Pork Carcass Value Determining Traits
Important

• Classes are ranked from the most valuable to the least valuable.
  
  – Therefore a general understanding of what determines carcass value is needed.

• Carcass cutability and quality determine carcass value.
Basics

• Cutability is the expected yield of the 4 lean cuts
  – The 4 lean cuts are the ham, loin, Boston butt and picnic shoulder.

• Quality refers to the expected palatability of the cooked product
  – Flavor, juiciness, tenderness
The 3 components of Pork Carcasses

- FAT
- MUSCLE
- BONE
CARCASS FATNESS

• Fatness is the most important factor in determining the cutability of a carcass.
• Fatness in one area is a good indicator of fatness in other areas.
• Fatter carcasses yield a lower percentage of the 4 lean cuts.
MUSCLE

• The degree of muscle is the second factor used to determine the cutability of a carcass.
• Muscling in one area is a good indicator of muscling in other areas
• Example, using the area of exposed lumbar lean as an indicator of loineye area in a pork carcass class.
BONE

• Bone is not considered a factor in placing pork carcass class
  – Because carcasses of similar structural dimensions will contain similar amounts of bone.
General Information

• Pork Carcass Cutability
  – Approximately, 75% of the hogs sold to the packers today are sold on a carcass merit basis.
    • These programs use a combination of weight and a measure of carcass composition to determine the price that will be offered to the producer.
    • These programs pay higher premiums for higher cutability carcasses
General Information cont.

• Pork Quality
  – Rapidly becoming a more important value determinant in the marketing of pork.
  – Important characteristics
    • Lean Color
    • Marbling (Intramuscular Fat)
    • Lean Firmness
    • Water Holding Capacity (Processing)
Pork Carcass Evaluation
Factors Affecting Pork Cutability

- The amount of external fat present.
- The degree of muscling evident in the carcass.
  - Can be measured using muscle score.
Muscle Scores

3 2+ 2 2- 1

Thick Average Thin
Factors Affecting Pork Quality

- Lean color
  - Reddish-pink is ideal
  - Pale is bad

- Firmness of the lean
  - Firmer is better
  - Softer is bad

- The amount of marbling present in the loineye.

- Pale, soft, and exudative lean is unacceptable.
Pork Quality

PSE - Pale pinkish gray, very Soft and Exudative. Undesirable appearance and shrinks excessively.

RSE - Reddish pink, Soft and Exudative. Desirable color but subject to excessive shrinkage.


DFD - Dark purplish red, very Firm and Dry. Firm and sticky surface, high water holding capacity.
How Do You Rank Pork Carcasses?

- Pork carcasses are ranked on two factors.
  - Trimness
  - Muscling
- Carcasses which exhibit a good combination of these factors are more desirable.
How Would You Rank These Carcasses?
Carcass # 1

Avg. Backfat : 0.85
LEA : 7.6
Muscle Score : 3
Carcass # 2

Avg. Backfat : 0.8
LEA : 5.4
Muscle Score : 2+
Carcass # 4

Avg. Backfat : 1.82
LEA : 4.9
Muscle Score : 2-
The Placing is 1-2-3-4

• Carcass #1 is the heaviest muscled and one of the trimmest, therefore it places first.
• Carcass #2 is the second heaviest muscled and is also one of the trimmest so it falls into second.
• Even though carcass #3 is light muscled, it is acceptable in trimness, and so it places third because carcass # 4 is unacceptable in trimness.
• Carcass #4 places last as it is the fattest, lowest cutability carcass in the class.