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An Educational Program Model for Pork Producers Pursuing Value-Added Marketing Opportunities

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PREVIOUS
ARTICLE



ISSUE
CONTENTS



NEXT
ARTICLE



0

An Educational Program Model for Pork Producers Pursuing Value-Added Marketing Opportunities

Abstract

An Extension program was developed to assist producers who are targeting products toward value-added markets. Market hogs from 11 producers were evaluated for hot carcass wt, lean composition, and fresh pork quality. Pork quality classification significantly differed by producer. These results were shared with producers during an educational program that described quality measures, presented individual results, and described methods to improve quality at the farm level. Producers were able to learn recommended production practices and share knowledge among their peer group. This program has helped pork producers improve pork quality, gain entry into value-added markets, and secure repeat sales.

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Introduction

Pork producers are aggressively pursuing value-added marketing opportunities. Historically, pork producers have focused on commodity production, achieving profit by keeping costs low. Currently, the market is gearing up to continuously monitor consumer preference information and respond with unique quality bundles that different consumer groups demand (Buhr & DiPietre, 1997). An Extension program was developed to assist producers who are targeting products toward markets with value-added attributes. In order to maintain these markets when established, the pork must be of a consistent, high quality.

Approach and Outcome

Consumer Preferences

Consumer quality preferences are generally placed upon color, marbling, pH, and drip loss. Color as measured by the Minolta Colorimeter has a subtle but important impact on consumer purchase decision. Most consumers prefer a bright reddish-pink color in fresh pork (49). Pork cuts that are too dark (31), too pale (61), or too variable in color within a package or within the meat case, may lower consumer perception of quality.

Marbling has been related to flavor, juiciness, and tenderness. Pork with a higher marbling score (1 = low to 10 = high) would be expected to produce meat with better eating quality. However, consumers differ in their preferences for marbling based on attitudes toward eating quality versus increased calories associated with increased marbling.

Drip loss is associated with the firmness and wetness of the meat. Not only is high drip loss unattractive, it can result in excessive cooking losses and drying of meat during cooking.

Ultimate pH is not a pork quality measurement in itself, but is highly correlated to color, drip loss, and eating quality traits. As pH declines below the ideal range (5.8 to 6.2), pork becomes paler, softer, and higher in drip loss.

Technical Evaluation

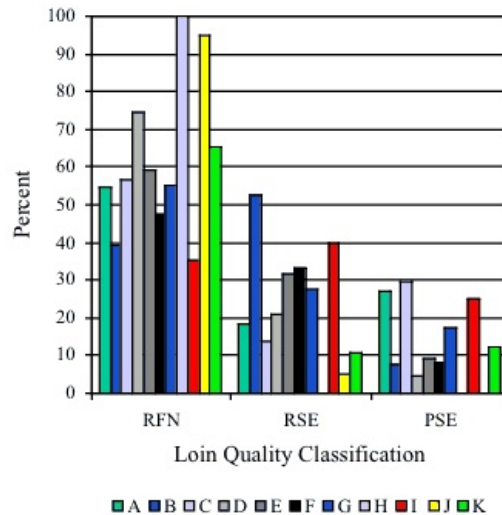
Market hogs (n = 354) from 11 producers were evaluated for hot carcass weight, lean composition, and pork quality. The right loin from each carcass was measured for pork quality, fat depth, and loin area (National Pork Board, 2000). In addition, loins were classified as red, firm, and normal (RFN); red, soft, and exudative (RSE); or pale, soft, and exudative (PSE). Differences in pork quality measurements among producers were evaluated using general linear models. Chi-square analysis was used to test differences in distribution of pork quality classification across producers.

Producer Results

Carcass composition differed by producer ($P < 0.001$), ranging in fat free lean percentage from 46.4 to 56.0. Average backfat depth ranged from 21.1 to 28.4 mm across producers. In addition, loins from different producers significantly differed in all quality measures ($P < 0.001$). Across producers, loin drip loss percentage ranged from 2.03 to 5.53, Minolta color ranged from 51.7 to 58.9, ultimate pH ranged from 5.66 to 6.19, and marbling score ranged from 1.3 to 2.3. Pork quality classification also differed by producer (Figure 1; $P < 0.01$).

Figure 1.

Percentage of Pork Loins Classified as Red, Firm, and Normal (RFN); Red, Soft, and Exudative (RSE); or Pale, Soft, and Exudative (PSE) by Producer



Pork Quality Control Points

A 16-step assessment program was developed to assist producers in enhancing quality. To optimize pork quality a producer should be able to answer yes to each question.

1. Are market hogs a minimum of 25% Duroc or other approved breeds?
2. Does the genetic supplier(s) provide quality information and utilize available genetic selection tools.
3. Are animals free of the Hal 1843 genetic mutation?
4. Are animals that contribute to marbling without increasing external fat utilized?
5. Have you completed training on "Effect of genetics on pork quality"?
6. Are pigs accustomed to human presence?
7. Has the use of electric prods been minimized?
8. Are handling and loading facilities designed to minimize stress?
9. Are health stressed animals separated?
10. Are pigs grown to maximum weight to maximize marbling?
11. Have truckers been certified in "Trucker Quality Assurance"?
12. Have electric prods been eliminated during loading and unloading?
13. Are only flat floor trailers utilized for transport?
14. Is appropriate space provided when trucking?
15. Is weather monitored and transport times and space adjusted accordingly?

16. Have workers completed training on "Animal Handling"?

Educational Program

Results were shared with producers during an educational program that described quality measures, presented individual results, and described methods to improve quality at the farm level. Each producer received all data from their farm, a written summary of their product evaluations, and a list of suggested management changes.

A presentation was prepared and presented that described in detail pork quality measurements, production practices that impact pork quality, consumer information and trends, observed carcass composition, and loin quality. Producers were able to learn recommended production practices and share knowledge among their peer group.

Impact

This group of pork producers has used this information to individually make changes on their farms to improve quality. Moreover, this producer group has developed a branded product and a successful marketing program. This program incorporates quality assessments and continuing education as part of their value-added attribute bundle. This pork has been well received by wholesalers, retailers, restaurants and consumers.

Conclusion

Pork producers were able to learn more about their product, make comparisons, and share information in a peer group and to learn recommended production practices that will improve their products quality attributes. This program has helped pork producers improve pork quality, gain entry into value-added markets, and secure repeat sales.

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