

## THE BROWN COW AND YOUR HEALTH

For over thirty years, information from medical and media sources has frightened the public away from consuming cholesterol, and therefore red meat and dairy products.

In the quietness of scientific research, there have been ongoing studies on healthy fatty acids. Now, Conjugated Linoleic Acid (CLA) is just such a healthy food constituent, and is naturally sourced in meat and milk. Study results indicate that CLA is beneficial in fighting cancer, diabetes, obesity, heart disease, and enhancing bone density.

The main source of CLA naturally, by far, is in ruminant meat and milk. Numerous studies have taken place in manipulating the feed to cattle, to increase CLA. Fattening cattle on cereal grains decreases CLA. Grass feeding to cattle increases CLA in meat and milk. Manipulating CLA in feed sources for dairy cattle have shown increases in CLA in milk, but detrimentally increases somatic cells and decreases fat. The unique ability of the Brown Cow is not fully understood, but may be attributed to a genetic trait that maximizes enzymes in the rumen and mammary gland that convert Linoleic and Linolenic fatty acids into CLA. Without feed manipulation, the Brown Dairy Cow naturally produces 1.22 grams of CLA per 100 grams of fat while other dairy breeds on the same feed study were shown to range from 0.33 to 0.78 grams of CLA per 100 grams of fat ( Dhiman et al ). This is a substantial differential.

It is believed that the Brown Cow may not be surpassed in the content of CLA in meat products. The natural level of CLA in the Brown Cow may be the result in the low back fat distribution that has been reported on the typical breed carcass. Further studies are required to exemplify the cause and effect. The supplementation of CLA in the human diet redistributes fat to a more healthy pattern. In addition, health benefit studies in breast, colon, prostate cancer, malignant melanoma, and leukemia are ongoing. Benefits to artery disease, and the reversal of diabetic complications are being proven. With CLA benefits having been raised, Brown Cow genetics should be the answer to healthy meat and milk products in the 21st century.

## ENVIRONMENTAL ADAPTABILITY

Braunvieh cattle are found adaptable to climates and altitudes in over fifty countries. This ability to withstand heat and humidity is a phenomenon which has evolved over time where Braunvieh cattle have been kept and bred over many centuries: the high alpine regions of Switzerland. Animals at high altitudes are subject to intense ultra-violet radiation and low oxygen content in the air. Color influences the adaptability of the animal to a higher incidence of solar radiation, including infra-red and ultra-violet. The color of the hair coat and the dark hide with a brown pigment assists the animal in absorbing infra-red radiation during cold weather.

Braunvieh cattle have a higher hemoglobin index, than any other cattle in Europe. The higher red blood cell count together with a greater heart-lung capacity make these cattle easily adaptable to a subtropical climate where the oxygen tension is low due to high temperature and humidity

## FEEDLOT AND CARCASS TRAITS

For over thirty years the Alberta Braunvieh Association has conducted many bull feeding tests and steer feeding trials at various commercial feedlots. The bull feeding tests involved feeding purebred bulls: selecting the best yearling bulls as breeding sires, with the remainder placed on a hot ration and slaughtered, and rail graded. The steer feeding trials consisted of crossbred steers and straight-bred steers entered into the trial at about 700 pounds, and taken to a finished state.

Typical results for steers: 133 day feeding period average daily gain at 3.7 pounds per day.

Rail grade data: average warm carcass weight at 750 pounds.  
average net live weight at 1300 pounds.  
average cutability at 58 percent.  
yield grade A1 at 52 percent.  
yield grade A2 at 40 percent.  
yield grade A3 at 8 percent.  
quality grade AAA at 52 percent.  
quality grade AA at 41 percent.  
quality grade A at 7 percent.

Typical results for bulls: 145 day feeding period average daily gain at 3.0 pounds per day, weight per day of age at 3.1 pounds. Scrotal measurements for bulls averaged 34 centimeters for bulls of 15 months of age.

Rail grade data: average warm carcass weight at 700 pounds.  
average net live weight at 1240 pounds.  
average cutability at 63 percent.  
yield grade A1 at 100 percent.  
quality grade AAA at 21 percent.  
quality grade AA at 58 percent.  
quality grade A at 21 percent.



