

# 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 loin eye 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

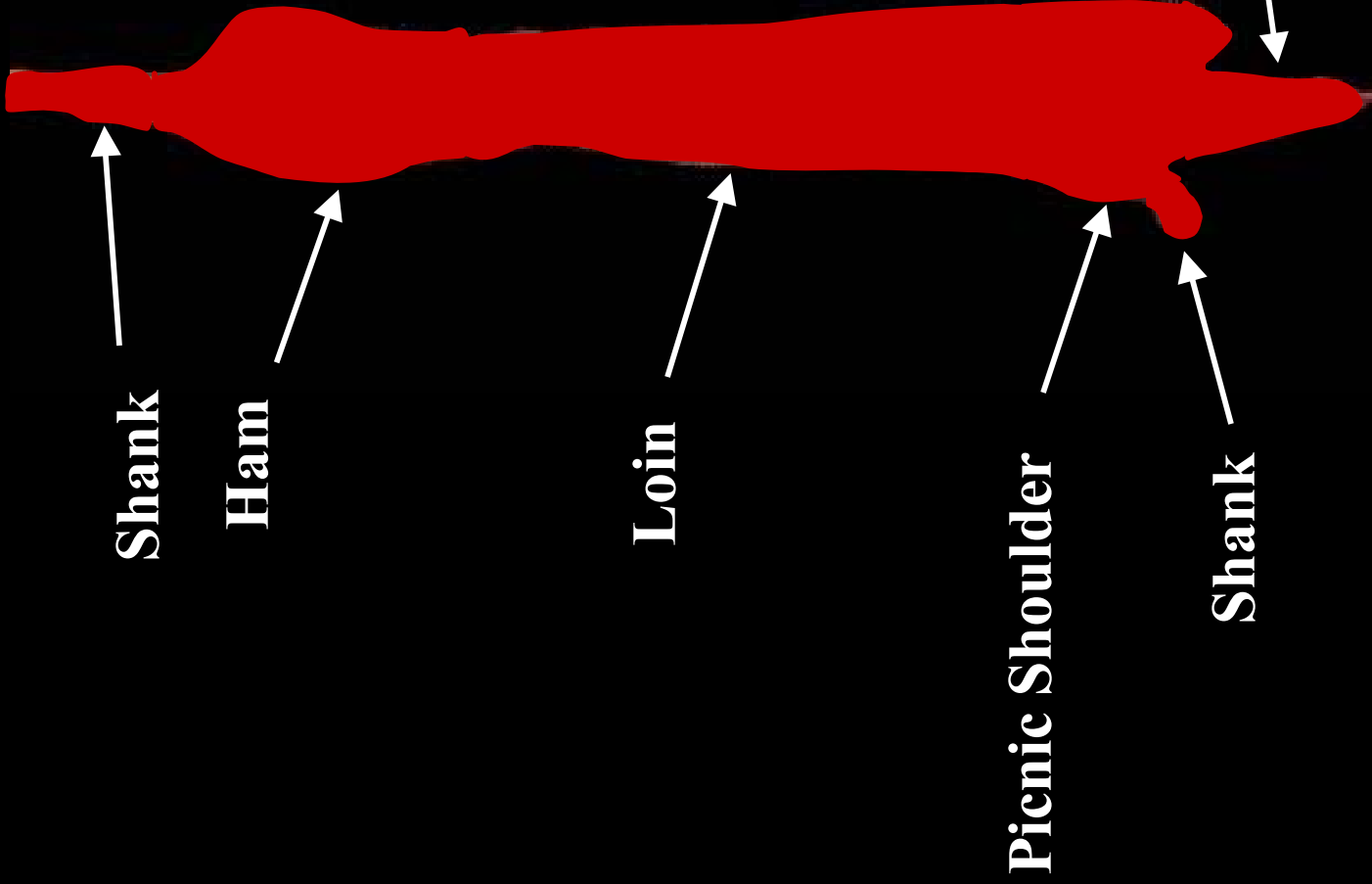


# General Information cont.

- **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

# Pork Carcass



Shank

Ham

Loin

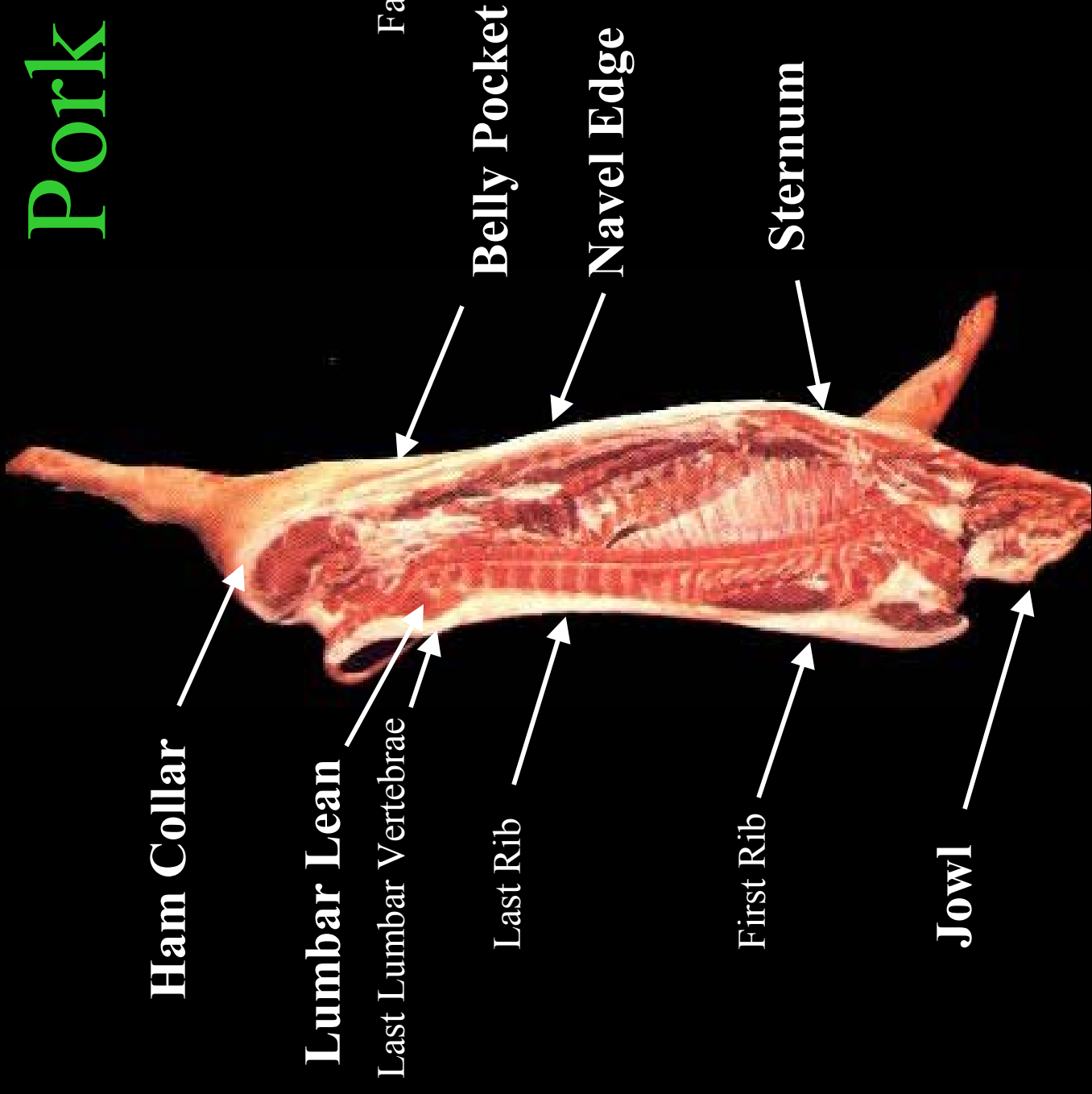
Picnic Shoulder

Shank

Boston Butt

