Beef consumers have become more health conscious and are concerned about the relationship between red meat diets and diseases of over-consumption. There is uneasiness over potential drug and chemical residue contamination of beef products. Also, there is the perception that using antibiotics in food animals might be responsible for increased antibiotic resistance in microbes associated with food borne illness in humans. These concerns and perceptions for the safety of beef products have sparked industry leaders to find ways to address public regard for beef product quality.

Beef quality assurance programs today aim at many quality issues including drug and chemical residue avoidance, reduction of injection-site damage, reduction of tissue damage from bruises, and excessive fat trim. Several quality deficits in marketed mature cows and bulls such as advanced lameness, inadequate muscling in cows, heavy live-weights in bulls, and low dressing percentages are also included.

The newest efforts toward overall quality and wholesomeness of meat products has been directed at reducing the number of bacteria on finished carcasses that cause human illness. These efforts have been sparked by outbreaks of food borne illness involving specific human pathogens found in hamburger and other meat products (e.g., E. coli 0157:H7).

At present, reduction and control steps are regulated by federal law at processing plants throughout the country. In the near future, the beef industry will be called on to reduce and/or control specific pathogens in animals at production facilities, such as feedlot, backgrounding, and cow-calf operations. Currently, methods for pathogen reduction at beef production centers are not well developed or are theoretical.

Cow-Calf Producers and Quality Assurance

First, one must be convinced of the need for strengthening and sustaining quality in beef products. From consumer surveys we learn that 83 percent believe that food safety is an important issue. Food safety concerns were ranked right with the importance of crime prevention and safe drinking water.

Further, 81 percent take as being accurate most or all of the information they get from the media regarding food safety issues. Therefore, they may react to both good and bad information about beef. Issues that are of greatest concern to our consumer clients are bacteria in food (85 percent), food handling and preparation (82 percent each), pesticide residue (78 percent), drug residue (75 percent), and hormones in food (67 percent).

The competition from poultry and swine products for market shares of meat sales is strong. If the market share of red meat is to remain competitive, the industry must establish and maintain high quality standards for their product. Decreased public confidence in red meat products causes reduced consumption, the cost for which trickles back along the production chain until it comes to rest at the producer’s gate.

Ultimately, producers share the responsibility to assure the public that high standards of quality and wholesomeness are being met. Every producer must realize they are producing an animal destined for human consumption.

Drug and Chemical Residue Avoidance

Violative residue avoidance is the main focus in quality assurance programs for all food-animal species. For most of the fed cattle sent to slaughter, contamination