Beef Cuts: Not All Are Created Equal

"Good wine, good meat, thank god, let's eat." Old Grace

By Meathead

Bovines have been a part of human life for thousands of years. We have used them to pull plows, for their hides, for milk and cheese, and their flesh for food.

It is a safe bet that it didn't take early humans long to determine that different muscles in the carcass had different characteristics. Some were tender, some juicy, some tough, some rich in flavor. Until the the late 1800s, beef was found mostly on farms where it could be grown, slaughtered, and eaten on the spot. Some livestock was shipped on the hoof to cities by train, but the mortality rate was high and meat prices were prohibitive. Before refrigeration beef could only be transported a few miles, unless it was salted and preserved.

With the advent of refrigerated transportation in the 1880s, especially boxcars running from the stockyards in Chicago, a new industry was invented. Farmers could ship live animals to Chicago where they were fattened in feed lots run by the beef barons, especially Gustavus Swift and Philip Armour. Then they were slaughtered and dismembered on an assembly line, and broken down into large hunks.

Nowadays most steers and heifers live on farms eating grass and hay until they are about 15 months of age. Then they are sold to huge feed lots where they stay for about four months and are fed grain, mostly a type of high calorie corn flake, and vitamins and medicines, often including antibiotics, for about four months. The AmazingRibs.com meat consultant, Dr. Antonio Mata, explains "Bovines are like humans. When they consume a lot of calories they accumulate fat. First belly fat, then subcutaneous fat, then fat between the muscles, and finally intramuscular marbling." The process is highly efficient and produces huge quantities of tasty low cost beef. On the other hand, the process has come under a great deal of criticism for a number of issues including arguments that the method is inhumane; that the antibiotics are not killing all the bacteria and the ones that survive are antibiotic resistant, and that means that humans can no longer rely on antibiotics when they get sick; that corn subsidies are making beef artificially cheap; that these large Concentrated Animal Feeding Operations (CAFOs) create a massive environmental hazard with unmanageable quantities of waste chief among them.

More and more cattle are being finished on farms on grass rather than grain, where the manure fertilizes the grass they eventually eat. The resulting meat is more expensive, often chewier, and tastes different, with a mineral character that I remember from my youth, before CAFOs. Some disdain the taste, some love it. I love the tast of both grass finished and corn finished meats. For more on the subject, **read my article on beef** grades. I hope to discuss these political and economic issues in depth in the future. Suffice it to say that I have read extensively on the subject, and I agree that corn subsidies, CAFOs, and antibiotic overuse are serious issues and there may be viable alternatives, but the impact of these other systems will certainly mean more expensive beef. Many of us can afford pricier beef, but many, especially those who depend on cheap ground beef, would face hardship or a major lifestyle change.

Beef primals & the cuts they contain

The large cuts, the ones fabricated at the slaughterhouse, are called primals. They are usually shipped whole, and broken down by local distributors, or even by neighborhood butchers and restaurants. In general the cuts that come off the primals can be classified as (1) roasts, which are large thick muscle groups that can feed at least four people, (2) steaks, individual servings that are flat and perfect for grilling, (3) stew meat, chunks cut from odd shaped pieces, and (4) ground meat or hamburger, from scraps.

Butchers long ago began excavating the carcass and named the cuts of meat, muscles, and groups of muscles they discovered. The jargon is confusing. There are more than 50 common cuts in the US, and some go by multiple names. Some have been confused for so long that nobody can say for sure what a Delmonico or London broil really are. To add to the confusion, the cuts and names are different around the world, even in English speaking countries.

New cuts



Meat scientists like the AmazingRibs.com consultant Dr.

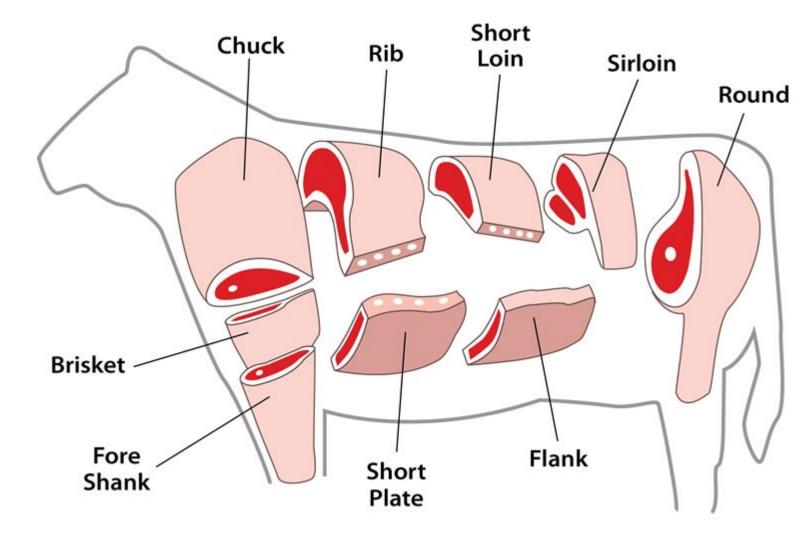
Antonio Mata have been busy digging around in the bovine carcass for decades in search of muscles and groups of muscles that deliver pleasure and profit. In 2012 Mata created and trademarked the Las Vegas Strip Steak (TM) from a muscle buried deep in the shoulder. It has a complex steely flavor, plenty of juice, and starts thin but plumps when grilled.