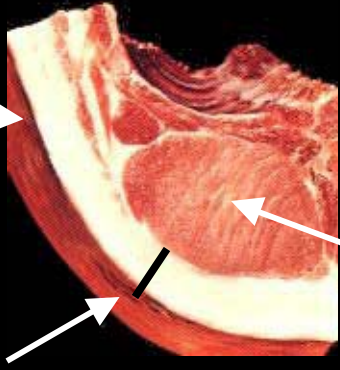
Jowl

# Pork Carcass



**Loin Edge**

**Fat Opposite 10th rib**



**Loineye**

# 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

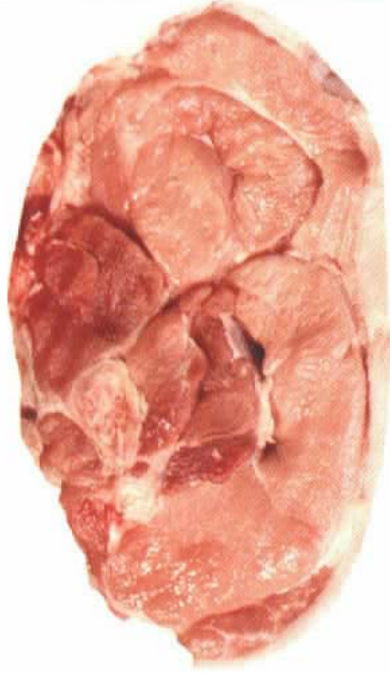


Thick  
Average  
Thin

# 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 loin eye.
- 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.



