portion.			

Per serving: Calories, 360; Protein, 27 g; Fat, 21 g (53% cal.); Cholesterol, 135 mg; Carbohydrates, 16 g; Fiber, 2 g; Sodium, 680 mg.

VARIATIONS

Home-Style All-Beef Meatloaf

In place of the mixture of beef, pork, and veal, use $7\frac{1}{2}$ lb (3.75 kg) ground beef.

Italian-Style Meatloaf

Add the following ingredients to the basic mix:

- 4 tsp (20 mL) chopped garlic, sautéed with the onion
- 1 oz (30 g) parmesan cheese
- ²/₃ cup (150 mL) chopped parsley
- 1½ tsp (7 mL) basil
- 1 tsp (5 mL) oregano

Salisbury Steak

Divide meat mixture for all-beef meatloaf into 6-oz (175 g) portions. Form into thick, oval patties and place on a sheet pan. Bake at 350° F (175°C) about 30 minutes.

Baked Meatballs

Divide basic meat mixture or Italian-Style Meatloaf mixture into $2\frac{1}{2}$ -oz (75 g) portions using a No. 16 scoop. Form into balls and place on sheet pans. Bake at 350° F (175° C). May be served with tomato sauce over pasta.

Loin or Rack of Venison Grand Veneur

PORTIONS: 8	B PORTION S	SIZE: ¼ LOIN OR RACK (2 CHOPS)	
U.S.	METRIC	INGREDIENTS	PROCEDURE
2	2	Loins or racks of venison $(2\frac{1}{2}-3 \text{ lb}/1.1-1.4 \text{ kg each})$	 Trim the venison, removing all silverskin. Because venison is very lean, there will be very little fat to remove.
2 qt	2 L	Red Wine Marinade for Game (below)	2. Marinate the venison for 2 days, using enough marinade to cover the meat completely. (The quantity indicated is approximate.)
12 oz (approx.)	350 g (approx.)	Pork fatback for barding	 Cut the fatback into thin sheets on a slicing machine. Bard the venison by covering the meat with the sheets of fat and tying them in place. Roast the meat at 450°F (230°C) until rare, 30–45 minutes.
_	500 mL 30 g 90 mL 480 g	Poîvrade Sauce (p. 189) Red-currant jelly Heavy cream Chestnut purée (fresh or canned), thinned to a soft texture with alittle demi-glace and cream 67 g; Fat, 65 g (60% cal.); Cholesterol, 345 mg; m, 200 mg.	 When the meat is done, set it aside in a warm place for 15 minutes. Degrease the roasting pan and deglaze it with a little of the marinade. Reduce slightly and strain it into the poîvrade sauce. Heat the sauce with the jelly until the jelly is melted and dissolved. Temper the cream with a little of the sauce, then add to the rest of the sauce. Cut the meat into chops, or else cut the meat from the bones in one piece and slice it into medallions. Serve each portion with 2 oz (60 mL) sauce and garnish with 2 oz
VARIATION	1		(60 g) chestnut purée.

Leg of Venison Grand Veneur

Leg of venison can be prepared and served in the same way. A whole leg of venison weighing 4–5 lb (about 2 kg) yields 8–10 portions. This larger cut should be marinated slightly longer, 2–3 days.

Red Wine Marinade for Game

YIELD: 2	Q1 (2 L)		
U.S.	METRIC	INGREDIENTS	PROCEDURE
4 oz	125 g	Carrot, chopped fine	 Combine all ingredients in a nonreactive container (e.g., stainless steel glass, plastic; do not use aluminum).
4 oz	125 g	Onion, chopped fine	
4	4	Garlic cloves, crushed	Marinate meat as desired or as indicated in recipe. Marinating times may vary from a few hours to several days. After marinating, use the
25	25	Parsley stems	liquid as a cooking medium and as the base for a sauce.
2 tsp	10 mL	Dried thyme	liquid as a cooking inequalit and as the base for a sauce.
4	4	Bay leaves	
2 tsp	10 mL	Dried ground sage	
1 tsp	5 mL	Peppercorns, crushed	
4	4	Cloves	
8 fl oz	250 mL	Red wine vinegar	
2 qt	2 L	Red wine	
Per serving: Calories, 25; Protein, 0 g; Fat, 0 g (0% cal.); Cholesterol, 0 mg;			
Carbohydrat	tes, 23 g; Fiber, 5 g; Sc	dium, 200 mg.	

Roast Loin of Rabbit with Risotto

PORTIONS	:8 PORTION	SIZE: 5-6 OZ (140-160 G) RABBIT,	4 OZ (125 G) RISOTTO, SAUCE AND GARNISH
u.s. 2½-3 lb as needed	METRIC 1-1.3 kg as needed	INGREDIENTS Boneless saddles of rabbit Oil	 PROCEDURE Trim the meat as necessary, leaving the meat in whole pieces. Heat the oil in a sauté pan. Add the rabbit meat and brown it on all sides. Transfer to an oven heated to 450°F (230°C) and roast 5–10 minutes, or until medium done (slightly pink in center). Remove the meat from the pan and keep warm.
2 oz 2 oz 4 oz 1 4 fl oz 1 pt to taste	60 g 60 g 125 g 1 125 g 500 mL to taste	Shallot, chopped fine Carrot, chopped fine Mushroom, chopped fine Garlic clove, chopped fine Dry white vermouth or white wine Rabbit stock or chicken stock, rich and concentrated Salt	 4. Add the shallots, carrots, mushrooms, and garlic. Brown lightly. 5. Add the vermouth or wine and reduce by half. 6. Add the stock and reduce by half. 7. Strain. Season to taste with salt.
•	1 kg as desired as desired lories, 490; Protein, 32 g; Fiber, 3 g; Sod	Risotto alla Parmigiana (p. 648) Carrot, small dice, cooked, hot Zucchini, small dice, cooked, hot 35 g; Fat, 22 g (27% cal.); Cholesterol, 100 mg; ium, 224 mg.	 8. Place a mound of risotto in the center of each plate. 9. Cut the rabbit meat into thick slices and arrange over the risotto. 10. Place a few pieces of diced carrot and zucchini on the plate. 11. Spoon the sauce onto the plate around the meat.



Roast Loin of Rabbit with Risotto

Broiling, Grilling, and Pan-Broiling

Broiling and grilling are dry-heat cooking methods, which use very high heat to cook meat quickly. Properly broiled meats have a well-browned, flavorful crust on the outside, and the inside is cooked to the desired doneness and still juicy.

It may be helpful to think of broiling and grilling as browning techniques rather than cooking techniques. This is because the best, juiciest broiled meats are those cooked to the rare or medium-done stage. Because of the intense heat, it is difficult to broil meats to the well-done stage and still keep them juicy. Pork and veal, which are usually eaten well done, are generally better griddled, sautéed, or braised than broiled or grilled. (Veal can be broiled successfully if the customer prefers it a little pink inside.)

For best results, only high-quality, tender cuts with a good fat content should be broiled.

Temperature Control

The object of broiling is not just to cook the meat to the desired doneness but also to form a brown, flavorful, crusty surface.

The goal of the broiler cook is to create the right amount of browning—not too much or too little—by the time the inside is cooked to the desired doneness. To do this, he or she must broil the item at the right temperature.

In general, the shorter the cooking time, the higher the temperature, or else the meat won't have time to brown. The longer the cooking time, the lower the temperature, or the meat will brown too much before the inside is done.

Cooking time depends on two factors:

- 1. The desired doneness.
- 2. The thickness of the cut.

In other words, a well-done steak should be cooked at a lower heat than a rare one. A thin steak cooked rare must be broiled at a higher temperature than a thick one cooked rare.

To control the cooking temperature of a broiler, raise or lower the rack. On a grill, set different areas for different temperatures and grill meats in the appropriate area.

Seasoning

As with roasting, chefs disagree on when to season. Some feel that meats should not be seasoned before broiling. This is because salt draws moisture to the surface and retards browning.

Procedure for Broiling or Grilling Meats

In a broiler, the heat source is above the food. In a grill, the heat is below the food. Except for this difference, the basic procedure is the same for both. Make sure you understand how to test broiled meats for doneness (p. 297) before starting.

- 1. Collect and prepare all equipment and food supplies. Trim excess fat from meats to avoid flare-ups that can char the meat too much and coat it with smoky residue. If necessary, score the fatty edges of meats to prevent curling.
- **2.** Preheat the broiler or grill.
- **3.** If necessary, brush the grill with a wire brush to clean off any charred food particles.
- 4. Brush the meat with oil, or dip it in oil and let the excess drip off. Place the item on the broiler or grill. The oil helps prevent sticking and keeps the product moist. This step may be unnecessary for meats high in fat. Using too much oil can cause grease fires. Alternatively, wipe the grill with an oiled towel before placing the meat on it.
- 5. When one side is brown and the meat is cooked halfway, turn it over with a fork (piercing only the fat, never the meat, or juices will be lost) or with tongs. Figure 11.4 illustrates the technique for grill-marking steaks and other meats.
- 6. Cook the second side until the meat is cooked to the desired doneness. If the meat is to be brushed with a glaze or sauce, such as a barbecue sauce, it is usually best to wait until the product is partially cooked on each side before applying the first coat. Many glazes or sauces burn if cooked too long. After the item has cooked on both sides and is one-half to three-fourths done, brush the top with a light coat of the sauce. Turn over and repeat as necessary.
- **7.** Remove from the broiler or grill and serve immediately.

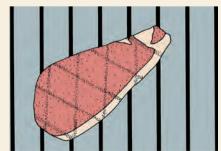
Figure 11.4 Grill-marking steaks.



(a) Place the meat on a preheated grill at an angle as shown.



(b) When the meat is about one-fourth done, turn the meat 60–90 degrees, as shown. Do not turn it over.



(c) When the steak is about half done, turn it over. The grill marks will appear as shown.

Others feel that seasoning before broiling improves the taste of the meat because the seasonings become part of the brown crust rather than something sprinkled on afterward.

Generally, if you have a professional broiler that has been properly preheated, it is not difficult to brown meat that has been salted. Low-powered broilers such as those found in home kitchens, on the other hand, do not get as hot. In such cases, it is better to salt after broiling, not before.

One way around this problem is to serve the meat with a seasoned butter (p. 193). Another option is to marinate the meat in seasoned oil 30 minutes or more before broiling. Be sure to dry marinated meats well before placing them on the broiler.

Sauces and Accompaniments for Grilled and Broiled Meats

Many kinds of sauces and accompaniments are appropriate for grilled meats, including compound butters; butter sauces such as béarnaise; brown sauce variations such as Bercy, mushroom, and bordelaise; tomato sauce variations; and salsas and relishes. For other examples, see the recipes in this section. Note that, unlike pan sauces made by deglazing sauté pans (see p. 333), all these sauces are prepared in advance because broiling or grilling does not give you the opportunity to deglaze a pan.

Part of the appeal of broiled and grilled meats is their brown, crisp surface. For this reason, it is best not to cover the item with the sauce. Also, less sauce is usually served with grilled items than with sautéed items. Serve the sauce on the side or around the meat or, at most, in a thin ribbon across only part of the meat.

Similarly, vegetables and accompaniments for broiled and grilled meats should, in most cases, not be heavily sauced. Grilled vegetables are often good choices as accompaniments.

Pan-Broiling

Broiling very thin steaks (minute steaks) to the rare stage is difficult because the heat is not high enough to form a good brown crust without overcooking the inside. Pan-broiling in a heavy iron skillet is an answer to this problem.

KEY POINTS TO REVIEW

- What are the steps in the basic procedure for roasting meats?
- What are the factors to consider when determining at what temperature to roast meats?
- What are the steps in the basic procedure for broiling and grilling meats?
- What are the steps in the basic procedure for pan-broiling meats?

Procedure for Pan-Broiling Meats

- **1.** Preheat an iron skillet over a high flame until it is very hot. Do not add fat. (The pan should, of course, be well seasoned.)
- **2.** Proceed as for grilling. Pour off any fat that accumulates during cooking, if necessary.



Broiled Strip Loin Steak Maître d'Hôtel

YIELD: 10	PORTIONS		
U.S.	METRIC	INGREDIENTS	PROCEDURE
to taste to taste as needed	to taste to taste as needed	Strip loin steaks, boneless, 10–12 oz (300–350 g) each Salt Black pepper Vegetable oil	 Trim steaks as necessary, leaving a thin layer of fat on the edge. Season the steaks to taste with salt and pepper. Brush lightly with oil. Place the steaks on a preheated grill or broiler. When the steak is about one-fourth done, turn it 60–90 degrees to grill-mark it (see Figure 11.4). When the steak is half done, turn it over and complete the cooking to the desired doneness. If turning with a fork, pierce the fat, not the meat, or juices will be lost.
	150 g Calories, 550; Protei , 0 g; Fiber, 0 g; Sodi	Maître d'Hôtel Butter (p. 194) n, 60 g; Fat, 33 g (55% cal.); Cholesterol, 185 mg; um, 250 mg.	6. Remove the steaks from the broiler and immediately place on a hot plate. Top each steak with a ½-oz (15-g) slice of seasoned butter.

VARIATIONS

Other steaks may be cooked by the same method, including *rib steak*, *rib-eye steak*, *tenderloin*, *club steak*, *porterhouse*, *T-bone*, *and sirloin*. *Chopped beef patties* may also be prepared using this recipe.

Other seasoned butters and sauces make good accompaniments to broiled steaks, including:

Garlic Butter Chasseur Sauce Mushroom Sauce (brown) Béarnaise Sauce Anchovy Butter Madeira Sauce Bercy Sauce (brown)

Foyot Sauce Bordelaise Sauce Périgueux Sauce Lyonnaise Sauce Choron Sauce Marchand de Vin Sauce

Broiled Lamb Chops

Prepare as for broiled steaks, using rib, loin, or shoulder chops.

London Broil

PORTION	IS: 24 PORTIO	N SIZE: 5 OZ (150 G)
U.S.	METRIC	INGREDIENTS
10 lb	4.75 kg	Flank steak (5 steaks) Marinade:
1 pt	500 mL	Vegetable oil
2 fl oz	60 mL	Lemon juice
2 tsp	10 mL	Salt
2 tsp	10 mL	Black pepper
1 tsp	5 mL	Dried thyme
1½ qt	1.5 L	Mushroom Sauce (brown) (p. 189)

Per serving: Calories, 520; Protein, 41 g; Fat, 37 g (65% cal.); Cholesterol, 110 mg; Carbohydrates, 3 g; Fiber, 0 g; Sodium, 370 mg.

Note: Flank steak should be broiled rare. If cooked well done, it will be tough and dry.

VARIATIONS

Thick-cut steaks from the round or chuck are sometimes used for London broil.

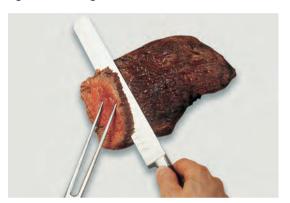
Teriyaki-Style London Broil

Marinate the steaks in a mixture of the following ingredients: 2½ cups (600 mL) Japanese soy sauce, 6 oz (200 mL) vegetable oil, 4 oz (125 mL) sherry, 6 oz (175 g) chopped onion, 2 tbsp (30 g) sugar, 2 tsp (10 mL) ginger, 1 crushed garlic clove. Marinate at least 4 hours or, preferably, overnight. Broil as in basic recipe.

PROCEDURE

- 1. Trim all fat and connective tissue from the beef.
- 2. Combine the marinade ingredients in a hotel pan. Place the steaks in the pan and turn them so they are coated with oil. Cover and refrigerate at least 2 hours
- 3. Remove the meat from the marinade and place in a preheated broiler or grill. Broil at high heat 3–5 minutes on each side, until well browned outside but rare inside (see Note).
- 4. Remove from broiler and let rest 2 minutes before slicing.
- 5. Slice the meat very thin on a sharp angle across the grain (see Figure 11.5).
- 6. Weigh 5-oz (150-g) portions. Serve each portion with 2 oz (60 mL) sauce.

Figure 11.5 Slicing London broil flank steak.



(a) Holding the knife at a sharp angle, slice the meat in very thin slices across the grain. Use a table fork or kitchen fork to hold the meat steady. Some chefs slice the meat toward the fork.



(b) Others prefer to slice away from the fork. The result is the same.

Beef Fajitas

PORTIONS: 12	PORTION SIZE: 4	OZ (150 G), PLUS GARNISH	
U.S.	METRIC	INGREDIENTS	PROCEDURE
3 fl oz 6 fl oz 4 tsp 4 tsp 4 tsp 2 tsp	90 mL 180 mL 20 mL 20 mL 4 20 mL 10 mL	Vegetable oil Lime juice Ground cumin Chili powder Garlic cloves, chopped fine Salt Pepper	 To make a marinade, mix together the oil, lime juice, cumin, chili powder, garlic, salt, and pepper. Place the meat in a nonreactive container with the marinade, turning the meat so it is coated on all sides. Refrigerate 2–4 hours. Remove the meat from the marinade. Grill the meat on both sides on a grill or under a broiler until it is lightly charred and rare to medium done, as desired.
4 lb 1 fl oz 1 lb 8 oz 1 lb 8 oz	1.9 kg 30 mL 700 g 700 g	Beef skirt steak or flank steak, trimmed of fat Vegetable oil Bell peppers, assorted colors, cut into strips Onion, in thick slices	 While the beef is grilling, heat the oil in a large sauté pan over high heat. Add the peppers and sauté briefly, keeping them slightly crisp. Remove the peppers from the pan, and then sauté the onions in the same way. When the beef is done, remove it from the grill and let it rest 5 minutes. Slice the meat across the grain into thin slices.
as desired Per serving: Calories,	24, or as desired as desired 740; Protein, 44 g; Fat, 22 Fiber, 6 g; Sodium, 830 mg.	Flour tortillas, steamed to soften Garnishes: Guacamole or sliced avocado Sour cream Shredded lettuce Diced tomato Salsa Cruda (p. 206)	9. Serve the meat strips and vegetables on a hot plate or sizzle platter. Serve the tortillas and the garnishes on the side in separate containers. Diners make their own soft tacos by rolling meat, vegetables, and choice of condiments in tortillas.

