

# Official United States Standards for Grades of Lamb, Yearling Mutton, and Mutton Carcasses

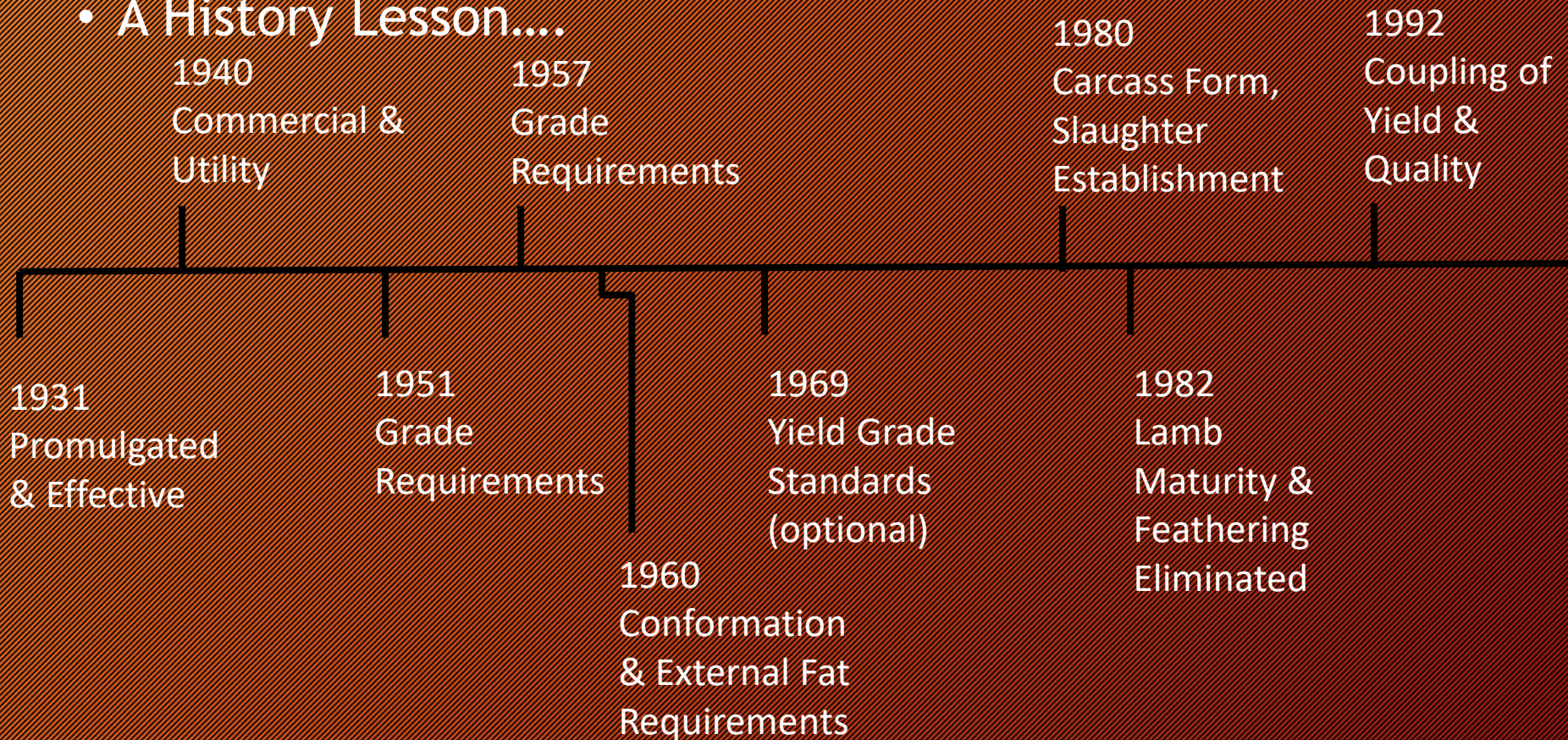
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United States Department of Agriculture  
Agricultural Marketing Service



# Development of the Standards

- A History Lesson....