In the past few years he and his peers have created these newcomers, among others: Petite Tender, Rib Cap, Denver Steak, Ranch Steak, Merlot Cut, Sierra Cut, Santa Fe Cut, Tucson Cut, San Antonio Cut, Round Petite Tender, Braison, Western Griller, Western Tip, and the Flat Triangle. Restaurants are seeking a leg up on the competition by featuring these new cuts.

In the past decade bison has taken off. The cuts are similar as is the flavor, but the muscles tend to have less intramuscular marbling, making them big and bold in flavor and lower in calories. I have tasted a number of cuts from **High Plains Bison**.

Below I have named the most important beef cuts in the US, from a popularity and quality standpoint, and below the is a gallery of photos.

Beef Primal Cuts



Rib (10%)

Here's where the best meat on the steer is found. And the most expensive. Well marbled ribeye steaks are the first choice of connoisseurs, prime rib roast is the ultimate feast for friends and family, and the little known rib cap is the best muscle on the animal. These cuts have a perfect balance of muscle and intramuscular fat to produce optimal flavor and juiciness. Beef ribs come in two sections, the curved back ribs from near the spine, and the straighter, meatier short ribs, from the side, which start here and

Chuck (about 25% of the meat)

The sturdy shoulder shoulders a great deal of weight and is a tangled mass of muscles, sinew, and fat. Many impressive roasts and steaks come from the chuck, fine stew meat, not to mention most of the best burgers. At the rear of the chuck, where it connects to the rib primal there are about two steaks called chuck eyes that are practically the same as the vaunted ribeye, only a lot cheaper.

> **Roasts** Chuck roast

continue into the short plate and even into the chuck.

Roasts Prime rib roast

Steaks

Ribeye steak Cowboy ribeye Eye of ribeye Rib cap

Other

Back ribs Short ribs

Short Loin & Sirloin (18%)

Here's where the bargains are, in a section that can challenge the rib primal for primacy when cooked properly. Strip steak, sometimes called shell steak, is the he-man cut and filet mignon is the ladies' cut. That was true when it was not sexist to make such statements, and, despite all our progress and the pain it causes me to type this, it remains true. Strip is marbled and mouth coating, filet, from the tenderloin, has little fat and is the most tender muscle on the steer. Delightfully, the two come together like man and woman, separated only by a bone, in T-bone and porterhouse steaks. The T-bone and porterhouse are similar looking steaks with two muscles separated by a bone. One side has a small section of filet, and the other side has a strip steak.

Filets are cut from a long baseball bat-shaped muscle (without the handle) called the Shoulder clod roast Chuck roll Chuck eye roast Petite tender roast Arm roast

Steaks

Chuck eye steak Flat iron steak Blade steak Ranch steak Shoulder tender medallions Denver cut Country style chuck ribs Chuck short ribs Chuck roll Mock tender Las Vegas strip

Other

Ground chuck Stew meat

Round (27%)

The hind legs put in a lot of work pushing around 1000 pounds or so of beast and thus produce ornery cuts. There are some roasts that must be slow cooked and cut thin, plenty of stew meat, abundant hamburger, and a few steaks that beg for **reverse searing**: Start low and slow, and sear just before serving.

Roasts

Rump roast Top round London broil Top inside round roast Bottom round London Broil Bottom outside round roast tenderloin. Sometimes filets are left on the Tshaped bone, sometimes they are removed. Ditto for the strip. The big difference between the porterhouse and T-bone is the amount of filet. Because the T-bone is further to the front of the animal, the filet portion is smaller, a minimum of 1/2" at the top of the T, because it comes from closer to the handle of the bat. The filet on the porterhouse must be a minimum of 1 1/4", but they can be up to 3" wide. Interestingly, porterhouse is getting hard to find because the animals are getting so big that a 1" steak can weigh a whopping 25 ounces.

