

We received this email from an American member of the Murray Grey Beef Cattle Society Australia. We share this with Maddie Brockhoff's permission.

"The Murray Grey Beef Cattle Society Board have been in discussions on the prevalence and effect of myostatin variant nt821 in the Murray Grey population.

There are 9 myostatin mutations that have currently been identified in beef cattle. Of these, one, nt821, is known to exist in the Murray Grey breed. Animals with two copies of the myostatin mutation have extreme muscling and are often referred to as "double muscled" (in fact, these affected animals do not have double the number of muscles of an unaffected animal. Rather the normal muscles are much larger than in an unaffected animal). While double muscled animals typically having increased retail beef yield, they are also typically leaner (less fat/marbling) and may have increased incidence of heavier birth weights and associated calving problems. Carrier animals (one copy of the nt821 myostatin mutation) are likely to be better muscled than unaffected animals (no copies of the nt821 myostatin mutation), but less so than affected animals. As the nt821 myostatin mutation is recessive, affected (double muscled) calves will only occur when two carrier animals are mated together.

There have been 694 tests recorded on the Murray Grey Beef Cattle Society database, of this 21% are carriers or affected. If you have tested your animals and have not supplied the results (non-carrier, carrier & affected), it would be beneficial for the Society and the breed if you would please provide these results to be recorded.

With this level of prevalence, the Board is considering if mandatory testing of sires should be implemented, the provision of your data will assist with this decision.

Thanks,

Maddie Brockhoff"

*Editor's Note:* We understand that MGBCS is requiring all new sires to be tested for the nt821 myostatin mutation beginning January 1, 2024.