

Testing for Contractural Arachnodactyly in your herd

Contractural Arachnodactyly (CA)—commonly referred to as fawn calf syndrome—is a nonlethal genetic condition that affects Angus and Angus-influenced cattle. While CA-affected calves are born alive, and most can walk, suckle and survive, their upper limb joints (particularly hip, stifle and hock) have a reduced range of motion. Affected calves appear normal by 4 to 6 months of age, but most perform poorly and are relatively tall and slender, with compromised feet and leg conformation. Without DNA or progeny testing, carrier animals are indistinguishable from animals that are free of the condition.

The Impact of CA

Dr. Jon Beever at the University of Illinois, in collaboration with the American Angus Association, has identified the gene mutation responsible for CA.

- Identifying CA-carrier animals provides critical information that impacts your future breeding, marketing and animal registration decisions.
- Identification of carriers empowers breeding decisions that greatly reduce the frequency of the recessive allele in the Angus and Angus-influenced populations over time.

Testing for CA

Pfizer Animal Genetics has produced a commercial version of the test originally developed by Dr. Beever. Samples for testing can be sent through Angus Australia, or directly to Pfizer Animal Genetics.

Samples may be submitted in one of the following forms:

- **Hair follicles** (Preferred Option).

When submitting hair samples, please make sure at least 25 follicles (bulb intact) are included to ensure an adequate volume of DNA to complete the test.

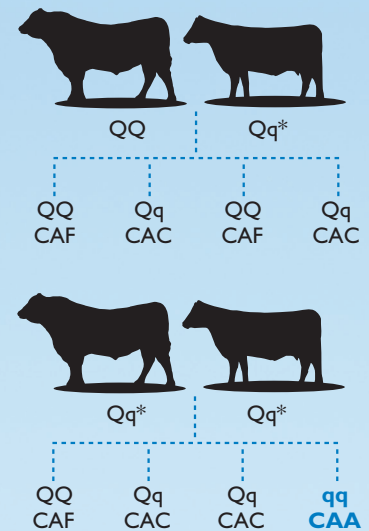
- **Blood FTA® cards.**

- **Semen samples.**

- **Whole blood tubes.**

For more information on CA and genetic defect tests offered by Pfizer Animal Genetics, please visit www.pfizeranimalgenetics.com.au or call 1300 768 400.

Chances of a CA Calf



*q denotes the recessive gene for the CA trait.

Importance of CA Testing

DNA testing of suspect animals is the most timely and efficient way to identify carriers.

As the illustration shows:

- Mating a CA-free (CAF) animal with an CA-carrier (CAC) animal will result in offspring that have a 50 percent chance of being CAF and a 50 percent chance of being CAC.
- Mating two CAC animals results in a 25 percent chance of a CAF calf, a 25 percent chance of a CA-affected (CAA) calf and a 50 percent chance of a CAC calf.

For breeders of Angus and Angus-influenced cattle, test results on suspect animals can:

- Enable breeding decisions that will decrease the incidence of the recessive alleles over time.
- Confirm carriers or syndrome-free animals.
- Facilitate registration requirements and help determine winter and spring sale decisions.