

# Checkoff Research: Foundation for Industry Progress



By Kylie Blanchard for the N.D. Beef Commission

Research has been an important component of the Beef Checkoff since the program's beginning, fostering positive impacts on the practices of beef producers, animal processing and the beef product. It has also impacted how society views, consumes and chooses beef.

"Without research, the beef industry wouldn't have been able to innovate, progress and protect the producers, as well as the product we all raise," says Fred Helbling, a North Dakota Beef Commission (NDBC) member. "Research has long been the cornerstone of the mission of the checkoff, focusing on sound, science-based information, leading to innovation, and ultimately impacting consumer trust in beef."



Fred Helbling,  
NDBC director

The following are a small example of huge industry changes that began with important research funded with state and national checkoff dollars.

## National Beef Tenderness Survey

In the early 1990s, experts projected one out of every four steaks was tough and did not provide consumers with a satisfactory eating experience. Beef was considered too fat, too inconsistent and too tough. The industry responded to nearly two decades of shrinking demand with the National Beef Tenderness Survey (NBTS), which has since been conducted five times.

Results from the 1999 survey showed a 20 percent increase in beef tenderness compared to 1990 findings, with more steaks grading high Choice and Prime. Much of the progress can be credited to changes producers began making to their cattle and that those handling the product made to chilling and aging practices. Another meaningful improvement of 18 percent (over the 1999 survey) in retail and foodservice beef tenderness was again substantiated by the 2005/2006 NBTS.

Tenderness levels for both retail and foodservice cuts have held steady since the 2005/2006 survey. The results of that survey confirmed the industry's notable progress since the early 1990s. The most recent 2020/2021 NBTS installment is now available.

## National Beef Quality Audit

Started in 1991, the National Beef Quality Audit (NBQA) has provided industry guideposts and measurements related to the quality conformance of the U.S. beef supply. Six audits have been conducted, with the most recent in 2016.

In 1991, carcass non-conformities in the beef industry cost approximately \$279.82 for every steer/heifer slaughtered in the U.S. By 2000, the NBQA suggested U.S. beef producers made

progress in helping improve beef quality in several areas, including reducing injection site lesions, improving herd health and managing genetics for reduction of fat.

The 2005 NBQA established a new benchmark for shortfalls in beef cattle quality and identified new targets for desired quality levels. This benchmark was used in creating Beef Quality Assurance educational efforts through 2010.

The 2011 NBQA expanded the focus to include food safety, sustainability, animal well-being, and the disconnect between agricultural producers and consumers. In 2016, the expanded focus also included consumer desires for more connection to beef production. The NBQA has demonstrated that cattle producers have made strides to improve the overall quality and consistency of the U.S. cattle supply.

## Beef Quality Assurance Program

The Beef Quality Assurance (BQA) program is a state and national partnership, funded by the beef checkoff, that provides systematic information of how common-sense husbandry techniques can be coupled with accepted scientific knowledge to raise cattle under optimum management and environmental conditions.

The program began 30 years ago, and today, more than 85 percent of beef produced in the U.S. comes from BQA certified farmers or ranchers. The program provides guidelines for proper animal care and welfare, which results in the production of higher quality beef.

## Nutrition Research

Human nutrition research has also been a NDBC priority. North Dakota checkoff funds have supported research over several years on the role of protein in the diet, as well as muscle health, inflammation, heart health, Type 2 diabetes remission, and gut health. Some of this research, conducted at North Dakota State University, provided critical information used in developing the federal government's "2020-2025 Dietary Guidelines for Americans," a cornerstone for federal food, nutrition and health policies.

"The research funded at the state and national level with checkoff dollars allows the industry to communicate beef's safety, nutritional quality, new products developed and over-all sustainability through strong, science-based research results. The areas of research have been directed through industry need, regulatory requirements and consumer concern," says Helbling. "We need to do our job as producers in sharing these victories that arise from many years of research in the beef industry."