Broiled Smoked Pork Chop with Flageolet Beans and Wilted Arugula

PORTIONS: 15 PORTION SIZE: 1 8-OZ (250-G) PORK CHOP, ABOUT 5 OZ (150 G) VEGETABLE

U.S.	METRIC	INGREDIENTS
15	15	Smoked pork loin chops, bone in, about 8 oz (250 g) each
as needed	as needed	Vegetable oil
4 lb 12 oz	2.2 kg	Flageolet Beans with Wilted Arugula (see Note)

Per serving: Calories, 620; Protein, 57 g; Fat, 26 g (39% cal.); Cholesterol, 110 mg; Carbohydrates, 26 g; Fiber, 9 g; Sodium, 3110 mg.

Note: The quantity of beans and arugula required for this recipe is equal to the yield of the recipe on page 637.

- 1. Brush the chops very lightly with oil. Place on a preheated grill or broiler until grill-marked on both sides and heated through. Smoked pork chops are fully cooked, so it is necessary only to heat them through.
- 2. Serve each chop with 5 oz (150 g) of the beans with arugula.



Grilled Marinated Pork Tenderloin with Sweet Potato Purée and Warm Chipotle Salsa

PORTIONS: 10 PORTION SIZE: 5 OZ (150 G) MEAT			N SIZE: 5 OZ (150 G) MEAT	
i	U.S.	METRIC	INGREDIENTS	PROCEDURE
	4 lb	2 kg	Pork tenderloin	1. Trim fat and membranes from the tenderloins (see Figure 10.16).
	2 oz	60 g	Onion, chopped fine	2. Mix together the onion, garlic, powdered chile, salt, oregano, cumin,
	1	1	Garlic clove, chopped fine	cinnamon, lime juice, and oil.
	2 tbsp	30 mL	Powdered red New Mexico chile (see Note)	Coat the meat with this mixture. Wrap and refrigerate several hours or overnight.
	1 tsp	5 mL	Salt	
	½ tsp	2 mL	Dried oregano	
	¼ tsp	1 mL	Ground cumin	
	⅓ tsp	0.5 mL	Cinnamon	
	2 fl oz	60 mL	Lime juice	
	1 fl oz	30 mL	Olive oil	
•	1	1	Garlic clove, unpeeled	4. Roast the garlic and tomatoes in a preheated 450°F (230°C) oven for 10
	1 lb	500 g	Plum tomatoes or other	minutes.
			small tomatoes	5. Remove the skins from the tomatoes and garlic. Place the tomatoes and
	2	2	Whole chipotle chiles in	garlic in a blender.
	½ tsp	2 mL	adobo (canned) Salt	Carefully cut open the chiles. Scrape out and discard the seeds. Chop the chiles.
	2–3 tsp	10-15 mL	Sauce from the canned chiles	7. Add the chiles, salt, and the sauce from the chiles to the blender. Blend
	2-3 tsp	10-17 IIIL	Sauce noin the callied clines	to make a coarse purée. Add more salt if needed.
İ	3 lb	1.5 kg	Sweet potatoes	8. Bake the sweet potatoes at 400°F (200°C) until soft. Cut in half and
	to taste	to taste	Salt	scoop out the flesh. Pass through a food mill to purée. Season lightly.
				9. Scrape the onions and garlic off the meat (they will burn if left on).
	Per serving:	Calories, 410: Protein	. 41 g: Fat. 10 g (22% cal.): Cholesterol. 110 mg:	10. Grill the meat until just well done. Be careful not to overcook, or the

Per serving: Calories, 410; Protein, 41 g; Fat, 10 g (22% cal.); Cholesterol, 110 mg; Carbohydrates, 38 g; Fiber, 5 g; Sodium, 630 mg.

Note: For a slightly different flavor, or if powdered New Mexico chile is not available, use a regular chili powder blend.

- meat will be dry.
- 11. To serve, place 3 oz (90 g) sweet potato purée on the plate. Slice the meat across the grain into medallions. Arrange 5 oz (150 g) meat on top of the sweet potato. Drizzle with 1½ oz (45 mL) tomato chipotle salsa.



Grilled Marinated Pork Tenderloin with Sweet Potato Purée and Warm Chipotle Salsa

Grilled Chopped Lamb "Steaks" with Rosemary and Pine Nuts

PORTIONS: 25 PORTION SIZE: 5 OZ (150 G) U.S. METRIC INGREDIENTS 6 oz 175 g Onion, chopped fine 2 fl oz Salad oil 60 g 6½ lb 3.25 kg Ground lamb Soft, fresh bread crumbs 8 oz 250 g 8 07 250 g Toasted pine nuts 10 fl oz 300 mL Chopped parsley ½ cup 30 g 2 tsp 10 mL Rosemary 2½ tsp 12 mL Salt 5 mL 1 tsp White pepper 25 strips 25 strips Bacon

Per serving: Calories, 460; Protein, 25 g; Fat, 37 g (72% cal.); Cholesterol, 95 mg; Carbohydrates, 7 g; Fiber, 1 g; Sodium, 520 mg.

Note: The patties may be browned under the broiler, arranged on a sheet pan, and finished in the oven at 375°F (190°C).

PROCEDURE

- 1. Sauté the onion in oil until tender. Do not brown. Cool thoroughly.
- 2. Combine all ingredients except bacon in a bowl. Mix gently until evenly combined. Do not overmix.
- 3. Scale the meat into 5-oz (150-g) portions. Form the portions into thick patties, about ¾ in. (2 cm) thick.
- 4. Wrap a strip of bacon around each patty and fasten with picks.
- 5. Grill or broil the patties under moderate heat until done, turning once (see Note).
- 6. Remove the picks before serving.

VARIATIONS

Ground beef or yeal may be used instead of the lamb.

Grilled Chopped Beef "Steaks" with Marjoram

Substitute ground beef for the ground lamb. Substitute marjoram for the rosemary. Omit the pine nuts.

Shish Kebab

PORTION	S: 25 PORTIO	N SIZE: 6 OZ (175 G)
U.S.	METRIC	INGREDIENTS
10 lb	4.5 kg	Lamb leg, boneless, trimmed Marinade:
1 qt	1 L	Olive oil, or part olive and part vegetable oil
½ cup	125 mL	Lemon juice
5	5	Garlic cloves, crushed
4 tsp	20 mL	Salt
1½ tsp	7 mL	Pepper
1 tsp	5 mL	Dried oregano

Per serving: Calories, 280; Protein, 37 g; Fat, $14\,\mathrm{g}$ (46% cal.); Cholesterol, 115 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 125 mg.

Note: Shish kebabs are sometimes made with vegetables (onions, green peppers, cherry tomatoes, mushrooms) on the same skewer with the meat. However, it is easier to control cooking times if vegetables are broiled on separate skewers. Also, the meat is less likely to steam in the moisture from the vegetables.

- 1. A day before cooking, trim any remaining fat and connective tissue from the lamb. Cut into 1-in. (2.5-cm) cubes. Keep all the cubes the same size for even cooking.
- 2. Combine the marinade ingredients and pour over the lamb in a hotel pan. Mix well. Refrigerate overnight.
- 3. Drain the meat and weigh out 6-oz (175-g) portions. Thread each portion onto a skewer.
- 4. Place skewers on a grill or broiler rack and broil at moderate heat until medium done, turning over once when they are half cooked.
- 5. To serve, place each portion on a bed of Rice Pilaf (p. 647). The skewers should be removed by the waiter in the dining room or by the cook in the kitchen.

Broiled Lamb Kidneys with Bacon

PORTIONS: 10 PORTION SIZE: 2 KIDNEYS, 2 STRIPS BACON U.S. METRIC INGREDIENTS 20 20 Bacon strips 20 20 Lamb kidneys as needed as needed Melted butter or oil to taste to taste Salt to taste to taste Pepper

Per serving: Calories, 410; Protein, 26 g; Fat, 33 g (73% cal.); Cholesterol, 515 mg; Carbohydrates, 1 g; Fiber, 0 g; Sodium, 580 mg.

PROCEDURE

- 1. Cook the bacon on a griddle or in the oven on a sheet pan until crisp. Drain off the fat and keep the bacon warm.
- 2. Split the kidneys in half lengthwise and cut out the white fat and gristle in center.
- 3. Arrange the kidneys on skewers, 4 half-kidneys per skewer.
- 4. Brush the kidneys well with melted butter or oil and season with salt and pepper.
- 5. Broil the kidneys under high heat, turning once, until browned on the outside but still slightly rare. (Test by pressing with finger, as for testing steaks.)
- 6. Serve immediately with 2 slices of bacon per portion. Mustard is often served with kidneys.

Grilled Venison with Lime Butter

diffica verificit with Lime Batter				
PORTION	S:8 PORTION	SIZE: 3-4 OZ (90-125 G))		
U.S.	METRIC	INGREDIENTS	PROCEDURE	
2 lb	1 kg	Boneless, trimmed venison (see step 1)	1. Select a piece or pieces of venison suitable for broiling and slicing in the manner of London broil. Make sure the venison is well trimmed of	
1 tsp	5 mL	Whole Sichuan peppercorns, toasted	all silverskin.	
1 fl oz	30 mL	Lime juice	2. Rub the meat with Sichuan peppercorns. Sprinkle with lime juice and	
to taste	to taste	Salt	salt. Let marinate 30 minutes.	
2 oz	60 g	Butter	3. Soften the butter and mix in the crushed peppercorns, lime zest, lime	
½ tsp	2 mL	Sichuan peppercorns,	juice, and salt. Refrigerate until needed.	
		toasted and crushed	4. Grill or broil the venison until rare or medium rare. Remove from the	
2 tsp	10 mL	Grated lime zest	heat and let rest for a few minutes.	
½ tsp	2 mL	Lime juice	5. Cut on the bias, across the grain, into thin slices, like London broil.	
to taste	to taste	Salt	6. Arrange the slices on plates. Top each portion with a small slice of lime butter, about 1½ tsp (8 g).	
Per serving: Calories, 190; Protein, 26 g; Fat, 9 g (43% cal.); Cholesterol, 110 mg; Carbohydrates. 1 g: Fiber. 0 g: Sodium. 115 mg.				

Grilled Loin of Elk

Carbohydrates, 0 g; Fiber, 0 g; Sodium, 115 mg.

PORTION	S: 12 PORTION S	SIZE: 5-6 OZ (150-180 G)	
U.S. 8 fl oz 2 fl oz 2 oz 1 tbsp ½ tsp 1 tbsp 1 tsp	METRIC 250 mL 60 mL 60 g 15 mL 1 mL 15 mL 5 mL	INGREDIENTS Red wine Vegetable oil Shallot, sliced Lemon zest, grated Cayenne Salt Black pepper	 PROCEDURE Mix together the wine, oil, shallot, lemon zest, cayenne, salt, and pepper in a nonreactive container big enough to hold the elk steaks. Place the steaks in the container, turning them to coat them with the marinade. Refrigerate 2 hours. The steaks should remain in the marinade only long enough to flavor them lightly. Remove the steaks from the marinade and pat them dry with clean towels.
12 Steaks, 5–6 oz (150–180 g) each, cut from trimmed, boneless loin of elk Per serving: Calories, 180; Protein, 33 g; Fat, 45 g (75% cal.); Cholesterol, 80 mg;			5. Broil or grill to rare or medium doneness.

Sautéing, Pan-Frying, and Griddling

If you review the general definitions of sautéing, pan-frying, and griddling in Chapter 4, you will see the differences among these methods are largely a matter of degree. Sautéing uses high heat and a small amount of fat and is usually used for small pieces of food. Pan-frying uses moderate heat, a moderate amount of fat, and is usually employed for larger items, such as chops. But at what point does moderate heat become high heat and a small amount of fat become a moderate amount of fat? It is impossible to draw an exact dividing line between sautéing and pan-frying.

Each time you cook a piece of meat, you must judge how much heat and how much fat to use to do the job best. This depends on the kind of food and the size of the pieces. Following are guidelines to help you make the right judgments.

Guidelines for Sautéing, Pan-Frying, and Griddling

- 1. Use only tender cuts for sautéing.
- 2. Smaller or thinner pieces of meat require higher heat. The object is to brown or sear the meat in the time it takes to cook it to the desired doneness. Very small or thin pieces cook in just a few moments.
- 3. If large or thick items are browned over high heat, it may be necessary to finish them at lower heat to avoid burning them.
- 4. The amount of fat needed is the amount required to conduct the heat to all surfaces so the item cooks evenly. Flat items need much less fat than irregularly shaped items like chicken pieces. Sautéing small pieces of meat requires little fat because the items are tossed or flipped so all sides come in contact with the hot pan.
- 5. When sautéing small pieces of food, do not overload the pan, and do not flip or toss the food more than necessary. This will cause the temperature to drop too much, and the meat will simmer in its juices rather than sauté.
- **6.** Use clarified butter or oil or a mixture of the two for sautéing. Whole butter burns easily.
- 7. Dredging meats in flour promotes even browning and helps prevent sticking. Flour meats immediately before cooking, not in advance, or the flour will get pasty. Also, shake off excess flour before adding meat to the pan.
- **8.** Meats to be pan-fried are often breaded. Review page 152 for Standard Breading Procedure.
- **9.** When pan-frying several batches, strain or skim the fat between batches. Otherwise, burned food particles from previous batches may mar the appearance of the meat.
- **10.** Griddling and pan-frying are preferable to broiling and grilling for cooking pork and veal chops because the lower temperatures keep these meats moister when cooked well done. Hamburgers cooked well done are also moister if cooked on a griddle.

Deglazing the Pan

A sauce made by deglazing the pan often accompanies sautéed meats. To *deglaze* means to swirl a liquid in a sauté or other pan to dissolve cooked particles of food remaining on the bottom. (Review discussions of deglazing in Chapter 4, p. 74, and in Chapter 8, p. 165 and p. 178). The deglazing liquid can be used to flavor a sauce in one of two ways:

- **1.** Add the reduced deglazing liquid to a prepared sauce. The deglazing liquid adds flavor and color to the sauce.
- **2.** *Use the deglazing liquid to make a freshly prepared sauce.* Add stock or other liquids and other flavoring and thickening ingredients and finish the sauce as indicated in the recipe.

Stir-Frying

The Chinese technique of stir-frying is very much like sautéing, except that in sautéing, the food items are usually tossed by flipping the pan, while in stir-frying, the pan is left stationary and the foods are tossed with spatulas or other tools. Although true Chinese stir-frying is done in a round-bottomed pan, called a *wok*, set over a special burner, you can use the same technique with a standard sauté pan.

General Procedures for Sautéing and Pan-Frying Meats

The following procedures are presented together so you can compare them. Keep in mind that these are the two extremes and that many recipes require a procedure that falls somewhere between the two.

The procedure for pan-frying applies to griddling as well, although only a small amount of fat can be used on a griddle.

Sautéing

- 1. Collect all equipment and food supplies.
- **2.** Prepare meats as required. This may include dredging with flour.
- 3. Heat a small amount of fat in a sauté pan until very hot.
- **4.** Add the meat to the pan. Do not overcrowd the pan.
- **5.** Brown the meat on all sides, flipping or tossing it in the pan as necessary so it cooks evenly.
- **6.** Remove the meat from the pan. Drain excess fat, if any.
- **7.** Add any sauce ingredients to be sautéed, such as shallots or mushrooms, as indicated in the recipe. Sauté them as necessary.
- **8.** Add liquid for deglazing, such as wine or stock. Simmer while swirling and scraping the pan to release food particles on the bottom so they can dissolve in the liquid. Reduce the liquid.
- **9.** Add a prepared sauce or other sauce ingredients, and finish the sauce as indicated in the recipe.
- **10.** Serve the meat with the sauce, or return the meat to the sauce in the pan to reheat briefly and coat it with the sauce. Do not let the meat cook in the sauce. Serve.

Pan-Frying

- **1.** Collect all equipment and food supplies.
- **2.** Prepare meats as required. This may include breading or dredging with flour.
- 3. Heat a moderate amount of fat in a sauté pan or skillet until hot.
- **4.** Add the meat to the pan.
- 5. Brown the meat on one side. Turn it with a spatula and brown the other side. Larger pieces may need to be finished at reduced heat after browning. If required, they may finish cooking, uncovered, in the oven.
- 6. Serve immediately.

Basic Procedure for Stir-Frying

- 1. Heat a wok or sauté pan over high heat until very hot.
- **2.** Add a small quantity of oil and let it heat.
- **3.** Add seasonings for flavoring the oil—one or more of the following: salt, garlic, ginger root, scallions.
- **4.** If meat, poultry, or seafood items are part of the dish, add them at this point. As when sautéing, do not overload the pan. Leave the food pieces untouched for a few moments so they begin to brown properly. Then stir and toss them with a spatula so they sear and cook evenly.
- 5. If any liquid seasoning for the meat, such as soy sauce, is used, add it now, but only in small quantities, so the meat continues to fry and does not start to simmer or stew.
- **6.** Remove the meat from the pan or leave it in, depending on the recipe. If a small quantity of quick-cooking vegetables is used, the meat can sometimes be left in the pan and the vegetables cooked with it. Otherwise, remove the meat when it is almost done and keep it on the side while cooking the vegetables.
- **7.** Repeat steps 2 and 3 if necessary.
- **8.** Add the vegetables to the pan and stir-fry. If more than one vegetable is used, add the longer-cooking ones first and the quicker-cooking ones last.
- **9.** Some dishes are dry-fried, meaning prepared without liquid or sauce. In this case, simply return the meat item, if any, to the pan to reheat with the vegetables, then serve. Otherwise, proceed to the next step.
- 10. Add liquid ingredients, such as stock or water, and continue to cook and stir until the vegetables are almost cooked.
- **11.** Add the meat item, which was removed in step 6, to the pan to reheat.
- 12. Optional but widely used step: Add a mixture of cornstarch and water to the pan and cook until lightly thickened.
- 13. Serve at once.

