

**Project Title:**                    **Determining the Value of Tenderness Classified Beef Cuts**

**Principle Investigators:**    **M. Koohmaraie, S. D. Shackelford and T. L. Wheeler:  
U.S. Meat Animal Research Center**

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**Layman's Summary:**

Recent surveys have reported that consumers are dissatisfied with the eating quality of beef prepared at home more than 20% of the time. The beef industry relies on the USDA quality grading system to segment carcasses into some level of expected palatability. Unfortunately, the relationship between marbling score and other quality grading factors with the palatability of beef is not very strong.

A new objective method of segmenting carcasses into tenderness categories has been developed and uses a slice shear technique to evaluate cooked meat tenderness. This study selected steaks from 55 select carcasses that had "low slice shear" values of less than 16 kg and 55 select carcasses having "high slice shear" values of > 20 kg. Steaks were given to consumers for testing and were also evaluated by a trained panel.

Both panels (trained and consumer) perceived steaks from the low slice shear group to be much more tender, juicy and flavorful than the high slice shear steaks. The relationship between tenderness and consumer ratings was highly correlated, indicating that tenderness was the primary determinant of consumer perceptions of palatability.

