



Your Beef Breakdown, Explained

If you have ever purchased a quarter, a side or a whole beef carcass, chances are you have wondered why you have received less meat than expected. The average weight of a live steer or heifer ready for harvest is 1,300 pounds! So how much of this product should you expect to receive in edible meat products?

Steer to Carcass

In order to change a 1,300-pound beef animal into edible meat product, butchers first have to convert it into a carcass by removing the hide, head and internal organs. On average, only 62 percent of the animal's original weight remains, resulting in an average carcass weight of 806 pounds. The meat industry calls this percentage the "dressing percentage," which varies between animals due to many factors including hide thickness, presence of horns, whether the animal was grass- or grain-fed, etc. The items removed in the conversion of an animal to a carcass are often not desired by consumers here in the United States, but you likely can request to have organ meats such as tongue, heart and liver wrapped and saved for you.

The beef carcass, which now only contains fat, bone, connective tissue and meat, is then chilled and hung for approximately 14 to 21 days. Chilling of the carcass converts muscle to meat. Once the meat is chilled properly, the carcass is then "aged" for the rest of the

14- to 21-day period. During this aging process the meat develops flavor, and most importantly, becomes more tender. Unfortunately, a small amount of weight is lost during the aging process due to water evaporation.

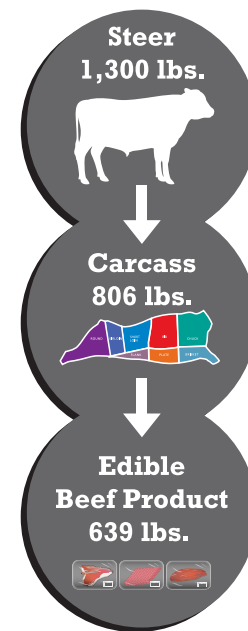
Carcass to Cuts

After the carcass is properly aged, it is ready to be broken down into retail cuts. On average, 21 percent of each carcass is inedible bone, fat and connective tissue. Once the carcass is fabricated and inedible objects are removed, a whole carcass will yield about 639 pounds of edible beef product.

Each beef carcass contains more than 200 muscles. Some of these muscles will become mouthwatering steaks such as Filet Mignon, while others may have little value as a steak or a roast and are directly converted into ground beef products. Ground beef is also made up of bits and pieces that are trimmed from steaks and roasts during the preparation process. Approximately 38 percent of the 639 pounds of edible beef products will be converted into ground beef. The remainder is cut into your favorite steaks and roasts as specified.

What Are Primals?

An important fact is that all steaks and roasts are not created equal. The carcass can be split into four major portions called primals. These four primals, the Chuck, Rib,



Loin and Round, all possess different taste characteristics because they are made up of different muscles with different tenderness levels, different fat contents and varying flavor profiles. For instance, the Chuck and Round are most commonly seen in roast form, but Round Roasts are much leaner (have less fat) than those from the Chuck and therefore will have a less intense flavor. The Rib and Loin are commonly cut into the steaks which are talked about most frequently — Ribeye Steak, Strip Loin Steak, Tenderloin Steak and Top Sirloin Steak. These primals can also be cut into high-quality roasts, but that will reduce the number of steaks available from the Rib and Loin. Generally, steaks and roasts from the Loin are leaner than those from the Rib.

For a full breakdown of yields and possible retail cuts from each primal, see page 2. Most butchers will provide an order sheet that allows you to select the cuts and portions you desire from the possible options.



Funded by the Beef Checkoff.

CHUCK (29%, 233.7 lbs.)

