Beef Carcass Evaluation

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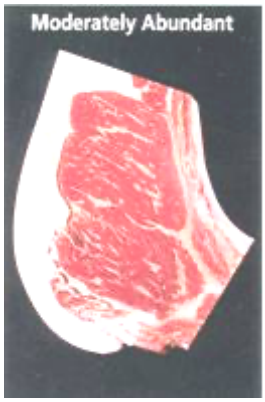
Beef carcass evaluation may seem intimidating as compared to the pork and lamb. However if you estimate and evaluate in a step by step manner, it is easy and fun.

Pick a carcass and begin!!

Step 1: Estimate a Quality Grade (How "good" the carcass is)

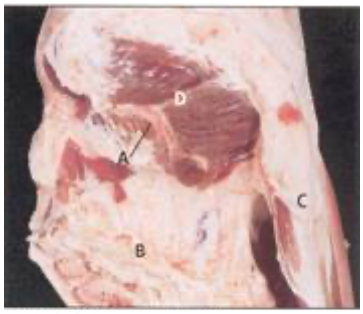
- Maturity - Look at the buttons on the thoracic vertebrae to estimate maturity (age) of the carcass. If they're pure white – OK!

- Marbling – The flecks of fat in the ribeye. The more amount of marbling the higher the quality grade.



Step 2: Compare Yield Grades (How "much" meat is in the carcass)

- (See attached sheet)

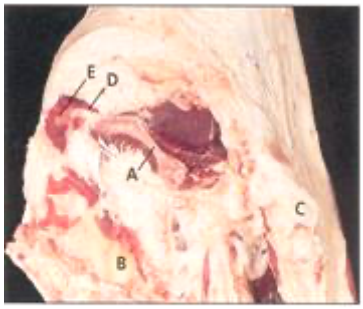


Heifer Carcass

A. Aitch Bone
B. Pelvic Cavity
C. Udder Fat
D. semimembranosus

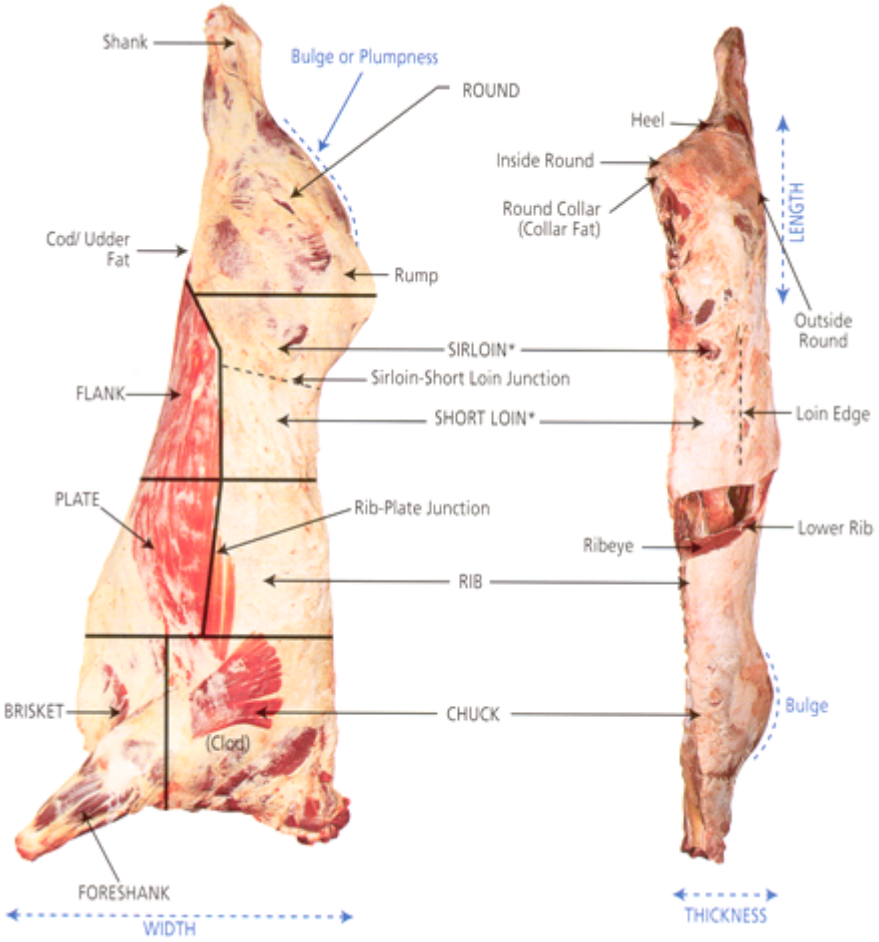
Step 3: Evaluate all the carcasses and make notes.

