



Adding Value on *M. Infraspinatus* Caudal Tip

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Objectives

Adding value to beef products is an alternative to improve industry profitability. Recently, the *m. subscapularis* was presented to consumers as a novel beef cut that provides great eating experience due to its tenderness. The caudal tip of the *m. infraspinatus* is often left on the rib after separation of the chuck and it is usually used as 80/20 trim. The objective of this experiment was to evaluate tenderness and cooking yields of the *m. infraspinatus* caudal tip and verify the opportunity of exploring this cut as an added-value product.

Materials and Methods

Both *m. subscapularis* and caudal tip of *m. infraspinatus* were obtained from a commercial abattoir. Muscles were fabricated from A-maturity carcasses, USDA Choice-graded. A total of 15 *m. subscapularis* and 30 caudal tips of the *m. infraspinatus* were transferred under refrigeration to the University of Nevada, Reno Meat Quality Lab, where they were aged until complete 15 d post mortem at 5°C. Due to its size, two caudal tips were randomly combined into a single sample. A total of 15 experimental units per treatment (muscle) were analyzed for Warner-Bratzler Shear Force and cooking yields. Samples were cooked on a tabletop

grill and after temperature reached 35°C, samples were flipped and cooked until temperature reached 70°C at the geometric center. After cooking, samples were cooled for 24h (cooled to approximately 5°C) and at least 6 cores (1.27 cm in diameter) were obtained from each sample. Cores were sheared with a Warner-Bratzler blade where the crosshead speed was 500 mm/min with a 100kg load cell. Data was analyzed by using PROC GLIMMIX of SAS (SAS Inst. Inc., Cary, NC) as a CRD.

Results

Although numerical differences were observed for cooking yields, results did not differ statistically ($P = 0.78$). For *m. subscapularis* and caudal tip of *m. infraspinatus*, cooking loss was 21.37 and 20.99% of total weight, respectively. Similar WBSF values were observed for both muscles ($P = 0.11$). Values for objective tenderness for *m. subscapularis* and the caudal tip of *m. infraspinatus* were 2.35 and 2.63 Kgf, respectively.

Conclusion

The *m. infraspinatus* caudal tip showed similar cooking yields and objective tenderness when compared to *m. subscapularis*. Results of this work suggest that it is possible to add value to *m. infraspinatus* caudal tip and improve industry profitability.