

# BEEF CARCASS CLASSES AND GRADING

## 1. TERMINOLOGY

### Muscling

Ribeye:

a larger ribeye

Chuck:

a more muscular chuck

a wider, more bulging chuck

a thicker chuck

Rib:

a plumper rib

a more muscular rib

Sirloin:

a plumper sirloin

a more bulging sirloin

a more muscular sirloin

Round:

a plumper round

a wider, thicker round

a more bulging round

a more muscular round

### Trimness

less fat opposite the ribeye

less kidney, pelvic, and heart fat

less fat over the:

Brisket

Chuck

Rib

Plate

Short-rib region

Loin

Loin edges

Sirloin

Round

Inside or outside round

less cod or udder fat (as applicable)

### Quality

Marbling:

a higher degree of marbling (Select vs Choice)

a greater amount of marbling

more finely dispersed marbling  
a more uniform distribution of marbling

Firmness:

a firmer lean in the ribeye

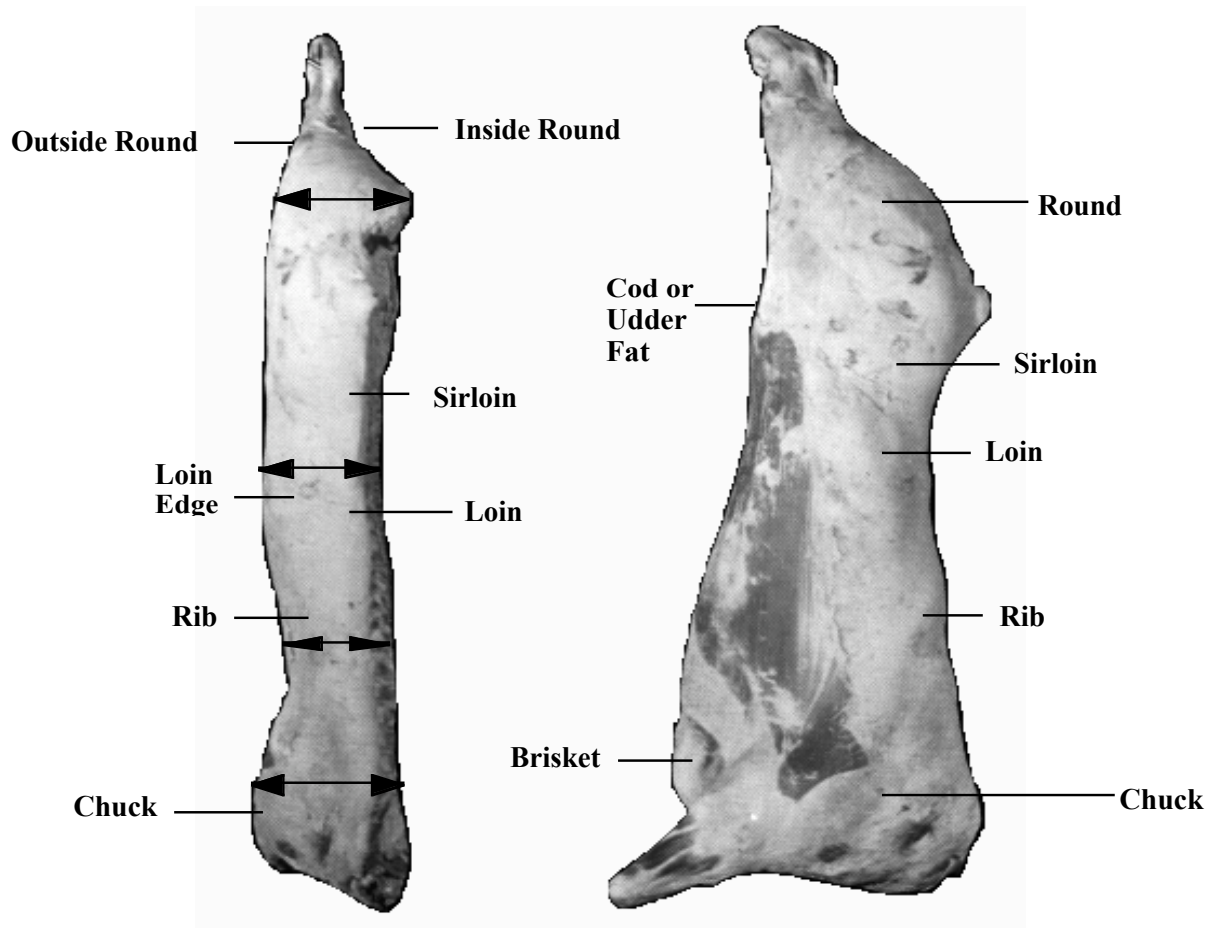
Texture:

a finer-textured lean in the ribeye

Color:

a brighter or more youthful colored lean in the ribeye

a brighter more cherry-red colored lean in the ribeye



## 2. HINTS ON JUDGING BEEF CARCASSES

- Identify the sex class of each carcass by looking at the fat in what is known as the cod or scrotal region (steers) or the udder region (heifers). Mention the sex of a carcass in reasons if all of the carcasses are not of the same sex class.
  - A) Steers have cod fat, which is typically rough and irregularly shaped, similar to “clumps of grapes” or “marbles.”
  - B) Heifers have udder fat, which is typically smooth and uniformly shaped, similar to “a football.”
- Students must be able to yield and quality grade beef carcasses to correctly place beef carcass classes. Unfortunately, learning these skills usually requires much effort and practice for most students. The best way to learn is to practice on actual carcasses in a beef processing plant. Students should be able to quickly grade carcasses so they will have enough time to analyze and place the class and take other notes as necessary.
- The contestants will not be able to use any aids in grading except visual appraisal. Make sure each student understands the basics before going into the cooler.
- Learning how to estimate preliminary yield grade (PYG) from fat thickness is the most important estimate a student must make. One method of teaching students to estimate fat thickness is to draw short lines on a piece of paper and have each student estimate the PYG of that line.
- The biggest difficulty for students is remembering that YG 1 is the most desirable and YG 5 is least desirable; therefore, if a carcass is heavier muscled than the average, you subtract the PYG adjustment and add for lighter muscled carcasses.

- Current market trends determine emphasis of quality and yield grades. For example, if beef carcasses in industry are currently discounted due to poor quality grades, then this loss of value should determine where a similar carcass in a class would place. Just as carcasses can be discounted for inferior quality, they can also be discounted for poor yield grades. Generally speaking, Prime, Top Choice and Choice quality grades are preferred as well as yield grades of 3 and better. Discounted carcasses currently include those with a Standard quality grade and/or yield grades of 4 and 5.
- How do we weigh the value of yield and quality grades? Suppose we have a carcass class in which there are three Choice and one Select carcasses, but the lowest quality carcass also has the best yield grade? Coaches should be familiar with current industry trends to help contestants understand how much emphasis is placed on the various grading differences. Many coaches have a general rule on weighing quality and yield grades: for a lower quality carcass to place above a higher quality carcass, it must be at least one and one-half numerical yield grades (1.5 YGs) better than the higher quality carcass. Carcasses that are Yield Grade 4 and 5 are often discriminated against in a beef carcass class.

### 3. EXAMPLE REASONS

#### BEEF CARCASSES

Placing: 4-3-1-2

I placed this class of beef carcasses 4-3-1-2.

(4/3) I placed 4 over 3 because 4 was a higher quality carcass as evidenced by a higher degree of more finely dispersed marbling in a firmer, brighter, more cherry-red colored lean in the ribeye. In addition, 4 displayed less fat in the short-rib region, over the chuck and the brisket, and in the udder region, as well as a larger ribeye and a plumper round. I admit 3 exhibited less fat opposite the ribeye and over the loin, the loin edge, and the rib.

(3/1) I placed 3 over 1 because 3 was a trimmer, more muscular carcass. 3's trimness was evidenced by less fat opposite the ribeye, less kidney, pelvic, and heart fat, less fat over the loin edge, rib, chuck, and less fat in the short-rib region. 3's muscling was evidenced by a larger ribeye, a thicker round, a plumper sirloin, and a more muscular chuck. I realize 1 had less fat over the round and the sirloin, along with a greater amount of marbling in the ribeye.

(1/2) I easily placed 1 over 2 as 1 exhibited greater trimness as indicated by much less fat opposite the ribeye, much less fat over the round, sirloin, loin, rib, and chuck, less fat in the short-rib region, less brisket fat, and less udder fat. Moreover, 1 revealed a firmer lean in the ribeye. I concede 2 displayed a plumper round and a more muscular chuck, combined with a brighter colored lean in the ribeye.

(2 Last) 2 placed last because it was the fattest carcass in the class. This was seen by the most fat opposite the ribeye, the most fat over the round, sirloin, loin, rib, chuck, and brisket, and an abundance of udder fat. Therefore, 2 would yield the lowest percentage of closely trimmed retail cuts and thus placed last.

I placed this class of beef carcasses 4-3-1-2.

**4. SAMPLE NOTES FOR BEEF CARCASS CLASS - Placing: 4-3-1-2 (All Heifers)**

<b>4/3</b>	<b>QUALITY</b> - Choice vs. Select	3/4
M	Larger ribeye Plumper round	M
T	Over short-rib, chuck, brisket Udder fat	T Opposite ribeye Over loin, loin edge, rib
Q	Higher degree of marbling More finely dispersed marbling Firmer lean Brighter, cherry-red color	Q
<b>3/1</b>	<b>TRIMNESS, MUSCLING</b>	1/3
<b>M(2)</b>	Larger ribeye Thicker round Plumper sirloin More muscular chuck	M
<b>T(1)</b>	Opposite ribeye Over loin edge, rib, short-rib, Over chuck	T Over round, sirloin
Q		Q More marbling
<b>1/2</b>	<b>TRIMNESS (easy pair)</b>	
M		M Plumper round More muscular chuck
T	Opposite ribeye ( <u>much</u> ) Over round, sirloin, loin ( <u>much</u> ) Over rib, chuck ( <u>much</u> ) Over short-rib, brisket Udder fat	T
Q		Q Brighter color
<b>2</b>	<b>LAST - FATTEST IN CLASS</b>	
	Most opposite ribeye Most over round, sirloin, loin	Most over rib, chuck, brisket Abundance of udder fat