	Edible	Inedible
CHUCK ROLL	37.9	
Chuck Roasts		
CHUCK CLOD	27.1	
Arm Roasts		
Flat Iron Steaks		
Shoulder Petite Tenders		
MOCK TENDER	6.3	
SHORT RIBS	2.8	
GROUND BEEF, STEW, etc.	124.6	
FAT & BONE LOSS		35.0
TOTAL	198.7	35.0

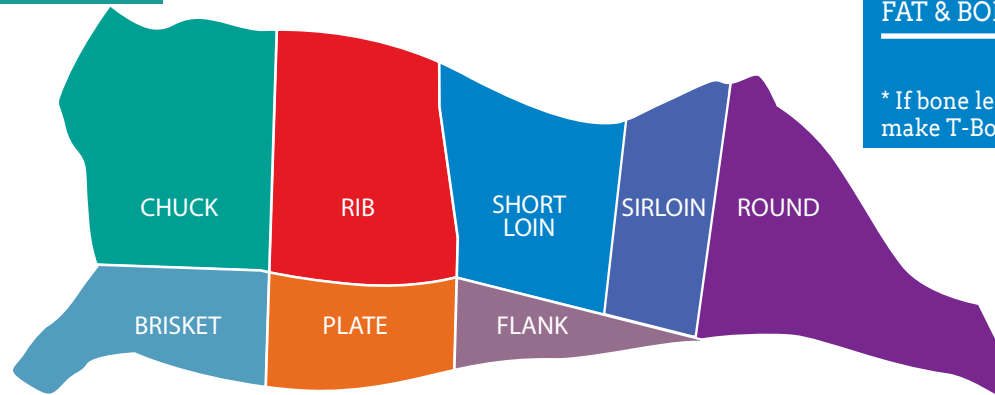
RIB (9%, 72.5 lbs.)

	Edible	Inedible
RIBEYE ROLL (Boneless)	33.9	
Ribeye Steaks		
Ribeye Roasts		
SHORT RIBS	8.7	
GROUND BEEF, STEW, etc.	20.6	
FAT & BONE LOSS		9.3
TOTAL	63.2	9.3

LOIN (16%, 129 lbs.)

	Edible	Inedible
PEELED TENDERLOIN*	11.9	
Tenderloin Steaks		
STRIP LOIN*	24.9	
Strip Loin Steaks		
TOP SIRLOIN	20.8	
Top Sirloin Steaks		
Top Sirloin Roasts		
TRI-TIP	8.8	
SIRLOIN FLAP	8.0	
BALL TIP	5.0	
GROUND BEEF, STEW, etc.	20.1	
FAT & BONE LOSS		29.5
TOTAL	99.5	29.5

* If bone left in, the Strip Loin and Tenderloin together make T-Bone and Porterhouse Steaks



MISCELLANEOUS (5%, 40.3 lbs.)

	Edible	Inedible
HANGING TENDER	2.2	
KIDNEY	3.8	
BREAKING FAT LOSS		34.3
TOTAL	6.0	34.3

THIN CUTS (19%, 153.1 lbs.)

	Edible	Inedible
FLANK	4.3	
PLATE, OUTSIDE SKIRT	3.4	
PLATE, INSIDE SKIRT	6.2	
BRISKET	26.4	
GROUND BEEF, STEW, etc.	90.1	
FAT & BONE LOSS		22.7
TOTAL	130.4	22.7

These figures are averages based on a 1,300 pound, Yield Grade 3 Steer. Not all carcasses are created equal and carcass data will vary based on breed, size, fatness level and cutting method.

For more information about these cuts, nutrition information or for recipes, visit our Interactive Butcher Counter on BeefItsWhatsForDinner.com

ROUND (22%, 177.3 lbs.)

	Edible	Inedible
SIRLOIN TIP (KNUCKLE)	25.5	
Sirloin Tip Steaks		
Sirloin Tip Roasts		
TOP ROUND	48.2	
Top Round Steaks		
Top Round Roasts		
GOOSENECK	64.3	
Eye of Round Steaks		
Bottom Round Steaks		
Eye of Round Roasts		
Bottom Round Roasts		
GROUND BEEF, STEW, etc.	2.9	
FAT & BONE LOSS		36.4
TOTAL	140.9	36.4

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www.beefresearch.org



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