KEY POINTS TO REVIEW

- When sautéing meats, what are the factors to consider when deciding on how much heat to use?
- What are the steps in the basic procedure for sautéing meats?
- What are the steps in the basic procedure for pan-frying meats?
- What are the steps in the basic procedure for stir-frying meats?



Breaded Veal Cutlets

PORTIO	NS: 24 POR	TION SIZE: 4 OZ (125 G)
U.S.	METRIC	INGREDIENTS
6 lb	3 kg	Veal cutlets (scaloppine): 24 pieces, 4 oz (125 g) each (See Figure 10.15 for preparation of veal)
to taste	to taste	Salt
to taste	to taste	Pepper
		Standard Breading Procedure (see Note):
4 oz	125 g	Flour
4	4	Eggs
1 cup	250 mL	Milk
1½ lb	750 g	Bread crumbs, dry or fresh
8 oz	250 mL	Oil or clarified butter, or a mixture of oil and butter
1207	275 a	Ruttor

PROCEDURE

- 1. Lightly flatten each piece of veal with a meat mallet. Do not pound too hard, or you may tear the meat.
- 2. Season the meat with salt and pepper and pass through Standard Breading Procedure (see p. 152).
- 3. Heat about ¼ in. (5 mm) oil or butter in a large sauté pan. Place the cutlets in the pan and pan-fry until golden brown. Turn and brown the other side. Remove from the pan and place on hot plates.

12 oz 375 g Butter

Per serving: Calories, 550; Protein, 31 g; Fat, 38 g (63% cal.); Cholesterol, 165 mg; Carbohydrates, 19 g; Fiber, 1 g; Sodium, 380 mg.

Note: Quantities given for breading materials are only guidelines. You may need more or less, depending on the shapes of the meat pieces, the care used in breading, and other factors. In any case, you will need enough so even the last piece to be breaded can be coated easily and completely.

4. Heat the butter in a small saucepan or sauté pan until lightly browned. Pour ½ oz (15 g) brown butter over each portion.

VARIATIONS

Veal Cutlet Sauté Gruyère

Top each cooked cutlet with 1 or 2 thin slices of tomato and 1 slice of Gruyère cheese. Pass under a broiler to melt cheese. Serve with tomato sauce placed under the cutlet or in a ribbon (cordon) around the cutlet.

Schnitzel à la Holstein

Top each portion with a fried egg and 4 anchovy fillets placed around the edge of the egg.

Veal Cutlet Viennese-Style (Wiener Schnitzel)

Top each cutlet with 1 peeled lemon slice and 1 anchovy fillet rolled around a caper. Garnish the plate with chopped hard-cooked egg white, sieved egg yolk, and chopped parsley.

Veal Parmigiana

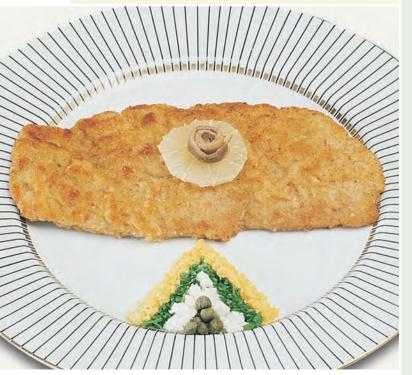
Top each cutlet with 2 fl oz (60 mL) tomato sauce, 1 slice of mozzarella cheese, and 2 tbsp (30 mL) parmesan cheese. Pass under a broiler to melt cheese.

Veal Cordon Bleu

Use 2 thin 2-oz (60-g) cutlets per portion. Sandwich 1 thin slice ham and 1 thin slice of Swiss cheese between 2 cutlets. Pound edges lightly to seal. Bread and fry as in basic recipe.

Breaded Pork Cutlets

Cutlets from pork leg or loin may be breaded and pan-fried like veal. They must be cooked well done.



Veal Cutlet, Viennese-Style



Veal Scaloppine alla Marsala

PORTIONS:	10 PORTION S	IZE: 4 OZ (125 G)	
U.S.	METRIC	INGREDIENTS	PROCEDURE
2½ lb	1.25 kg	Small veal scaloppine: 20 pieces, 2 oz (60 g) each (See Figure 10.15	1. Lightly flatten each piece of veal with a meat mallet. Do not pound hard, or you may tear the meat.
to taste to taste for dredging 2 fl oz	to taste to taste for dredging 60 mL	for preparation of veal) Salt White pepper Flour Oil	 Dry the meat, season it with salt and pepper, and dredge it in flour. Shake off excess. (Do not do this step until immediately before cooking.) Heat the oil in a large sauté pan until very hot. Add the veal and sauté over high heat just until lightly browned on both sides. (If necessary, sauté the meat in several batches.)
			4. Remove the meat from the pan and drain the excess oil.
4 fl oz 8 fl oz	125 mL 250 mL	Marsala wine Strong white stock, veal or chicken	5. Add the Marsala to the pan and deglaze.6. Add the stock and reduce over high heat by about half.
2 oz 2 tbsp	60 g 30 mL	(see Note) Butter, cut in pieces Chopped parsley	7. Add the pieces of butter and swirl the pan until they are melted and blended with the sauce.8. Add the veal to the pan and bring just to the simmer. Turn the meat to coat it with the sauce.
Per serving: Calories, 360; Protein, 27 g; Fat, 26 g (65% cal.); Cholesterol, 115 mg; Carbohydrates, 2 g; Fiber, 0 g; Sodium, 120 mg. Note: Brown sauce may be used instead of white stock. However, the white stock		120 mg.	9. Serve immediately, 2 pieces per portion, sprinkled with chopped parsley.

VARIATIONS

Veal Scaloppine with Sherry Substitute sherry for the Marsala.

makes a more delicate product without masking the flavor of the veal.

Veal Scaloppine à la Crème

Prepare as in basic recipe, but omit the wine. Deglaze the pan with the stock. Add 1 cup (250 mL) heavy cream and reduce until thickened. Omit the butter. Season the sauce with a few drops of lemon juice. Taste carefully for salt.

Veal Scaloppine with Lemon

Substitute 3 fl oz (90 mL) lemon juice for the 4 fl oz (125 mL) wine. After plating, top each piece of veal with 1 lemon slice and sprinkle with chopped parsley.

Veal Scaloppine with Mushrooms and Cream

Prepare as for Veal Scaloppine à la Crème, but sauté ½ lb (250 g) sliced mushrooms in butter in the sauté pan before deglazing.

Tournedos Vert-Pré

PORTIONS: 1 PORTION SIZE: 5-6 OZ (150-175 G))

U.S.	METRIC	INGREDIENTS
1 oz	30 g	Clarified butter
2	2	Tournedos (see Note), $2\frac{1}{2}$ – 3 oz (75–90 g) each
2 slices	2 slices	Maître d'Hôtel Butter (p. 194)
as needed	as needed	Allumette Potatoes (p. 625)
as needed	as needed	Watercress

Per serving: Calories, 640; Protein, 27 g; Fat, 59 g (83% cal.); Cholesterol, 185 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 410 mg.

Note: Tournedos (TOOR-nuh-doe; singular form: one tournedos) are small tenderloin steaks cut about 1½ in. (4 cm) thick. The same recipe may be used for fillet steaks, which are larger but thinner cuts from the tenderloin. See Figure 10.9 for cutting tenderloin.



Tournedos Rossini; Berny Potatoes; Braised Lettuce

PROCEDURE

- 1. Heat the butter in a small sauté pan over moderately high heat.
- 2. Place the tournedos in the pan and cook until well browned on the bottom and about half cooked.
- 3. Turn the meat over and continue to cook until rare or medium done. according to customer's request.
- 4. Place the tournedos on a hot dinner plate and top each with a slice of maître d'hôtel butter. Garnish the plate with a portion of allumette potatoes and a generous bunch of watercress. Serve immediately, while the butter is still melting.

VARIATIONS

Tournedos Béarnaise

Pan-fry tournedos as in basic recipe and serve with béarnaise sauce (p. 197).

Tournedos Bordelaise

Pan-fry as in basic recipe. Top each steak with 1 slice poached beef marrow and coat lightly with bordelaise sauce (p. 189).

Tournedos Chasseur

Pan-fry as in basic recipe. Plate the steaks and deglaze the sauté pan (drained of cooking fat) with ½ fl oz (15 mL) white wine. Add 2 fl oz (60 mL) chasseur sauce (p. 189), bring to a simmer, and pour around the tournedos.

Tournedos Rossini

Pan-fry as in basic recipe. Set the tournedos on croûtons (rounds of bread cut the same size as the steaks and fried in butter until golden). Top each steak with 1 slice pâté de foie gras (goose liver pâté) and 1 slice truffle (if available). Coat lightly with Madeira sauce (p. 189).

Pork Chops Charcutière

PORTIONS: 24 PORTION SIZE: 6 OZ (175 G) CHOP, 2 FL OZ (60 ML) SAUCE

U.S.	METRIC	INGREDIENTS
24	24	Pork chops, 6 oz (170 g) each
as needed	as needed	Oil

PROCEDURE

- 1. Trim excess fat from chops if necessary.
- 2. Add enough oil to a skillet, sauté pan, or griddle to make a thin film. Heat over moderate heat.
- 3. Place the chops in the hot pan or on the griddle and cook until browned and about half done. Turn over and cook until well done and browned on the second side.

Charcutière Sauce (p. 189) 1½ qt 1.5 L

Per serving: Calories, 260; Protein, 28 g; Fat, 13 g (46% cal.); Cholesterol, 90 mg; Carbohydrates, 4 g; Fiber, 0 g; Sodium, 180 mg.

- 4. Place the chops on hot dinner plates for service (or place them in a hotel pan if they must be held).
- 5. Spoon a ribbon of sauce (2 oz/60 mL) around each plated chop.



Sautéed Veal Chop; Zucchini with Tomatoes

VARIATIONS

Pork Chops Robert

Use Robert Sauce (p. 189) instead of charcutière sauce.

Pork Chops Piquante

Use Piquante Sauce (p. 189) instead of charcutière sauce.

Veal Chops

These may be cooked by the same basic procedure and served with an appropriate sauce, such as a well-seasoned demi-glace or a mixture of demi-glace and cream. Other suggestions; Ivory Sauce (p. 186), Hungarian Sauce (p. 186), Mushroom Sauce (white) (p. 186), Aurora Sauce (p. 186).

Thai Green Curry of Pork with Vegetables 🏾 🌑

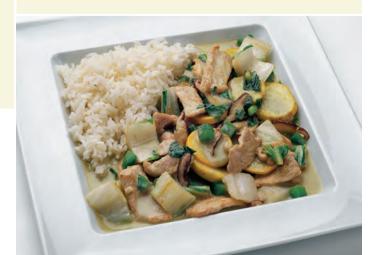


FUNITUMS:	12 PORTION	312E: / UZ (200 d)
U.S.	METRIC	INGREDIENTS
2 fl oz	60 mL	Vegetable oil
2 lb	1 kg	Boneless pork loin, cut into thin slices
1 lb	500 g	Bok choy, cut into 1-in. (2.5-cm) pieces
10 oz	300 g	Yellow summer squash, sliced
8 oz	250 g	Green bell pepper, medium dice
6 oz	180 g	Shiitake mushrooms, sliced
1 tbsp	15 mL	Garlic, chopped
12	12	Scallions, sliced
18 fl oz	550 mL	Thai Green Curry Sauce (p. 210), hot

Per serving: Calories, 250; Protein, 18 g; Fat, 19 g (64% cal.); Cholesterol, 40 mg; Carbohydrates, 6 g; Fiber, 2 g; Sodium, 310 mg.

Note: This method of making a curry is designed for advance preparation and quick, last-minute cooking. A more traditional method is to make the sauce as an integral sauce. Stir-fry the meat and vegetables, add curry paste (see sauce recipe, p. 186), and cook until aromatic. Add the coconut milk, other liquids, flavorings, and any other ingredients indicated in the sauce recipe, and finish cooking.

- 1. Heat half the oil in a large sauté pan or wok.
- 2. Over high heat, stir-fry the pork just until it loses its pink color. Cook it in several batches if necessary. Remove from pan.
- 3. Add the rest of the oil to the pan.
- 4. With the pan still over high heat, add the bok choy, squash, peppers, mushrooms, garlic, and scallions. Stir-fry for a few minutes, keeping the vegetables crisp.
- 5. Return the pork to the pan and add the sauce. Simmer until the pork is cooked through.
- 6. Serve immediately with steamed rice.



Thyme-Scented Medallions of Lamb with Balsamic Glaze

PORTIONS: 8 PORTION SIZE: 5 OZ (150 G)	
U.S. METRIC INGREDIENTS	PROCEDURE
2 lb 8 oz 1.2 kg Boneless lamb loin (see Note) 2½ fl oz 75 mL Olive oil 2 tbsp 30 mL Fresh thyme leaves, lightly crushed	 Trim the lamb of all fat and silverskin. Slice into uniform 2½-oz (75-g) medallions. Flatten them slightly with the side of a cleaver or chef's knife blade. Rub the medallions with olive oil and fresh thyme. Refrigerate several hours or overnight.
to taste to taste Salt to taste to taste Pepper as needed as needed Olive oil	 4. Remove the lamb from the refrigerator and scrape the thyme leaves from each medallion. 5. Season the meat with salt and pepper. 6. Heat a thin film of oil in a sauté pan and sear the medallions well on both sides. Continue to sauté until the meat reaches medium rare or medium doneness, or as requested by the customer.
2 fl oz 60 mL Balsamic vinegar 1 fl oz 30 mL Water 3 fl oz 90 mL Glace de viande 1 oz 30 g Raw butter Per serving: Calories, 460; Protein, 28 g; Fat, 37 g (74% cal.); Cholesterol, 115 mg; Carbohydrates, 2 g; Fiber, 0 g; Sodium, 80 mg. Note: Boneless lamb loin yields tender, uniform, oval medallions, but it is costly. For more economical medallions, cut uniform portions from seamed, trimmed	 Remove the medallions from the pan and keep warm. Deglaze the pan with the vinegar. Reduce au sec. Add the water and glace to the pan. Heat briefly and stir to mix. Finish the glaze by swirling in the raw butter. Dip each medallion in the glaze to coat, then plate 2 medallions per portion. Alternatively, plate the medallions first, then drizzle the glaze over or around the meat.

Beef Stroganoff

leg of lamb and shape medallions as shown in Figure 10.10.

200,000,000				
PORTIONS	: 10 PORTIO	N SIZE: 6 OZ (180 G)		
U.S.	METRIC	INGREDIENTS	PROCEDURE	
2 oz 4 oz 8 oz 2 fl oz 1 oz 2 tsp 1½ pt 10 fl oz to taste to taste	60 g 120 g 240 g 60 mL 30 g 10 mL 720 mL 300 mL to taste to taste	Clarified butter Onion, brunoise Mushrooms, sliced White wine Tomato paste Prepared mustard Demi-glace Sour cream Salt Pepper	 Heat the butter in a sauté pan and sauté the onion and mushrooms briefly without letting them brown. Add the white wine. Reduce by half over high heat. Stir in the tomato paste and mustard, and then add the demi-glace. Reduce over high heat until lightly thickened. Stir in the sour cream. Season to taste with salt and pepper. Keep the sauce hot in a bain-marie. 	
2 fl oz 2½ lb	60 mL 1.2 kg	Vegetable oil Beef tenderloin, trimmed of all fat, cut into thin strips about 1½×1 in. (4×2.5 cm) (see Note)	 6. Heat the oil in a sauté pan over high heat until almost to the smoke point. Sauté the beef quickly, until well browned but not overcooked. It should still be slightly pink inside. If necessary, sauté in several batches or in more than one pan to avoid overcrowding the pan. 7. Remove the meat from the pan and discard excess fat. 8. Add the sour cream sauce to the pan and bring to a simmer. Stir in the meat and adjust the seasonings. 	

Per serving: Calories, 410; Protein, 28 g; Fat, 29 g (7% cal.); Cholesterol, 120 mg; Carbohydrates, 7 g; Fiber, 1 g; Sodium, 160 mg.

Note: Trimmings and ends left after cutting steaks from the center portion of the tenderloin are usually used for this dish. Less tender cuts of beef may be used if the meat is simmered in the sauce until tender. The item will then be braised rather than sautéed.

- 9. Serve immediately with noodles or spaetzle (p. 677).



Calf's Liver Lyonnaise

PORTIONS: 10	PORTION SIZE:	1 SLICE LIVER, 1½ OZ (50 G) ONIO
U.S.	METRIC	INGREDIENTS
2 lb	1 kg	Onions
3 oz	90 g	Butter
1 cup	250 mL	Demi-glace or strong brown stock
to taste	to taste	Salt
to taste	to taste	Pepper
•••••		
10 slices	10 slices	Calf's liver, ½ in. (6 mm) thick, about 4 oz (125 g) each
as needed	as needed	Salt
as needed	as needed	Pepper
as needed	as needed	Flour
as needed	as needed	Clarified butter or oil

Per serving: Calories, 310; Protein, 24 g; Fat, 19 g (54% cal); Cholesterol, 445 mg; Carbohydrates, 13 g; Fiber, 1 g; Sodium, 250 mg.

PROCEDURE

ON GARNISH

- 1. Peel and slice the onions.
- 2. Heat the butter in a sauté pan and add the onions. Sauté them over medium heat until tender and golden brown.
- 3. Add the demi-glace or stock and cook a few minutes, until the onions are nicely glazed. Season to taste.
- 4. Place in a bain-marie and keep warm for service.
- 5. Season the liver and dredge in flour. Shake off excess flour.
- 6. Pan-fry the liver in butter or oil over moderate heat until browned on both sides and slightly firm to the touch. Do not overcook or use high heat.
- 7. Serve each portion with $1\frac{1}{2}$ oz (45 g) onion mixture.



