

Producing the “Ideal” Market Steer

By Dr. Jan R. Busboom, Washington State University (5/09)

I. Beef Grading

- A. **Quality grades** for young cattle are Prime, Choice, Select and Standard. They are an indication of **palatability**.
- B. **Yield grades** are 1, 2, 3, 4 and 5. They are an indication of **cutability** or the yield of boneless trimmed retail cuts from the round, loin, rib and chuck.

II. Ideal Steer =

- A. **Rapid Gaining** - >3 pounds per day
- B. **Weight** - 1075-1395# live weight. 650-875# carcass weight. In some markets a lower carcass weight is desired.
- C. **Fat Thickness** -
 - 1. .3 to .5 inch of fat and a steer with .3 to .4 would have an advantage if it has a reasonable chance of grading Choice. Less fat is required if the animal has a high and accurate Marbling EPD or ultrasound scan.
 - 2. USDA Yield grade of 1.5-2.5.
- D. **Muscle** -
 - 1. Heavy muscling but not double muscling.
- E. **Soundness** - No major structural problems. Freedom of movement.
- F. **Balance** - Straight top, clean front, uniform depth and high percentage of weight in valuable cuts.
- G. In a live show, the champion should be very muscular, structurally correct, well balanced, the proper weight, have between .3 and .5 inch of fat thickness and a reasonable probability of grading Choice.
- H. In some commercial situations a higher quality grades may be beneficial.
- I. Tenderness and color are also important in the carcass.
- J. The Beef Quality Audits showed that far too many cattle are too big, too fat, poor quality and tough with carcass defects.
- K. Thus we need Quality Assurance and value-based marketing programs

III. How does a producer reach the ideal?

- A. **Genetics** - most important, because carcass traits (especially muscling) are highly heritable. Marbling and tenderness are also heritable.
- B. **Feeding to proper weight** (very important for fat).
 - 1. For some large framed animals the ideal weight will be 1500#
 - 2. Some steers are already too fat at 1000#.
 - 3. Ultrasound and carcass Expected Progeny Differences (EPD's) may help.
- C. **Proper feed and management**.
 - 1. Properly balanced diets and good health practices yield rapid growth.
- D. **Hormone Implants**. Safe & effective when used properly. May decrease quality.
- E. **Exercise** affects live appearance more than carcass traits.

IV. Food Safety – Farm to Table HACCP (Hazard Analysis Critical Control Points).