

NATIONAL BEEF QUALITY AUDIT -- 1995: RESULTS OF FACE-TO-FACE INTERVIEWS WITH BEEF PURVEYORS, RETAILERS, RESTAURATEURS AND PACKERS

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Story in Brief

Persons (n = 40) representing purveyor, retailer, restaurateur and packer sectors of the U.S. beef industry were interviewed and given questionnaires to numerically identify and assess the presence and severity of producer-controllable quality defects of wholesale/retail cuts of beef and processed items manufactured from lean trimmings. Questionnaires itemized potential quality concerns with each item receiving a severity score reflecting its effect on overall quality. Additionally, purveyors, retailers and packers were asked to identify quality concerns that have or have not improved since 1991. The greatest concern with the quality of beef for the consumer group (aggregate of purveyors, retailers and restaurateurs) was "Low overall uniformity and consistency." The top concern for the packing sector was "Lack of uniformity/consistency and predictability of live cattle." The single quality defect cited most frequently by all sectors that has improved the greatest from 1991 was the incidence of injection site lesions, while the item least improved related to inappropriate USDA quality grade mix. The results of these interviews indicate dramatic improvements in the incidence of injection-site lesions while lack of uniformity/consistency of live animals as well as their end-products is a marked problem within the beef industry.

(Key Words: Beef Quality, Retail Beef, Wholesale Beef.)

Introduction

In an effort to assess quality defects in U.S. beef, a National Beef Quality Audit (NBQA) of slaughter cattle (their carcasses and dress-off/offal items) was conducted in 1991. Quality defects were identified through documenting factors affecting the value of slaughter cattle in terms of value of their carcasses and dress-off/offal items. Serving as a progress report on improvements since

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1991 was the 1995 National Beef Quality Audit, with a goal of conducting a sequel to the 1991 audit. One phase of these audits consisted of interviewing beef purveyors, retailers, restaurateurs and packers in an attempt to identify factors which hinder the quality of beef at both live and boxed levels.

Materials and Methods

Industry representatives (n = 40) from four sectors of the beef industry were personally interviewed by a member(s) of an interview team and given a questionnaire pertaining to the present status of U.S. beef quality. The four sectors included wholesale beef sales (Purveyors), supermarket/retail sales (Retailers), prepared food sales (Restaurateurs) and live animal harvest (Packers). Each interviewee was directly involved with purchasing, processing and/or sales of one or more of the following: live cattle, carcasses, offal, boxed-beef and individual food-service beef items. Two separate questionnaires (one for purveyors, restaurateurs and retailers collectively and one for packers) were distributed and each questionnaire listed potential quality defects. The questionnaire for purveyors, restaurateurs and retailers contained 27 potential quality defects and the questionnaire for packers contained 40 entries addressing potential quality problems. Individuals were asked to assign a severity score (10 = severe problem; 1 = no problem) to each item of interest based upon their perception of the severity of the problem. In addition, individuals (excluding restaurateurs) were asked to list those quality concerns that have or have not improved since 1991.

Results and Discussion

The top ten aggregated quality concerns (combined purveyor, restaurateur and retailer concerns) for 1995 are listed in Table 1. The item receiving the highest aggregated severity score was "Low overall uniformity/consistency", which ranked 3rd, 2nd, 1st and 1st for purveyors, restaurateurs, retailers and packers, respectively. The 10th highest aggregated concern was "Low overall cutability", which ranked 7th for both purveyors and restaurateurs and did not appear in the top-ten category for retailers or packers. Table 2 lists quality defects that have or have not improved since 1991 according to the responses of purveyors, retailers and packers. The incidence of injection-site lesions received the greatest response in terms of quality defects that have improved since 1991. Increased problems relative to appropriate USDA quality grade mix resulted in the greatest response for this item when individuals were asked to list that which has not improved since 1991.

Purveyors. Purveyor responses in relation to the top ten aggregated quality concerns are presented in Table 1. The 2nd ranked quality problem according

to purveyors was "Too large ribeyes/loineyes". Quality items that have improved since 1991 according to purveyors were 1) fewer injection-site lesions, 2) heightened producer awareness of quality problems, 3) increased availability of closer-trimmed beef, and 4) reduced microbial counts. Items that worsened were 1) increased variability of USDA Choice, 2) too large ribeyes/loineyes, 3) decreased availability of U.S. Prime, 4) decrease in palatability, and 5) insufficient flavor.

Restaurateurs. Nine of the top ten quality concerns for restaurateurs were consistent with the top ten aggregated quality concerns (Table 1). Furthermore, the top five restaurateur responses were most similar to the top five aggregated quality concerns. Restaurateurs, however, ranked "Too high occurrence of dark and unattractive lean" ninth in their top ten list for producer controllable defects; an item not found in all other top ten lists. Restaurateurs were not asked to list quality defects that have/have not improved since 1991, however based upon restaurateurs 1991 top ten list of quality defects, areas that have improved include 1) fewer injection site lesions, 2) less seam fat, 3) too large ribeyes/loineyes, and 4) incidence of dark cutters. These improvements, however, have yielded to other areas recognized as still needing improvement. These include 1) low overall uniformity/consistency and 2) inadequate tenderness.

