Beef! Its What's for Dinner!

Emerson, Case

The purpose of this research was to determine if prior browning (cooking) of pork and beef meat cuts increased palatability as compared to browning post sous vide cooking methods. Trained panelist and Warner-Bratzler Slice Shear force testing was conducted to come to a determination. Pork and beef muscles were trimmed consistently, vacuum packaged and aged for 7 and 14 d postmortem, respectively prior to freezing and subsequent evaluation. Pairs of muscles from the same species were evaluated per run/day during evaluation. Muscles were seasoned with a consistent amount of salt and pepper and weighed. One muscle from one side of each carcass was browned in a non-stick skillet for up to 20 mins, and then weighed and then vacuum sealed prior to being cooked sous vide at 135°F (57.2°C) for 10 h. When muscles were removed from the water bath, all were removed from vacuum packaging, reweighed, and the muscles not browned prior to sous vide cooking were browned as previously described, and reweighed prior to trained sensory panel evaluation. Additionally, the pork and beef cuts were sliced into 1 inch slices used for Warner-Bratzler shear force (WBSF) assessment and the remainder used for sensory assessment. A total of 20 beef and pork samples were evaluated over five or four sensory panel sessions, respectively. A 7–12 member sensory panel trained according to the American Meat Science Association (AMSA) sensory evaluation guidelines (AMSA, 1995) evaluated each sample for tenderness, juiciness, flavor, and off-flavor.

Awards Won: