

Chapter 1

The Importance of Beef Quality Assurance



Beef Quality Assurance (BQA) is a program developed to ensure that beef and dairy cattle are managed in a manner that will result in safe and wholesome beef and milk products for the consumer. This statement is not only the definition but the goal of BQA. Specifically, BQA is designed to enhance carcass quality by preventing drug residues, injection-site blemishes, and bruises. The Mid Atlantic Beef Quality Assurance Program is based on recommended national guidelines and scientific research. This program enables beef and dairy producers to enhance their product, maximize marketability, and strengthen consumer confidence.

Is BQA Necessary?

From gate to plate, BQA is a positive step for producers and consumers. Concern over food wholesomeness and safety is an important consumer issue. It is of utmost importance that the public knows beef is a safe product. A BQA program will help secure consumer confidence for expanding domestic and export markets. BQA is a good business practice, which can identify potential problem areas to avoid product defects.

All sectors of the industry—from seedstock, cow-calf, heifer growers, and dairy producers to stocker operators, backgrounders, cattle feeders, and points of sale and harvest—must take responsibility for the production of a safe food product through proper animal care, handling, and management practices.

The level of consumer confidence in beef significantly affects consumer eating habits and impacts the future of our industry. Consumer confidence is essential if we are to “steak” our claim in the meat case.

Beyond safety, the economic importance of BQA can be seen when analyzing the top quality challenges in the production of beef. The 2000 National Beef Quality Audit showed that the industry lost an average of \$100 for every fed steer or heifer marketed. Quality challenges include:

- Inconsistent size of meat cuts
- Non-uniform cattle
- Injection-site blemishes
- Branding
- Excessive external fat
- Excessive seam fat
- Inadequate muscling
- Dark cutters

Members of each industry sector should assume responsibility for the role they play in delivering a quality beef product to their respective markets. By working together toward continued improvement of our product and our responsiveness to consumers, we all benefit.



BQA Objectives

- Set production standards in your operation that can be met or exceeded.
- Establish systems for data retention and record keeping, which will allow validation of management activities and fulfill the program goal.
- Provide hands-on training and education for participants to meet or exceed the guidelines of the BQA program and to realize the benefits of such a program.
- Provide technical assistance through state cattlemen's associations, state beef councils, BQA certified veterinarians, and BQA certified university Extension agents. These individuals will be available for on-site assistance, if desired by producers.



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All meat industries face similar concerns. By following BQA guidelines and management practices, beef and dairy producers increase the value of their product in the eyes of the consumers, while enhancing their stewardship of natural and financial resources.

The History of Beef Quality Assurance

Consumers have always expected safe and wholesome food. In 1980, because of beef safety concerns, beef producers began investigating ways to ensure that their production practices would pass the scrutiny of the consumer.

The Beef Quality Assurance program is not a new idea. In 1982, the United States Department of Agriculture Food Safety Inspection Service (USDA-FSIS) began working with the beef industry in the United States to develop the Pre-Harvest Beef Safety Production Program. The beef industry refers to this as Beef Quality Assurance, or BQA.

Because the majority of beef is raised by small independent producers in a vast variety of environmental climates, the BQA program has been modified and adapted to meet the needs of a range of production and marketing circumstances. Presently, a BQA educational program is active in 47 states.

Implementing BQA practices provides cattle producers with an important key for avoiding additional government regulation.

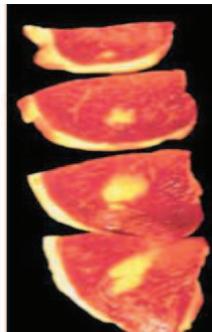
Producer-driven programs have proven very successful and will continue to allow the industry the flexibility needed to produce safe, wholesome food in an economical manner.

Meeting the Industry Quality Challenges

Four National Beef Quality Audits (NBQA) have been conducted between 1991 and 2005. In three of the audits, defects in the hide (from branding and lice) and lack of uniform size of rib eye and other meat cuts were identified. In the 2005 NBQA, inadequate tenderness, excessive external fat, insufficient marbling, and excess carcass/cut weights were identified as the major factors affecting meat quality. For the first time, the 2005 NBQA identified lack of traceability of cattle from feedlots, need for instrument grading, need for clearer market signals, and need for communication among sectors as areas that the industry must address.

BQA practices have almost eliminated the reported injection-site blemishes as a major effect on quality because producers moved injection sites to the neck and away from the rump.

Good production practices can reduce, if not eliminate, the occurrence of quality problems. This manual outlines Best Management Practices (BMP) in key areas to help producers meet the industry's beef quality challenges. These include implementing genetic and production management systems that have been shown to reduce beef quality defects, improve beef eating quality characteristics (such as flavor, tenderness, and juiciness), and ensure food safety.



This injection site lesion was a result of a 2 ml seven-way injection given to a calf at 50 days of age, and was not discovered in the processing of the carcass until the whole muscle was sliced for retail. A retailer would send this back for a refund. Not only does this blemish cause economic losses to the industry, it reflects real damage to customer confidence in the overall quality and reliability of our product.

Potential Value Loss

Today's estimated potential loss in value due to quality defects continues to exceed \$100 for every fed steer and heifer marketed in the United States. The value lost due to management defects can begin to be recovered simply by evaluating and altering the management techniques used in today's beef and dairy production systems. Current problems that producers have control over include injection-site blemishes, hide damage, bruises, and dark cutters.

Capturing Added Value

As the food industry develops new products and packaging processes, correct injection sites and techniques become even more critical to realizing added value. New beef products have been introduced that add value to traditionally under-utilized chuck and round primals. The popular flat iron steak, cut from the chuck, is one example. It lies 3 to 4 inches in front of the shoulder blade, therefore, producers should give intramuscular shots further forward in the shoulder blade to keep from reducing the value of the flat iron. Furthermore, the use of modified atmosphere (MA) packaging processes for case-ready beef can discolor the meat near an injection site—even if the muscle contains no blemishes from the injection.

Animal health companies continue to research and develop products with BQA-friendly routes of administration. Administering animal health products according to label directions, marketing cattle at the optimum end point, reducing stress in cattle handling, and eliminating extremes in size of breeding stock are some of the ways by which quality defects are reduced and the market value of the beef cuts is increased.

MA (modified atmosphere) packaging is a process that exposes meat to a mix of oxygen and carbon dioxide. It can cause green discoloration of the meat close to an injection site, even when no blemish or lesion has occurred. The practice allows packers to more easily identify lesions at the plant level so that they do not end up on a consumer's plate inadvertently.

Mid-Atlantic BQA Alliance

The Mid-Atlantic BQA Alliance is a unified effort by BQA programs in Pennsylvania, West Virginia, Maryland, Virginia, Maine, Vermont and New Jersey to provide similar training and standards. While each state program has its own components, the program cores are the same for each respective state. Please refer to the acknowledgement pages in the front of the manual for contact information for each state.

BQA certification is a process by which producers accept responsibility for the actions under which cattle on their production unit were managed and produce a safe, wholesome product for the consumer. Any farm personnel who handle cattle should be certified. BQA certification is for all people in beef production –Not the cattle.