Calf's Liver Lyonnaise

Medallions of Venison Poîvrade with Cassis

PORTIONS: 8	PORTION SI	ZE: 2 MEDALLIONS, 2-3 OZ (60-90	G) EACH
U.S.	METRIC	INGREDIENTS	PROCEDURE
16	16	Medallions of venison, cut from the loin, ¾ in. (2 cm) thick, 2–3 oz (60–90 g) each	 Season the meat with salt and pepper. Sauté in butter or oil, keeping the meat rare. Remove the meat from the sauté pan and set it aside in a warm place.
to taste	to taste	Salt	, , , , , , , , , , , , , , , , , , ,
to taste	to taste	Pepper	
as needed	as needed	Butter or oil	
4 fl oz 12 fl oz	125 mL 375 mL	Chicken stock Poîvrade Sauce (p. 189)	 Degrease the sauté pan. Deglaze it with the chicken stock and reduce the stock by half.
1 fl oz	30 mL	Crème de cassis (black-currant liqueur)	4. Add the sauce and the cassis to the pan and bring to a simmer. Strain the sauce.
Per serving: Calories, 260; Protein, 26 g; Fat, 11 g (39% cal.); Cholesterol, 120 mg; Carbohydrates, 4 g; Fiber, 2 g; Sodium, 150 mg.		• • • • • • • • • • • • • • • • • • • •	 Serve 2 medallions per portion. Spoon the sauce around the meat, using about 1½ oz (45 mL) per portion. Garnish the plate with appropriate seasonal vegetables.

VARIATION

Medallions of Boar Poîvrade with Cassis

Prepare as in the basic recipe, substituting loin of boar for the venison. Cook the meat until it is almost well done but still a little pink inside. Do not overcook, or the meat will be dry.

Steak en Chevreuil

PORTIONS:	4 PORTION SIZ	E: VARIABLE		
U.S.	METRIC	INGREDIENTS	PROCEDURE	
4 11/ ===	4	Beef steaks, size and type (tenderloin, strip, etc.) desired	 Trim the steaks as necessary. Place the steaks in a nonreactive container and add enough 	
1–1½ pt	500-750 mL	Red Wine Marinade for Game (p. 324)	marinade to cover. Refrigerate 1–2 days. Turn the steaks several times so they marinate evenly.	
8 fl oz	240 mL	Poîvrade Sauce (p. 189)	Drain the marinade into a separate container and return the steaks to the refrigerator. Use the marinade to prepare the poîvrade sauce.	
as needed	as needed	Oil for cooking	4. Before cooking, dry the steaks on clean towels.	

Per serving: Calories, 520; Protein, 51 g; Fat, 29 g (3% cal.); Cholesterol, 150 mg; Carbohydrates, 4 g; Fiber, 2 g; Sodium, 190 mg.

STEAK EN CHEVREUIL

Chevreuil means "venison," and en chevreuil (on shev roy) means "cooked like venison." It has long been a tradition to marinate game, especially venison, in a wine marinade, and much of the flavor we associate with venison dishes comes from the marinade rather than the meat itself. Marinating beef in a red wine game marinade makes the beef taste like venison. In addition, the steak is served with a poîvrade sauce, also a traditional game accompaniment.

- Heat a thin film of oil in a sauté pan and cook the steaks to the desired doneness.
- 6. Plate the steaks as desired. Serve the sauce in a separate sauceboat, or ladle it around the steaks.

Sautéed Veal Sweetbreads with Shiitake Mushrooms and Port Wine Sauce

PORTIONS: 10 PORTION SIZE: 4 OZ (125 G) SWEETBREADS, PLUS SAUCE AND GARNISH U.S. METRIC INGREDIENTS PROCEDURE 2½ lb Sweetbreads, blanched, trimmed, 1.25 kg 1. Slice the sweetbreads in half horizontally. and pressed according to the 2. Season the sweetbreads with salt and pepper. Dredge them with flour procedure on p. 301 and shake off the excess. to taste to taste Salt 3. Heat butter in a sauté pan over moderately high heat. Sauté the to taste sweetbreads until golden brown on both sides. Place on hot dinner to taste Pepper as needed as needed Flour as needed as needed Clarified butter as needed as needed Clarified butter 4. Heat additional butter in the sauté pan and quickly sauté the mushrooms over high heat just until tender, about 1 minute. Add salt 11/4 lb 625 g Shiitake mushrooms, caps only, and pepper to taste. cut into strips 5. Spoon the sauce around (not over) the sweetbreads. Distribute the to taste to taste mushrooms around the sweetbreads. to taste to taste Pepper 6. Serving suggestion: A green vegetable, such as small green beans, 500 mL Port Wine Sauce (p. 189) 1 pt makes a good complement to the plate.

VARIATION

Carbohydrates, 17 g; Fiber, 1 g; Sodium, 270 mg.

Instead of dredging the sweetbreads in flour, bread them using the Standard Breading Procedure (p. 152). Omit the port wine sauce and top each portion with a little beurre noisette.

Per serving: Calories, 330; Protein, 23 g; Fat, 16 g (43% cal.); Cholesterol, 340 mg;

Sautéed Veal Sweetbreads with Shiitake Mushrooms and Port Wine Sauce



Stir-Fried Beef with Bell Peppers 🌑



PORTION	S: 16 PORTIO	N SIZE: 4 OZ (125 G)	
U.S.	METRIC	INGREDIENTS	
2½ lb	1.2 kg	Flank steak	
4 fl oz	125 mL	Soy sauce	
1 fl oz	30 mL	Sherry or Shaoxing wine	
5 tsp	25 mL	Cornstarch	
6	6	Bell peppers, 2 or 3 colors	
4 slices	4 slices	Fresh ginger root	
1-2	1-2	Garlic cloves, sliced	
2 fl oz	60 g	Scallion, sliced	
3–4 fl oz	90–125 mL	Oil	••••
½ tsp	2 mL	Salt	
2 fl oz	60 mL	Chicken stock	
2 11 02	00 IIIL	CHICKEH SLUCK	

Per serving: Calories, 180; Protein, 16 g; Fat, 11 g (54% cal.); Cholesterol, 35 mg; Carbohydrates, 5 g; Fiber, 1 g; Sodium, 525 mg.

VARIATIONS

Other vegetables may be used instead of the peppers, such as celery, broccoli, snow peas, green beans, asparagus, mushrooms, bok choy. Or use 2 or 3 fresh vegetables, plus water chestnuts and/ or bamboo shoots.

Chicken or pork may be used instead of beef. If chicken is used, cut it into medium dice or bâtonnet. Also, reduce the quantity of soy sauce to avoid discoloring the light meat of the chicken.

CHINESE STIR-FRIES

Chinese restaurants in North America often finish stir-fried dishes by adding a quantity of commercially prepared sauce to the mixture. In traditional Chinese cooking, however, the sauce is more often made as part of the stir-frying procedure. Far less liquid is used, so the finished dish has much less sauce than the Chinesestyle dishes that most North Americans are familiar with. The recipe included here is an example of this dryer style of stir-frying.

- 1. Cut the flank steak lengthwise (with the grain) into strips 2 in. (5 cm) wide. Then cut the strips crosswise into very thin slices. (This is easier if the meat is partially frozen.)
- 2. Toss the meat with the soy sauce, sherry, and cornstarch. Let marinate 30 minutes or longer.
- 3. Core and seed the peppers. Cut them into strips ½ in. (6 mm) wide.
- 4. Have the ginger, garlic, and scallions ready in separate containers.
- 5. Stir-fry the beef in 3 or more batches, depending on the size of the pan or wok. Use a little of the oil for each batch, as needed.
- 6. As each batch of the beef is cooked, remove it from the pan and set it
- 7. Heat additional oil in the pan and add the salt, ginger, garlic, and scallions. Stir-fry for a few seconds to develop flavor.
- 8. Add the peppers and stir-fry until lightly cooked but still crisp.
- 9. Add the stock and toss the vegetables a few times.
- 10. Return the meat to the pan. Toss the meat with the vegetables until it is hot and evenly combined with the peppers. Serve at once.



Stir-Fried Beef with Bell Peppers

Costolette di Vitello Ripiene alla Valdostana (Veal Cutlets Val d'Aosta-Style)

U.S. METRIC INGREDIENTS PROCEDURE 16 16 Veal rib chops 1. Remove the chine and feather bones so only the rib be each chop. 2. Cut a pocket in each, as shown in Figure 10.17. 3. Flatten the chops lightly with a cutlet pounder to increase of the eye. Be careful not to tear a hole in the meat. 12 oz 350 g Fontina cheese 4. Cut the cheese into thin slices.	
12 oz 350 g Fontina cheese 4. Cut the cheese into thin slices.	17. er to increase the diameter
to taste the pockets, with none hanging out. Press the edges together and pound lightly to seal. If this is done care need to skewer them shut. Season the chops with salt and pepper. Set up a breading station. Crumble the rosemary and bread crumbs. Bread crumbs to taste the pockets, with none hanging out. Press the edges together and pound lightly to seal. If this is done care need to skewer them shut. Season the chops with salt and pepper. Set up a breading station. Crumble the rosemary and bread crumbs. Bread the chops. Sauté the chops in butter and serve immediately.	ne edges of the pockets done carefully, you don't mary and mix it with the

VARIATIONS

Costolette alla Milanese (Cutlets Milan-Style)

Carbohydrates, 19 g; Fiber, 1 g; Sodium, 530 mg.

Omit the cheese stuffing and the rosemary. Do not cut pockets in the meat. Flatten the chops with a cutlet pounder until they are half their original thickness. Bread and sauté them as in the basic recipe.

Simmering

Meats are not often simmered. Part of the reason simmered meats are not as popular as meats cooked in other ways may be that they lack the kind of flavor produced by browning with dry heat.

However, simmering is used effectively for less tender cuts for which browning is not desired or not appropriate. Popular examples of simmered meats are cured products such as ham and corned beef, fresh or cured tongue, fresh beef brisket, and white stews such as veal blanquette.

The term *stewing* means cooking small pieces of meat by simmering or braising (a composite method that includes both browning and simmering). Stews cooked by braising are covered in the next section. See also the discussion of stewing and braising on pages 352–353.

One difference between stews and many other simmered meats is that stews are served in a sauce or gravy made of the cooking liquid.

This section also contains a recipe for short ribs cooked sous vide. Although this is not a standard simmering method, it is included here because no dry heat is used except for finishing, and the meat cooks in its own moisture. It is essential that you read the discussion of sous vide cooking, and especially the safety precautions, on page 78 before you try this recipe.

Liquids and Flavoring Ingredients for Simmered Meats

The kind of meat to be cooked determines the kind and amount of cooking liquid to use as well as the flavorings and seasonings to use.

- For fresh meats, use enough liquid to cover the meat completely, but don't use too
 much, as flavors will be diluted. Water is the main cooking liquid, but other liquids,
 such as wine, can be added to flavor the meat. Use herbs, spices, and a generous
 amount of mirepoix to give a good flavor to the meat.
- For cured meats, especially those that are heavily salted or smoked, use a generous amount of water to help draw excess salt or smoky flavor from the meat. In some cases, such as country hams, the water may even have to be changed during cooking to remove salt from the meat. Heavily seasoned cured meats, such as corned beef, are often simmered in pure, unseasoned water, but milder cured meats may be simmered with mirepoix and herbs. Do not add salt, however, because cured meats already contain a great deal of salt.

Basic Procedure for Simmering Meats

- **1.** Collect all equipment and food supplies.
- 2. Prepare meat for cooking. This may include cutting, trimming, tying, or blanching.
- **3.** Prepare the cooking liquid:
 - For fresh meats, start with boiling liquid, usually seasoned.
 - For cured and smoked meats, start with cold, unsalted liquid to help draw out some of the salt from the meats.
 - For both kinds of meats, use enough liquid to cover the meat completely.
 - Add mirepoix and seasonings as desired. (See the discussion of seasonings and flavorings above.)
- **4.** Place the meat in the cooking liquid and return (or bring) to a boil.
- **5.** Reduce heat to a simmer and skim the surface. Meat must never boil for any length of time. Simmering yields a more tender, juicier product than boiling.
- **6.** Simmer until the meat is tender, skimming as necessary. To test for doneness, insert a kitchen fork into the meat. The meat is tender if the fork slides out easily. This is called *fork tender*.
- **7.** If the meat is to be served cold, cool it in its cooking liquid to retain moistness. Cool rapidly in a cold-water bath, as for stocks.



Simmered Fresh Beef Brisket ("Boiled Beef")

PORTIONS:	25 PORTIO	N SIZE: 4 OZ (125 G)
U.S.	METRIC	INGREDIENTS
10 lb	5 kg	Fresh beef brisket, well trimmed
		Mirepoix:
8 oz	250 g	Onion, coarsely chopped
4 oz	125 g	Carrot, coarsely chopped
4 oz	125 g	Celery, coarsely chopped
2	2	Garlic cloves
1	1	Bay leaf
½ tsp	2 mL	Peppercorns
2	2	Whole cloves
6	6	Parsley stems
to taste	to taste	Salt

Per serving: Calories, 280; Protein, 35 g; Fat, 15 g (49% cal.); Cholesterol, 110 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 90 mg.

VARIATIONS

Beef tongue (fresh, cured, or smoked), beef shank, various cuts of beef chuck, beef short ribs, fresh or smoked ham, pork shoulder, and lamb shoulder or leg may be cooked using the same method.

Simmered Pork Shoulder with Cabbage

Cook fresh or smoked pork shoulder or pork butt as in basic recipe. Cut 5 lb (2.3 kg) cabbage (for 25 portions) into wedges and simmer in some of the pork broth. Serve each portion of meat with a cabbage wedge. For 25 portions, 4 oz (125 g) each, use about 15 lb (7.5 kg) bone-in, skin-on shoulder.

PROCEDURE

- 1. Place beef in a stockpot with enough boiling water to cover. Return the water to a boil, reduce heat to a simmer, and skim the scum carefully.
- 2. Add the mirepoix and seasonings.
- 3. Simmer until the meat is tender when tested with a fork.
- 4. Transfer the meat to a steam-table pan and add enough of the broth to barely cover (to keep the meat moist), or cool the meat with some of the broth in a cold-water bath and refrigerate.
- 5. To serve, cut the meat into thin slices across the grain. Slice at an angle to make the slices broader. Serve each portion with Horseradish Sauce (p. 186), prepared horseradish, or mustard and with boiled vegetables, such as carrots, potatoes, or turnips.
- 6. Strain the broth and save for soups or sauces. If desired, use some of the broth to make horseradish sauce to accompany the meat.



Simmered Pork Shoulder, Braised Red Cabbage, Kasha Pilaf with Parsley, Roasted Onions

New England Boiled Dinner

	PORTIONS	PORTIONS: 16 PORTION SIZE: 3 OZ (90 G) MEAT, PLUS ASSORTED VEGETABLES		
	U.S.	METRIC	INGREDIENTS	PROCEDURE
	5½ lb	2.75 kg	Corned beef brisket	 Trim excess fat from corned beef if necessary. Place the beef in a stockpot or steam kettle. Cover with cold water. Bring to a boil and reduce heat to a simmer. Simmer until the meat feels tender when pierced with a fork. Cooking time will be 2-3 hours. To hold and serve hot, place the cooked meat in a steam-table pan and add some of the cooking liquid to keep it moist.
•	2 heads 2 lb 2 lb 48 32 32	2 heads 1 kg 1 kg 48 32	Green cabbage Turnips Carrots Pearl onions Baby beets Small red-skinned potatoes	5. Prepare the vegetables: Cut each cabbage into 8 wedges; pare the turnips and carrots and cut them into serving-size pieces; peel the onions; scrub the beets and potatoes.6. Cook the cabbage, turnips, carrots, onions, and potatoes separately in a little of the beef cooking liquid.7. Steam the beets, then peel them.
•	as needed	as needed	Horseradish Sauce (p. 186) or prepared horseradish	8. To serve, cut the meat across the grain into slices, holding the knife at an angle to get broader slices. Serve with horseradish sauce or prepared horseradish.
	Per serving: Calories, 700; Protein, 35 g; Fat, 26 g (46% cal.);			VARIATION



VARIATION

To serve the corned beef cold, cool the beef in some of its cooking liquid, to keep it moist, in a cold-water bath. When cool, remove from the liquid and refrigerate, covered. Cold corned beef may be reheated in its cooking liquid.



Blanquette of Veal

Dian	Branquette or veat						
PORTIONS: 25	PORTION SIZE:	5 OZ (150 G)					
U.S.	METRIC	INGREDIENTS	PROCEDURE				
10 lb	5 kg	Boneless, trimmed veal breast, shoulder, or shank	 Cut the veal into 1-in. (2.5-cm) dice. Blanch the meat: Place in a saucepot and cover with cold water. Bring to a boil, drain, and rinse the meat under cold water (see Note). 				
1 1 4 tsp 2½ qt (approximately)	1 20 mL 2.5 L (approximately)	Medium onion stuck with 2 cloves Bouquet garni Salt White veal stock	 Return the meat to the pot and add the onion stuck with cloves, bouquet garni, and salt. Add enough stock to just cover the meat. Bring to a boil, skim, cover, and lower heat to a slow simmer. Simmer until meat is tender, about 1½ hours. Skim when necessary. Strain the stock into another pan. Reserve the meat and discard the onion and bouquet garni. 				
4 oz 4 oz 5 1 pt to taste pinch pinch	125 g 125 g 5 500 mL to taste pinch pinch	Roux: Butter, clarified Flour Liaison: Egg yolks Heavy cream Lemon juice Nutmeg White pepper	 Reduce the stock to about 2½ pt (1.25 L). Meanwhile, prepare a white roux with the butter and flour. Beat into the stock to make a velouté sauce and simmer until thickened and no raw flour taste remains. Remove the sauce from the heat. Beat the egg yolks and cream together, temper with a little of the hot sauce, and stir into the sauce. Combine the sauce and meat. Heat gently; do not boil. Season to taste with a few drops of lemon juice, a pinch of nutmeg and white pepper, and more salt if needed. 				
Per serving: Calories, 350; Protein, 35 g; Fat, 21 g (55% cal.); Cholesterol, 230 mg; Carbohydrates, 4 g; Fiber, 0 g; Sodium, 550 mg. Note: Blanching eliminates impurities that discolor the sauce. This step can be omitted, but the product will have a less attractive appearance.		21 g (55% cal.); Cholesterol, 230 mg; g. color the sauce. This step can be omitted,	WARIATIONS Blanquette of Lamb Prepare as in basic recipe, using lamb shoulder or shank. If desired, use white lamb stock.				

