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Pork 101 A Short Course Focusing on the Importance of Pork Quality and Consistency

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A Short Course Focusing on the Importance of Pork Quality and Consistency

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As we move towards the next century, pork producers face many challenges. The Pork Quality Audit in 1994 identified consistency of the meat product, meat quality and food safety as major issues producers can't afford to ignore.

To introduce participants to these important segments of the pork industry, a three-day, hands-on short course has been developed at the University of Nebraska, with the assistance of the American Meat Science Association, the National Pork Producers Council, Michigan State University and Texas A&M University.

Course Objectives

The course provides:

a. In-depth training on quality and consistency issues in the pork industry.
b. Insight on value differences in swine, pork carcasses, pork primals and processes pork products due to quality variation.
c. A framework allowing participants in all phases of pork production to implement management and production changes to increase value through improvements in quality and consistency.

The target audience for the three-day course is individuals involved in the production, processing and marketing of pork and might include pork producers, veterinarians, researchers, educators, pork packers, meat processors, retail merchandisers, food service distributors, exporters, allied industry and media. To ensure everyone can participate in the hands-on learning activities, each session is limited to 32 participants.

Course Activities

The activities for the course center around two groups of market hogs. One group of four market hogs is used during the course for live evaluation and slaughter demonstrations. A second group of eight market hogs is slaughtered before the workshop to provide carcasses for fabrication, taste panel evaluations and quality measurements. The use of both sets of market hogs allows for the course to cover quality and consistency issues from production to consumption.

On the first day, participants have the chance to evaluate four live hogs, including a lean or fat animal and a light weight or heavy weight animal. These hogs are slaughtered on the second day of the workshop, and demonstrations, such as measuring carcass pH and carcass composition, HACCP (hazard analysis critical control point) systems for slaughter, hot processing of pork, microbiological interventions during slaughter and microbiological sampling for generic *E. coli*, are included. On the third day of the course the carcasses from the slaughtered hogs are evaluated for lean quality and quantity traits and are priced according to industry buying programs.

A second set of market hogs of diverse genetic background are recorded on video and slaughtered prior to the course. These carcasses are used during the workshop to give participants the chance for hands-on lessons in carcass evaluation, carcass fabrication, curing of the hams and bellies and taste panel evaluations.

Other activities provide unique learning experiences for the participants. For example, the first day's dinner provides participants with two chops to rate for tenderness and taste. The chops can come from loins preselected for opposite quality traits such as high marbling versus low marbling and pale, soft and exudative (PSE) versus dark, firm and dry (DFD). Different quality contrasts are served to different individuals to cover a number of quality comparisons during the meal. The information is summarized and presented to the participants at the end of the first day.

Course Outline

The following agenda is followed for each Pork 101 short course.

DAY 1

4 p.m.	Welcome
	Impact of genetics on lean quality
	Grading and evaluation of live animals
	Pork carcass lean value pricing
	Evaluate market swine
5:30 p.m.	Quiz on pork quality
	Dinner and taste test
	Perspective on quality and consistency
	Group selects one of eight hogs for fabrication
	Review results of dinner taste test

DAY 2

7 a.m.	Breakfast
7:30 a.m.	Pork carcass evaluation and review of eight carcasses for fabrication
8 a.m.	Pork slaughter demonstration HACCP and microbial interventions pH and other quality measurements Measures of carcass composition Hot boning demonstration
10:30 a.m.	Pork carcass fabrication
12 p.m.	Lunch
1 p.m.	Value-added product demonstration including bacon, low-fat ham and fresh pork sausage Demonstration of PSE and DFD pork processing Marinated pork products

DAY 3

7 a.m.	Breakfast
7:30 a.m.	Pork Quality Assurance Review of quality and consistency on carcasses Taste panel evaluation of hog used in the demonstrations Assessment of carcass value Evaluation of cured products made the previous day Carcass grading demonstration
12 p.m.	Lunch Adjourn

Course Evaluation

Past evaluations by participants indicate the course is successful and many participants had very positive remarks about it. When asked to identify things they liked about the course, the most popular answers related to "the hands-on nature of the course" and the "evaluation of the market hog from live to the meat products."

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