Tri-tip is the poor man's tenderloin, and strip loin roasts can be just as good as prime ribs.

Roasts

Strip loin roast Tenderloin roast Chateaubriand Tri-tip roast Ball tip roast Top sirloin roast Top sirloin butt roast

Steaks

Strip steak T-bone steak Porterhouse steak Sirloin steaks Coulotte steak Tenderloin tips Filet of sirloin

Other

Bottom sirloin flap meat Stew meat Eye of round roast Sirloin tip roast

Steaks

Sirloin tip steak Eye of round steak Round steak Top round steak Petite tender steaks

Other

Hind shank Stew meat Ground round

Brisket (6%)

This boneless mass from the chest contains two major muscles, including the pectorals, a thick fat cap, and it is tough as nails unless cooked low and slow. That's why it is braised in every Jewish household, or smoke roasted in every Texas barbecue joint. And on St. Patrick's Day cured brisket, corned beef, is simmered with cabbage. Take a slab of corned beef, give it the right rub, smoke it, and you may have the most sublime taste on the steer: pastrami.

Roasts

Whole brisket Brisket flat Brisket point

Fore Shank (4%)

A gnarly and knotty knot of twisted muscles and tendons, this is meat best for long slow braises and for soups.

Short Plate (6%)

Rife with marbling and layers of fat, this is the meat on top of the rib bones on the side, tough but rich. If cooked gently for a long time, as in a braise of wine and spices, or in air filled with smoke, it turns into the ultimate comfort food. Chefs are discovering that there are some fancy burgers in there.

Other

Foreshank Shank cross cut Osso bucco

Offal & Other Cuts

Heart Liver Kidneys Cheeks Tongue Brains, and Sweetbreads Tripe Stomach Ox Tails

Steaks

Skirt steak Hanger steak

Other

Short plate Short ribs Navel

Flank (4%)

Rich in beefy flavor, with a quick searing char, this flap of flavor is a poor man's ribeye. But beware, it has long fibers that must be cut across the grain and thin to give up its goodness.

> Flank steak Flap



Boneless rib roast. Click for a recipe.



Boneless ribeye. Eye is in center, rib cap on the right and bottom. Click here for steak cooking tips.



Bone-in ribeye. Click here for steak cooking tips.



Eye of ribeye.



Rib cap from American Wagyu beef.



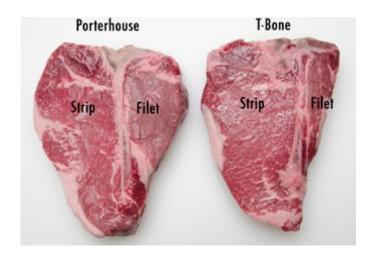
Chuck-eye. Click here for more about the various cuts of chuck steaks.



Cowboy ribeye, a.k.a.tomohawk ribeye



Two loin primals with two porterhouses facing us. At the bottom are the filets, on the top are the strips. If they were joined, they would be called a saddle of beef.



The main difference between the porterhouse and the T-bone is the size of the filet, which is from the tenderloin. The T-bone comes mostly from the shortloin and the filet must be a minimimum of 1/2" below the backbone (top of the T). The Porterhouse from the Sirloin, and the filet must be at least 1 1/4" wide below the backbone.



Bone-in strip steak.



Round/rump. This is the top of one of the rear legs and several cuts, mostly roasts, come from the round.



Navel is most often used for pastrami. Click here for a recipe for making pastrami.



Tri-tip. Click for a recipe



Whole packer brisket. Click here for my Texas Brisket recipe.



Flank steak. Click for a recipe.



Skirt steak (fajita steak).



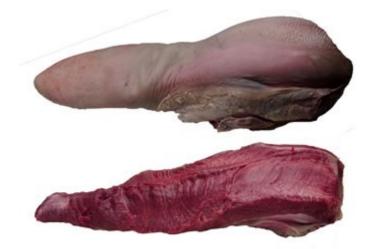
Beef cubes for kabobs or spiedies from bottom sirloin, but they can come from many cuts.



Flat-iron Steak. From the shoulder, the meat is flavorful and tender, but that strip of gristle is tough.



Las Vegas Strip Steak, from the chuck.



Tongue with its skin (top), without (bottom)





Chateaubriand (from the center of the tenderloin).

Whole tenderloin (top), butchered into chateaubriand, two steaks, and stir fry meat (bottom).



Filets Mignon from the chateaubriand, in a mushroom cream sauce.



Beef short rib. Click the link for pictures of other rib