American Blue – A Greener Meat

How are our cattle greener, you ask?

Over a six year span the American Blue cattle were studied along with other traditional beef breeds. The breeds were segregated in penned control groups. The American Blues had the highest feed efficiency and costs were down over \$70 on average for the other pens on test.

Genetically American Blue cattle produce a limited amount of fat which produces twice the calories of protein. It will take more energy by other breeds to put on that extra fat.

So, if putting weight on a calf, it takes more than three (3) times the energy (calories) to put a gram of fat on a calf than muscle (protein).

American Blues have higher feed efficiency and use fewer natural resources. This breed is also noted for its' hyper-muscular growth. This allows more meat on the rail with less waste. In a recent USDA study comparing Angus and Blues, the Angus had 66lbs more waste per half, whereas the blues had 100lbs. more retail meat on their half. On average other breeds will yield 55-65% on the rail and blues will yield 68-75%.

If you are putting weight on a calf, it takes more than three times the energy (9 calories/gram) to put a gram of fat on a calf than muscle (4 calories/gram for protein).

High feed efficiency, high yield, and high processing percentage with less waste. That equals green, or rather, Blue beef!.

*CONSUMER NUTRITIONAL NOTE: Approximately 9 calories to 1 gram of fat Approximately 4 calories to 1 gram of muscle protein

museus process								
(Based on a 4 oz raw serving	Certified American Blue Ground Beef	USDA Regular Ground Beef	USDA Average Chicken Breast (w/skin)****					
Fat (g)	7.0	30.0	10.5					
Moisture (g)	71.7G/per 100 g	63.34	79.18					
Protein (g)	25	18.78	23.7					
Cholesterol (mg)	64	96	72.1					

American Blue Cattle...

The Ultimate Terminal Crossbreeding Choice

Beef producers have been benefitting when using a fullblood American Blue bull as a terminal crossing sire. Blue cross-bred calves result in increased carcass yields as compared to their dams

The American Blue bull will put more weight and muscle on calves. When using a fullblood American Blue bull he will pass on one myostatin gene and farmers/ranchers can experience on average a 7% yield increase, making the crossbreeding program more profitable.

Overall Benefits of Crossbreeding

- High growth rates
- Early turnoff
- Outstanding feed conversion
- Dress out percentages 60%+
- High yield
- 10% more lean retail product
- Easy calving
- Early maturity
- Tenderness from fine muscle fibers
- Higher protein content
- Excellent flavor & juiciness
- Very docile temperament





History

The American Blue Cattle began as the Belgian Blue, which originated in central and upper Belgium when the local red-pied and black-pied cattle were crossed with Durham Shorthorns in the late 1800's. Some Charolais influence during the 19th century is also suggested.

Originally a dual-purpose breed, beef production become the focus following World War II, when Europe's economy demanded increased beef quality and quantity. During the 1950's the Belgian cattle underwent a selective genetic breeding and development program conducted by Professor Hanset at the AI Center in the Province of Liege. This program created their unusually heavy muscling.

The first Belgian Blues were imported to the United States in 1978. Today, American Blue Cattle are their own fullblood registered breed, independent from their Belgian relatives after years of breeding for easier calving, lower birth weights and improved structural soundness.



What to Expect When Crossbreeding

- The main thing is that you may not see any difference in a Blue cross calf at birth. The muscle is a natural development for the breed. They are not born with extreme muscle but will start developing it at 4 to 6 weeks old. The one copy Blue cross might not look very different from the side but if you look from behind or from the top the cross should be thicker and be a heavier calf. What you cross them with also makes a difference. Some breeds have weaker forms of the Myostatin gene and will show more muscle expression on the first cross.
- American Blue beef is famous for its impressive muscling. This breed of beef outclasses all other beef breeds in carcass yield (up to 80%). When using crossbreeding programs of other dairy or beef breeds, it increases carcass yield from 5 to 7 percent compared to the maternal line.

Meat Quality

"Preliminary results indicate that the American Blue is an excellent terminal sire breed. They produce a 5 to 9% higher percentage retail product than other sire breeds with meal palatability similar to Angus and Hereford sire breeds."

USDA Animal Research, Clay Center, Nebraska, July 1997.

Sire Breed of Steer	Carcass Wt.	Dressing %	.3 Trim Retail Prod	Fat Thick	Rib Eye Area	Flavor	Juiciness
Crossbred	Lb.	0/0	%	in.	sq. in	0/0	0/0
Am. Blue	779	62.2	74	.26	13.34	4.85%	5.02
Hereford	767	60.4	67.6	.46	11.47	4.34%	5.19
Angus	771	60.4	60.7	.47	11.62	4.9%	5.28



Ethiciency of Feeding Blues

American Blue animals are extremely lean, characterized by a deviant muscle fiber type compared to non- American Blue Cattle. This fiber type can result in lower maintenance energy requirements. Maintenance requirements of the American Blue Cattle were investigated based on a zero-body weight gain. This showed that maintenance energy requirements of the American Blue Beef cows were close to the mean requirements of other beef genotypes.

Among the 18 breeds of cattle tested for this study, the blues were shown to be the most profitable. They used twenty-two factors to test performance including feed efficiency, feed cost, purchase price and average daily gain. A higher efficiency means the reduction of feed costs for livestock production which will therefore result in higher profitability and is what the ultimate cattleman is looking for.



BLUE X BLUE CROSS CALVES

Nutritional Comparisons

Meat Type American Blue	Calories	Total Fat	Cholesterol	Protein
1/2 BB x 1/2 Hereford	96	.76%	22мс	21.80%
Fish	165	9.00%	50мд	18.80%
Boneless Skinless Chicken Brea	ıst 130	4.10%	41мс	22.90%
Traditional American Beef	188	25-35%	76мс	24 см
Lite American Beef 1	33 (45% fat)	15.25%	76мс	25 см







Pictured meat selections were Blue Cross steers that were processed by Beard Brothers Meats 'N More, Coweta/Broken Arrow, OK