



** This news release from K-State Research and Extension is available online at <https://ksre-learn.com/agriculture-cattlemens-day-flavor-aging-round-steaks>

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K-State Cattlemen's Day: Flavor in check after lengthened aging of round steaks

K-State researcher shares results of study to evaluate palatability over three round muscles

By Jacob Klaudt, K-State Research and Extension news service

MANHATTAN, Kan. — Kansas State University graduate student Lauren Frink and her research team have evaluated consumer's perceptions of the flavor of three muscles in the round after extended periods of wet aging as part of a larger project to highlight less popular cuts of meat.

Frink's results will be included in the annual research report for [K-State's 112th annual Cattlemen's Day](#), set for Mar. 7 at the National Guard Armory in Manhattan. Registration costs \$35 on the day of the event.

Researchers examined the gluteus medius, semimembranosus and bicep femoris muscles within this project – cuts located in the hindquarter of a beef carcass and not typically eaten as steaks but rather as roasts. Meat scientists designate cuts thicker than two inches as roasts.

“Roasts from the biceps femoris are called coulottes or picanhas and are a commonly consumed cut,” Frink said. “Yet, because these are muscles of locomotion, they are not as tender as some of the support muscles located in the loin like the longissimus dorsi, so they do not get eaten commonly as steaks, which requires a dry cooking method.”

She added: “In turn, we don't typically see steaks from the round being promoted to consumers. The goal is to eventually market these cuts for a similar amount of money to muscles from the loin that get sold at a premium because of their palatability.”

To achieve that task, the K-State researchers studied wet aged steaks from the round to make them more tender and ensure the flavor did not deteriorate, which may heighten their notoriety among beef eaters. The wet-aging process consists of vacuum sealing cuts and placing them in refrigerators.

The meat industry practices aging to a standard of 14-28 days. Taking advantage of a natural process called proteolysis, aging breaks down the connective tissues within the meat, making it more palatable.

“The point of the study was to evaluate the flavor as we aged these muscles for longer periods,” Frink said. “Overall, we found that the flavor wasn't hindered; we can age these steaks up to 70 days and that flavor is still acceptable to the consumer.”

Moreover, Frink said that consumers were less likely to favor cuts that were aged for less time.

“We saw an acceptability cutoff from a consumer standpoint at around 14 days,” she said. “Those steaks aged in a shorter timeframe are not quite as tender because proteolysis has not occurred in full within that first week of aging.”

Frink said the team’s research findings may lead to the ability to store fresh beef for longer durations while selling favorable products to consumers at the same price – an advantage for the industry.

“Typically, these muscles aren’t consumed in this fashion, so I think it could also open some sales avenues from a producer standpoint and encourage consumers to try new cuts that may be more economical with still as much flavor and tenderness,” she said.

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FOR PRINT PUBLICATIONS: Links used in this story

K-State’s 112th annual Cattlemen’s Day, <https://www.asi.k-state.edu/events/cattlemens-day>

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