Blanquette of Pork

use white pork stock.

Prepare as in basic recipe, using pork shoulder or butt. If desired,

Irish Lamb Stew 🏮



PORTIONS: 16 PORTION SIZE: 8 OZ (250 G) MEAT, VEGETABLES, AND BROTH

PROCEDURE U.S. METRIC INGREDIENTS 3½ lb 1.75 kg Lean, boneless lamb shoulder or shanks 1. Cut meat into 1-in. (2½ -cm) cubes. 1.5 L Water or white lamb stock 2. Bring the water to a boil in a large, heavy saucepot. Add the 3 pt (approximately) (approximately) lamb. There should be just enough liquid to cover the meat; add more liquid if necessary. Small onion stuck with 2 cloves 3. Return to a boil, reduce heat to a simmer, and skim the scum Sachet: carefully. 1 1 Bay leaf 4. Add the onion stuck with cloves, the sachet ingredients tied Garlic 1 clove 1 clove in a piece of cheesecloth, and salt to taste. Simmer 1 hour. Whole peppercorns 4 6 6 Parsley stems 1 mL Dried thyme ½ tsp to taste to taste Salt 1 lb 500 g Onions, sliced thin 5. Add the onions, leeks, and potatoes. Continue to simmer until the meat is tender and the vegetables are cooked. The 8 oz 250 g Leeks (white part), sliced potatoes should break down somewhat and thicken the stew. 2 lb 1 kg Potatoes, peeled and sliced thin 6. Remove and discard the sachet and the onion stuck with as needed as needed Chopped parsley cloves. Correct the seasoning. Per serving: Calories, 200; Protein, 18 g; Fat, 7 g (33% cal.); Cholesterol, 60 mg; 7. Garnish each portion with chopped parsley. Carbohydrates, 14 g; Fiber, 2 g; Sodium, 55 mg.

VARIATION

Carrots and white turnips may be cooked with the stew or cooked separately and added as a garnish.

Tripes à la Mode de Caen 🏽 🌑

YIELD: ABOUT 5 LB (2.4 KG) PORTIONS: 8 PORTION SIZE: 10 OZ (300 G)

U.S.	METRIC	INGREDIENTS
4 lb 8 oz	2.2 kg	Beeftripe
2	2	Calf's feet (see Note)
8 oz	250 g	Onion, medium dice
6 oz	185 g	Carrot, sliced
6 oz	185 g	Leek, sliced
		Sachet:
12	12	Peppercorns, lightly crushed
2	2	Bay leaf
12	12	Parsley stems
½ tsp	2 mL	Dried thyme
4	4	Whole cloves
2 pt	1 L	Dry white wine
1 pt	500 mL	White stock
to taste	to taste	Salt
3 oz	90 mL	Calvados (apple brandy)

Per serving: Calories, 640; Protein, 159 g; Fat, 28 g (40% cal.); Cholesterol, 345 mg; Carbohydrates, 8 g; Fiber, 1 g; Sodium, 200 mg.

Note: If calf's feet are not available, substitute twice the number of pig's feet. Do not omit, or the tripe stew will not have enough gelatin to give it the proper texture.

This dish is from the Normandy region of France, famed for, among other things, its apples. The traditional recipe calls for hard cider, but white wine is an acceptable substitute.

PROCEDURE

- 1. Trim all fat from the tripe. Put the tripe in a pot of cold water and bring it to a boil. Simmer 5 minutes. Drain and rinse in cold water. Cut the tripe into 1½-in. (4-cm) squares.
- 2. Cut the feet into pieces with a meat saw as necessary so they fit into the braising pan.
- 3. Combine all the ingredients, except the Calvados, in a braising pan or other heavy pot. Salt lightly. Bring to a boil, cover tightly, and put in an oven at 325°F (160°C). Cook 5 hours or longer, until the tripe is very
- 4. Remove the feet and bone them out. Dice the skin and meat and return it to the pot. Discard the bone, fat, and connective tissue.
- 5. Stir in the Calvados. Adjust the seasoning. Simmer a few minutes to blend in the flavor of the Calvados.
- 6. Serve with boiled potatoes.



Tripes à la Mode de Caen

Pearl Balls 💿



YIELD: AI	BOUT 40 PIECES	
U.S.	METRIC	INGREDIENTS
2 cups	500 mL	Glutinous rice (also called sweet ric
3 tbsp	45 mL	Cornstarch
1 fl oz	30 mL	Water, cold
2 lb	900 g	Ground pork
4	4	Scallions, minced
8	8	Water chestnuts, minced
2 tsp	10 mL	Minced fresh ginger root
2	2	Eggs, beaten
1 fl oz	30 mL	Soy sauce
1 fl oz	30 mL	Sherry or Shaoxing wine
2 tsp	10 mL	Sugar
1½ tsp	7 mL	Salt

Per 1 piece: Calories, 70; Protein, 5 g; Fat, 3.5 g (49% cal.); Cholesterol, 25 mg; Carbohydrates, 3 g; Fiber, 0 g; Sodium, 145 mg.

VARIATIONS

Fried Pork Balls

Omit the rice coating and cook the meatballs by deep-frying them.

Wontons 🐻



The pork mixture can be used for wonton filling. Put a small spoonful of meat in the center of a wonton skin. Moisten the edges of the skin with beaten egg, and then fold the skin in half to make a triangle (or, if you are using round wonton skins, a semicircle) enclosing the filling. Moisten one of the two corners (on the folded edge) with egg, then twist the wonton to bring the two corners together. Press the corners together to seal. Makes 60 or more wontons, depending on size. Wontons can be cooked by simmering, steaming, or deepfrying. They are often served in chicken broth as wonton soup.

PROCEDURE

- 1. Wash the rice in several changes of cold water. Drain. Add enough fresh water to cover by 1 in. (2.5 cm). Let soak at least 30 minutes.
- 2. Mix together the cornstarch and water.
- 3. Combine all ingredients except the glutinous rice and mix together.
- 4. Form the meat mixture into small meatballs, about 1 oz (30 g) each.
- 5. Drain the rice. Roll the balls in the rice so they are well coated.
- 6. Line a rack or perforated steamer pan with cheesecloth. Arrange the meatballs in the pan, allowing about ½ in. (1–2 cm) between them.
- 7. Steam 30–45 minutes, or until the rice is translucent and the pork is done.



Pearl Balls

Shredded Pork (Carnitas) 🏮



YIELD: ABOUT 3½ LB (1.6 KG)

U.S.	METRIC	INGREDIENTS
6 lb	2.8 kg	Pork butt or shoulder, boned
1	1	Onion, medium, cut in half
1	1	Garlic clove, chopped
1 tbsp	15 mL	Salt
¼ tsp	1 mL	Pepper
1 tsp	5 mL	Dried oregano
1 tsp	5 mL	Cumin seeds

Per ounces: Calories, 390; Protein, 31 g; Fat, 28 g (67% cal.); Cholesterol, 120 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium 590 mg.

VARIATIONS

Picadillo 🧰



Add a little extra water to the basic recipe so some liquid is left when the meat is tender. Drain and degrease the liquid and use it to make Tomato Broth for Chiles Rellenos (p. 206). Heat 3 oz (90 g) oil or lard and sauté 6 oz (175 g) onion, medium dice, and 4 cloves garlic, chopped. Add the meat and a sachet containing 10 peppercorns, 1 small cinnamon stick, and 6 cloves, and brown slowly. Add 4 oz (125 g) raisins, 4 oz (125 g) slivered almonds, and 2 lb (900 g) peeled, seeded, chopped tomatoes. Cook slowly until almost dry. Serve as is or as a stuffing for Chiles Rellenos (p. 600).

Shortcut Picadillo

Instead of preparing Shredded Pork, use 5 lb (2.3 kg) raw ground pork. Sauté it with the onion and garlic in the picadillo recipe, then proceed as directed with the rest of the recipe.

PROCEDURE

- 1. Remove most of the large chunks of fat from the pork, leaving a little of it on. Cut the meat into strips measuring 1×2 in. $(2.5 \times 5$ cm).
- 2. Put the pork in a large pot with the rest of the ingredients. Add water to barely cover the meat.
- 3. Bring to a boil, reduce heat, and simmer slowly, uncovered, until all the liquid has evaporated. By this time, the meat should be tender. If it is not, add more water and continue to cook until it is.
- 4. Remove the onion and discard it.
- 5. Lower the heat and let the meat cook in the rendered fat, stirring from time to time, until browned and very tender. Shred the meat slightly.
- 6. Serve as a snack, an appetizer, or a filling for tortillas, either as it is or moistened with any of the sauces in this section or with guacamole.

Dillkött 🦚



PORTION	S: 16 PORTIO	N SIZE: 6 OZ (175 G)	
U.S.	METRIC	INGREDIENTS	PROCEDURE
7 lb	3.2 kg	Boneless, trimmed veal shoulder, breast, or shank	 Cut the veal into 1-in. (2.5-cm) dice. Put the meat in a pot with the onion, sachet, water, and salt. Bring to a
1	1	Medium onion stuck with 2 cloves	boil and skim well.
		Sachet:	3. Reduce the heat and add the dill. Simmer slowly until the meat is very
1	1	Bay leaf	tender, 1½–2 hours.
5-6	5-6	Parsley stems	4. Strain off the broth into another pan. Discard the onion and the sachet.
6	6	Peppercorns	
2 qt	2 L	Water	
1 tbsp	15 mL	Salt	
2 tbsp	30 mL	Fresh dill weed, chopped (see Note)	
••••••	•••••	Roux:	5. Reduce the broth over high heat to 1 qt (1 L).
2 oz	60 g	Butter	6. Make a blond roux with the flour and butter. Thicken the broth with it.
2 oz	60 g	Flour	7. Add the lemon juice, brown sugar, dill, and capers. Adjust the seasonings.
1 fl oz	30 mL	Lemon juice or wine vinegar	
1½ tsp	7 mL	Brown sugar	VARIATION
2 tbsp	30 mL	Fresh dill weed, chopped	Dillkött på Lamm 🌘
2 tbsp	30 mL	Capers, drained	Substitute lamb shoulder or shank for the yeal.

Per serving: Calories, 280; Protein, 36 g; Fat, 12 g (41% cal.); Cholesterol, 165 mg; Carbohydrates, 3 g; Fiber, 0 g; Sodium, 640 mg.

Note: If fresh dill is not available, substitute one-third its quantity of dried dill.

Lamb Tagine with Chickpeas 🌘



PORTIONS: 12	PORTION SIZE: 10 OZ (2	285 G) MEAT, VEGETABLES	, AND SAUCE
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U.S.	METRIC	INGREDIENTS
3 fl oz	90 mL	Vegetable oil
8 oz	240 g	Onion, chopped fine
½ 0Z	15 g	Garlic, crushed
1 tsp	5 mL	Ground ginger
1 tsp	5 mL	Turmeric
1 oz	30 g	Fresh cilantro, chopped
2 tsp	10 mL	Salt
1 tsp	5 mL	Pepper
5½ lb	2.5 kg	Lamb shoulder, boneless, trimmed of fat cut into 1½-in. (4-cm) pieces
1 pt	500 mL	Water
1½ lb	675 g	Chickpeas, cooked or canned, drained
1½ lb	675 g	Carrots, cut into 1-in. (2.5-cm) pieces
6 oz	180 g	Mediterranean-type olives, such as Kalamata, pitted
3 fl oz	90 mL	Lemon juice
to taste	to taste	Salt

Per serving: Calories, 620; Protein, 43 g; Fat, 40 g (57% cal.); Cholesterol, 145 mg; Carbohydrates, 24 g; Fiber, 7 g; Sodium, 640 mg.

PROCEDURE

- 1. In a heavy braising pan or casserole or in the base of a tagine (see sidebar), mix together the oil, onion, garlic, ginger, turmeric, cilantro, salt, and pepper.
- 2. Add the lamb to the pan and toss with the spice mixture to coat all the
- 3. Add the water. Bring to a boil, and then cover tightly. Simmer slowly on top of the stove or in an oven heated to 325°F (165°C) for 1½ hours.
- 4. Add the chickpeas and carrots to the pan. If necessary, add a little more water if the tagine is becoming dry.
- 5. Return to the heat and cook until the carrots and meat are very tender.
- 6. Add the olives and lemon juice and stir. Simmer another 5 minutes.
- 7. Remove the meat and vegetables with a slotted spoon.
- 8. Degrease the cooking liquid.
- 9. Reduce the cooking liquid over moderate heat until it has the consistency of thick gravy.
- 10. Season the liquid with salt if necessary. Pour over the meat and vegetables.

TAGINES

A tagine (tah zheen) is a type of stew originating in North Africa. It is traditionally cooked in an earthenware pot also called a tagine. In Morocco, the traditional tagine consists of a round, shallow base and a cone-shaped lid. The stew is usually cooked on the stovetop over low heat. The dish is usually made with poultry or less expensive cuts of meat, such as lamb neck or shoulder, which are made tender by long, slow cooking.

Traditional spices used to flavor tagines include cinnamon, saffron, ginger, turmeric, cumin, paprika, and black pepper, Vegetables, fruits, nuts, and legumes may also be added to the stew.

The lamb tagine in this book is shown in a classic tagine pot to illustrate the appearance of this vessel. In a commercial kitchen, you are more likely to cook such stews in a brazier or other heavy pan.



Lamb Tagine with Chickpeas

Poached Beef Tenderloin with Beef Short Rib Ravioli in Morel Consommé

In Morel Consomme			
PORTIONS: 16 PORTION SIZE: 4 OZ (125 G) MEAT, 3 OZ (90 G) RAVIOLI, 3 MUSHROOMS, 3 FL OZ (90 ML) CONSOMMÉ			
U.S. 2 lb ½ cup ½ cup 2 lb	1 kg 125 mL 60 mL 1 kg	INGREDIENTS Trimmed meat from Braised Short Ribs (p. 356) Chopped parsley Grated parmesan cheese Fresh Egg Pasta (p. 662)	 PROCEDURE Prepare the ravioli filling: Shred the meat and place it in a bowl. Add the chopped parsley and cheese. Mix well. If the meat mixture is dry, moisten with a little of the short rib braising liquid or brown stock. Roll out the pasta and, using the meat mixture as a filling, make ravioli following the procedure illustrated on page 663. If desired, cook the ravioli in advance. Simmer in salted water until just tender. Drain. Rinse briefly with cold water to stop the cooking. Toss with a little vegetable oil to keep the ravioli from sticking. Refrigerate, covered, until needed.
48 as needed 3 pt	48 as needed 1.5 L	Dried morel mushrooms Hot water Consommé (p. 230)	 Place the mushrooms in a bowl and add hot water to cover. Let soak until soft. Drain the mushrooms, squeezing them lightly. Strain and reserve the soaking liquid. Combine the soaking liquid with an equal volume of the consommé. Bring to a simmer. Add the mushrooms and cook until they are tender. Drain the mushrooms. Strain the cooking liquid again and add it to the consommé.
	2 kg to taste to taste 4 L Calories, 680; Prote	Beef tenderloin, completely trimmed of fat and silverskin, in 1 or 2 pieces Salt Pepper Brown stock sin, 46 g; Fat, 40 g (55% cal.); Cholesterol, 210 mg; Godium, 180 mg.	 9. Season the beef with salt and pepper. 10. Bring the stock to a boil in a pot large enough to hold both the stock and the beef. 11. Lower the beef into the stock. Adjust the heat and cook at a slow simmer until the meat reaches the desired doneness, as determined by a meat thermometer. The temperature at the center of the meat should be 120°F (49°C) for rare, 130°F (54°C) for medium. Cooking time will be 20–30 minutes for rare, slightly longer for medium.

- 12. Remove the meat from the liquid and let rest in a warm place about 15
- 13. Reserve the stock for another use, such as for making the next batch of consommé.
- 14. While the meat is cooking, bring the consommé to a simmer and hold.
- 15. If the ravioli were cooked in advance, reheat them by dropping them for a moment into boiling water. Drain. If they were not cooked ahead, cook them now in simmering salted water until just tender.
- 16. Slice the meat. Arrange it in heated broad soup plates with the ravioli and the morels. Ladle 3 fl oz (90 mL) consommé into each bowl.

Per serving: Calories, 290; Protein, 21 g; Fat, 22 g (3% cal.); Cholesterol, 70 mg;

Carbohydrates, 2 g; Fiber, 0 g; Sodium, 60 mg.

