

## Safe Handling of Veal

### WHAT IS VEAL?

Veal is the meat from a calf or young beef animal. Male dairy calves are used in the veal industry. Dairy cows must give birth to continue producing milk, but male dairy calves are of little or no value to the dairy farmer. A small percentage are raised to maturity and used for breeding.

A calf is a young bovine of either sex that has not reached puberty (9 months of age) and has a maximum live weight of 750 pounds. “Bob” Veal is a veal calf marketed up to 3 weeks of age or at a weight of 150 pounds. “Special-Fed” Veal is a veal calf raised until 16 to 18 weeks of age, weighing up to 450 pounds.

### SELECTING THE BEST

Choose veal that is grayish pink in color in the fresh meat case. Vacuum packaged veal in the self-serve case will be more maroon in color because it has not been exposed to oxygen. Choose veal that is firm to the touch. Look for packages that are cool to the touch, have no wear or punctures, and little or no excess liquid. Always check the “sell-by” date.

Purchase raw meats last. Make sure all meats — whether raw, pre-packaged or from the deli are refrigerated when purchased. Fresh meats may contaminate other grocery items. The best way to prevent this cross-contamination is to always keep fresh meats from other items. Put raw meat packages in a plastic bag so juices won’t drip onto other foods. Pack raw meats in an ice chest if it will take more than an hour to get home. Keep ice chest in the passenger area of the car during warm weather. Take meats straight home to the refrigerator or freezer.

**Product Dating:** Product dating, applying “sell-by” or “use-by” dates, is not required by federal regulations. However, many stores and processors may voluntarily choose to date packages of raw veal or processed veal products. Use or freeze products with a “sell-by” date within three to five days of purchase. If the manufacturer has determined a “use-by” date, observe it. It’s always best to buy a product before its date expires. It’s not important if a date expires after freezing veal, because all foods stay safe while properly frozen.

**Product Inspection and Grading:** All veal found in retail stores is either USDA-inspected for wholesomeness or inspected by state systems which have standards equal to the federal government. Each animal and its internal organs are inspected for signs of disease. The “Passed and Inspected by USDA” seal ensures that the veal is wholesome and free from disease. Although inspection is mandatory, its grading for quality is voluntary, and a plant pays to have its veal graded.

Quality grade refers to the eating quality of the meat. Veal and calf carcasses are graded on a composite evaluation of two general grade factors: conformation (proportion of lean, fat and bone-in carcass) and quality of the lean. In addition, the color of the lean carcasses is key in differentiating between veal, calf and beef carcasses. The five grades for veal are as follows: prime, choice, good, standard and utility.

**Retail Cuts:** There are seven basic major cuts into which veal is separated: leg (round), sirloin, loin, rib, shoulder, foreshank and breast. When examining a package of veal, the label can help the purchaser identify the meat in the package.

For example, a label stating “veal rib chop” identifies the packaged meat as “veal,” the primal or large wholesale cut from the “rib,” and the name of the retail cut as “chop.” This information helps consumers know what type of preparation method to use. The most readily available cuts of veal today include rib chops, loin chops, veal for stew, cutlets, arm steak, blade steak, rib roast, breast, shanks and round steak.

## STORAGE

**Refrigeration:** Keep veal below 40 °F during storage. Store uncooked veal items together, separate from cooked foods. Refrigerate or freeze fresh veal IMMEDIATELY after bringing it home. NEVER leave veal in a hot car or sitting out at room temperature. Packaged whole cuts of fresh veal may be refrigerated in their original wrappings in the coldest part of the refrigerator for three to five days after purchase, while ground veal can be stored in the refrigerator for one or two days. Keep veal refrigerated until you are ready to cook it. When transporting cooked veal to another dining site, place it in an insulated container or ice chest until ready to eat. Cooked whole cuts of veal are at their best when refrigerated no longer than two to three days. Cooked ground veal is best when refrigerated no longer than one or two days.

**Freezing:** Freeze whole cuts of fresh veal if you do not plan to cook it within three to five days after purchase. Freeze ground veal if you do not plan to cook it within one to two days after purchase.

Wrap veal parts separately in aluminum foil or freezer paper before freezing, and label for ease in selecting just the right number of parts to thaw for a single meal. Be sure to press the air out of the package before freezing. If you plan to freeze veal in its original wrapping, overwrap with freezer bag or paper. Cooked parts may be frozen in the same way as fresh, unless made with a sauce or gravy; in that case, pack in a rigid container with a tight-fitting lid.

