



Testing for *E. coli* O157:H7 in Raw Ground Beef

The beef industry's commitment to improving food safety began with a Blue Ribbon Task Force more than 15 years ago, and today, the Beef Industry Food Safety Council (BIFSCO) brings the industry together to collaboratively improve beef safety. The beef industry has agreed that safety is a non-competitive issue, and through BIFSCO, companies openly share proprietary business information with their competitors and customers with the common goal of advancing beef safety. This effort has resulted in a series of "best practices" documents that serve as the definitive guide for advancing beef safety at each stage of the beef production process. "Best practices" documents have been developed and continuously updated to assist all sectors of the beef chain in preventing *E. coli* O157:H7 from entering the food supply as well as testing for *E. coli* in beef products.

FACT: Every federally inspected beef processing plant implements a customized safety program to eliminate pathogens.

Research and experience show the best way to combat foodborne pathogens is with the consistent application of validated safety programs. In order to fit each company's unique safety program, "best practices" for pathogen testing provide companies flexibility in how they are implemented. Carcass trimmings used to make ground beef must be tested for *E. coli* by the supplier. Re-testing by the processor prior to grinding is not part of the "best practices" for raw ground beef. Many companies perform finished product testing prior to shipping ground beef to grocery stores and restaurants as an additional step to ensure that only the safest, highest quality ground beef products enter commerce.

FACT: Testing is a verification that other safeguards are working properly.

There are many safeguards in place throughout the beef production system to ensure that only the safest, highest-quality ground beef products enter commerce. Testing of carcass trimmings and finished product is a scientifically valid approach to ensure these safeguards are working. Testing alone is not the answer to producing a safe product. Testing works in combination with other safeguards in place throughout the beef production system to verify those systems are working properly.

BIFSCO "best practices" call for suppliers and processors to use a standardized, validated method to collect samples for testing known as "N=60 sampling." In 2008, BIFSCO distributed an instructional video through the U.S. Department of Agriculture to 675 federally-inspected beef processing operations that provides clear visual guidelines on how to properly use the N=60 sampling method.

FACT: Third-party audits validate supplier raw material sampling and testing compliance.

BIFSCO "best practices" call on companies who rely on supplier raw materials testing to conduct third-party audits to ensure their suppliers are in compliance with standard sampling and testing. The labs conducting third party audits must be reputable and accredited. Competence of the laboratory testing methods must be established in order to accept testing results from suppliers.

FACT: Our collaborative approach has been successful in advancing beef safety.

Approaching beef safety as a non-competitive issue has allowed the beef industry to make significant advances in beef safety over the past 15 years, including the implementation of new safety technologies and "best practices" throughout the beef production chain. The combination of interventions to remove bacteria such as hide washes, steam vacuums, steam pasteurization, hot water washes, and/or cleaning

solutions with scientifically validated testing and sampling procedures to verify the effectiveness of those interventions is advancing beef safety. According to data from the Centers for Disease Control and Prevention, *E. coli* illnesses declined significantly between 1996 and 2004, and have remained low since then at approximately one case per 100,000 people.

FACT: Our work continues.

E. coli O157:H7 and other foodborne threats are tough, adaptable foes, and food producers must be aggressive and remain vigilant to keep them out of our food. Since 1993, beef producers have directly invested more than \$28 million in ongoing beef safety research programs that establish foundational beef safety knowledge; and the industry makes sure information on safety “best practices” is widely distributed by providing training and communication tools to all industry sectors. Collectively, the industry invests more than \$350 million per year to implement safety programs. Details on beef research are available at www.BIFSCo.org and www.BeefResearch.org.