**RFN**-Reddish pink, **Firm** and **Non-exudative**. "**IDEAL**". Desirable color, firmness and water-holding capacity.



**DFD**-Dark purplish red, very **Firm** and **Dry**. Firm and sticky surface, high water holding capacity.

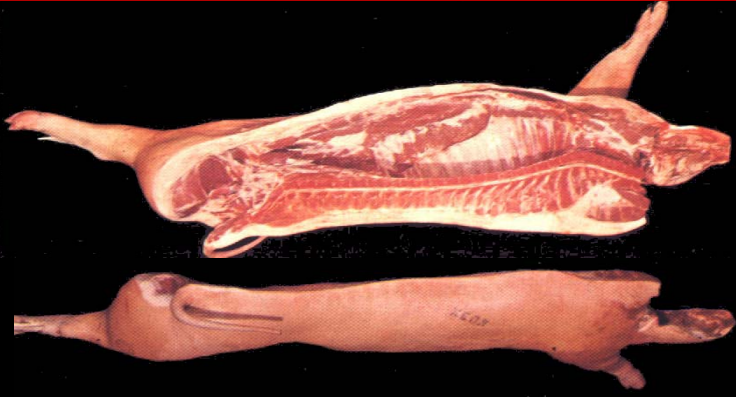


# How Do You Rank Pork Carcasses?

- 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?

1



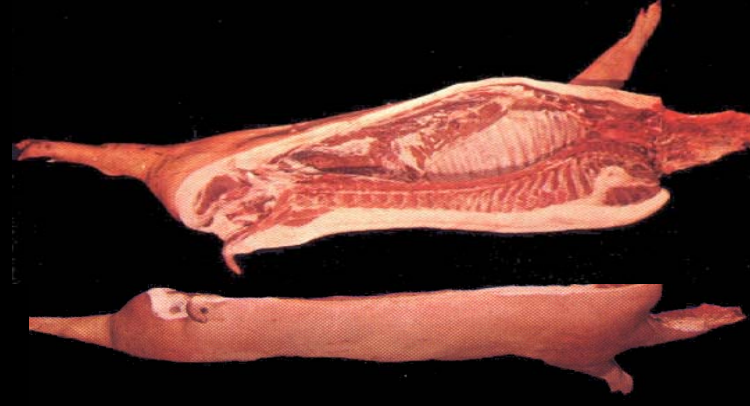
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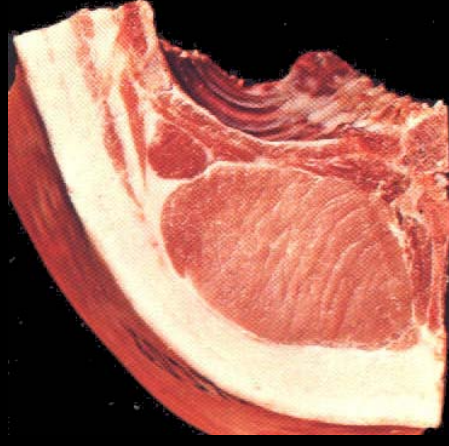
3



