Energy efficiency is a hot topic for discussion in everything from cars to appliances to the architecture. With corn being our energy source for feeding cattle over $7.00 a bushel earlier this fall, profitability can be dramatically influenced by feeding efficient cattle.

In the fall of 2010, 48 head of known pedigree cattle were put on feed at the University of Minnesota feedlot in Rosemount, Minn. Thirty purebred Limousin steers were fed for 135 days alongside 18 purebred Angus steers using a Calan Gate system. Both groups were implanted with Revalor® S on the first day of the test. The steers were fed a 61.5 Mcal ration consisting of dry-rolled corn, modified distillers grains, grass hay, and a liquid supplement. All the cattle were shipped on July 8 to Tyson in Dakota City, Nebraska.

Interestingly, both groups of steers gained 3.56 pounds per day. The Limousin steers consumed 21.47 pounds of dry matter per day, which equates to a feed to gain ratio of 6.08, while the Angus steers averaged 24.2 lbs of dry matter intake per day which gives them a feed to gain ratio of 6.80. This is 2.7 pounds less feed per day. With the ration cost for that time period of approximately $250 per ton, or $0.125 per pound, the Limousin steers fed for $0.34 less per head per day. Over the course of the 135 days the Limousin steers fed $45.56 per head less than their Angus contemporaries.

The Angus steers had heavier live weights, with a 1,439 pound average compared with a 1,394 pound average live weight for Limousin. However, carcass weights were relatively similar: 909 pounds for Limousin and 912 pounds for the Angus due to nearly a 1.5 percent increase in Limousin dressing percentage compared with Angus. By comparing cattle with a similar final live weight of 1,400 pounds, each percentage increase in dressing percent is worth an extra 14 pounds of carcass weight. Considering the current hanging carcass price for the week the cattle were harvested, the $1.90 per pound of carcass equated to an extra 14 pounds or almost $30 per head.

Feed efficiency has never been as economically relevant as it is today. Beef producers are in the business of producing red meat. In the current era of record high corn prices, the efficiency gained by using Limousin in a crossbreeding system can offer a real time advantage in lowering the number one cost in beef production—feed.

**Wulf Limousin (31 Head)**
- Final Weight (4% shrink) = 1394 lbs
- Hot carcass weight: 909 lbs
- Dressing Percent = 65.3%
- 1 heavy carcass (3%)
- Marbling score = 353 (range 250-560)
- 0% Prime
- 16% Choice
- 6.5% CAB®
- 77% Select
- 7% Standard

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- Backfat = 0.27 in
- Ribeye = 17.56 sq. in

**Angus (18 head)**
- Final Weight (4% shrink) = 1439 lbs
- Hot Carcass Weight: 912 lbs
- Dressing Percent = 64.8%
- 2 heavy carcasses (11%)
- Marbling score = 625 (range 450-950)
- 28% Prime
- 72% Choice
- 67% CAB®
- 0% Select or Standard

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- Backfat = 0.66 in
- Ribeye = 14.66 sq. in

**Limosin Average RFI -0.8**

**Angus Average RFI 1.3**

Considering the current hanging carcass price for the week the cattle were harvested, the $1.90 per pound of carcass equated to an extra 14 pounds or almost $30 per head.