Consumer Preference Study and Survey

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For more information on these study results, contact McMullen at (319) 462-2791 or e-mail at lkmcmull@iastate.edu

Project Description

ISU Extension swine field specialist Larry McMullen researched consumers' views of pork loin tenderness, juiciness, flavor, and overall acceptance, along with their preferences, attitudes, and acceptance of pork. This study, "Sensory Preference of Consumers for High pH, Low pH, and Berkshire Loins" and its accompanying survey, "Consumer Preference, Attitude, and Acceptance of Pork" were funded by a grant from Iowa Pork Industry Center. Consumers were involved in pork selection workshops where they participated in sensory evaluation and educational sessions on selecting pork, food safety, pork storage, recipes, and other nutritional and health attributes of pork.
People participated in one of four workshops conducted during Nov. 16-18, 2004

All workshops were held at the Jones County Extension Office in Anamosa, IA
Consumer Preference Test

For the sensory evaluation portion of the workshop, each participant was provided with samples of three specifically chosen types of pork.

The three types: high pH, low pH, and Berkshire, had been harvested on the same day and were then aged for 7 days prior to the study.
The high pH and low pH loins came from Swift and Company in Marshalltown, IA.

The Berkshire loins were from animals raised at the ISU Teaching Farm and were processed at Mid West Pack in Nevada, IA.
All loins were sliced to approximately 3/4 inch in thickness and the slices were trimmed of external fat.

A George Forman griddle was used to cook the loin samples at 350°F to an internal temperature of 160 °F.
Participants were asked to evaluate loin samples for tenderness, juiciness, and flavor, using this 1 to 9 scale:

1 = “Dislike extremely”
5 = “Neither like nor dislike”
9 = “Like extremely”

Participants learned about appearance differences among the high pH, low pH and Berkshire pork samples.
Consumer Preference Test

ISU Extension family nutrition specialists Susan Uthoff and Vera Stokes presented information on food safety, pork storage, recipes, and nutritional and health attributes of pork.

Participants recorded their willingness to pay premiums for taste, tenderness, and juiciness of pork, natural and organic pork, and specific breeds and production methods.

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Using the 1 to 9 scale for tenderness, juiciness, and flavor, the consumer panels’ overall acceptance scores showed that high pH pork was rated highest, followed closely by Berkshire pork.