# BEEF EVALUTION: YIELD GRADE - QUALITY GRADES MARBLING SCORE- DRESSING PERCENTAGE

## Yield Grade (YG):

USDA YIELD GRADE 1 | USDA YIELD GRADE 2 | USDA YIELD GRADE 3 | USDA YIELD GRADE 4 | USDA YIELD GRADE 5

**What is it?** Yield Grades estimate the amount of boneless, closely trimmed retail cuts from the high-value parts of the carcass: the round, loin, rib and chuck.

**Range: 1.0 (lean, heavily muscled) - 5.9 (very fat, lightly muscled)**

* ↑ REA = More Muscle = ↓YG
* ↓ REA = Less Muscle = ↑YG
* Less KPH = Trimmer = ↓YG
* More KPH = Fatter = ↑YG

## Dressing Percentage

**What is it?** The percentage if the live animal weight that is left as carcass after slaughter and "dressing" - Industry Average is 62%

**Dr% = (Carcass Wt./Live Wt.) x 100%**

## How do we Calculate it?

- **Preliminary Yield Grade (PYG)**
  - start at a YG of 2 ↑0.25 per 0.1 inch of back fat
  - **Example: Carcass with 0.2 in backfat = PYG 2.50**
- **Required Ribeye Area (RREA)**
  - A 600lb carcass should have a REA of 11.0 inches
    - Add 1.3in per additional 100lbs
  - **Example: 700lb Carcass should have a 12.3in REA**
- **Ribeye Area Adjustment**
  - Above average or below average muscled steers require a 0.3 PYG for each square inch change in REA size.
    - **PYG Adj. = (Required REA - Actual REA) x 0.3**
- **Kidney Pelvic Heart Fat (KPH)**
  - Measurement of Internal Fat
  - Adjust PYG ↑or↓0.1 per 0.5% KPH starting at 3.5%
  - **Example: 4.0% KPH with a PYG 3.0 = PYG of 3.1**

**Calculation: YG = PYG +/- REA +/- KPH**

## Quality Grades and Marbling Scores



| PRIME | | | PREMIUM CHOICE | | LOW CHOICE | SELECT |
|---|---|---|---|---|---|---|
| AB PR+ | MA PR° | SA PR- | MD CH+ | MT CH° | SM CH- | SL SE |

**What is Quality Grade?** When it comes to quality grade, it is all about the eating experience of beef. Quality grades are based on two main criteria: the degree of marbling or intramuscular fat in the beef, and the maturity or estimated age of the animal at slaughter - They are one of the main determinants in the value of a beef carcass.

**Top Three Used in Fed Cattle: Prime, Choice and Select**

**What is Marbling?** Its the term we use to describe the intramuscular fat - fat that is in the meat. We look at the ribeye between the 12th and 13th rib to determine the marbling for the whole carcass. Genetics plays a role in how well an animal can marble.

**Marbling Designations (Highest to Lowest):**
**Moderately Abundant (MA), Slightly Abundant (SA), Moderate (MD), Modest (MT), Small (SM), Slight (SL)**

## Questions?
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**Resources**
- https://meat.tamu.edu/beefgrading/
- https://www.ams.usda.gov/grades-standards/carcass-beef-grades-and-standards
- https://fyi.extension.wisc.edu/wbic/files/2011/04/Beef-Grading.pdf
- https://www.ndsu.edu/agriculture/ag-hub/ag-topics/livestock/beef/production/yield-grades-carcasses