

Public Abstract

First Name:Clairyce

Middle Name:Elizabeth

Last Name:Ohman

Adviser's First Name:Bryon

Adviser's Last Name:Wiegand

Co-Adviser's First Name:Carol

Co-Adviser's Last Name:Lorenzen

Graduation Term:SP 2014

Department:Animal Sciences

Degree:MS

Title:Beef chuck muscle isolation has no effect on premium ground beef programs

Meat processors want to isolate muscles from the beef chuck for individual sale, rather than including them in ground chuck, because they can receive a higher price/pound. Therefore, the need for research in the quality attributes for ground chuck containing varying muscles has become apparent. Color and oxidative characteristics were measured objectively and by a sensory panel on ground beef patties from 48 beef chucks, 24 containing traditional muscle mixes and 24 processed in the innovative style, which excluded several high value muscles. Objective color measurements showed that traditional patties faded faster than innovative patties, but the consumer panel did not detect this difference; therefore, we can safely assume that the typical customer would also not notice a difference in patty fading. No other differences were found. Based on these findings, meat processors can remove certain muscles from the ground chuck mix to gain more dollars per carcass, and still provide their customers with high quality ground chuck.