# Application of Standards

## Grade Factors

- Quality - Palatability-indicating characteristics of the lean and conformation, and
  - Yield - the estimated percent of closely trimmed (0.10 inch fat or less), semi-boneless and boneless, major retail cuts to be derived from the carcass.
- ⓄWhen officially graded, shall consist of a combination of both a quality grade and a yield grade (see exceptions in the standard).

# Application of Standards *continued*

## Grade Factors

- To be eligible for grading, ovine carcasses cannot have more than 1.0 percent of their carcass weight in kidney and pelvic fat.
  - If more than 1.0 percent of kidney and pelvic fat is present, the excess fat must be removed prior to grading.
  - The amount of these fats is evaluated subjectively and expressed as a percent of the carcass weight.

# Application of Standards

## Yield Grade

- There are five yield grades applicable to all classes of ovine carcasses,
  - 1 through 5,
  - Yield Grade 1 representing the highest degree of cutability

# Application of Standards *continued*

## Yield Grade

- The adjusted fat thickness range for each yield grade is as follows:
  - Yield Grade 1 -- 0.00 to 0.15 inch
  - Yield Grade 2 -- 0.16 to 0.25 inch
  - Yield Grade 3 -- 0.26 to 0.35 inch
  - Yield Grade 4 -- 0.36 to 0.45 inch
  - Yield Grade 5 -- 0.46 inch and greater

# Probing an Intact Carcass



# Application of Standards *continued*

## Yield Grade

- The standards for each yield grade include an additional related measurement -
  - body wall thickness, which is measured 5 inches laterally from the middle of the backbone between the 12th and 13th ribs.



# Application of Standards *continued*

## Quality Grade

- The quality grade of an ovine carcass is based on separate evaluations of two general considerations -
  - the quality, or the palatability-indicating characteristics of the lean, and
  - the conformation of the carcass.

# Application of Standards

## Quality Grade

- ◎ The quality grade section is divided further into three separate sections **applicable to lamb, yearling mutton, and mutton carcasses.**
- ◎ There are four quality grades within each class -
  - Lamb and Yearling Mutton - Prime, Choice, Good, and Utility
  - Mutton - Choice, Good, Utility, and Cull

# Differentiation Between Lamb, Yearling Mutton, and Mutton Carcasses

- ◎ Classified as **lamb, yearling mutton, or mutton** depending upon evidences of maturity as indicated by the development of their muscular and skeletal systems.
  - size, shape, and ossification of the bones and cartilages
  - color and texture of lean flesh

