Beef Processing Options for Consumers



K-STATE Research and Extension

Shank - 3%; Kidney, Pelvic, and Heart Fat - 3%

The primal cuts of beef as a percentage of carcass weight.

This guide explains choices available to consumers when they take a beef animal to be processed. It provides information on the approximate amount of meat that should be returned from each primal after the animal has been prepared to customer specifications.

Chuck: The chuck is commonly cut into bone-in or boneless roasts of specified thickness or weight. Alternatively, the chuck can be cut into bone-in steaks and some boneless steaks. Ranch steaks, flat iron steaks, and petite tender steaks are boneless steaks commonly produced from the chuck. Some of the chuck also can be used for stew meat or ground beef.

Rib: Normally, the rib is cut into either bone-in ribeye steaks or boneless ribeye steaks and back ribs. Consumers may prefer the rib to be cut into either boneless or bone-in roasts for cooking of prime rib.

Short loin: Two options for cuts from the short loin are T-bones and porterhouse steaks or boneless New York strip steaks and tenderloin steaks (filets). T-bones and porterhouses are larger cuts. The boneless options are typically selected by consumers who desire smaller portion sizes.

Sirloin: The sirloin can be cut into either boneless or bone-in steaks. Because of the large size of bone-in sirloin steaks, customers may prefer smaller boneless alternatives. Additionally, the coulotte roast (sirloin cap) can be cut from the sirloin or cut as part of the sirloin steaks. The tri-tip is typically cut as a roast from the sirloin as well.

Round: Cut options from the round include tip roasts, rump roasts, heel roast, and top, bottom, and eye-of-round roasts of a specified size and weight. The round can also be cut into steaks, with many customers choosing to have some of these steaks tenderized (for chicken fried steak) or to have this product produced into ground beef.

Ground beef: Consumers can specify leanness of ground beef, commonly 90%, 80%, or 70% lean, but can expect fewer pounds of ground beef with increased lean points.

Miscellaneous: Each carcass half has one brisket and flank steak as well as two skirt steaks. Briskets can either be whole or cut into two halves (flat half and point half). The plate can be returned as short ribs or used for ground beef. Organs (heart, liver, kidneys, oxtail, and tongue) are optional.

Beef Cutout Tables

The numbers below are based on an 800-pound, Low Choice, Yield Grade 3 carcass and represent the industry average. A 3% shrink (cooler shrink and cutting loss) is assumed. The table shows boneless and bone-in options and the approximate weight and percentage of the hot (unchilled) carcass represented by each.

Boneless Option	% of Hot Carcass	Weight (lbs)
Chuck		
Chuck eye roasts or steaks	4.1	32.8
Mock tender roasts or steaks	0.8	6.2
Flat iron steaks	1.3	10.3
Shoulder petite tender steaks	0.3	2.1
Ranch steaks or boneless arm roasts	1.5	12.3
Denver steaks	0.8	6.2
Boneless short ribs	0.3	2.1
Ground beef / stew meat	12.8	102.6
Fat and bone	3.8	30.8
Rib		
Ribeye steaks or boneless rib roasts	3.5	28.1
Back ribs	1.0	7.9
Ground beef or stew meat	3.2	25.8
Fat and bone	1.8	14.4
Loin		
Strip loin steaks	3.1	24.5
Tenderloin steaks or roasts	1.5	11.6
Top sirloin steaks (cap-off)	2.1	16.8
Coulotte (sirloin cap)	0.5	3.9
Tri tip roast	1.1	9.0
Ground beef	4.2	33.6
Fat and bone	3.7	29.7
Round		
Top round steaks and roasts	5.6	45.1
Bottom round steaks and roasts	3.7	29.4
Eye of round steaks and roasts	1.3	10.8
Tip steaks and roasts	2.9	23.4
Ground beef / stew meat / kabob meat	2.9	23.3
Fat and bone	4.4	35.1
Miscellaneous		
Brisket	3.2	25.8
Flank steak	0.5	3.8
Short ribs	6.3	50.2
Skirt steaks	1.1	9.1
Kidney, pelvic, and heart fat	2.0	16.0
Ground beef	5.4	43.1
Fat and bone	6.3	50.2
Total steaks and roasts	46.4	371.4
Total ground beef / stew meat	28.6	228.5
Total fat and bone	22.0	176.2

Bone-in Option	% of Hot Carcass	Weight (lbs)
Chuck		
Blade roasts and steaks	10.2	81.8
Bone-in arm roasts and steaks	7.6	60.9
Ground beef / stew meat	5.0	39.9
Fat and bone	2.8	22.7
Rib		
Bone-in ribeye steaks or roasts	4.5	35.7
Ground beef / stew meat	3.2	25.8
Fat and bone	1.8	14.4
Loin		
T-bones and porterhouses	4.5	36.2
Bone-in sirloin steaks	3.1	24.5
Tri tip roast	1.1	9.0
Ground beef	4.2	33.6
Fat and bone	3.2	25.8
Round		
Top round steaks and roasts	5.6	45.1
Bottom round steaks and roasts	3.7	29.4
Eye of round steaks and roasts	1.3	10.8
Tip steaks and roasts	2.9	23.4
Ground beef / stew meat / kabob meat	2.9	23.3
Fat and bone	4.4	35.1
Miscellaneous		
Brisket	3.2	25.8
Flank steak	0.5	3.8
Short ribs	6.3	50.2
Skirt steaks	1.1	9.1
Kidney, pelvic, and heart fat	2.0	16.0
Ground beef	5.4	43.1
Fat and bone	6.3	50.2
Total steaks and roasts	55.7	445.9
Total ground beef / stew meat	20.7	165.7
Total fat and bone	20.5	164.2

References

A Guide to Beef Cuts – Beef Retail. 2017. National Cattlemen's Beef Association, Centennial, CO. Available from: http://www.beefretail.org/

Beef Cutout Calculator. 2010. National Cattlemen's Beef Association, Centennial, CO. Available from: http://beefresearch.org/CMDocs/BeefResearch/Beef Cutout Calculator.pdf

Beef Cuts Primal and Subprimal Weights and Yields. 2014. National Cattlemen's Beef Association, Centennial, CO. Available from: http://www. beefboard.org/library/files/BeefCutsGuide.pdf How Much Meat to Expect From a Beef Carcass. 2014. Rob Holland. University of Tennessee. Knoxville, TN. Available from: https://extension.tennessee.edu/ publications/Documents/PB1822.pdf

How Much Meat to Expect from a Carcass. 2010. Gregg Rentfrow. University of Kentucky, Lexington, KY. Available from: http://www2.ca.uky.edu/ agcomm/pubs/asc/asc179/asc179.pdf

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