

the profitable & predictable Genetic Reality



Photos courtesy of USDA MARC showing from left to right:
2-copy Piedmontese rib and carcass; 0-copy rib and carcass; 1-copy rib and carcass

$$2_{\text{-copy}} \times 0_{\text{-copy}} = 1_{\text{-copy}}$$

The Piedmontese Breed is the "Myostatin Breed".

In North America, Piedmontese-influenced cattle are the ONLY breed that carry the inactive myostatin variant C313Y gene.

This natural genetic feature of Piedmontese dramatically improves carcass YIELD while also reducing saturated FAT content and improving TENDERNESS.

All NAPA registered Piedmontese are homozygous (2-copy) for this unique gene. The USDA Meat Animal Research Center (MARC) Germplasm Evaluations compared 27 different breeds of sires all as mated to Hereford x Angus cows, collecting data from calving to carcass performance. The Piedmontese-sired calves resulted in the leanest, highest yielding carcasses of all breeds compared, with daily rate of gain equal to Limousin and calving ease very similar to Hereford x Angus. These USDA results are from 1-copy Piedmontese-cross calves produced at MARC:

	Ribeye Sq.In	Retail Product %	% Un-assisted Births
USDA-MARC			
Piedmontese-sired	13.19	73.4	92.5
Limousin-sired	12.28	71.5	91.8
Charolais-sired	12.56	70.2	86.8
Simmental-sired	11.87	70.1	89.2
Gelbvieh-sired	12.00	70.2	94.1
Hereford X Angus	11.19	67.2	92.7

Genetic heritability assures that 2-copy X 0-copy = 1-copy, every time.

North American Piedmontese Association (NAPA)

NAPA is the first breed Association to make a gene a mandatory registry requirement.

The inactive myostatin variant C313Y is the specific gene NAPA requires.

Animals that possess 2-copies of this specific gene are eligible for registry;

animals that possess 1-copy of this gene are eligible for recordation.

NAPA maintains two separate Herdbooks: the *Fullblood* Registry - 100% pure animals test verified as 2-copy that have an unbroken ancestry of registered Fullblood stock tracing to registered Italian stock; and the *Naturaleam* division, test verified as recorded 1-copy or registered 2-copy and comprised of composite or crossbred animals and those 'pure' animals which cannot meet Fullblood registry requirements.

This preserves the original gene pool while encouraging composite breeding to bring polled, solid color, heavy milking & other characteristics of economic importance into the composite Herdbook.

This innovative registry practice offered by NAPA is designed to preserve the source of this unique inactive myostatin gene, and to further promote it's powerful effects to enhance beef production through terminal crossbreeding.

When a 2-copy is mated to a 0-copy (non-Piedmontese) all offspring are 1-copy for the gene that dramatically improves yield, beef tenderness and protein levels, while reducing fat.

Contact Certified Piedmontese Beef at
www.piedmontese.com

Or contact your local producer:

Disclaimer: the statistics reported in this brochure are indicative of tested samples and/or animals only. NAPA does not guarantee that any or all Piedmontese animals or Piedmontese beef products will meet the standards expressed here.

North American Piedmontese Association (NAPA)

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*Dedicated to breed improvement generation after generation
with Bull Performance Evaluations & Breed EPD Development*

Piedmontese



Mature Fullblood
Piedmontese herd sire



Young Fullblood Piedmontese
bull in commercial herd



1-copy Piedmontese
T-bone steak

Piedmontese

genetically TENDER beef
terminal cross YIELD

$$2 \times 0 = 1$$

predictable profitability

USDA research confirms these *significant* differences:

Piedmontese 1 and 2-copy beef rated between 10% to 13.75% more tender than 0-copy beef by trained sensory panel review; Piedmontese 1-copy beef consistently ranked as most-tender of all sire groups compared in the USDA Germplasm Evaluations by Warner-Bratzler Shear Force Test (WBSF).

0-copy animals produced 64.4% retail product yield;

1-copy animals produced 71.5% retail product yield;

2-copy animals produced 85% retail product yield.

This clearly illuminates the effect on carcass performance and beef tenderness from the Piedmontese inactive myostatin gene.

Low fat, high protein beef that eats like Prime efficiently produced from the highest yielding carcasses

Naturalean Piedmontese
1-copy dam with 2-copy calf



Naturalean Piedmontese
2-copy composite calves



Naturalean Piedmontese
2-copy herd sire

A top priority identified in the recent National Beef Quality Audit (NBQA):

"Use genetics to optimize cutability and palatability, and thereby reduce variation in beef eating quality."

This rare & unique breed

Piedmontese

achieves the goal in one cross breeding season.

TENDER
HIGH YIELDING
HEALTHFUL



Fullblood Piedmontese females
utilized for embryo production
to increase seedstock population.

The Piedmontese Breed is the "Myostatin Breed".

Fullblood Characteristics: A moderately sized beef breed, naturally evolved over centuries in the alpine environment of northwest Italy, the Piedmontese are born fawn in color and gradually change to grey / white with full black skin pigmentation. Genetically horned, with exceptional adaptability to varied elevations and climates from extreme heat to harsh winter cold, this breed thrives from Texas to Canada and remains consistent in production of tender low-fat high yielding carcasses - due to the unique gene they carry. All NAPA registered Fullbloods are homozygous (2-copy) for this gene - inactive myostatin C313Y.

Naturalean™ Piedmontese Characteristics: May be any color including homozygous black, and may be either horned or polled or homozygous polled, due to genetic influences carried forward from other breeds. All NAPA registered Naturalean™ are DNA test verified as homozygous (2-copy) for inactive myostatin variant C313Y while NAPA recorded Naturalean™ are test confirmed as heterozygous (1-copy) for this gene.

When a 2-copy is mated to a 0-copy (non-Piedmontese) - all offspring are 1-copy for the gene that dramatically improves yield, beef tenderness and protein levels, while reducing fat.

Data below from *Certified Piedmontese Beef* includes nutritional & tenderness information from 1-copy Piedmontese raised specifically for their highly successful branded beef program. Visit them at www.piedmontese.com

	Ribeye		Top Sirloin		Strip Loin	
Serving size 3.5 ounces	Certified Piedmontese	USDA Prime	Certified Piedmontese	USDA Prime	Certified Piedmontese	USDA Prime
Calories (kcal)	238.7	304.9	125	183.1	179.1	271.3
Total Fat (g)	17.43	26.11	3.39	10.3	10.3	21.47
Saturated Fat (g)	8.88	12.8	1.66	5.17	4.48	10.2
Protein (g)	18.9	16.7	22.83	20.8	21.61	18.0
Tenderness (WBSF*kg)	2.50	2.74	2.99	3.06	2.84	3.04

WBSF measures the pounds of force required to cut meat - lower values indicate tenderness; shear force values below 3.2 are considered "very tender". Nutritional data courtesy of Certified Piedmontese, tests from Midwest Labs, Omaha, NE; shear force data from University of Nebraska Lincoln. (circa 2016)



*cooks faster
higher in protein
lower in fat & calories
consistently tender
Piedmontese beef*

North American Piedmontese (NAPA)