Quality Evaluation of Beef Coulotte Steaks from Four Quality Grade Treatments

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Introduction

- The Beef top sirloin cap (*biceps femoris*) of the Top Butt has long been used in Brazilian cuisine and is a popular cut found on Brazilian steakhouse menus known as "picanha".
- The top sirloin cap is the most popular sirloin steak at retail.
- Minimal research exists as to how USDA quality grade impacts the eating quality and palatability of the Coulotte.

Objective

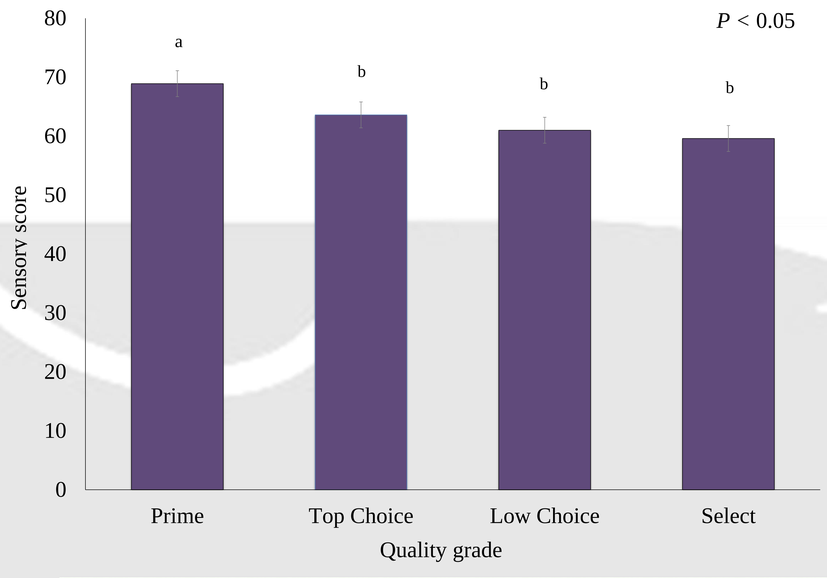
- To evaluate the influence of quality grade on the palatability of Coulotte (Biceps Femoris) steaks.

Experimental Procedures

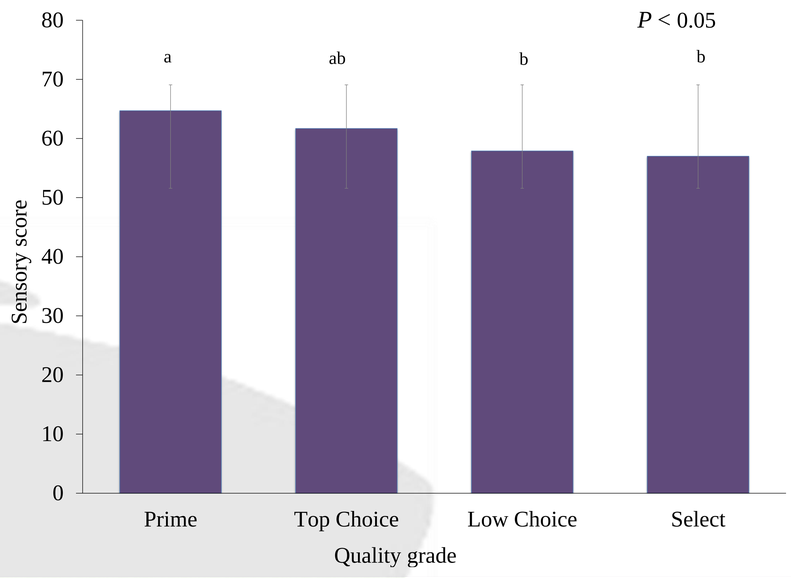
- 60 Beef top sirloin caps (IMPS #184D) representing different quality grades were collected from a Midwest meat processor.
- Four quality grade treatments were used (Prime, Top Choice (modest and moderate marbling), Low Choice and Select); *n*=60; 15/treatment).
- Steaks went through a standard 28-day aging period until being fabricated into 2.54 cm. steaks.
- Steaks were randomly assigned into one of 3 analysis methods: Warner-Bratzler shear force (WBSF), fat and moisture analysis and consumer sensory analysis.
- Consumers (*n*=118) were fed 4 samples representing each of the quality grade treatments at a medium (71°C) degree of doneness.
- Consumers evaluated each sample for juiciness, tenderness, flavor, and overall liking on continuous line scales.
- Consumers rated each trait as either acceptable or unacceptable, and indicated their perceived quality rating.
- Statistical analysis was conducted using the GLM/MIXED procedure of SAS (SAS Institute, NC) with blocking for the time of the consumer panels.