- Determine the sex of the carcass.
- Compare the carcasses as far as their parts are concerned. From round to chuck.
- For example:
    - Determine which had the larger ribeye area?
    - Determine the sex of each carcass,
    - Which had the heavier muscled round?
    - Which had the heavier muscled chuck?
    - Which carcass was the fattest?
    - Note defects such as: Blood splashing, dark cutters, etc…



Steer Carcass

A. Aitch Bone
B. Pelvic Cavity
C. Cod Fat
D. Pizzle Eye
E. Pizzle Muscle



Step 4: Place the class based on the Quality and Yield Grade observations. (Make notes for reasons and questions if so noted.)
Rule of Thumb: Carcasses that achieve a quality grade of Choice average or higher with a desirable yield grade (Yield grade 3 or better) have considerable value and usually place high in a judging class. When yield grades are fairly similar, Choice carcasses should always place over Select or Standard carcasses. If yield grades are fairly similar (within 0.8 yield grade), a Prime carcass would place over a Choice carcass. However, a Select carcass which is one yield grade better than a Choice carcass, would rank over the Choice carcass. The same would be true for yield grade differences between Choice and Prime carcass pairs.

Sample Beef Carcass Questions:

1. Which carcass had the most desirable yield grade?
2. Which carcass had the least desirable quality grade?
3. Between carcasses 1 and 2 which had the larger rib eye area?
4. True or False: All carcasses were heifer carcasses.
5. Which carcass had the heavier muscled, plumper cushioned round?

Carcass Ranges:

	Average	Range
Carcass Weight, pounds	800	630 - 1000
Fat thickness, 12-13th rib, inches	0.5	0.1 – 1.0
Ribeye area, square inches	12.5	9.5 - 17
Kidney, pelvic, heart fat (KPH), %	2.0	1.0 - 4.0
Yield Grade	3.0	1.0 – 5.0
Quality Grade	Se- - Ch°	Ch-

Beef Carcass Evaluation

ID	Example	1	2	3	4
Carcass Weight (pounds)	650				
Maturity (A, B, C, D, or E)	A				
Ribeye Area (square inches)	12.6				
Fat Thickness (inches)	.4				
% Kidney, pelvic, and heart fat (1% – 5%)	2.5				
Marbling	small				
Quality Grade					
Yield Grade: Fat thickness = base YG					
Ribeye Adjustment					
KPH Adjustment					
Final yield grade					

1. Starting Yield Grade

Fat	Yield Grade
.1	2.2
.2	2.5
.3	2.7
.4	3.0
.5	3.2
.6	3.5
.7	3.7
.8	4.0
.9	4.2
1.0	4.5

2. Ribeye Adjustment

Weight	Ribeye
550	10.4
600	11.0
650	11.6
700	12.2
750	12.8
800	13.4
850	14.0

+ 1.0" = - .3 YG
- 1.0" = + .3 YG

3. % KPH Adjustment

% KPH	YG Change
1.5%	- .4
*2.5%	- .2
3.5%	—
4.5%	+ .2

*average for most carcasses

Beef Quality Grades

Degrees of Marbling	MATURITY A	B	C	D	E
Slightly Abundant	PRIME				
Moderate			COMMERCIAL		
Modest	CHOICE				
Small					
Slight	SELECT		UTILITY		
Traces	STANDARD				
Practically Devoid				CUTTER	

Fat Thickness

12th – 13th Rib

Maturity

A = 9–30 months
B = 30–42
C = 42–72
D = 72–96
E = > 96 months