Beef Short Ribs Sous Vide with Bordelaise Sauce

PORTIONS: 1 PORTION SIZE: 5 OZ (150 G) U.S. METRIC PROCEDURE INGREDIENTS Beef short ribs, boneless, in one piece 1. Review the guidelines for safe sous vide cooking on page 78. 5 oz 150 g 2. Season the meat with salt and pepper. Place the meat in a plastic bag to taste to taste appropriate for sous vide cooking and seal it under vacuum. to taste to taste Pepper 3. Place the sealed meat in a hot bain-marie set at 158°F (70°C) and cook 20 hours. At the end of cooking time, the interior of the meat should be 158°F (70°C). 4. If the meat is not to be finished and served immediately, chill it as quickly as possible in an ice bain-marie or blast cooler. The interior of the meat must reach 37°F (3°C) or colder in less than 90 minutes. 5. For finishing and serving, rewarm the meat, still sealed in its plastic as needed as needed Oil bag, in a warm bain-marie at 140°F (60°C). 1 fl oz 30 mL Bordelaise Sauce (p. 189; omit the marrow garnish) 6. Open the bag and remove the meat. 7. Heat a thin film of oil in a sauté pan. Brown the meat lightly on top and bottom.



Beef Short Ribs Sous Vide with Bordelaise Sauce

8. Serve the meat with the sauce around it.



Braising is a combination of dry-heat and moist-heat cooking methods. Meats are first browned or seared in fat or in a hot oven, then simmered in a flavorful liquid until tender.

The popularity of properly braised items is due to the flavor imparted by the browning and by the sauce made from the braising liquid. Clearly, the quality of a braised meat depends greatly on the quality of the stock the meat is cooked in. Other liquids used in braising include wine, marinades, tomato products, and, occasionally, water.

Popular Types of Braised Meat Dishes

1. Large cuts.

Large cuts of meat braised whole, sliced, and served with a sauce or gravy are sometimes called *pot roasts*.

2. Individual portion cuts.

Meats may be cut into portion sizes before braising instead of afterward. When portion cuts of beef round are braised in a brown sauce, the process is sometimes called *swissing*, and the product is called *Swiss steak*.

Other braised portion-cut meats include short ribs, lamb shanks, and pork chops.

3. Stews.

Stews are made of meats cut into small pieces or cubes. Most stews are made by braising, but some are cooked by simmering only, without first browning or searing the meat.

Stews are usually made with enough liquid or gravy to cover the meat completely while cooking. However, so-called dry stews are braised in their own juices or in a very little added liquid.

Brown stews are made by browning the meat thoroughly before simmering. A *fricassée* (free kah say) is a white stew made by cooking white meat in fat over low heat without letting it brown, then adding liquid. Compare this to a *blanquette* (blawn ket), which is a white stew made by simmering the meat in stock without first cooking it in fat. The cooking method for blanquettes, therefore, is simmering rather than braising.

Note: This use of the term *fricassée* is its traditional or classical usage. Today the word is used for many kinds of stews.

Many other dishes can be classified as braised stews, even if we don't normally think of them that way. Chili, for example, is a braised dish made of finely cut or ground beef or pork. Even meat sauce for spaghetti (p. 664) is actually a braised meat or a stew.

Many chefs prefer to use the term *braising* only for large cuts of meat, and they use the term *stewing* for small cuts. However, the basic cooking method—using first dry heat, then moist heat—is the same for both large and small cuts. (Review the discussion of stews on pages 343–344.)

Guidelines for Braising Meats

The basic principle of braising is a combination of searing or browning and then simmering. This process accomplishes two things: *it cooks the meat*, and *it produces a sauce*. (You will use some of your sauce-making techniques when you braise meats.)

Before giving basic procedures that apply to most popular braised meats, we discuss factors that affect the quality of the finished product.

1. Seasoning.

The meat may be seasoned before browning, or it may receive its seasonings from the cooking liquid while braising. But remember that salt on the surface of meat retards browning. Also, herbs may burn in the high heat necessary for browning.

Marinating the meat for several hours or even several days before browning is an effective way to season meat because the seasonings have time to penetrate it. The marinade is often included as part of the braising liquid.

2. Browning.

Dry the meat thoroughly before browning. Small pieces for stew may be dredged in flour for better browning. In general, red meats are well browned; white meats are browned less heavily, usually until they are golden.

3. Amount of braising liquid.

The amount of liquid to be added depends on the type of preparation and on the amount of sauce required for serving. Do not use more liquid than necessary, or the flavors will be less rich and less concentrated.

Pot roasts usually require about 2 oz (60 mL) sauce per portion, and this determines the amount of liquid needed. The size of the braising pot used should allow the liquid to cover the meat by one-third to two-thirds.

Stews usually require enough liquid to cover the meat.

Some items are braised with no added liquid. They are browned, then covered, and the item cooks in its own moisture, which is trapped by the pan lid. Pork chops are frequently cooked in this way. If roasted, sautéed, or pan-fried items are covered during cooking, they become, in effect, braised items.

4. Vegetable garnish.

Vegetables to be served with the meat may be cooked along with the meat or cooked separately and added before service.

If the first method is used, the vegetables should be added just long enough before the end of cooking for them to be cooked through but not overcooked.

5. Adjusting the sauce.

Braising liquids may be thickened by a roux either before cooking (Method 2) or after cooking (Method 1). In some preparations, the liquid is left unthickened or is naturally thick, such as tomato sauce.

In any case, the sauce may require further adjustment of its consistency by

- · Reducing.
- Thickening with roux, beurre manié, or other thickening agent.
- The addition of a prepared sauce, such as demi-glace or velouté.

Basic Procedures for Braising Meats

Method 1: Braising in Unthickened Liquid

- 1. Collect all equipment and food supplies.
- **2.** Cut or trim the meat as required. Dry it thoroughly. For stews, the meat may be dredged with flour.
- **3.** Brown the meat thoroughly on all sides in a heavy pan with a small amount of fat, or in an oven.
- **4.** Remove the meat from the pan and brown mirepoix in the fat left in the pan.
- 5. Return the meat to the pan and add the required amount of liquid.
- **6.** Add a sachet or other seasonings and flavorings.
- **7.** Bring the liquid to a simmer, cover the pot tightly, and simmer in the oven or on top of the range until the meat is tender.

Oven braising provides more uniform heat. Temperatures of 250° to 300°F (120° to 150°C) are sufficient to maintain a simmer. Do not let boil.

- 8. Remove the meat from the pan and keep it warm.
- **9.** Prepare a sauce or gravy from the braising liquid. This usually includes the following:
 - Skim fat.
 - Prepare a brown roux with this fat or with another fat if desired.
 - Thicken the braising liquid with the roux. Simmer until the roux is cooked thoroughly.
 - Strain and adjust seasonings.
- **10.** Combine the meat (sliced or whole) with the sauce.

Method 2: Braising in Thickened Liquid

- 1. Collect all equipment and food supplies.
- 2. Prepare the meat for cooking, as required.
- **3.** Brown the meat thoroughly in a heavy pan with fat or in a hot oven.
- 4. Remove the meat from the pan (if required) and brown mirepoix in remaining fat.
- 5. Add flour to make a roux. Brown the roux.
- **6.** Add stock to make a thickened sauce. Add seasonings and flavorings.
- **7.** Return the meat to the pan. Cover and simmer in the oven or on the range until the meat is tender.
- **8.** Adjust the sauce as necessary (strain, season, reduce, dilute, etc.).

Method 3: Classic Fricassées

- 1. Follow Method 2, except:
 - Do not brown the meat. Cook it gently in the fat without browning.
 - Add flour to the meat in the pan and make a blond roux.
- **2.** Finish the sauce with a liaison of egg yolks and cream.

Figure 11.6 Preparing braised meats.



(a) Brown the meat well in a heavy pan.



(b) Remove the meat from the pan. Add the mirepoix to the pan and brown well.



(c) Add flour to the mirepoix. Stir to combine the flour with the fat and brown the roux.



(d) Add stock to the pan and whip to combine with the roux. Add seasonings and flavorings and return the meat to the pan. For portion cuts, there should be just enough liquid to cover the meat.

KEY POINTS TO REVIEW

- What are the steps in the basic procedure for simmering meats?
- What are the three basic procedures for braising meats? How are they alike, and how are they different?



Beef Pot Roast

PORTION	PORTIONS: 25 PORTION SIZE: 4 OZ (125 G) MEAT, 2 FL OZ (60 ML) SAUCE			
U.S.	METRIC	INGREDIENTS	PROCEDURE	
10 lb	5 kg	Beef bottom round, well trimmed (see Note)	 Dry the meat so it will brown more easily. Heat the oil in a brazier over high heat and brown the meat well on all sides. Remove from pan. 	
4 fl oz	125 mL	Oil	(Alternative method: Brown meat in a very hot oven.)	
***************************************	••••••	Mirepoix:	2. Add the mirepoix to the brazier and brown it.	
8 oz	250 g	Onion, medium dice	3. Add the tomato product, the stock, and the sachet. Bring to a boil,	
4 oz	125 g	Celery, medium dice	cover, and place in an oven preheated to 300°F (150°C), or just hot	
4 oz	125 g	Carrot, medium dice	enough to maintain a simmer.	
6 oz	175 g	Tomato purée	4. Braise the meat until tender, 2–3 hours.	
		or	Remove meat from pan and keep warm for service in a covered pan. Discard sachet. (See alternative method of service given below.)	
12 oz	375 g	Tomatoes, canned	Discard Sacriet. (See alternative method of Service given below.)	
2½ qt	2.5 L	Brown stock		
		Sachet:		
1	1	Bay leaf		
pinch	pinch	Dried thyme		
6	6	Peppercorns		
1	1	Garlic clove		
4 oz	125 g	Flour	6. Skim the fat from the braising liquid and reserve 4 oz (125 g) of it.	

Per serving: Calories, 320; Protein, 38 g; Fat, 15 g (45% cal.); Cholesterol, 90 mg; Carbohydrates, 4 g; Fiber, 0 g; Sodium, 70 mg.

Note: Other cuts of beef from the round, or from the chuck or brisket, may be used instead of bottom round. Braised round makes the best slices, but it tends to be dry. Chuck and brisket are moister when braised because they have a higher fat content. For quicker, more uniform cooking and easier handling, cut meats for braising into 5–7 lb (2–3 kg) pieces.

- 7. Make a brown roux with the flour and the reserved fat. Cool the roux slightly.
- 8. Bring the braising liquid to a simmer and beat in the roux. Simmer the sauce at least 15–20 minutes, or until thickened and reduced slightly.
- 9. Strain the sauce and adjust the seasonings.
- 10. Slice the meat across the grain. The slices should not be too thick. Serve each 4-oz (125-g) portion with 2 fl oz (60 mL) sauce.

VARIATIONS

Alternative Method of Service: Cool beef as soon as it is cooked. For service, slice cold meat on an electric slicer and arrange in hotel pans. Add sauce, cover pans, and reheat in oven or steamer. Individual portions may also be reheated to order in the sauce.

Braised Beef Jardinière

Garnish the finished product with 1 lb (500 g) each carrots, celery, and turnips, all cut bâtonnet and boiled separately, and 1 lb (500 g) pearl onions, boiled and sautéed until brown.

Braised Lamb Shoulder

Prepare boned, rolled shoulder of lamb according to the basic recipe. Use either regular brown stock or brown lamb stock.



Braised Short Ribs

PORTION	PORTIONS: 25 PORTION SIZE: 10 OZ (300 G) MEAT WITH BONE, 2 FL OZ (60 ML) SAUCE			
U.S.	METRIC	INGREDIENTS	PROCEDURE	
25	25	Short rib sections, 10 oz (300 g) each	1. Dry the meat so it will brown more easily.	
8 oz	250 mL	Oil	Heat the oil in a heavy brazier until very hot. Brown the meat well on both sides. Remove it and set aside.	
10 oz 5 oz	300 g 150 g	Onion, medium dice Celery, medium dice	3. Add the onion, celery, and carrot to the fat in the pan and sauté until browned.	
5 oz	150 g	Carrot, medium dice	4. Stir in the bread flour to make a roux. Cook until the roux is browned.	
5 oz 2½ qt	150 g 2.5 L	Bread flour Brown stock	5. Stir in the stock and tomato purée and simmer until the sauce thickens. Add the bay leaves and season to taste with salt and pepper.	
5 oz 2	150 mL 2	Tomato purée Bay leaves	6. Return the short ribs to the pan. Cover and braise in the oven at 300°F (150°C) until tender, about 2 hours.	
to taste	to taste	Salt	7. Transfer the short ribs to a hotel pan for service.	
to taste	to taste	Pepper	8. Strain the sauce (optional). Degrease. Adjust the seasoning and consistency and pour over the short ribs.	
_	Calories, 299; Protein es, 6 g; Fiber, 0 g; Sod	ı, 29 g; Fat, 17 g (52% cal.); Cholesterol, 55 mg; ium, 70 mg.		

VARIATIONS

Short ribs and the variations that follow may be braised in a prepared brown sauce or espagnole instead of a specially made sauce. Omit steps 4, 5, and 6. If desired, use 1 lb (500 g) chopped canned tomatoes instead of the purée. Alternatively, use 2 oz (55 g) tomato paste; add the paste to the browned mirepoix and continue to brown until the paste turns a rusty brown color.

Swiss Steak

Instead of the short ribs, use beef round steaks, about 5 oz (150 g) per portion. Omit celery and carrot if desired.

Swiss Steaks in Tomato Sauce

Reduce flour to $2\frac{1}{2}$ oz (75 g). For braising liquid, use $2\frac{1}{2}$ pt (1.25 L) brown stock, $2\frac{1}{2}$ lb (1.25 kg) chopped canned tomatoes with their juice, and $1\frac{1}{4}$ lb (625 g) tomato purée. Season with bay leaf, oregano, and basil. After removing cooked steaks, reduce sauce to desired consistency. Do not strain. Garnish each portion with chopped parsley.

Swiss Steaks with Sour Cream

Prepare as in the basic Swiss Steak recipe, above. When steaks are cooked, finish the sauce with 1 pt (500 mL) sour cream, 2½ fl oz (75 mL) Worcestershire sauce, and 2 tbsp (30 g) prepared mustard.

Swiss Steaks in Red Wine Sauce

Prepare as in the basic Swiss Steak recipe, above, but add 1 pt (500 mL) dry red wine to the braising liquid.

Braised Oxtails

Allow 1 lb (500 g) oxtails per portion. Cut into sections at joints.

Braised Lamb Shanks

Allow 1 lamb shank per portion. Add chopped garlic to mirepoix if desired.



Braised Short Ribs with Steamed Broccoli and Mashed Potatoes



Beef Stew

PORTIONS: 25	PORTION	SIZE: 8 OZ (250 G)
U.S.	METRIC	INGREDIENTS
6 lb	3 kg	Beef chuck, boneless and well trimmed of fat
4 fl oz	125 mL	Oil
1 lb	500 g	Onion, fine dice
2 tsp	10 mL	Chopped garlic
4 oz	125 g	Flour
8 oz	250 g	Tomato purée
2 qt	2 L	Brown stock
		Sachet:
1	1	Bay leaf
pinch	pinch	Thyme
small sprig	small sprig	Celery leaves
1 lb	500 g	Celery, EP
1½ lb	750 g	Carrots, EP
1 lb	500 g	Small pearl onions, EP
8 oz	250 g	Tomatoes, canned, drained, and coarsely chopped
8 oz	250 g	Peas, frozen, thawed
to taste	to taste	Salt
to taste	to taste	Pepper

Per serving: Calories, 240; Protein, 27 g; Fat, 9 g (34% cal.); Cholesterol, 60 mg; Carbohydrates, 13 g; Fiber, 2 g; Sodium, 150 mg.

Note: For more elegant service, remove the cooked meat from the sauce before adding the vegetables. Strain the sauce and pour it back over the meat.

PROCEDURE

- 1. Cut the meat into 1-in. (2.5-cm) cubes.
- 2. Heat the oil in a brazier until very hot. Add the meat and brown well. stirring occasionally to brown all sides. If necessary, brown the meat in several small batches to avoid overcrowding the pan.
- 3. Add the onion and garlic to the pan and continue to cook until onion is lightly browned.
- 4. Add the flour to the meat and stir to make a roux. Continue to cook over high heat until the roux is slightly browned.
- 5. Stir in the tomato purée and stock and bring to a boil. Stir with a kitchen spoon as the sauce thickens.
- 6. Add the sachet. Cover the pot and place in an oven at 325°F (165°C). Braise until the meat is tender, $1\frac{1}{2}$ – 2 hours.
- 7. Cut the celery and carrots into large dice.
- 8. Cook the celery, carrots, and onions separately in boiling salted water until just tender.
- 9. When meat is tender, remove the sachet and adjust seasoning. Degrease the sauce.
- 10. Add celery, carrots, onions, and tomatoes to the stew.
- 11. Immediately before service, add the peas. Alternatively, garnish the top of each portion with peas. Season with salt and pepper.

VARIATIONS

Vegetables for garniture may be varied as desired.

Beef Stew with Red Wine

Prepare as in basic recipe, but use 2½ pt (1.25 L) dry red wine and 1½ pt (750 mL) brown stock instead of 2 qt (2 L) brown stock.

Boeuf Bourguignon

Prepare Beef Stew with Red Wine, using rendered salt pork or bacon fat instead of oil. (Cut the pork into bâtonnet shapes, sauté until crisp, and save the cooked pork for garnish.) Increase garlic to 2 tbsp (30 mL). Omit vegetable garnish (celery, carrots, pearl onions, tomatoes, and peas) indicated in basic recipe, and substitute lardons (cooked salt pork or bacon pieces), small mushroom caps browned in butter, and boiled pearl onions browned in butter. Serve with egg noodles.

Navarin of Lamb (Brown Lamb Stew)

Prepare as in basic recipe, using lamb shoulder instead of beef chuck. Increase garlic to 2 tbsp (30 mL).

Brown Veal Stew

Prepare as in basic recipe, using veal shoulder or shank.

Brown Veal with White Wine

Prepare Brown Veal Stew, replacing 1 pt (500 mL) stock with white wine.

Beef Pot Pie

Fill individual casserole dishes with stew and vegetable garnish. Top with pie pastry (p. 1008). Bake in a hot oven (400°-450°F/200°-225°C) until the crust is brown.

