



NATIONAL CATTLEMEN'S BEEF ASSOCIATION

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Attn: Mr. Keith Payne
United States Department of Agriculture
Food Safety and Inspection Service
1400 Independence Avenue, SW
Room 1175 South Building

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2008-0011
2008-0011-11
Phyllis J. Marquitz

Dear Under Secretary Raymond,

On behalf of the National Cattlemen's Beef Association (hereinafter NCBA) I want to express our appreciation for the opportunity to comment on the subjects discussed at the Public Hearing on April 9-10, 2008 on *E. coli*. Producer-directed and consumer-focused, the National Cattlemen's Beef Association is the trade association of America's cattle farmers and ranchers, and the marketing organization for the largest segment of the nation's food and fiber industry and Food safety is our number one priority. Beef safety is more than an expectation, more than the effort of one single entity — it is the sum of the entire beef production system, from farm to table.

The industry and the scientific community realize that further improvements can be made through a collaborative effort between industry, scientists, consumers and regulators. The beef industry believes that the optimal system of food safety assurance relies upon a food safety net extending from farm to consumer. We work closely with groups such as the Beef Industry Food Safety Council (BIFSCo) and believe strongly in cooperation efforts from each segment of the food chain.

NCBA's policy supports science-based decision making at the legislative and regulatory levels and we work with our research partners to focus on keeping consumers safe as they enjoy our product. Therefore, we focus our efforts in the following areas:

1. The use of science-based pathogen intervention strategies to enhance sanitary processes that include effective Hazard Analysis Critical Control Point (HACCP) Programs and microbiological testing protocols to verify process control. A summary of interventions that have been researched and implemented can be found in the Beef Decontamination Technologies Fact Sheet^{1,2,3,4}. Extensive research has been conducted to collect data on the prevalence of pathogens in the pre-harvest environment so that effective interventions can be developed for use

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in production settings^{5,6,7,8,9,10,11}. Beef producers are committed to playing an active role in ensuring beef safety through research funding as well as intervention adoption once technologies are approved for use on live cattle.

2. An understanding, shared by each segment of the beef food chain, of the risks involved and the steps needed to ensure a safe beef experience.
3. The principles of prevention and risk reduction from farm to table, including effective monitoring and intervention strategies^{12,13}. These strategies must be based on data collected through research. The Best Practices developed by BIFSCo and embraced by our industry follow this model by inclusion of interventions and systems validated through research. On-going research is used to collect data on pathogen prevalence and ecology so that effective interventions can be developed to reduce pathogen prevalence in the beef chain. Interventions for use in production settings must be adopted and multiple interventions have been researched.
4. The notice for today's meeting included the statement "FSIS will discuss growing evidence that may support a determination that raw beef products such as primal cuts and boxed beef contaminated with *E. coli* O157:H7 are adulterated". Based on available research, the prevalence of *E. coli* O157:H7 on the surface of subprimals is rare. In two studies funded by The Beef Checkoff that examined 1,200¹⁴ and 1,014¹⁵ beef samples from multiple processing facilities, the incidence of *E. coli* O157:H7 on the surface of the subprimals was zero and two, respectively. The levels of *E. coli* O157:H7 in the two positive samples in the latter study were <0.375 colony-forming units per cm². The results indicated that *E. coli* O157:H7 is not a common contaminant on the surface of subprimals, and if it is present, it is at extremely low levels.
5. Expansion of the adulteration policy for *E. coli* O157:H7 to all intact beef products is not warranted due to the lack of supporting scientific evidence and because interventions and processes exist for application to such products entering further processing. Steaks and roasts from intact beef have not been implicated in foodborne illness. Existing regulations and policies and industry best practices are currently in place to address the use of trim intended for ground beef production from intact primals. Existing policies and industry best practices that effectively address the hazard of *E. coli* O157 are also in place for non-intact beef primals. These facts, combined with research that indicates the very low prevalence and very low quantitative levels found on the surface of intact primals show that this policy expansion is unwarranted.
6. The expansion of the adulteration policy to all non-O157 STEC is viewed by NCBA as premature based on data that exists as a result of the most current research. This position is based largely upon the scientific literature and on public health data^{16,17}. Studies were conducted to determine prevalence and