## PREPARATION

**Cleanliness:** Always wash hands thoroughly with hot soapy water before preparing foods and after handling raw veal. Don’t let raw meat or juices touch ready-to-go foods either in the refrigerator or during preparation. Don’t put cooked foods on the

same plate that held raw veal. Always wash utensils that have touched raw meat with hot, soapy water before using them for cooked meats. Wash counters, cutting boards and other surfaces raw meats have touched.

**Thawing:** Thaw uncooked veal in the refrigerator or in cold water. NEVER thaw veal at room temperature. Thawing by refrigeration requires planning ahead and most likely allowing a 24-hour thawing period. After defrosting raw veal by this method, it will be safe in the refrigerator for up to five days before cooking. During this time, if you decide not to use the veal, you can safely refreeze it without cooking it first. To thaw veal in cold water, leave the veal in its original wrapping or place it in a watertight plastic bag. Change the water every 30 minutes.

For quick thawing of uncooked or cooked veal, use the microwave, but plan on cooking the meat immediately after thawing, because some areas of the food may become warm and begin to cook during microwaving. Thawing time will vary according to whether you’re thawing a whole roast or cuts and the number of parts frozen together. Use the DEFROST or MEDIUM-LOW setting, according to the manufacturer’s directions. Turn the roast and separate parts as they thaw, taking care the meat does not begin to cook. Repeat as needed. Foods defrosted by the cold water method or in the microwave should be cooked before refreezing, because they may have been held at temperatures above 40 °F. For a more detailed outline of safe handling and cold storage of veal, refer to Table 1.

**Marinating:** Marinate food in the refrigerator, not on the counter. Discard the marinade after use because it contains raw juices, which may harbor bacteria. If you want to use the marinade as a dip or sauce, reserve a portion before adding raw food.

**Partial Cooking or Browning:** Never brown or partially cook veal, then refrigerate and finish cooking later, because any bacteria present would not have been destroyed. It is safe to partially precook or microwave veal IMMEDIATELY before transferring it to a hot grill or oven to finish cooking.

## COOKING

**Importance of Kitchen Thermometers:** One of the critical factors in controlling bacteria in food is controlling temperature. Pathogenic microorganisms grow very slowly at low temperatures multiply rapidly in mid-range temperatures, and are killed at high temperatures. For safety, foods must be cooked thoroughly. It is essential to use a meat thermometer when cooking veal to prevent undercooking and, consequently, prevent food-borne illness.

Using a thermometer is the only reliable way to ensure safety and to determine the “doneness” of most foods. To be safe, a product must be cooked to an internal temperature high enough to destroy any harmful bacteria that may have been in the food. Recent research has shown that color and texture indicators are not reliable.

When cooking whole cuts or parts of veal, the thermometer should be inserted into the thickest part of the meat, away from the bone, fat and gristle. The thermometer may be inserted sideways if necessary. When the food being cooked is irregularly shaped, the temperature should be checked in several places. Proper cooking times for veal can be viewed in Table 2.

**Whole Muscle Meats:** The USDA recommends minimum endpoint cooking to ensure food is safe to eat. The USDA recommends cooking to a minimum internal temperature of 160 °F for medium-cooked whole cuts of fresh veal, and 170 °F for well-done cuts.

**Ground Veal:** Ground veal must be cooked thoroughly to kill harmful bacteria. Unlike whole muscle meat that is sterile inside, the grinding process exposes the interior meat in ground veal to bacteria that may be on the surface, in the air, on equipment or on people’s hands. To kill these bacteria, food safety experts have one major rule of thumb – cook ground veal to at least 160 °F. This step, while very simple, offers the best protection that consumers have to serve ground veal products safely.

**Microwaving:** When microwaving unequal size pieces of veal, arrange in a dish or on a rack so thick parts are toward the outside of the dish and thin parts are in the center and cook on medium-high or medium power. Place a roast in an oven-cooking bag or in a covered pot. Refer to the manufacturer’s directions that accompany the microwave oven for suggested cooking times. Use a microwave-safe thermometer inserted before cooking, or remove meat from microwave and use a digital meat thermometer to test for doneness in several places to be sure correct temperatures have been reached. Remember that microwaved foods continue to cook after standing, so wait until standing time is complete to test for doneness.