Retailers. Quality defects concerning retailers are compared to the aggregated quality concerns in Table 1. Results of interviews with retailers reveal that concerns with lack of uniformity/consistency and inadequate tenderness have gained greater importance while concerns with excessive external and seam fat as well as incidence of injection site lesions have been reduced. Although the problem with excessive fat has decreased for retailers, it is worth noting that of the product purchased by the retailers interviewed, 65% was closely-trimmed (one-quarter inch or less residual fat). Accordingly, the decrease in retailer concerns regarding excessive fat could be due to the availability and procurement of closely-trimmed boxed beef. One item that has not improved since 1991 is excessive weights of cuts and boxes. Moreover, four new problems addressing retailers include 1) low overall palatability, 2) beef prices too high for the value received, 3) inappropriate USDA quality grade mix, and 4) insufficient flavor.

Packers. Results of interviews with packers are for comparative purposes and were not included into the aggregated quality concerns (Table 1). Nine packers were interviewed and the top ten quality concerns were as follows: 1) lack of uniformity and predictability of live cattle, 2) too high rate of liver condemnations, 3) too frequent hide damage due to mud/manure, 4T) too frequent bruise damage, 4T) too many dark cutters, 4T) excessive external fat,

7) cattle of too heavy weight, 8) inadequate marbling, 9T) too frequent hide damage due to hot-iron brands, and 9T) beef prices too high for the value received. Compared with the 1991 top ten list, packers cited lack of uniformity/predictability of live cattle and the incidence of dark cutters as items with increasing concern. The most dramatic change from 1991, however, was a decline in concerns for occurrence of injection-site lesions. When asked specifically about items that have/have not improved from 1991, packers again identified reduced injection-site lesions as well as improved cutability (i.e. - less fat). Packer concerns that have not improved, or even worsened from 1991 include 1) overall eating quality (Premium [branded] programs have deteriorated quality of the remaining U.S. Choice beef), 2) incidence of dark cutters, 3) increased variability in muscling, 4) increased live cattle weights, and 5) Increased inconsistencies in beef.

It was estimated in 1994 that the three largest packers accounted for approximately 79% of the total fed steer and heifer slaughter in the U.S. For the quality concerns identified in 1991, all packers were asked to rate the beef industry regarding progress in producer-controllable defects. Using a 10-point scale, the mean for all packers was 4.35, whereas the mean for the three largest packers was 3.0.

Implications

Results of these interviews suggest that producer and industry efforts to relocate and reduce injection-site lesions have received an enormous and positive response from all sectors. However, uniformity and consistency in both live animals and carcasses currently lacks acceptability standards for the industry.

Literature Cited

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Table 1. Rankings of top ten beef quality concerns for NBQA 1995 according to four beef industry sectors.

	Industry Sector ^a				
	AGGR	PURV	REST	RETA	PACK
Number of individuals interviewed	31	10	6	15	9
Quality Concern	Rank (severity score) ^b				
Low overall uniformity/consistency	1	3 (5.85)	2 (5.83)	1 (6.90)	1 (6.83)
Inadequate tenderness	2	8 (5.00)	3 (5.75)	2 (6.13)	--
Low overall palatability	3	6 (5.30)	5 (5.50)	4 (5.47)	--
Excessive external fat	4	1 (6.30)	1 (6.00)	9 (4.17)	T4 (5.89) ^c
Beef prices too high for the value received	5	9 (4.95)	4 (5.58)	5 (5.33)	T9 (5.25) ^c
Insufficient flavor	6	4 (5.50)	10 (4.25)	7 (4.80)	--
Excessive weights of boxes and cuts	7	--	6 (5.20)	3 (5.87)	7 (5.61)
Inappropriate USDA quality grade mix	8	5 (5.35)	--	6 (5.03)	8 (5.50)
Too high incidence of injection site lesions	9	10 (4.45)	8 (4.50)	10 (3.67)	--
Low overall cutability	10	7 (5.05)	7 (4.75)	--	--

^a AGGR = aggregated quality concerns (combination of purveyor, restaurateur and retailer responses);
PURV = purveyors; REST = restaurateurs; RETA = retailers; PACK = packers.

^b Rank: 1 = most severe, 10 = least severe; Severity score: mean response using a 10 point scale (10 = severe problem, 1 = no problem).

^c T indicates a tie.

Table 2. Percentage of purveyor, retailer and packer responses about quality concerns for NBQA 1995 that have/have not improved from NBQA 1991.

Quality Concern	% ^a		
	Purveyor	Retailer	Packer
Improvements			
Fewer injection-site lesions	30	40	33
Increased availability of closer-trimmed beef	10	33	--
Heightened producer awareness	20	27	11
Improved cutability	--	13	44
Extended shelf life/case life	10	13	--
Shortfalls			
Increased USDA quality grade mix problems	50	20	11
Cattle and/or cuts are heavier	30	13	11
Lessened eating quality	20	13	11

^a Number represents the percentage of individuals interviewed that indicated whether each item has or has not improved.