characterization of non-O157 STEC on pre- and post- intervention carcasses and in ground beef. 10,159 samples (carcass, trim and ground beef) were analyzed and only 15 isolates match one of the top 6 CDC STEC serotypes. A fraction of these have the ability to cause disease. This data does not support making all STECs adulterants in raw ground beef. At the public meeting held in October 2007, CDC reported no outbreaks linked to non-O157 STEC from beef. The scientific literature clearly indicates that not all serotypes of STEC are pathogenic to humans and much is still unknown concerning virulence factors and their relationship to human disease. FSIS has no published, validated and accepted laboratory protocol for determining pathogenic STEC in beef and many analytical challenges remain related to adapting laboratory methodology for industry use. Given these facts, declaration of all non-O157 STEC as adulterants is not technologically feasible nor would it be a wise use of food safety resources. NCBA believes that the **best course of action is for industry and government to continue targeting *E.coli* O157:H7 with validated interventions and appropriate testing since this is the serogroup that is most virulent and most often associated with severe human disease. Broad spectrum interventions currently in place will have a correlated effect on other serogroups beyond O157.** This was demonstrated in a study conducted by USDA scientists that showed a sevenfold reduction in carcass contamination by STEC through the use of interventions¹⁶. We, therefore have interventions in place currently that will address *E. coli* O157 and other serotypes while we continue to find more answers about specific STECs that are pathogenic, methodologies for testing and measuring presence in the public health labs, and monitoring presence in samples.

7. Plant re-assessments were recently conducted which resulted in many changes to plant processes and policies. The effects of these changes, therefore, cannot be evaluated since results from these adjustments have yet to be measured. The use of data to track microbiological trends is a valuable tool used by the beef industry but this tool must utilize data that is collected over time and is not effective when used as a snapshot. We must allow the enhanced systems to operate for a substantial period of time before a judgment is made on the effectiveness of the changes.

Beef safety has been, and will continue to be, a dominant feature of the beef industry; The Beef Checkoff program spends \$2 million every year researching beef safety. NCBA also believes that food safety cannot be addressed without considering the route that beef makes to the consumer's table. This food chain begins on the farm and extends through processors, distributors and ends with retail and food service establishments having direct contact with consumers. Thus we work with stakeholders in all of these areas through the Beef Checkoff program, including educating consumers on safe handling practices.

NCBA believes that the decision to declare non-O157 STECs adulterants will lead foreign countries to develop similar requirements in their regulations, even if they do not intend to test for these bacteria in domestic products. Like zero tolerance requirements for *Salmonella* and *E. coli* O157:H7, the requirement will likely function as a non-tariff trade barrier to U.S. red meat

products in many countries. It is imperative the USDA perform a very thorough analysis of the prevalence and risk associated with these bacteria in ground and raw, intact products to prevent misuse of a requirement intended to protect human life and health.

For these reasons, the NCBA and its partners are committed to enhancing the current science-based, industry-wide approach. Every segment of the beef industry is united behind effective programs designed to solve microbiological problems, including *E. coli* O157:H7 in the beef supply, and aimed at long-term solutions for the problems presented by other hazards already existing or those that may evolve in the future.

NCBA, representing America's beef producers, would welcome the participation of USDA officials representing the government's responsibility to provide a regulatory framework for food safety to work collaboratively on improvements that are science-based and technologically feasible. We also renew our request for information regarding past recalls and analysis as part of a continuing improvement process. Again, we strongly believe that there is no evidence at this time to support new regulatory determinations with respect to adulteration of beef products.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Phyllis J. Marquitz". The signature is fluid and cursive, with a large initial "P" and "M".

Phyllis J. Marquitz, MS JD
Director, Food Policy
National Cattlemen's Beef Association

1. Beef Decontamination Technologies Fast Sheet

<http://www.beefresearch.org/CMDocs/BeefResearch/ACFFC.pdf>

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