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Consumer Preference and Value of Beef with Country-Of-Origin Labeling

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Summary

The 2002 Farm Bill mandates country-of-origin labeling for beef and other items by 2004. A majority (69.2%) of consumers in Denver and Chicago preferred a fresh beef strip steak with a label guaranteeing the meat came from a U.S. animal over an unlabeled steak. On average, consumers were willing to pay 18.7% more ($0.81/lb) for labeled product. When 17 attributes were rated for their desirability when purchasing beef, country-of-origin labeling ranked ninth; "freshness" and "inspected for food safety" were the most popular selection criteria. Food safety concerns were the primary reason consumers preferred beef labeled with country of origin.

Introduction

Many countries require country-of-origin labeling of perishable agricultural products. Until recently, the United States did not. Mandatory country-of-origin labeling for fresh and frozen meat in the United States will be required by Sept. 30, 2004, with the recent passage of the Farm Security and Rural Investment Act of 2002. Meat products may increase in price to alleviate the cost of country-of-origin labeling. This research was conducted to determine the extent to which consumers might prefer country-of-origin labeling in isolation of other beef attributes. It was also designed to learn the relative importance of country-of-origin labeling to other product selection criteria and why consumers might prefer their beef to be so labeled.

Procedure

Consumers in Denver and Chicago who were participating in a larger study involving sensory evaluation of beef completed an attitudinal survey and then visually evaluated two steaks during June and July, 2002. A one-inch thick steak was divided in the center to create two, identical, 1/2-inch thick steaks. The steaks were individually placed on foam trays, cut side up, and overwrapped with oxygen permeable film. The steaks were kept refrigerated and allowed to bloom. One steak remained unlabeled, while a 3.3 x 2.3 inch label, guaranteeing the animal from which the steak was taken was born and raised in the United States, was placed on the other steak. The label contained a red, white, and blue American flag with the words "U.S.A. Guaranteed" across the flag, and "Born and Raised in the United States of America" on the label.

Two hundred seventy-three consumers participated in the study (n = 132 for Denver, n = 141 for Chicago). To qualify for the study, panelists had to be the primary shopper of the household, between the ages of 19 and 60, with no food allergies, and willing to consume beef. A dialogue explaining the design of the evaluation session and auction methods was read to the panelists. A moderator explained to the panelists that both steaks were inspected and passed by the USDA. The moderator clarified the only difference between the steaks was the labeled steak was guaranteed to be born and raised in the United States, while the unlabeled steak may or may not have been born, raised, or both in the United States. A reference price of $7 for an unlabeled steak was given. The panelists were asked to write a hypothetical monetary value they would be willing to pay for the unlabeled and labeled steaks. The steaks were only visually evaluated and not sold in the auction process.

Results

When consumers were asked on a survey if they would be willing to purchase a steak labeled with the country of origin of the animal, 74.7% indicated they would. Surprisingly, 22.3% did not care and 3% claimed to prefer unlabeled over labeled beef. Consumers preferring to purchase a labeled product were asked to indicate why they preferred the label. Their responses were grouped into six categories (followed by the percentage of consumers who made such comments): safety and health of meat (45.0%), freshness of meat (4.5%), meat quality (11.0%), support of producers (21.0%), support of location (12.5%), and general information (31.8%). Concerns about food safety were the primary reason for consumer support of country-of-origin labeling.

Those consumers preferring a labeled product were asked to volunteer how much they would be willing to pay for such information. About 20% were unwilling to pay a premium (Table 1). More than 50% were willing to pay a premium of $0.25/lb or more. This was true whether the product was steak or ground beef. The mean premium for the label was $0.42/lb for the steak

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and $0.36 for the hamburger, which equated to an 11% and a 24% premium, respectively.

Consumers were asked to rank products in the order they would most prefer to have a country-of-origin label. In order of preference, they ranked hamburger, steak, roast, pre-prepared beef products and processed beef products. Given public concern over the safety of ground beef, these results are consistent with the food safety issues identified in their comments.

In the survey, consumers were asked to rate 17 items on their desirability when purchasing beef. Table 2 indicates that "freshness" and "inspected for food safety" were the top two concerns. In ninth place was country-of-origin labeling. This suggests consumers would use country-of-origin labeling information as an indicator of food safety.

The data discussed so far came from the survey. Such data can be used to explore consumer attitudes about topics but cannot be used to actually predict how consumers would respond to country-of-origin labels in the marketplace.

After completing the survey, consumers were shown the two steaks (one with a label and one without) and asked to volunteer a price they might be willing to pay for each package. It should be noted the label provided considerable focus on just the country-of-origin labeling, excluding all of the other criteria consumers often used to make purchase decisions. As such, the data likely inflates the value of the label. It does, however, give another indication of consumer willingness to pay for labeling information.

After viewing the steaks, 69.2% of consumers indicated a willingness to pay a premium for a steak guaranteed to be from an animal born and raised in the U.S.A. This is comparable to the 74.7% who indicated an interest in country-of-origin labeling on the written survey. On average, consumers were willing to pay 18.7% more ($0.81/lb) for labeled product (Table 3).

Table 1. Percentage of consumers willing to pay a voluntary premium for country of origin labeling information on beef.

Premium/lb	Steaks	Ground Beef
No premium	21.2	20.6
$0.10 - $0.20	22.5	28.4
$0.25 - $0.50	34.3	30.9
> $0.50	21.7	19.8

Table 2. Ratings for desirability of characteristics people may look for when purchasing beef, where 1=extremely desirable and 5=not at all desirable.

Rank	Characteristic	Relative rating
1	Freshness	1.23
2	Inspected for food safety	1.45
3	Color	1.60
4	Price	1.72
5	Leanness	1.76
6	High quality grade	1.79
7	Tender	1.86
8	Nutritional value	2.20
9	Country-of-origin label	2.41
10	Marbling	2.43
11	Brand name	2.53
12	Source assurance	2.56
13	Environmentally friendly production methods	2.61
14	Beef raised in your region of the country	2.64
15	Convenience	2.66
16	Fat content	2.75
17	Organic/natural	3.01

Table 3. Auction data (bids, $/lb) for visual evaluation of country-of-origin labeling.

Visual Evaluation	Overall	Chicago	Denver
U.S.A. Label	5.14	5.56	4.69
No Label	4.33	4.53	4.12
Difference	0.81	1.03	0.57
Significance (P-value)	.0001	.0001	.0001

Consumers in Chicago were willing to pay more for labeling information than consumers in Denver.

Advocates for country-of-origin labeling assume consumers want information about the source of their beef and are willing to pay for such information. Our results would agree with this assumption. However, not all consumers placed a higher value on the labeled steak. Nearly one quarter of the consumers (24.2%) were indifferent in their preference for the labeled or unlabeled product, while 6.6% of consumers were willing to pay more for the unlabeled product. Consideration should be given to consumers who are indifferent in their preference or preferred unlabeled steak, as these consumers may be unwilling to pay for country-of-origin labeling.

A majority of consumers appear willing to pay a premium for country-of-origin information. Many appear to use the information as an indication of food safety. By itself, country-of-origin labeling was judged to be intermediate in importance, following issues of freshness and safety.

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