Results

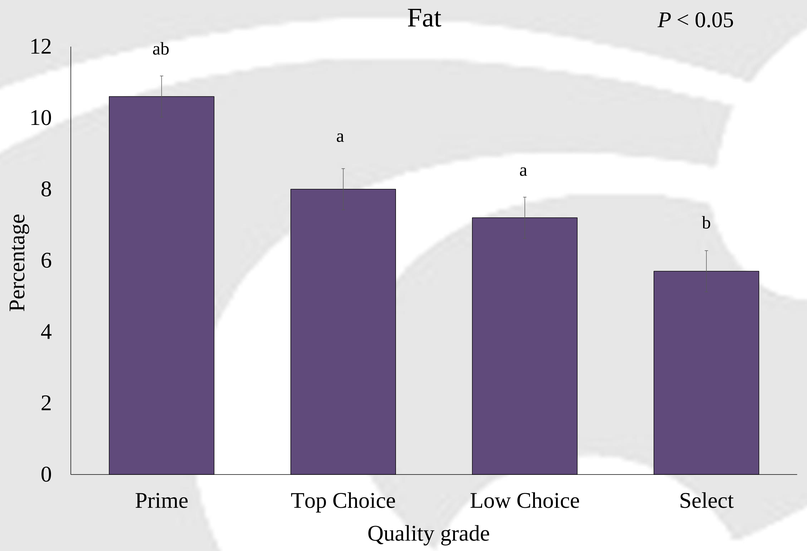
Consumer Ratings for Overall Like

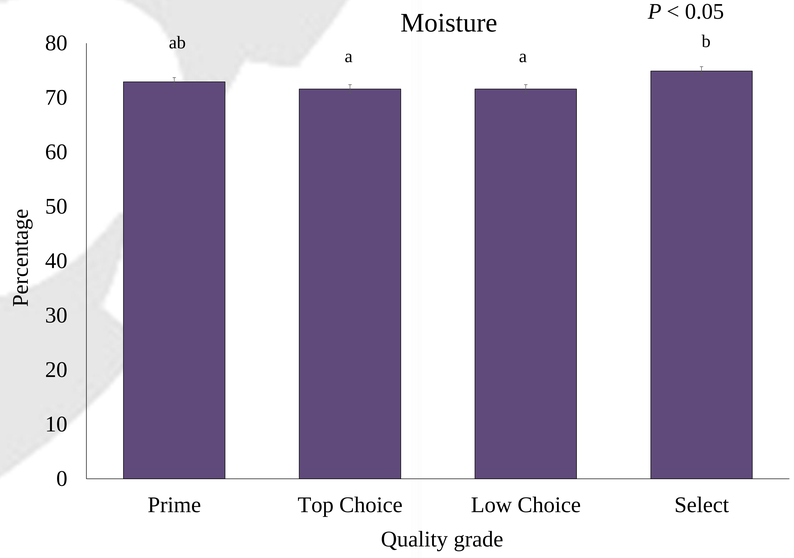


Consumer Ratings for Flavor



Fat and Moisture Analysis





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Conclusions

- With there being no difference amongst the various quality grades for consumer acceptability, food service providers do not need to be paying the extra cost associated with a higher quality top sirloin cap. Consumers did show preference for the flavor and overall liking of Prime steaks, however, purveyors and retailers must have customers who are willing to pay for the extra cost associated with Prime.