Braunvieh Sire &  
Braunvieh - Hereford Dam



Braunvieh Sire &  
Red Angus Dam

# Canadian BRAUNVIEH



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## ORIGIN AS A BREED

Braunvieh cattle belong to the worlds oldest breeds, as chronicled by officials of the Swiss Braunvieh Federation in Switzerland, considered the country of origin for brown cattle. Monastic records kept in the alpine areas of Central Switzerland confirm these brown cattle were kept as a pure breed since the 13th century.

Molecular Biologists define a breed as a dynamic population of animals having:

- 1.) Common genetic origin and history
- 2.) Unique and distinctive characteristics
- 3.) Genetic stability

## ORIGIN IN CANADA

The Animal Pedigree Act for Canada regulates all species, including cattle breed associations in this country. The Act was first passed by the Parliament of Canada in the 1900. The charter for a brown cattle breed association was granted the Federal Department of Agriculture in July of 1914. That was the beginning of the Canadian Brown Swiss Association. Breeders of this association bred and selected brown cattle for milk production purposes.

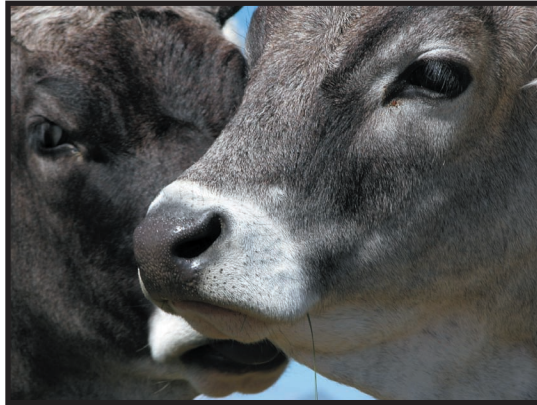
The Canadian Brown Swiss Herd Book has the initial enrollment of 69 animals of the initial imports from Switzerland. This group was part of the original group of 129 animals that were imported by American Breeders into the New England States. No other Switzerland imports were enrolled into the Herd Book up until 1969, when importation from Europe resumed once again. This action was precipitated by a group of breeders in Alberta, intent on breeding and selecting brown cattle for beef production purposes.

In 1996 the name of the association was changed to the Canadian Brown Swiss and Braunvieh Association: this change was made to identify by name, the two phenotypes within the breed.

## BRAUNVIEH PHENOTYPE

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The physical color characteristics are a single-colored grayish brown coat of varying pigmentation, from light to dark brown. Males tend to be darker than the females. A white ghost occurs around the muzzle.



In the groin and under belly area, the hair color is also lighter than on the body. The elastic skin is pigmented, and the hair coat is fine and soft. The mucosa of the body orifices and the muzzle are black. The head is short but broad. The body has a straight top line, deep chest, and well sprung ribs. The dewlap is not emphasized. The underline is often parallel to the back. The hind quarters are long and wide, with the muscles carried down to the hocks. The legs are well muscled and possess strong bones, with hooves hard and dark colored. Mature animals in Canada will generally range between 1300 to 1400 pounds for females, and between 1900 to 2200 pounds for males.



## MILK & MATERNAL CHARACTERISTICS AND CONVENIENCE TRAITS

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Braunvieh and Braunvieh-cross females are excellent mother cows, and maintain a good milking ability. They have well attached udders with well placed teats that provide ample milk to their calves over the 180 to 200 day nursing period. In general, the milking ability results in higher weaning weights. It has been shown that sixty percent for the possible difference in weaning weight was due to milk and twelve percent is due to birth weight. This makes the Braunvieh cow a highly desirable maternal animal. Feedlot tests have shown that a higher weight per day of age at weaning resulted generally in higher average daily gains on feed.

Braunvieh and Braunvieh-cross cows are noted for easy calving, even though birth weights are high: ranging from 80 pounds to 120 pounds in the temperate Canadian climate. This range of birth weights tends to go down as the cattle are kept and bred and raised in lower latitudes: approximately on average by one pound for each degree reduction in latitude.



The Braunvieh and Braunvieh-cross mother cows are noted for their docile nature and easy handling. This is boon to the cow-calf operator who is looking at every beneficial aspect possible. Braunvieh cows and bulls are long lived. Some cows have been known to have a productive life up to twenty years of age: although this is more the exception rather than the rule. Some bulls have been known to have been active breeders in natural service up to fifteen years of age: although this is more the exception rather than the rule.