

Beef Safety Today



BEEF SAFETY
HANDBOOK

A recent study funded by The Beef Checkoff indicates consumers are concerned about food safety. However, the same survey shows 81 percent of consumers agree that the entire beef industry is working together to provide safe and wholesome food, and 78 percent of consumers agree that safeguards developed by beef industry scientists have made ground beef safer than ever.

The beef industry pledged to consumers many years ago to produce the safest food possible, and the industry is supporting that commitment through research, application of safety interventions and education to ensure it is making continual improvements to the safety of beef.

Safety Steps In the Beef Production Process

The safety of America's beef is assured through the cooperative efforts of all partners in the beef supply chain. The safeguards developed by the industry overlap and touch all aspects of beef production, and the beef industry continues to invest in new research to make beef even safer. Each year, the industry collectively spends approximately \$350 million on testing, safety interventions and other strategies to protect beef from pathogens like *E. coli* O157:H7.

The beef industry uses a “multiple hurdle” approach to safety by integrating beef safety interventions and technologies into each step of the production process. While no technology or practice is 100-percent effective in reducing *E. coli* O157:H7 and other pathogens by itself, the combination of safety steps throughout the stages of beef production creates a robust food safety system. Through the Beef Industry Food Safety Council (BIFSCo), the beef industry also provides free “best practices” documents that outline safety practices for participants involved in each step in the beef production process.

Here's what happens at each stage of beef production to ensure food safety:

ON FARMS AND RANCHES – Beef producers have funded basic research to characterize the ecology of *E. coli* O157:H7 and other pathogens both in the farm environment and in the animal. This research has built the foundation for future safety intervention strategies. For example, one of the most promising areas of beef safety research is at the earliest stage in the production chain – on farms and ranches. This research is focused on steps that can be taken to reduce or eliminate *E. coli* O157:H7 in cattle through technologies like vaccines, feed supplements and washes. Most of these technologies are currently in the approval process, but are expected to become more available over the next few years. Once approved, these safety tools will have a complementary effect on the measures already in place throughout the rest of the beef production chain.

AT BEEF HARVEST AND PROCESSING – Because most U.S. beef is harvested and processed in a relatively small number of plants, processing facilities are a key target for maximizing the impact of safety interventions. Since the beef industry began its efforts to combat *E. coli* O157:H7 in the 1990s, a variety of safety technologies have been researched and implemented and are still in use today, including:

- Hand-held steam vacuums to remove spot contamination;
- Steam pasteurization of carcasses;
- Hot water carcass washes;
- Organic acid carcass washes;
- Testing and validation procedures; and
- Hazard Analysis Critical Control Point (HACCP) programs.

These safety steps take place under the continuous presence of Food Safety and Inspection Service (FSIS) personnel at all federally-inspected processing facilities. Beef processing facilities meet and exceed tough U.S. government rules, and the approximately 7,800 FSIS inspectors verify that every day.

“Other nations are struggling with *E. coli* still, and certainly with *Salmonella* to a greater extent than any of us here in the United States. We are the model for the whole world, and I think it's the leadership that is displayed by the industry that has gotten us to this point.”

– Elsa Murano,
former USDA Under Secretary for Food Safety



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AT RESTAURANTS AND RETAILERS – Both restaurants and retailers must handle, store and prepare food according to local, state and federal laws. Food establishments also are inspected by local and/or state health authorities. Additionally, extensive food safety training programs are offered both online and in person for retail and restaurant employees.

IN CONSUMERS' KITCHENS – Consumers can take a final step by following the correct handling, cooking and storing instructions for food. For example, by cooking ground beef to an internal temperature of 160 F – as measured with an instant-read meat thermometer – home cooks can help ensure a safe and delicious meal.

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 \$27 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. Details on beef research are available at www.bifsc.org and www.beefresearch.org.

The beef industry's commitment to improving food safety began with a Blue Ribbon Task Force more than 15 years ago, and today, BIFSCo brings the industry together to collaboratively improve beef safety. The beef industry has agreed that safety is a noncompetitive issue, and representatives from all parts of the industry work together through BIFSCo to discuss and address food safety challenges, update “best practices” documents, share the latest research and set a course for future safety work. Beef producers will continue to identify and incorporate new safety tools to provide consumers with the safest food possible.

