Safe Handling of Veal

What is Veal?
Veal is the meat from a calf or young beef animal. A veal calf is raised until about 16 to 18 weeks of age, weighing up to 450 pounds. 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 usually fed nutritionally balanced milk or soy based diets. These specially controlled diets contain iron and 40 other essential nutrients. The majority of veal calves are “special-fed”.

Selecting the Best
Choose veal in the fresh meat case that is grayish pink in color and firm to the touch. Vacuum packaged veal in the self-serve case will be more maroon in color because it has not been exposed to oxygen. 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 kept refrigerated. 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 & 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 tightfitting 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. Allow 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, or, 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.

It is safe to cook frozen veal in the oven, or on the stove or grill without defrosting. Estimate one-third to one-half more cooking time depending upon the size of the meat. Broil frozen veal farther away from the heat source; preheat the skillet when pan-frying or pan-broiling. Do not cook frozen veal in a slow cooker.

Marinating: Marinate food in the refrigerator, not on the counter. Boil used marinade before brushing on cooked veal. Discard any uncooked, leftover marinade after use because it contains raw juices, which may harbor bacteria.

Rinsing: There is no need to rinse raw veal before cooking. Any bacteria that might be present on the surface would be destroyed by cooking.
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 foodborne 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: Cook whole cuts of meat to a minimum internal temperature of 145 °F for medium-rare, with a 4 minute rest before carving or eating (for both safety and quality reasons), or 160 °F for medium-cooked whole cuts of meat, 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 155 °F. This step, while very simple, offers the best protection that consumers have to serve ground veal 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 oven and use a digital meat thermometer in several places to be sure correct temperatures have been reached. Meats cooked in the microwave oven must be cooked to a minimum internal temperature of 165 °F and allowed to stand covered at least 2 minutes. Follow standing or rest times given.

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.
Table 1. Safe Handling of Veal in Cold Storage

<table>
<thead>
<tr>
<th>Product</th>
<th>Refrigerator (40°F)</th>
<th>Freezer (0°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Whole Cuts of Veal: Chops, roasts and steaks</td>
<td>3-5 Days</td>
<td>4-6 Months</td>
</tr>
<tr>
<td>Raw Ground Veal &amp; Stew</td>
<td>1-2 Days</td>
<td>3-4 Months</td>
</tr>
<tr>
<td>Broiled, Fried, Grilled or Roasted Veal</td>
<td>2-3 Days</td>
<td>2-3 Months</td>
</tr>
<tr>
<td>Cooked Ground Veal &amp; Gravies Made From Veal</td>
<td>1-2 Days</td>
<td>2-3 Months</td>
</tr>
</tbody>
</table>

Table 2. Approximate Veal Cooking Times

<table>
<thead>
<tr>
<th>Types of Veal</th>
<th>Size</th>
<th>Cooking Method</th>
<th>Cooking Times</th>
<th>Internal Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rib Roast</td>
<td>4 to 5 lbs.</td>
<td>Roast 325 °F</td>
<td>25 to 27 min/lb.</td>
<td>Cook at least to an internal temperature of 145 °F with a 4 minute rest.</td>
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<tr>
<td>Loin</td>
<td>3 to 4 lbs.</td>
<td>Roast 325 °F</td>
<td>34 to 36 min/lb.</td>
<td></td>
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<tr>
<td>Loin/Rib Chops</td>
<td>1&quot; thick or 8 oz.</td>
<td>Broil/Grill</td>
<td>7 min. per side 8 to 9 min per side</td>
<td></td>
</tr>
<tr>
<td>Cutlets</td>
<td>⅛&quot; thick</td>
<td>*Pan Fry</td>
<td>3 to 4 min. 5 to 6 min.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>¼&quot; thick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arm/Blade Steak</td>
<td>¾&quot; thick</td>
<td>Broil/Grill</td>
<td>7 min per side 8 min. per side</td>
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<tr>
<td></td>
<td>16 oz.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cross Cut Shanks</td>
<td>1½&quot; thick</td>
<td>Cover with liquid; simmer</td>
<td>1 to 1¼ hrs.</td>
<td></td>
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<tr>
<td>Stew Meat</td>
<td>1 to 1½&quot; cubes/pieces</td>
<td>Cover with liquid; simmer</td>
<td>45 to 60 min.</td>
<td></td>
</tr>
<tr>
<td>Round Steak</td>
<td>¼&quot; thick</td>
<td>**Braise</td>
<td>30 min 45 min.</td>
<td></td>
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<tr>
<td></td>
<td>½&quot; thick</td>
<td></td>
<td></td>
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*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:  
3. USDA/FSIS (2006). *Veal from Farm to Table* http://www.fsis.usda.gov/Fact_Sheets/Veal_from_Farm_to_Table/index.asp

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