Boeuf à la Mode (Beef Braised in Red Wine)

PORTIONS	8:8 PORTION	I SIZE: 5½ OZ (170 G) MEAT, 2 FL OZ	(60 ML) SAUCE
U.S.	METRIC	INGREDIENTS	PROCEDURE
8 oz	240 g	Pork fatback	1. Cut the fat into strips ¼ in. (6 mm) across and as long as the piece of
1 fl oz	30 mL	Brandy	beef.
to taste	to taste	Salt	Sprinkle the fatback strips with brandy, salt, and pepper (omit the salt if you are using salted fatback). Marinate 2 hours.
to taste	to taste	Pepper	ii you are using salled lalback). Marinale 2 nours.
4 lb	2 kg	Beef rump or top round, trimmed of excess fat	 Lard the beef with the fatback strips (see Figure 10.18). Rub the beef with salt and pepper.
to taste	to taste	Salt	5. Combine the red wine and brandy in a nonreactive container large
to taste	to taste	Pepper	enough to hold the beef. Add the sachet.
24 fl oz	750 mL	Red wine	6. Add the beef. Marinate, refrigerated, overnight.
2 fl oz	60 mL	Brandy	
1	1	Sachet: Bay leaf	
10	10	Parsley stems	
½ tsp	0.5 mL	Dried thyme	
2 oz	60 g	Butter or beef fat	Remove the meat from the marinade and dry it. Remove the sachet and set it aside.
4 oz 4 oz	120 g 120 g	Onion, chopped coarse Carrot, chopped coarse	8. Heat the butter or beef fat in a heavy braising pan. Brown the meat well
1	120 g	Calif's foot (see Note)	on all sides.
4	4	Garlic	9. Remove the meat from the pan. Add the onion and carrot and brown.
1 qt	1 L	Brown stock	10. Return the meat to the pan. Add the marinade.
			11. Set the pan over moderate heat. Cook until the marinade is reduced by one-half. Baste the meat with the marinade occasionally.
			12. Add the calf's foot, garlic, stock, and reserved sachet to the pan. Bring to a simmer, cover, and place in an oven heated to 300°F (150°C). The meat should cook slowly at a gentle simmer.
			13. Braise the meat until there are no traces of red blood in the juices that appear when the meat is pierced deeply with a skewer. Baste the meat occasionally as it cooks.
			14. Remove the meat and the calf's foot from the cooking liquid. Strain and degrease the liquid.
			15. Put the meat, calf's foot, and liquid in a clean braising pan. Cover the
			pan and return it to the oven. Let it cook, basting frequently, until the
•••••			meat is tender. Total cooking time, starting with step 11, is 3–4 hours.
1 lb	480 g	Carrots	16. While the meat is cooking, prepare the carrot and onion garnish. Cut
24	24	Pearl onions	and trim the carrots into uniform pieces about 1½ in. (4 cm) long. Blanch them in boiling salted water 3–4 minutes. Peel the pearl onions
			and brown slowly in butter in a sauté pan. About 45 minutes before the
		n, 64 g; Fat, 44 g (9% cal.); Cholesterol, 190 mg;	meat is done, add them to the braising pan and let them finish cooking
	s, 8 g; Fiber, 3 g; Sod 's foot-rich in gelatir	num, 290 mg. n, supplies body to the braising liquid. If a calf's	with the meat.
		ice as many pig's feet.	17. Remove the foot from the pan. Bone it out, being careful to remove all the tiny bones. Cut the meat and rind into ½-in. (1-cm) squares. (It is
			traditional to serve the diced calf's foot with the meat, but it may be
			discarded if desired. It has already accomplished its main purpose of
			enriching the sauce with its high gelatin content.) 18. Remove the meat and vegetable garnish from the cooking liquid. Strain
			and degrease the liquid. There should be enough liquid for about 2 fl oz
			(60 mL) per portion. If necessary, reduce the liquid over moderate heat
			to reach the proper volume. If it is not rich enough, add additional stock and reduce again. Adjust the seasoning with salt and pepper.
			19. Slice the meat. Arrange it on a platter or on dinner plates with the
			garnish of carrots, onions, and diced foot (if desired). Serve the sauce
			on the side or ladled over the meat.

Lombatine di Maiale alla Napoletana (Braised Pork Chops Naples-Style)

PORTIONS: 16 PORTION SIZE: 1 CHOP, 3-4 OZ (90-125 G) VEGETABLES

U.S.	METRIC	INGREDIENTS
6	6	Italian peppers or bell peppers, red or green
1 lb 8 oz	700 g	Mushrooms
3 lb	1.4 kg	Tomatoes

6 fl oz 175 mL Olive oil Garlic cloves, crushed 2 2

16 16 Pork loin chops to taste Salt to taste to taste to taste Pepper

Per serving: Calories, 430; Protein, 45 g; Fat, 23 g (49% cal.); Cholesterol, 125 mg; Carbohydrates, 9 g; Fiber, 2 g; Sodium, 100 mg.

Note: Charring and peeling the peppers is optional, but it improves the flavor and removes the peel, which would otherwise come off during cooking and make the vegetable mixture less attractive.

VARIATION

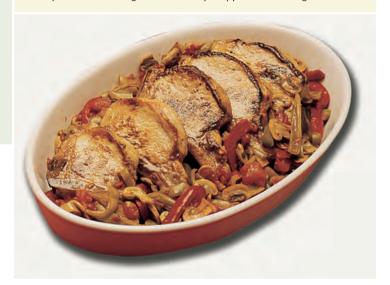
Pollo con Peperoni all'Abruzzese 🌑



Double the quantity of peppers. Increase the tomatoes to 4½ lb (2 kg). Omit the mushrooms and garlic. Add 1 lb (450 g) sliced onions and sauté them with the peppers. Instead of pork, use 8-10 lb (3.6-4.5 kg) chicken parts. Season with a little basil. If desired, reduce the quantity of chicken in the above recipe and add some Italian pork sausages.

PROCEDURE

- 1. Char the peppers over a gas flame until the skin is black. Peel off the blackened skin (see Figure 16.14, p. 546). Remove and discard the seeds and core and cut the peppers into bâtonnet (see Note).
- 2. Slice the mushrooms.
- 3. Peel, seed, and chop the tomatoes.
- 4. Heat the olive oil in a large sauté pan or brazier. Add the garlic cloves. Sauté them until they are light brown, then remove and discard them.
- 5. Season the chops with salt and pepper. Brown them in the olive oil. When they are well browned, remove and set them aside.
- 6. Add the peppers and mushrooms to the pan. Sauté briefly, until wilted.
- 7. Add the tomatoes and return the chops to the pan. Cover and cook on the range or in a low oven until the pork is done. The vegetables should give off enough moisture to braise the chops, but check the pan from time to time to make sure it is not dry.
- 8. When the chops are done, remove them from the pan and keep them hot. If there is a lot of liquid in the pan, reduce it over high heat until there is just enough to form a little sauce for the vegetables.
- 9. Adjust the seasoning. Serve the chops topped with the vegetables.



Lombatine di Maiale alla Napoletana

Provençal Beef Stew

PORTIONS: 16 PORTION SIZE: 6½ OZ (195 G)						
U.S.	METRIC	INGREDIENTS	PROCEDURE			
3 pt 4 fl oz 2 tsp 6 lb	1.5 L 120 mL 10 mL 2.8 kg	Marinade: White wine Olive oil Salt Beef chuck, boneless, well trimmed	 Mix together the marinade ingredients in a nonreactive container large enough to hold the meat. Cut the meat into 2-in. (5-cm) dice. Add the meat to the marinade. Mix slightly so all the meat is moistened, then cover and refrigerate overnight. 			
8 oz	240 g	Meaty slab bacon	 4. Cut the bacon into ½-in. (1-cm) dice. 5. Blanch the bacon: Place it in a saucepan with enough cold water to cover. Bring to a simmer; simmer 5 minutes, drain, and rinse under cold water. 			
4 fl oz	120 mL	Olive oil	6. Remove the meat from the marinade and pat it dry. Reserve the marinade.			
3 pt	1.5 l	Brown stock	7. Heat the oil in a heavy braising pan. Brown the meat well on all sides.			
1 lb	480 g	Onions, sliced	8. Remove the meat from the pan and drain off excess fat from the pan.			
4 oz	120 g	Tomato paste Sachet:	9. Add the marinade, stock, onions, tomato paste, sachet, and blanched bacon to the pan. Put the meat back in the pan and bring to a boil. Cover			
4	4	Whole cloves	and braise in an oven at 325°F (160°C) for 1 hour.			
2	2	Bay leaves	10. Add the olives to the pan. Continue to braise until the meat is tender.			
1 tsp	5 mL	Thyme	11. Degrease the sauce and reduce it slightly, if necessary, to thicken it.			
20	20	Parsley stems	12. Remove and discard the sachet.			
2	2	Orange zest, in wide strips	13. Taste and adjust the seasoning with more salt if necessary.			
1 tsp	5 mL	Peppercorns				
12 oz	360 g	Green olives, pitted				
to taste	to taste	Salt				

VARIATION

Provençal Lamb Stew Substitute lamb shoulder for the beef.

Carbohydrates, 7 g; Fiber, 1 g; Sodium, 1100 mg.

Per serving: Calories, 530; Protein, 37 g; Fat, 31 g (5% cal.); Cholesterol, 85 mg;

Chile con Carne

PORTIONS: 2	4 PORTION SI	ZE: 8 OZ (250 G)
U.S.	METRIC	INGREDIENTS
2½ lb	1.25 kg	Onion, small dice
1¼ lb	625 g	Green bell pepper, small dice
1 oz	30 g	Garlic, chopped
4 fl oz	125 g	Oil
5 lb	2.5 kg	Ground beef
1 No. 10 can	1 No. 10 can	Tomatoes
10 oz	300 g	Tomato paste
2½ pt	1.25 L	Brown stock
3 oz	90 g	Chili powder
to taste	to taste	Salt
to taste	to taste	Pepper

Per serving: Calories, 310; Protein, 20 g; Fat, 19 g (54% cal.); Cholesterol, 55 mg; Carbohydrates, 16 g; Fiber, 4 g; Sodium, 380 mg.

PROCEDURE

- 1. Sauté the onion, pepper, and garlic in oil in a heavy saucepot until tender but not browned. Remove from the pot.
- 2. Add the meat to the pot and brown over high heat, breaking it up with a spoon as it browns. Drain off the fat.
- 3. Return the vegetables to the pot and add the remaining ingredients.
- 4. Simmer uncovered until the chili is reduced to the desired thickness, 45–60 minutes. Stir occasionally during the cooking period.

VARIATION

Chile with Beans

Add 4 lb (2 kg) (drained weight) cooked or canned and drained kidney beans or pinto beans about 15 minutes before the end of cooking.

Game Chile

In place of the ground beef, use ground bison, venison, elk, caribou, or boar.

Texas Red

	YIELD: 6 LB 12 OZ (3 KG)		PORTIONS: 12 PORTION SIZE: 9 OZ (250 G)		
ĺ	U.S.	METRIC	INGREDIENTS	PROCEDURE	
	6 lb	2.75 kg	Lean beef, preferably chuck or shank, well trimmed	 Cut the beef into 1-in. (2.5-cm) cubes. In a brazier, brown the beef in the vegetable oil over high heat. Brown a 	
	2 fl oz	60 mL	Vegetable oil	little at a time so as not to overcrowd the pan.	
	1 oz	30 g	Garlic, chopped fine	3. Add the garlic, chili powder, cumin, oregano, and cayenne to the beef	
	5 oz	140 g	Chili powder	over moderate heat. Stir and cook a few minutes, until the spices are	
	1½ tbsp	22 mL	Ground cumin	aromatic.	
	1½ tbsp	22 mL	Dried oregano	4. Add the stock. Bring to a boil, cover, and place in an oven at 325°F (165°C) for 1½–2 hours, or until the beef is tender.	
	1-2 tsp	5-10 mL	Cayenne	5. Degrease the cooking liquid carefully.	
	2 qt	2 L	Brown stock or beef broth	3. Degrease the cooking hydra carefully.	
Ī	2 oz	60 g	Cornmeal or masa harina	6. Mix the cornmeal or masa harina with the cold water to make a smooth	
	4 fl oz	120 mL	Cold water	paste.	
	to taste	to taste	Salt	7. Stir the cornmeal mixture into the beef mixture.	
				8. Simmer 30 minutes to thicken the cooking liquid.	
	Por conting C	planias 200 Dratain 4	(a. Fat 1(a (200/ sal), Chalastaral 00 mg.	9. Season to taste with salt.	

Per serving: Calories, 380; Protein, 46 g; Fat, 16 g (38% cal.); Cholesterol, 90 mg; Carbohydrates, 12 g; Fiber, 5 g; Sodium, 200 mg.

VARIATION

Texas Short Ribs

In place of the lean beef, use 7 lb 8 oz (3.4 kg) beef short ribs. After the ribs are tender, remove them from the braising liquid and carefully degrease the liquid. Add just enough cornmeal or masa harina to lightly thicken the liquid, about half the amount in the basic recipe.



Braised Beef with Ancho Chiles

YIELD: 3 LI	B 12 OZ (1.7 KG)	PORTIONS: 10 PORTION SIZE:	6 OZ (170 G) MEAT, 2 FL OZ (60 ML) JUS
U.S.	METRIC	INGREDIENTS	PROCEDURE
6 lb	2.75 kg	Beef chuck, well trimmed, in large pieces	1. In a braising pan, brown the beef well in v little of the meat at a time if necessary to p
as needed	as needed	Vegetable oil	Remove the meat from the pan.
1 lb	900 g	Onions, sliced	Using additional oil as needed, brown the until they are well browned but not scorch
4 oz	120 g	Slab bacon, in 1 piece	3. Return the beef to the pot and add the ren
4	4	Whole dried ancho chiles, stems and seeds removed (see Note)	4. Bring to a boil, cover, and place in an over about 2 hours, or until the meat is very ter
1 oz	30 g	Garlic, coarsely chopped	5. Remove the meat from the braising liquid
¼ tsp	1 mL	Ground cumin	bacon.
¼ tsp	1 mL	Dried thyme	Degrease the cooking liquid.
¾ tsp	3 mL	Dried oregano	7. Remove the chiles from the liquid. Place t
2 oz	60 g	Tomato paste	a cutting board, and carefully scrape the s surface. Discard the thin, transparent ski
3 pt	1.5 L	White stock	cooking liquid.
1 tbsp	15 mL	Salt	8. Reduce the liquid over moderate heat to a
1 tsp	5 mL	Pepper	9. Taste and add salt and pepper if needed.

Per serving: Calories, 410; Protein, 56 g; Fat, 16 g (36% cal.); Cholesterol, 110 mg; Carbohydrates, 9 g; Fiber, 3 g; Sodium, 920 mg.

Note: If whole chiles are not available, or if it is necessary to save the labor of scraping the pulp of the chiles after cooking (step 7), substitute 2½ tbsp (40 mL) ground ancho chiles for the whole chiles.

- well in vegetable oil. Brown just a ssary to prevent overcrowding the pan.
- rown the onions over moderate heat ot scorched.
- d the remaining ingredients.
- n an oven at 325°F (165°C). Braise s very tender.
- ng liquid and keep warm. Discard the
- d. Place the chiles, skin side down, on ape the soft pulp from the inside arent skins. Stir the pulp back into the
- heat to about 1½ pt (700 mL).
- needed.



Duet of Beef and Corn: Braised Beef with Ancho Chiles on Grits with Cheddar paired with sliced grilled steak on Corn with Poblanos, garnished with roasted diced squash

Veal Fricassée Pork Fricassée

See Chicken Fricassée variations, page 428.



PORTIONS: 12 PORTION SIZE: 1 PIECE, APPROXIMATELY 8 OZ (240 G) COOKED WEIGHT, PLUS 1½ FL OZ (45 ML) SAUCE U.S. METRIC INGREDIENTS PROCEDURE 12 pieces 12 pieces Veal shank, cut crosswise into 1. Tie each piece of veal shank tightly around the circumference to hold thick slices, about 11 oz the meat to the bone. (320-350 g) each 2. Lightly season the meat with salt and pepper. to taste to taste Salt 3. Heat the oil in a brazier just large enough to hold the pieces of veal to taste to taste Pepper shank in a single layer. 2 fl oz 60 mL Vegetable oil 4. Dredge each piece of meat in flour to coat completely, then shake off the excess. as needed as needed Flour 5. Brown the meat on all sides in the oil. Clarified butter 6. Remove the meat from the pan and set it aside. 1½ oz Mirepoix: 7. Drain off excess oil from the pan, then add the clarified butter. 8 oz 250 g Onion, small dice 8. Add the mirepoix and garlic. Brown lightly. Carrot, small dice 4 oz 125 g 125 g 4 oz Celery, small dice ½ 0Z Garlic, chopped 7 g 8 fl oz 250 ml Dry white wine 9. Return the meat to the pan and add the white wine. Simmer about Canned plum tomatoes, coarsely 10 minutes. 1 lb 500 g chopped, with their juice 10. Add the tomatoes, lemon zest, stock, and sachet. Bring to a simmer, cover, and place in an oven at 325°F (160°C). Braise until the meat is 2-3 strips 2-3 strips Lemon zest, in wide strips very tender, 1½-2 hours. 1 pt 500 mL Brown stock 11. Remove the meat from the pan with a slotted spoon and set aside in a Sachet: warm place. Parsley stems 8 8 12. Strain and degrease the sauce. Reduce the sauce, if necessary, to about ½ tsp 1 mL Dried thyme 1½ fl oz (45 mL) per portion. The flour on the meat should have been 1 Bay leaf enough to thicken the sauce to a very light consistency. 13. The traditional but optional seasoning finish for osso buco is called Gremolada (optional): gremolada. Mix together the lemon zest, parsley, garlic, and anchovy. 1½ tsp 7 mL Grated lemon zest Just before serving, sprinkle the gremolada over the osso buco and turn Chopped parsley 1½ tbsp 22 mL the meat so it gets an even coating of the mixture. Garlic, chopped fine ½ tsp 2 ml 14. Serve 1 piece of yeal shank per portion, along with 1½ fl oz (45 mL) 2 2 Anchovy filets, chopped sauce. Osso buco is traditionally served with Risotto Milanese (p. 648) fine (optional) as well.