# Break verses Spool Joint



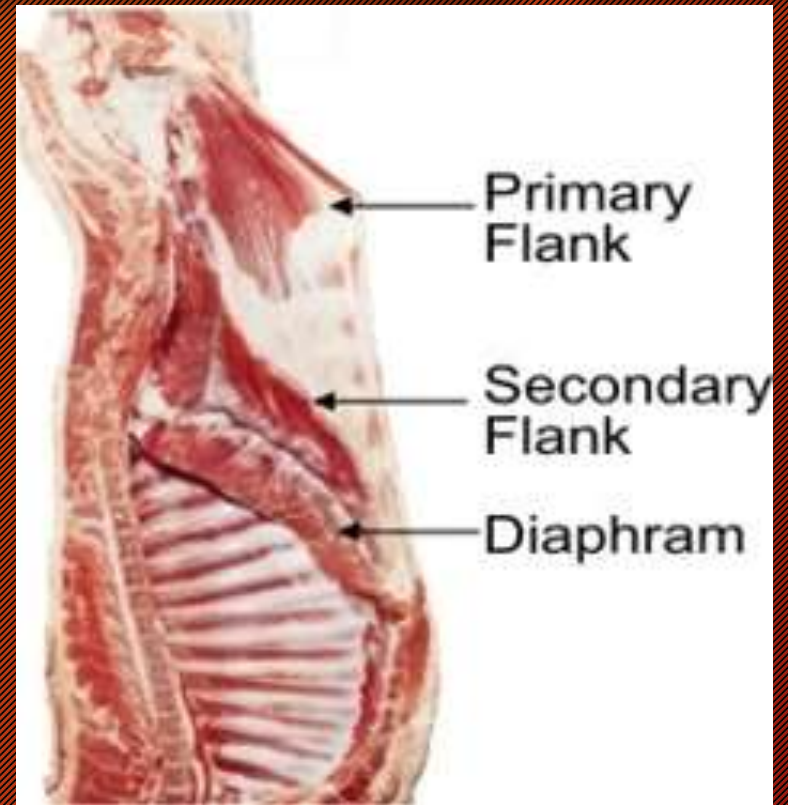
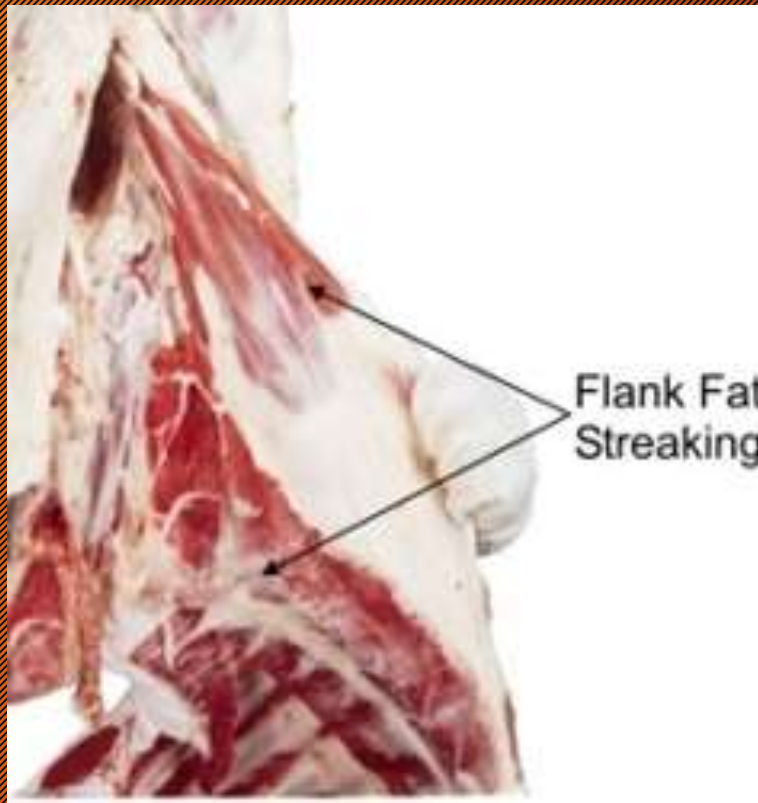
## Guidelines *continued*

- Perfect break joint on one trotter and has either: (1) A spool joint on the other trotter, or (2) has had the other trotter removed, - classed as a lamb if its other maturity characteristics are not more advanced than the more mature lamb group.
  - Otherwise, such carcasses will be classed as yearling mutton.
  - Maturity within the lamb class shall be based on the combination of lean and all skeletal characteristics.

# Application of Standards Quality Grade

- Quality of the lean is evaluated indirectly by giving consideration to the quantity of fat streakings within and upon the inside flank muscles in relation to the apparent evidences of maturity.
  - Within each grade, the requirements for flank fat streakings increase progressively with evidences of advancing maturity.

# Fat Streaking in Flank



# Application of Standards *continued*

## Quality Grade

- Conformation is the relative development of the muscular and skeletal systems.
  - External fat in excess of that normally left on retail cuts is not considered in evaluating conformation.
- The conformation descriptions included in each of the grade specifications refer to the thickness of muscling and to an overall degree of thickness and fullness of the carcass.



# Conformation



Prime



Choice



Choice



Good



Prime

# Application of Standards *continued*

## Quality Grade

- +Minimum degree of firmness of lean flesh and external fat for each grade.
- +Minimum degree of external fatness for carcasses in the Prime and Choice grades.

# Quality Grade: Minimum Firmness Requirements



After calculating the final quality grade, determine if the carcass meets the minimum firmness requirements in the applicable grade. If not, make adjustment to the overall quality grade.

**Small 50**