## SERVING

Wash hands with soap and water before serving or eating food. Serve cooked products on clean plates with clean utensils and clean hands. Never put cooked foods on a dish that has held raw products unless the dish is washed with soap and hot water. Hold hot foods above 140 °F and cold foods below 40 °F. Never leave foods, raw or cooked, at room temperature longer than two hours. On a hot day with temperatures at 90 °F or warmer, foods should not be left out longer than an hour.

## LEFTOVERS

Always use clean utensils and storage containers for safe storage. Divide large amounts of leftovers into small, shallow containers for quick cooling in the refrigerator. Avoid placing large pots of gravy in the refrigerator to cool since it will likely take until the next day for this amount of food to cool. For refrigerator storage, wrap cooked meat in plastic wrap or aluminum foil or store it in a tightly covered container and use within two to three days. For frozen storage, wrap meat in moisture- and vapor-proof packaging material intended for freezer storage and use within two to three months. If you may have kept the food refrigerated for too long, throw it out. Never taste food that looks or smells strange to see if you can still use it. Reheat all leftovers to 165 °F.

TABLE 1. SAFE HANDLING OF VEAL IN COLD STORAGE		
Product	Refrigerator (40 °F)	Freezer (0 °F)
<b>RAW WHOLE CUTS OF VEAL: Chops, roasts and steaks</b>	3-5 Days	4-6 Months
<b>RAW GROUND VEAL and STEW</b>	1-2 Days	3-4 Months
<b>BROILED, FRIED, GRILLED OR ROASTED VEAL</b>	2-3 Days	2-3 Months
<b>COOKED GROUND VEAL AND GRAVIES MADE FROM VEAL</b>	1-2 Days	2-3 Months

TABLE 2. APPROXIMATE VEAL COOKING TIMES				
TYPES OF VEAL	SIZE	COOKING METHOD	COOKING TIMES	INTERNAL TEMPERATURE
<b>Rib Roast</b>	4 to 5 lbs.	Roast 325 °	25 to 27 min/lb. 29 to 31 min/lb.	Medium 160 °F Well done 170 °F
<b>Loin</b>	3 to 4 lbs.	Roast 325 °F	34 to 36 min/lb. 38 to 40 min/lb.	Medium 160 °F Well done 170 °F
<b>Loin/Rib Chops</b>	1" thick or 8 oz.	Broil/Grill	7 min. per side 8 to 9 min per side	Medium 160 °F Well done 170 °F
<b>Cutlets</b>	<sup>1</sup> / <sub>8</sub> " thick <sup>1</sup> / <sub>4</sub> " thick	*Pan Fry	3 to 4 min. 5 to 6 min.	Medium 160 °F
<b>Arm/Blade Steak</b>	<sup>3</sup> / <sub>4</sub> " thick 16 oz.	Broil/Grill	7 min per side 8 min. per side	Medium 160 °F Well Done 170 °F
<b>Cross Cut Shanks</b>	1½" thick	Cover with liquid; simmer	1 to 1¼ hrs.	Fork Tender or 160 °F
<b>Stew Meat</b>	1 to 1½" cubed/pieces	Cover with liquid; simmer	45 to 60 min.	Fork Tender or 160 °F
<b>Boneless Breast, stuffed</b>	2 to 2½ lbs. 4 to 4½ lbs.	**Braise	1¼ to 1½ hrs. 2 to 2½ hrs.	Fork Tender or 160 °F
<b>Round Steak</b>	<sup>1</sup> / <sub>4</sub> " thick <sup>1</sup> / <sub>2</sub> " thick	**Braise	30 min 45 min.	Fork Tender or 160 °F
*Pan frying, which is often called "sautéing," is a quick cooking method. Meat is placed in small amount of heated oil and cooked on medium-high heat.				
**Braising is roasting or simmering less tender meats with a small amount of liquid in a tightly covered pan.				

Source:

USDA/FSIS (1998). *Safety of Veal...from Farm to Table* [WWW document]. URL <http://www.fsis.usda.gov/oa/pubs/veal.htm>

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This information has been reviewed and adapted for use in South Carolina by E.H. Hoyle, Extension Food Safety Specialist, Clemson University.

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