Per serving: Calories, 360; Protein, 42 g; Fat, 14 g (11% cal.); Cholesterol, 170 mg; Carbohydrates, 10 g; Fiber, 2 g; Sodium, 260 mg.



Osso Buco

Hungarian Goulash (Veal, Beef, or Pork) 🌑



PORTION	S: 25 PORTIO	N SIZE: 8 OZ (250 G)	
U.S.	METRIC	INGREDIENTS	PROCEDURE
7½ lb	3.75 kg	Boneless, lean meat: Veal (shoulder, shank, or breast), beef (chuck), or pork (shoulder or butt)	 Cut the meat into 1-in. (2.5-cm) cubes. Heat the fat in a brazier and sauté the meat until lightly seared on all sides.
5 fl oz	150 mL	Oil, lard, or rendered beef suet	3. Add the onions and sweat over moderate heat. Continue to cook until
2½ lb	1.25 kg	Onions, fine dice	most of the liquid that forms is reduced.
5 tbsp	75 mL	Hungarian paprika	4. Add the paprika, garlic, and caraway seeds and stir.
2 tsp	10 mL	Garlic, crushed	
½ tsp	2 mL	Caraway seeds	
10 oz	300 g	Chopped, drained canned tomatoes or tomato purée	5. Add the tomatoes and stock, cover, and simmer until the meat is almost tender, about 1 hour in the oven (325°F/165°C) or on the range.
2½ qt	2.5 L	White stock	
2½ lb	1.25 kg	Potatoes, medium dice	6. Add the potatoes and continue to cook until the meat and potatoes are
to taste	to taste	Salt	tender.
_	Calories, 250; Protein es, 14 g; Fiber, 2 g; So	, 27 g; Fat, 10 g (35% cal.); Cholesterol, 35 mg; dium, 120 mg.	7. The potatoes will thicken the sauce slightly but, if necessary, reduce the sauce a little. Degrease and season to taste.8. Serve with spaetzle or noodles.

Rabbit with Mustard

PORTIONS	:8 PORTIO	N SIZE: APPROXIMATELY 8 OZ (250 G), I	NCLUDING SAUCE
U.S.	METRIC	INGREDIENTS	PROCEDURE
4-5 lb as needed	2 kg as needed	Rabbit Oil	 Clean and cut up the rabbit for stewing. Brown the rabbit in oil in a heavy pan. Remove the rabbit pieces from the pan and keep them warm. Degrease the pan.
½ oz 1 oz 2 oz to taste to taste ½ tsp 8 fl oz 8 fl oz	15 g 30 g 60 g to taste to taste 1 mL 250 mL 250 mL	Butter Shallot, chopped Prepared mustard, Dijon-style or grainy Salt Pepper Dried thyme White wine Chicken stock	 4. Add the butter to the pan. Sweat the shallot in the butter, but do not brown. 5. Add the mustard, salt, pepper, thyme, wine, and stock to the pan and return the browned rabbit to the pan. Cover and braise slowly over low heat or in a low oven until the meat is cooked. 6. Remove the rabbit from the liquid and set aside.
-	250 mL alories, 450; Proteir s, 2 g; Fiber, 0 g; Sod	Heavy cream 1, 30 g; Fat, 28 g (58% cal.); Cholesterol, 150 mg; ium, 260 mg.	 Reduce the cooking liquid by about one-third. Skim any excess fat from the top. Temper the heavy cream and add it to the reduced liquid. Simmer and reduce until the sauce is lightly thickened. Adjust the seasonings. Return the rabbit pieces to the sauce.

Lamb Vindaloo 📵



PORTIONS: 10	PORTION SIZE: 5	OZ	
U.S.	METRIC	INGREDIENTS	PROCEDURE
4 oz	120 g	Onion, chopped	1. Combine the onion, garlic, and ginger in a blender. Blend to a smooth
2 oz	60 g	Garlic, chopped	paste, adding just enough water to make this possible.
½ 0Z	15 g	Fresh ginger root, peeled and chopped	
as needed	as needed	Water	
4 tsp	20 mL	Ground cumin	2. Mix together the spices and salt in a bowl. Add the vinegar and mix
2 tsp	10 mL	Ground cardamom	to a thin paste.
1 tbsp	15 mL	Cinnamon	
½ tsp,	2 mL,	Cayenne or red	
or more to taste	or more to taste	pepper flakes	
2 tsp	10 mL	Black pepper	
2 tbsp	30 mL	Ground coriander	
1 tsp	5 mL	Turmeric	
1 tbsp	15 mL	Salt	
4 fl oz	140 mL	Vinegar	
4 lb	2 kg	Lamb shoulder, boneless	3. Cut the lamb into 1-in. (2.5-cm) dice.
		and well trimmed	4. Heat a thin film of oil in a heavy braising pan. Brown the lamb
as needed	as needed	Oil	well on all sides, adding it in batches if necessary to avoid
1 pt	500 mL	Water	overcrowding the pan. Remove the browned lamb with a slotted spoon and set aside in a bowl.
_	, 310; Protein, 32 g; Fat, 17	g (7% cal.); Cholesterol, 105 mg;	Put the onion paste in the braising pan and fry about 30 seconds, adding additional oil if necessary.

Carbohydrates, 5 g; Fiber, 1 g; Sodium, 790 mg.

- 6. Add the spice mixture from step 2. Continue to cook, stirring, another
- 7. Return the lamb and any accumulated juices to the pan. Add the water and stir.
- 8. Cover and braise on the stovetop or in a 325°F (160°C) oven until the meat is tender. The stew should be fairly dry (that is, not too saucy), but check from time to time to make sure it isn't too dry and likely to burn. Add water if necessary. When finished, the liquid should be reduced to a lightly thickened sauce. If necessary, remove the meat with a slotted spoon and reduce the braising liquid to thicken it.
- 9. Taste and add salt if necessary.
- 10. Serve with rice.

VARIATION

Beef Vindaloo

Substitute beef chuck for the lamb.

Sauerbraten



PORTIONS: 25 PORTION SIZE: 4 OZ (125 G), 2 FL OZ (60 ML)			.) SAUCE
U.S.	METRIC	INGREDIENTS	PROCEDURE
10 lb	5 kg	Beef bottom round, trimmed (see Note) Marinade:	 Place the trimmed beef in a nonmetallic crock or barrel. Add all the marinade ingredients to the crock. If the meat is not completely covered by the liquid, add equal parts vinegar and water
1 qt	1 L	Red wine vinegar	until it is. Cover.
1 qt	1 L	Water	3. Refrigerate 3–4 days. Turn the meat in the marinade every day.
1 lb	500 g	Onion, sliced	, ,
8 oz	250 g	Carrot, sliced	
2	2	Garlic cloves, chopped	
2 oz	60 g	Brown sugar	
2	2	Bay leaves	
3	3	Whole cloves	
1 tsp	5 mL	Peppercorns, crushed	
2 tsp	10 mL	Salt	
as needed	as needed	Vegetable oil, if needed for browning meat	 Remove the meat from the marinade. Dry it thoroughly with paper towels. Brown the meat on all sides. This may be done on the range in an iron skillet, on a very hot griddle, under the broiler, or in a brazier in a hot oven. Place the meat in a braising pan. Strain the marinade. Add the vegetables to the meat and enough of the liquid to cover the meat by half. Cover and braise in a 300°F (150°C) oven until the meat is tender, 2–3 hours. Remove the meat from the braising liquid and transfer to a hotel pan. Set aside.
8 fl oz 4 oz	250 mL 125 g	Red wine Gingersnap crumbs	8. Strain 2 qt (2 L) of the braising liquid into a saucepan and skim off fat. Bring to a boil. Reduce to about 1½ qt (1.5 L).
102	1275	sgs.shap danibs	9. Add wine and boil another 2–3 minutes.
Carbohydrates	s, 4 g; Fiber, 0 g; Soc	n, 37 g; Fat, 8 g (32% cal.); Cholesterol, 80 mg; dium, 110 mg. n in large quantities and are using whole bottom	10. Reduce heat to a simmer and stir in the gingersnap crumbs. Simmer another 3–4 minutes. Remove from heat and let stand 5 minutes to allow the crumbs to be completely absorbed.
cut the bottom the eye of rour Brisket or	n round in half lengtl nd.	te the eye of round from the bottom round and hwise, so two pieces are about the size of used for sauerbraten. They do not make attractive y good.	11. Slice the meat across the grain. Serve 4 oz (125 g) meat per portion, overlapping the slices on the plate. Ladle 2 oz (60 mL) sauce over the meat.
MARIATI	o. 11		

VARIATION

Sauerbraten with Sour Cream Gravy

Marinate and braise meat as in basic recipe. Prepare gravy through step 8. Thicken the sauce with a roux made of 4 oz (125 g) butter or beef fat, 4 oz (125 g) flour, and 2 oz (60 g) sugar. Cook the roux until well browned and use it to thicken the sauce. Omit wine and add 8 oz (250 mL) sour cream.

Braised Sweetbreads

PORTIONS: 1	10 PORTION	SIZE: 3½ OZ (100 G) SWEETBREADS	G (COOKED WEIGHT), 2 FL OZ (60 ML) SAUCE
U.S.	METRIC	INGREDIENTS	PROCEDURE
3 lb 2 oz 6 oz 3 oz 3 oz 3½ pt	1.5 kg 60 g 175 g 90 g 90 g 750 mL	Sweetbreads Butter Mirepoix: Onion, medium dice Carrot, medium dice Celery, medium dice Demi-glace, hot	 Prepare (blanch and trim) sweetbreads according to the procedure on page 301. Leave them whole or cut into uniform serving pieces. Heat the butter in a large sauté pan. Add the mirepoix and cook over medium heat until lightly browned. Place the sweetbreads on top of the mirepoix and pour in the demi-glace. Cover tightly and place in oven at 325°F (165°C), until the sweetbreads are very tender and well flavored with the sauce, 45–60 minutes.
•	ries, 500; Protein, 0 g; Fiber, 1 g; Sod	21 g; Fat, 42 g (75% cal.); Cholesterol, 350 mg; ium, 340 mg.	5. Remove the sweetbreads from the sauce and place in a hotel pan.6. Bring the sauce to a rapid boil and reduce slightly. Strain and adjust seasoning. Pour over sweetbreads.

Swedish Meatballs

U.S. MET	FDIC		
2 fl oz 6	300 g 50 mL 300 g 10 mL 10	Onion, chopped fine Oil Dry bread crumbs Milk Eggs, beaten	PROCEDURE 1. Sauté the onions in oil until tender but not brown. Cool thoroughly. 2. Combine the bread crumbs with the milk and egg and let soak 15 minutes.
1½ lb 6 2½ tsp 1 ½ tsp	2.5 kg 625 g 2 mL 2 mL 2 mL 30 g	Ground beef Ground pork Dried dill weed Nutmeg Allspice Salt	 Add the cooked onion and the crumb mixture to the meat in a mixing bowl. Add the spices and salt and mix gently until well combined. Portion the meat with a No. 20 scoop into 2-oz (60-g) portions. Roll into balls and place on a sheet pan. Brown in a 400°F (200°C) oven.
1 tsp		Brown sauce, hot Light cream, hot Dried dill weed 19 g (61% cal.); Cholesterol, 180 mg; ng.	 6. Remove meatballs from sheet pan and place in baking pans in a single layer. 7. Add the hot cream and dill to the hot brown sauce and pour over the meatballs. 8. Cover the pans and bake at 325°F (165°C) for 30 minutes, or until the meatballs are cooked. 9. Skim fat from sauce. 10. Serve 3 meatballs and 2 fl oz (60 mL) sauce per portion.

Veal Curry with Mangos and Cashews

	PORTIONS: 25	PORTION SIZE:	8 OZ (250 G)	
	u.s. 9 lb 8 fl oz	METRIC 4.5 kg 250 mL	INGREDIENTS Boneless, lean veal (shoulder, shank, or breast) Oil	 PROCEDURE Cut the veal into 1-in. (2.5-cm) cubes. Heat the oil in a brazier over medium heat. Add the meat and cook it in the fat, stirring occasionally, until seared on all sides but only lightly
•••	2½ lb 2 tbsp 5 tbsp 1 tbsp 2½ tsp 1 tsp 1 tsp 2 tsp 2 tsp 2 tsp	1.25 kg 30 mL 75 mL 15 mL 12 mL 5 mL 2 mL 2 mL	Onions, medium dice Garlic, chopped Curry powder (see Note) Ground coriander Paprika Ground cumin Pepper Cinnamon Bay leaves Salt	browned. 3. Add the onions and garlic to the pan. Sauté until softened, but do not brown. 4. Add the spices and salt and stir. Cook 1 minute.
•••	4 oz 2 qt 10 oz	125 g 2 L 300 g	Flour White stock Tomato concassé	 Stir in the flour to make a roux and cook another 2 minutes. Add the stock and tomatoes. Bring to a boil while stirring. Cover and simmer slowly in the oven (300°F/150°C) or on top of the range until the meat is tender, 1–1½ hours.
	8 fl oz 4–5 as needed a 4 oz 2 tbsp	250 mL 4–5 as needed 120 g 30 mL	Mangos Boiled or steamed rice Cashews, coarsely chopped Chopped parsley	 8. Degrease, discard the bay leaf, and add the cream. Adjust the seasonings. 9. Peel the mangos with a paring knife or vegetable peeler. Cut the mango flesh from the stone in thick slices. Cut into medium dice. 10. To serve, place a bed of rice on a plate. Spoon the curry onto the center of the rice. Top with diced mango. Sprinkle with chopped cashews and
				chopped parsley.

Per serving: Calories, 430; Protein, 31 g; Fat, 26 g (64% cal.); Cholesterol, 95 mg; Carbohydrates, 18 g; Fiber, 2 g; Sodium, 330 mg.

Note: If desired, increase curry powder to taste and omit other spice (except bay leaf).



Veal Curry with Mangos and Cashews

VARIATIONS

In place of the mango and cashews, serve meat curries with an assortment of other condiments, such as raisins, chutney, peanuts, chopped scallions or onions, diced pineapple, diced banana, diced apple, shredded coconut, and poppadums.

Lamb Curry

Substitute lean boneless lamb shoulder, breast, or leg for the veal.

Saltimbocca alla Romana 🏾 🧟



PORTIONS: 16 PORTION SIZE: 2 PIECES				
U.S.	METRIC	INGREDIENTS		
32	32	Veal scaloppine, 1½-2 oz (45-60 g) each		
to taste	to taste	Salt		
to taste	to taste	White pepper		
32	32	Thin slices of prosciutto, about the same diameter as the scaloppine		
32	32	Fresh sage leaves		
4 oz	125 g	Butter		
12 fl oz	350 mL	White wine		

Per serving: Calories, 320; Protein, 28 g; Fat, 21 g (60% cal.); Cholesterol, 115 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 800 mg.

PROCEDURE

- 1. Pound the scaloppine with a cutlet pounder. Season with salt and white pepper. Put 1 slice of prosciutto and 1 sage leaf on top of each and fasten with a toothpick.
- 2. Sauté briefly in butter on both sides.
- 3. Add the wine and continue to cook until the meat is done and the wine is partly reduced, no more than 5 minutes.
- 4. Remove the meat from the pan and serve, ham side up, with a spoonful of the pan juices over each.

Carbonnade à la Flammande 📵



PORTIONS: 16 PORTION SIZE: 6-7 OZ (175-200 G)			
U.S.	METRIC	INGREDIENTS	PROCEDURE
3 lb as needed	1.4 kg as needed	Onions Beef fat or vegetable oil	 Peel the onions. Cut them into small dice. Cook the onions in a little fat over moderate heat until golden. Remove
6 oz 2 tsp 1 tsp 5 lb	175 g 10 mL 5 mL 2.3 kg	Flour Salt Pepper Beef chuck, 1-in. (2.5-cm) dice	from the heat and set aside. 3. Season the flour with salt and pepper. Dredge the meat in the flour. Shake off the excess flour. 4. Brown the meat well in a sauté pan. Do a little at a time to avoid overcrowding the pan. As each batch is browned, add it to the pot with the onions.
2½ pt 2½ pt 2 1 tsp 8 8 1 tbsp	1.25 L 1.25 L 2 5 mL 8 8 15 mL	Dark beer Brown stock Sachet: Bay leaves Dried thyme Parsley stems Peppercorns Sugar	 Deglaze the sauté pan with the beer and add it to the pot. Add the stock, sachet, and sugar. Bring to a boil, cover, and transfer to the oven. Cook at 325°F (160°C) until very tender, 2–3 hours. Degrease. Adjust the consistency of the sauce. If it is too thin, reduce over moderately high heat. If it is too thick, dilute with brown stock. Taste and adjust the seasonings. Serve with plain boiled potatoes.

FOR REVIEW

deglaze pot roast fricassée blanquette stewing Swiss steak

FOR

1. List four advantages of roasting at a low temperature.

Per serving: Calories, 450; Protein, 30 g; Fat, 29 g (52% cal.); Cholesterol, 100 mg;

- 2. When might you use high temperatures for roasting?
- 3. What is the purpose of basting?

Carbohydrates, 19 g; Fiber, 1 g; Sodium, 290 mg.

- 4. In the recipe for Home-Style Meatloaf (p. 323), why are the sautéed vegetables cooled after cooking in step 1?
- 5. Which steaks require the highest broiler heat, thick ones or thin ones? steaks to be cooked rare or steaks to be cooked well done?
- 6. Why is it important not to overload the pan when sautéing meats?
- 7. Why is the menu term boiled beef inaccurate?