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Beef Quality Assurance



Because of your 4-H market steer project, you are a food producer. All beef producers are linked to the human food chain because they produce meat for people to eat. Therefore, it is your responsibility to ensure that the beef you produce is wholesome and safe.

Objectives

After studying the materials and completing the suggested activities, you should be able to:

1. Name two ways antibiotics can be given to steers.
2. Tell why it is important to handle steers carefully.
3. List three things consumers evaluate before buying fresh beef.

Using Antibiotics

Things you do to a live steer can affect the safety of the beef it produces. Both injectable and feed grade antibiotics can help steers get over being sick. But if the steer is slaughtered before the antibiotics have had time to clear the animal's system, the beef produced by the treated steer could contain antibiotic residues. Antibiotic residues are illegal and can be a public health hazard.

Antibiotics in steer feed can also make steers grow faster and more efficiently. But because of consumer concerns about antibiotic residues, the National Cattlemen's Beef Association (NCBA) recommends that antibiotics not be fed for this purpose.

Antibiotics are species specific. Any antibiotics used on your steers must be labeled for use in feedlot cattle. The only exception is if the antibiotic has been prescribed by a licensed veterinarian.

Some antibiotics require a withdrawal time. This is the minimum time you must allow between when the antibiotic is given to the steer and slaughter. This period allows the antibiotic to clear the steer's system. Some antibiotics can be used safely until the steer is marketed. Others must be discontinued for a period of days or weeks before marketing. It is up to you as a beef producer to make sure you observe the proper withdrawal times for any antibiotics given to your steers. If an antibiotic has a withdrawal time, it will be listed on the label.

If you are using medicated feeds (those containing antibiotics), the withdrawal times are printed on the feed tag. For safety's sake, the feed you give to your steer for the last month or so of the feeding period should be completely free of medications. Check tags of medicated feeds fed earlier in the steer's life, because some feed grade medications have very long withdrawal periods. If you use medicated feed, write down what medication was fed, the level of medication in the feed, and the dates you started and stopped

feeding it. Again, the NCBA recommends that antibiotics not be included in cattle feed for growth promotion purposes.

Injectable antibiotics should be used only when a steer is sick, and then only under the supervision of a veterinarian. If you must treat a sick steer, ask your veterinarian what withdrawal times must be observed, or strictly follow the directions listed on the label. Record any injections given, which steer it was given to, the date, and where you injected the steer.

All intramuscular (in the muscle) injections should be given in the neck muscle, in the area in front of the shoulder. Subcutaneous (under the skin) injections can be given in the same place, and are preferred if you have a choice between intermuscular and subcutaneous. *Never* give a steer a shot anywhere other than the neck region.

Treatment of Live Animals

The way you physically treat live steers can also affect beef quality. If you handle steers roughly, they could have bruises that will show up on the carcass after slaughter. Bruised meat must be cut off and thrown away, lowering the value of the carcass. To avoid bruised carcasses, be especially careful when loading and unloading steers. Never hit a steer hard with a solid object. Also check pens, trucks, and alleyways for sharp or protruding objects that could puncture or bruise the steer.

Meat Quality

Meat quality is how good beef looks and tastes to the people who eat it. Consumers look at color, leanness, and marbling in fresh beef cuts. Color should be a bright cherry red. The outside of a beef cut should be trimmed of nearly all fat, but there should be a reasonable amount of marbling sprinkled in the lean portion of the cut. Marbling makes the beef juicy and flavorful. Go to a grocery store and look at packages of fresh beef steaks. Observe the differences in marbling and color.

Marbling is controlled mostly by genetics, by length of time on feed, and by types of feed used.

The amount of fat remaining on the outside of fresh beef is determined mainly by the person doing the trimming. However, beef producers can help ensure that beef cuts are the correct color.

If steers are stressed in the few hours before slaughter, they stand a greater chance of producing dark-colored beef. Therefore, they should be handled carefully and calmly and should not be allowed to overheat. Also, steers should be rested for several hours after unloading at the slaughter plant before being killed.

Beef Quality Assurance

You and all other parties who contribute to beef production—including dairy, veal, and cow-calf producers and cattle feeders—must realize your role in producing safe, wholesome beef. It takes only one mistake to shake consumer confidence in the safety of beef and beef products.

Words You Should Know

Antibiotic: Substance fed or injected to improve growth rate or treat disease.

Quality assurance: Assurance to the consumer that beef is a safe and wholesome food.

Withdrawal time: The minimum time that must pass between when an antibiotic or vaccination is given to a steer and the steer's slaughter.

Suggested Activities

- Visit a grocery store and note differences in beef quality.
- Ask local beef producers what steps they take to ensure beef quality.

Ideas for Presentations and Talks

- Factors affecting beef quality
- Identifying good quality beef in the supermarket

Things to Talk About

- How do you make sure that the beef from your steers will be of high quality?
- What are some different definitions of beef quality?