4



# Carcass # 1

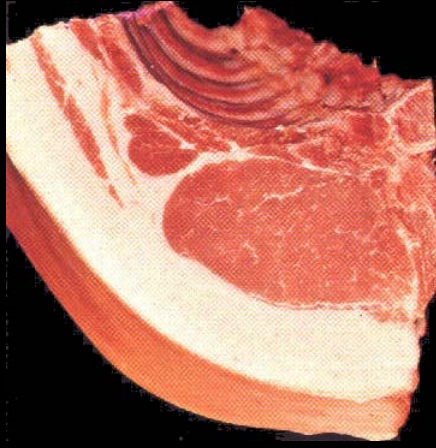


Avg. Backfat : 0.85

LEA : 7.6

Muscle Score : 3

# Carcass # 2

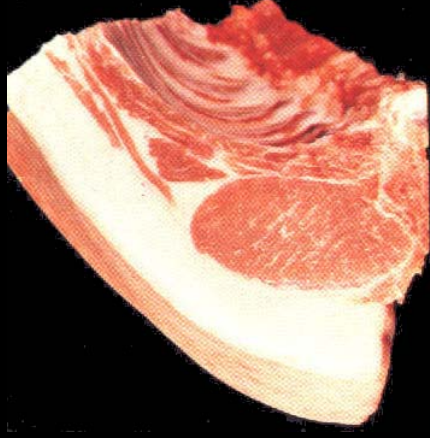
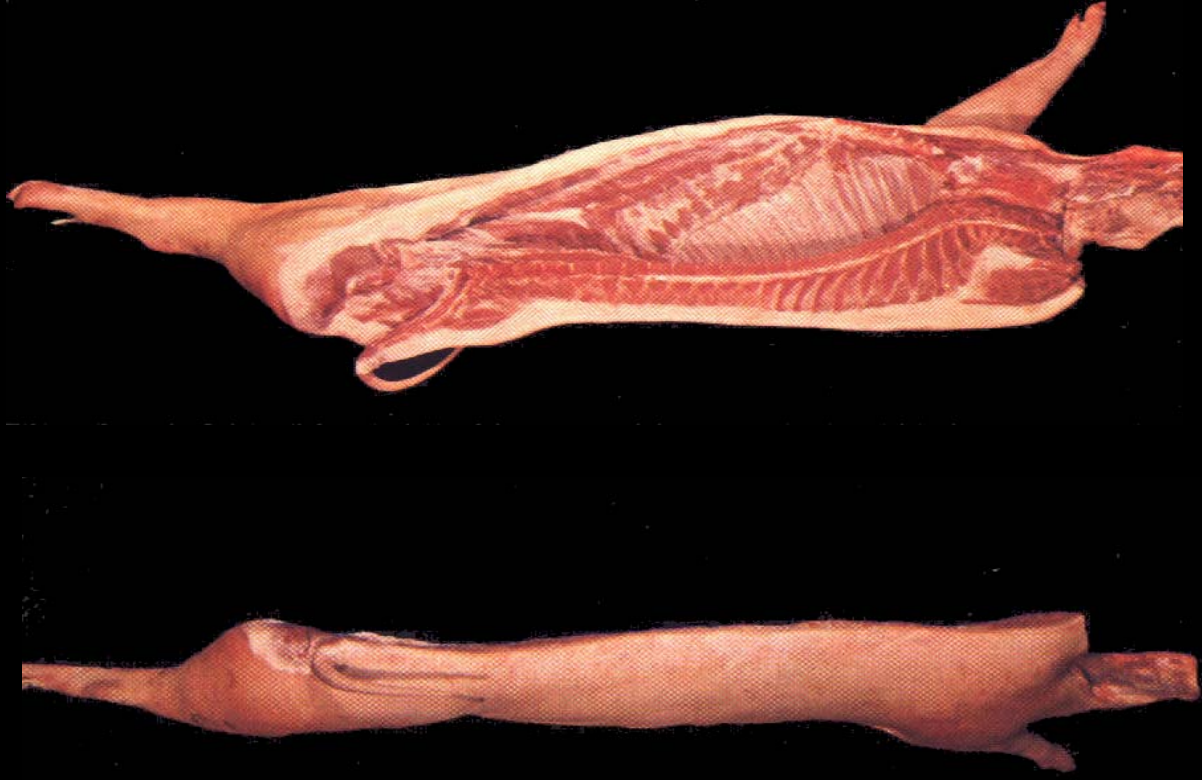


Avg. Backfat : 0.8

LEA : 5.4

Muscle Score : 2+

# Carcass # 3

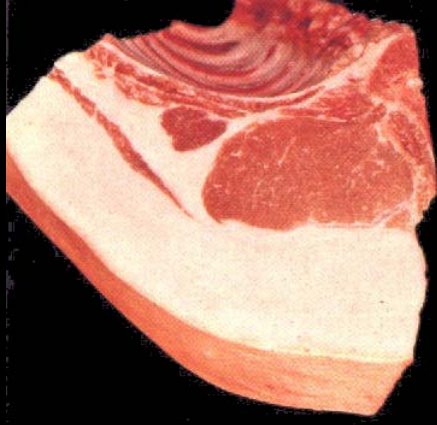


Avg. Backfat : 0.9

LEA : 4.5

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.