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Meat and Muscle BiologyTM



Understanding Beef Nutritional Attributes Contributes to Consumers' Willingness-to-Pay for a Healthier Product

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Objectives

Nutritional value impacts consumers' purchasing decisions of food products. Beef is a nutrient rich foodstuff excelling in protein, vitamins, and minerals. There is growing controversy regarding fat content of beef and its healthfulness in the diet. Although much of the fatty acid (FA) content in beef is considered "healthy fats," many consumers are confused about the different classifications of FA. Research at the University of Florida shows there is variation among cattle for FA composition. This provides opportunity to identify cattle with a favorable composition and market this product to the increasing population of health-conscious consumers. Before producers invest in such marketing opportunities, it is necessary to understand how consumers perceive this information. The objective of this study was to determine consumers' knowledge of beef nutritional value and its importance in their purchasing decisions and willingness-to-pay.

Materials and Methods

A national survey was administered online to over 1000 respondents. The study began with 7 questions, each asking the respondent to choose between 2 steaks that varied in polyunsaturated and saturated FA levels, iron content, and price. Following the 7 choice questions, respondents were asked to categorize "Trans Fat," "Saturated Fat," "Monounsaturated Fat," and "Polyunsaturated Fat," as either "healthy" or "unhealthy." After receiving an educational excerpt, respondents were re-asked the 7 steak choice questions and the fat-categorization question. Lastly, respondents were asked demographic questions along with questions regarding their normal fat consumption habits.

Results

The results from the survey indicate many consumers are confused about the differences in beef nutritional value, specifically FA content. Initially, only 66.40, 69.05, 79.14 and 79.24% of respondents correctly categorized the monounsaturated, polyunsaturated, saturated, and trans fat, respectively. However, a favorable shift occurred and more than 90% of respondents correctly categorized the various FA once provided the educational excerpt. Furthermore, once respondents better understood the healthfulness of FA in beef, respondents were willing-topay a premium for a product of improved FA composition (Table 1). Also, prior to information regarding FA, respondents preferred more iron content, especially compared to better FA composition, but these preferences reversed after the informational excerpt was provided and respondents better understood that not all fat in beef is bad.

Table 1. Premiums/discounts in U.S. dollars respondents are willing-to-pay per lb of steak before and after the educational excerpt

| | Premiums/discounts | |
|-------------------------------|--------------------|-------------------|
| Nutritional | Before information | After information |
| Impr ovement | | |
| 50% more favorable fat | -1.0 | 3.0 |
| composition | | |
| 100% more favorable | -1.4 | 4.2 |
| fat composition | | |
| 50% iron content | 0.2 | 0.1 |
| increase | | |
| 100% iron content increase | 1.3 | -0.5 |

Conclusion

In the past, much controversy surrounding fat content of red meat and its role in the diet led to many health professionals recommending cutting such food from the diet. In recent years, research on different FA categories supports

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the idea that not all fat is bad. Our results indicate that relaying this information to consumers is extremely important to their purchasing decisions and willingness-to-pay for beef.

These findings provide insight for beef promotion and marketing opportunities to the increasing population of health-conscious consumers.