



USDA Grading Module and Simulation

Learning Module

This learning module explores the history, procedures, and technologies involved in USDA beef grading. The two grading systems used are **quality grading** and **yield grading**.

Chapter 1: History – Learn about the history of US beef grading and the organization that sets and maintains beef grading standards.

1. Agricultural Marketing Service
2. History Timeline

Chapter 2: Pre-Grading – Learn about the steps commonly taken before a carcass is graded.

1. Pre-Grading Procedures
2. Hot Carcass Weight
3. Electrical Stimulation
4. Hot Box
5. Rigor Mortis
6. pH Decline
7. Pale, Soft and Exudative (PSE)
8. Dark, Firm and Dry (DFD)
9. Ribbing
10. Blooming

Chapter 3: Quality Grading – Learn about the procedures and factors involved in quality grading.

1. Quality Grading
2. Eight Quality Grades
3. Quality Grade Chart
4. Different Sex Classes
5. Determine Sex Class
6. Determine Maturity
7. Collagen Cross Linkage
8. Maturity Groups
9. Ossification of Cartilage
10. Lean Muscle Color and Texture
11. Determine Maturity Group
12. Marbling
13. Determine Quality Grade
14. Quality Stamp

Chapter 4: Yield Grading – Learn about the procedures and technologies involved in yield grading.

1. Yield Grading
2. BCTRC Percentage
3. Yield Grades and BCTRC Percentage
4. Yield Grade Procedure
5. Measuring Ribeye Fat Thickness
6. Kidney, Pelvic, and Heart Fat (KPH)
7. Measuring Ribeye Lean Area
8. Factoring in Hot Carcass Weight (HCW)
9. Yield Grade Calculation
10. Camera Assisted Grading

Chapter 5: Stamping – Learn about the stamps applied to a beef carcass after grading.

1. USDA Grading Stamps
2. Branded Programs

Grading Simulation

The grading simulation allows you to apply your knowledge from the grading module during a guided grading procedure, starting with the quality grade and then determining the yield grade.

