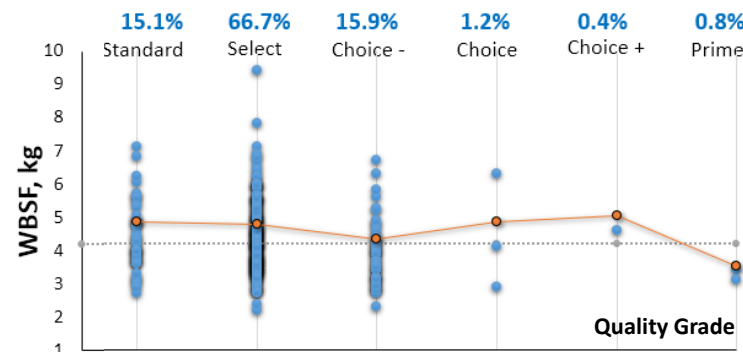# Genomic tools for meat quality in Brahman and Brahman-influenced cattle
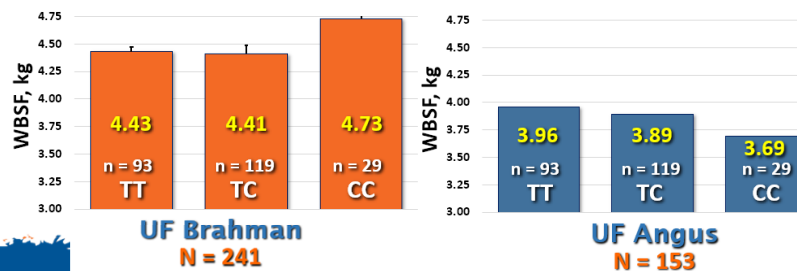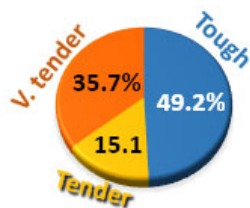
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Meat quality Traits

- Marbling, tenderness, juiciness, and flavor: complex traits, controlled by many **genes** and by the **environment**. They also:
  - -- are measured after the animal is slaughtered
  - -- are difficult and costly to measure
  - -- have relatively low heritability

- Genomic selection - the best strategy for genetic improvement of these traits.

Findings

- The USDA grading system (marbling and maturity) is limited in predicting eating quality of beef (**tenderness**).

- Existing genomic tests, developed mostly on Bos Taurus data, are not predictive in our **Brahman** influenced cattle populations.

Goal: Identify genetic variants strongly associated with the most important beef quality traits in *Bos Indicus* influenced cattle, particularly tenderness and marbling.

Conclusion

Improving meat quality will improve the economic position of the beef industry, improve **demand** for beef, increase **profits** and will lead to more **satisfied consumers**.

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