Common Questions and Answers about Beef Cattle Production

ANIMAL CARE and HOUSING

Q. How are beef cattle housed?

A. Cattle comfort is a top priority on beef farms. Comfortable, well cared for animals live healthy lives with less stress. Sometimes animals are managed outdoors on pastures or outdoor lots, during colder months, indoor housing may be used to provide mud-free shelter or in the summer to provide shade. Housed animals provide greater control of manure nutrients both from an environmental aspect and to recycle nutrients on crop fields. Well-managed beef farms provide cattle clean bedded areas to rest and access to food and water 24-hours a day. Cattle are free to move about to eat, drink and rest whenever they like.

Q. Who assists beef farmers with animal health needs?

A. Beef producers work with veterinarians to oversee herd health**,** vaccinations and care for sick animals as needed. Farms are required to have a patient client relationship with a veterinarian for antibiotic treatment of any sick animals. This helps to ensure proper diagnosis and treatment of all animals on the farm.

What is Beef Quality Assurance?

A. Beef Quality Assurance (BQA) is a nationally coordinated, state implemented program that provides systematic information to U.S. beef farmers and beef consumers about common sense husbandry techniques. BQA uses accepted scientific knowledge to help manage cattle under optimum management and environmental conditions. BQA sets production standards for quality and safety that are appropriate to an operation. Key elements include biosecurity, animal health and well-being, production performance, and environmental stewardship. BQA production guidelines are designed to make certain all beef consumers can take pride in the beef they purchase and have confidence in the safety of the entire beef industry.

FOOD SAFETY and MEAT QUALITY

Q. How do we know beef is high quality and safe to eat?

A. High-quality meat begins with taking good care of cattle on the farm. Meat processors are the next key step in creating a safe and wholesome beef product to eat. Meat that is sold for food is processed at a federally inspected meat facility. Meat processing is one of the most highly regulated industries. Meat facilities have inspectors present every day of production, whereas other food production has inspections once or twice a year. Preventive measures are put in place to reduce or eliminate bacterial contamination. Inspectors and meat processors also screen animals and meat for antibiotic and chemical residues. Meat that tests positive for a residue is not allowed to be sold or used for human consumption.

Q. Are there harmful hormones in meat?

A. Hormones are naturally present in all plants and animals. The level of hormones in meat are essentially the same in meat labeled, “no added hormones”, “organic”, unlabeled or grown using hormone implants. Beef marketed under the label of “no added hormones” or “organic” must be from animals grown without hormone growth promotants and verified through a USDA verification program. Other common foods are naturally much higher in estrogen than implanted beef (*i.e.* tofu, cabbage, soybean flour). Implanted beef falls far below established safety allowances for hormones by the U.S. Food and Drug Administration (FDA) and is safe to eat. Nonetheless, consumers who are concerned about the use of implants can find beef labeled as “no hormones added” or “organic”. However, since implants significantly reduce the cost and

resources used in the production of beef, consumers should be prepared to pay a premium for these products and consider the environmental trade-offs. Federal regulations prohibit use of added hormones in pork or poultry.

Q. What if an animal gets sick?
A. All farmers work closely with their veterinarian to develop a preventive health program including vaccinations, feeding and other protocols to keep the animals on the farm healthy. Good beef farmers monitor individual animal health. However, just like people, animals can get sick. When this happens, a sick cow or calf gets examined by the farmer. If the illness is severe enough, a veterinarian will be asked to examine the animal or be consulted. Sometimes it is necessary to treat animals with antibiotics when they are ill. Just like humans, some cattle need medication when they are sick. An animal being treated with antibiotics is withheld from harvest until the antibiotics have cleared their body. Antibiotics are used for specific illnesses, must be approved by FDA for use in different types of animals, and have specific withholding times before cattle can be marketed.

ENVIRONMENTAL IMPACT and SUSTAINABILITY

Q. What impact do beef and dairy cows have on the environment in the U.S.?
A. The current EPA estimates for greenhouse gas emissions by sector are 9% from agriculture, with less than half coming from animal agriculture; electricity 28%, transportation 28%, industry 22%, commercial and residential 11%. https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#agriculture. Increased efficiency in meat production reduces the overall carbon footprint of meat production and land needed. If we used the same methods and technology as in the 1950's we would have to increase the dairy cow population of 9.3 million to 39.3 million (+30M) and beef cows from 29.3 million to 44.6 million (+15.3M) to produce the same amount of milk and meat as we did in 2015 (data from USDA/NASS).

Q. Why raise beef cattle to produce meat?
A. Cattle can convert many feedstuffs into high quality protein and fats while producing a very complete human food. Cattle are herbivores, adapted to consume many forages and grains. The rumen, first stomach compartment of cattle, allows them to digest plants (e.g. whole corn plant) and plant by-products (e.g. corn distillers grains (ethanol by-product), corn gluten meal (corn sweetener by-product), soybean meal (soybean oil by-product), that are indigestible by humans. These by-products from human use of grains and other plants would be wasted if not fed to animals. Corn is a grass selected over centuries for large seeds that contain starch, which is a good energy source. Grains, such as corn, and by-products are added to cattle diets to provide additional energy, protein, fiber and other nutrients. The rumen converts feeds into nutrients that help cattle grow and make meat containing high quality proteins, fats, carbohydrates, vitamins and minerals for the human diet. Nearly all cattle spend much of their life grazing on pastures. Those that are grain fed are fed in feedlots the last 4-6 months of their life. Feedlot diets are high in energy so that cattle grow quickly and develop desirable marbling that enhances beef flavor.