

BEEF CARCASS JUDGING CARD

Exhibitor number: _____

PLACINGS: 1st _____

2nd _____

3rd _____

4th _____

PLACING SCORE: _____
REASON SCORE: _____
TOTAL: _____

REASONS	Marbling Prime-Ideal AAA - small amt AA - slight amt A - trace amt	Weight Ideal 875-1050lbs Min. <700 lbs Max. >1050 lbs	Yield Grade Y1: >52.3% Y2: 52.3%-50% Y3: 47.7 - 50% Y4: 45.5-47.7% Y5: < 45.4%	Fat Cover Ideal: 7-9 mm <2 mm-Grade B >10 mm-too much	Fat Color Ideal: White Yellow: B3	Score
I place ____ over ____ because:						
Comments:						
I place ____ over ____ because:						
Comments:						
I place ____ over ____ because:						
Comments:						
I place ____ last because:						
Comments:						

BEEF CARCASS JUDGING GUIDE



APPROACH TO JUDGING A BEEF CARCASS CLASS

Judging a beef carcass class is similar to judging other 4-H classes. Members have 20 minutes to evaluate and compare 4 carcasses and complete a judging card. Initially, members should stand back and look at the class from a distance to help form their first impression placing. Then follow with a close inspection of each carcass and adjust your placing if needed and develop your reasons. Carcasses are displayed in a cooler, and members are not allowed to touch the carcasses. The carcasses are numbered 1,2,3,4 from left to right as in other 4-H classes when viewed facing the

front of the cooler. The judging card has been modified to help members develop their reasons for beef carcass judging. An example of the beef carcass judging card is included, and should be reviewed prior to judging the class.

CHARACTERISTICS OF AN IDEAL BEEF CARCASS

The ideal beef carcass weighs 875-1050 lbs and is heavily muscled showing meatiness and thickness from the hock to neck especially through the round, loin and rib cuts. It should have even distribution of white firm fat over the outside surface, and the lean meat should be bright cherry red in color and fine in texture. The ideal carcass will have a firm large oval ribeye with abundant finely dispersed marbling throughout the lean meat. It will also have indicators of a high yield grade which are large ribeye muscle at the level of the 12th to 13th rib with 7-9 mm of firm white fat on the outside rim.

JUDGING CRITERIA FOR BEEF CARCASSES

Members should develop a systematic way to evaluate each carcass in the class. The judging card for the carcass class is modified to help members consider important factors in the process of evaluating the quality and yield grade of the carcasses.

There are categories on the beef carcass judging card:

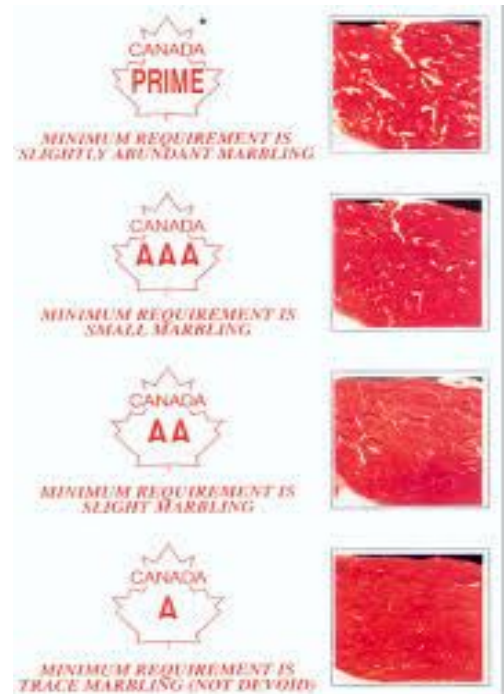
- 1, Marbling
2. Yield grade
3. Carcass Weight
4. Fat cover
5. Fat colour

These 5 categories are important to consider when attempting to determine the overall quality and value of beef carcasses. The quality grade of a beef carcass depends upon the following factors: maturity, sex, marbling, fat colour and texture, and meat colour and texture. At the fair, all carcasses are considered to be youthful (less than 24 months of age) and no carcasses from bulls are allowed, so the factors of maturity and sex are equalized. The colour of lean meat and fat influence consumer's acceptability of beef and play a role in determining the quality grade. Marbling is a critical factor in assessing the quality grade of the carcasses, as it affects the eating quality, juiciness and tenderness of meat. Another important consideration in evaluating beef carcasses is determining the yield grade which is an estimate of the percent of the carcass that will yield boneless, closely trimmed saleable retail cuts from the round, loin, rib and chuck. Consideration of these 5 categories will help members determine which carcass is most ideal and be able to place them in order with supporting reasons.

Marbling

Marbling is the intermingling and dispersion of fat in the lean meat of the carcass. The flecks of fat should be bright white, firm and finely distributed throughout the muscle. Graders evaluate the amount of marbling on the cut surface of the ribeye muscle after the carcass has been ribbed between the 12th and 13th rib. The degree of marbling is the primary determination of quality grade. In close placings between carcasses, emphasis is often placed on the degree of marbling.

In Canada, there are 4 high quality grades of youthful beef. Approximately 98% of all young Canadian beef carcasses receive one of these four grades. The only difference between these four grades is the degree of marbling. Canada Prime is the most desirable grade and has the most marbling present.



Canada Prime - slightly abundant marbling

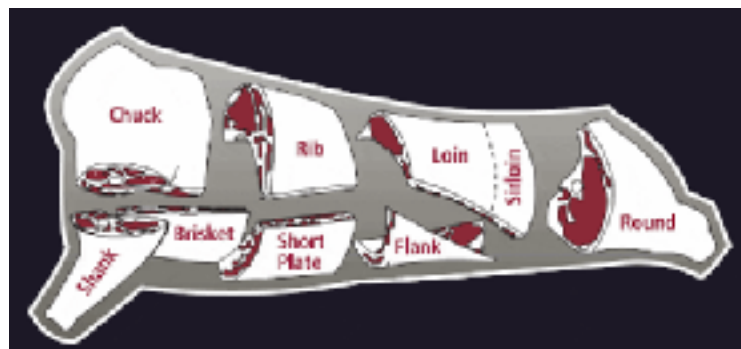
AAA - small amount of marbling

AA - slight amount of marbling

A - trace amount of marbling

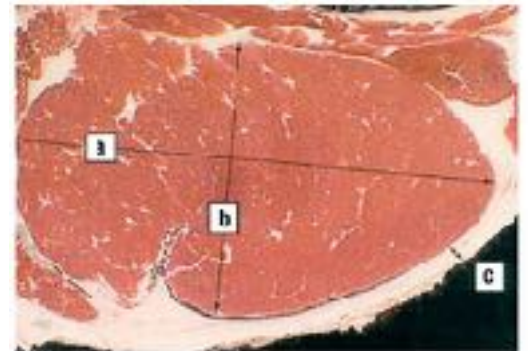
Yield Grade

Yield grade is a prediction of cutability or yield of boneless, closely trimmed retail cuts from the round, loin, rib, and chuck.



It helps define the percent of the carcass that will end up as saleable meat product. The yield grade is determined by considering the dimensions of the ribeye at the cut

surface between the 12th and 13th rib, and the fat depth on the outside rim of the ribeye. The amount of lean meat in the whole carcass is estimated by the size of the ribeye muscle. It has been found that the size of the ribeye muscle correlates well with total carcass muscle. Larger ribeyes reflect heavier muscled carcasses that have greater lean meat. The fat measurement on the outside of the ribeye accurately reflects overall fat content of the carcass. A ruler is often used to measure the fat depth, and the rib eye length and width. These measurements of fat and lean are then used to predict the overall carcass yield grade.



a) rib-eye length b) rib-eye width c) fat depth on the rib-eye

When a carcass qualifies for Canada A grades, they are also given a yield grade. In Canada there are five yield grades:

1. Yield Grade 1: carcasses with 52.3% or more lean useable meat.
2. Yield Grade 2: carcasses with 52.3-50% lean useable meat.
3. Yield Grade 3: carcasses with 47.7-50% lean useable meat.
4. Yield Grade 4: carcasses with 45.5-47.7% lean useable meat
5. Yield Grade 5: carcasses with <45.4% lean useable meat

When judging carcasses, members are only able to make an estimation of yield grade. They will not be able to measure the ribeye or fat depth with a ruler. Members will need to visually assess the depth of the exterior fat of the rib eye and the size and shape of the ribeye muscle. In a close placing where marbling is very comparable, emphasis is placed on yield grade to determine ranking of carcasses.

Carcass Weight

The ideal beef carcass weighs 875-1050 lbs. When carcasses are graded, they are assessed points depending on their weight. Heavy and light carcasses are given fewer points as they do not meet current market demands. Carcasses less than 700 lbs are often lightly muscled and have inadequate fat cover, and carcasses more than 1050 lbs are often overly fat and have lower yields. Within the same yield and quality grades heavier carcasses are more valuable until the carcass gets too heavy and receives a price per lb discount

Fat Cover

Fat is necessary for flavour, juiciness and tenderness of meat. Beef carcasses should have even distribution of fat over the outside of the carcass. The fat should be firm and consistent. Optimal fat cover allows the carcass to cool in a way which maximizes eating quality. Fat cover is assessed over the round, loin edge, plate, chuck, and brisket area. Evaluating the entire carcass for fat cover is important to see

if the ribeye measurement of fat is truly representative of the entire carcass. Carcasses with minimal fat cover and less than 2 mm of fat on the outer rim of the ribeye don't meet the requirement for Canada A grades and fall into the Canada B category. Carcasses with excessive fat have lower yields and are less desired. Evaluating the amount of fat on the outside of a beef carcass is another way to estimate the yield of a carcass.

Yield Grade 1: These carcasses have a thin layer of external fat over the loin and rib; there are slight deposits of fat in the flank, cod, kidney, pelvic and heart regions. Usually there is a very thin layer of fat over the outside of the round and over the chuck.

Yield Grade 2: These carcasses are almost completely covered with external fat, but lean is very visible through the fat over the outside of the round, chuck and neck. Usually, there is a slightly thin layer of fat over the inside round, loin and rib, with a slightly thick layer of fat over the rump and sirloin.

Yield Grade 3: These carcasses are usually completely covered with external fat; lean is plainly visible through the fat only on the lower part of the outside of the round and neck. Usually, there is a slightly thick layer of fat over the rump and sirloin. Also there are usually slightly larger deposits of fat in the flank, cod, kidney, pelvic and heart regions.

Yield Grade 4: These carcasses are usually completely covered with external fat, except that muscle is visible in the shank, outside of the flank and plate regions. Usually, there is a moderately thick layer of external fat over the inside of the round, loin and rib, along with a thick layer of fat over the rump and sirloin. There are usually large deposits of fat in the flank, cod, kidney, pelvic and heart regions.

Yield Grade 5: Generally, the carcass is covered with a thick layer of fat on all external surfaces. Extensive fat is found in the brisket, cod, kidney, pelvic and heart regions.

Fat Color

Fat should be white and firm. When fat is discoloured, carcasses will be discounted. Yellow fat is less pleasing for the consumer and will result in lower grading (Canada B2). The colour of fat can be influenced by the diet and health of the market animal.