

# The Murray Grey Beef Cattle Society



## Marbling 4 Tenderness 4 Feed Efficiency 4 Results Explanation

The current GeneSTAR® test includes a suite of 12 markers: 4 markers for Marbling, 4 markers for Tenderness and 4 markers for Feed Efficiency. Results are reported as a star result for each individual marker, and also as a combined star rating for each trait. There is a maximum of 8 stars available for any one of these traits. Results should be treated independently for each trait.

For each single marker it is possible to obtain a result of 0, 1 or 2 Stars as one allele (or half of the marker) is inherited from the sire and one allele from the dam. An animal can inherit a 0 Star from both the Sire and Dam (in which case it will be a **0 Star** for that marker), or inherit a 1 Star from one parent and a 0 Star from the other (which makes it a **1 Star** for that marker), or a 1 Star from both parents (which makes it a **2 Star** for that marker).



Hence it is possible, as we test for four DNA markers for each trait, to obtain an eight star result for each trait, calculated by adding up the stars for each individual marker. Results for each marker within a trait are additive, which means **the more stars, the better**.

**GeneSTAR® Marbling** is a test for four separate DNA markers that impact on marbling. The more stars, the more likely the animal is to produce higher marbling scores. An animal with 8 stars for marbling has the best possible result on the current scale of tests and will on average have a higher marble score than an animal with a lower GeneSTAR® Marbling star result.

**GeneSTAR® Tenderness** is a test for four markers that impact on Tenderness in the carcass. The more stars an animal has for tenderness, the more tender it is likely to be.

**GeneSTAR® Feed Efficiency** is a test for four separate DNA markers that affect an animal's Feed Efficiency. The more stars an animal has for feed efficiency, the less feed it will consume to gain the same weight.

**May 2008**

**The Society has tested over 70 cattle with excellent results.**

**95.5%      6 - 8 Stars for Tenderness**

**71.6%      7 - 8 Stars for Tenderness**