

BEEF USES:

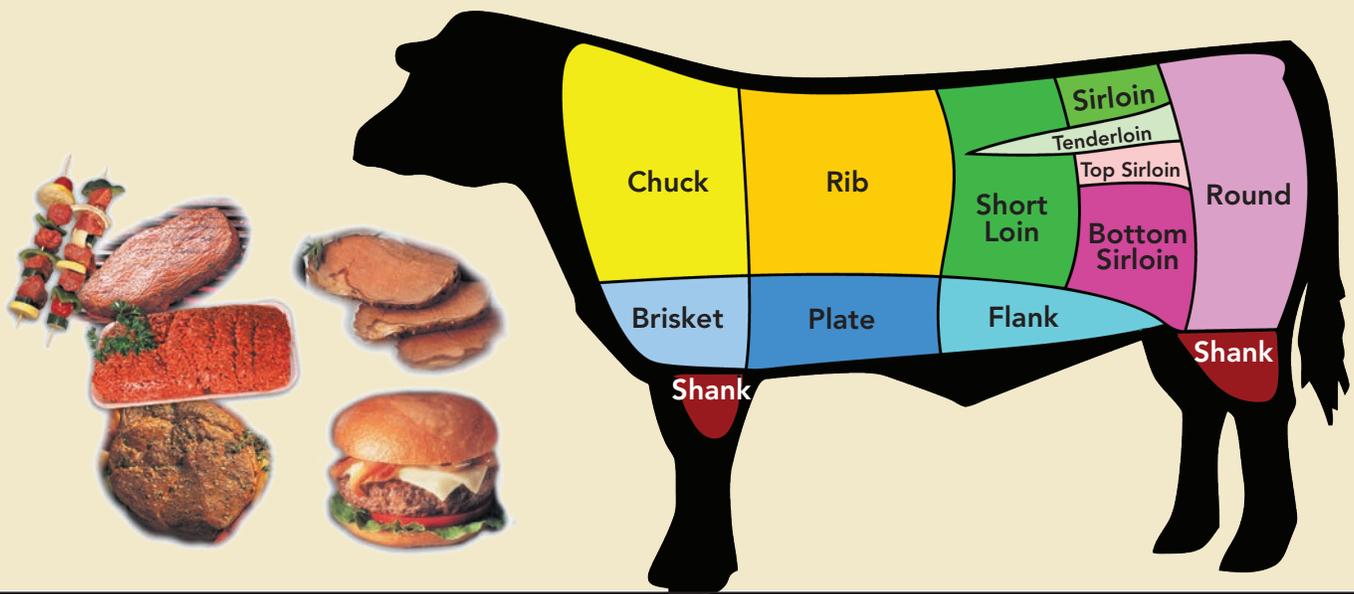
shampoo, hamburger, cosmetics, shoes, brisket, footballs, steaks, paint brushes, medicines, bandages, shaving cream, piano keys, perfume

WHAT IS BEEF?

Beef is meat from full-grown cattle about 2 years old. This includes steaks, roasts, brisket, hamburger and others. A live steer weighs about 1,000 pounds and yields about 450 pounds of edible meat. There are at least 50 breeds of beef cattle, but fewer than 10 make up most cattle produced. Beef is an important part of our diet. It is a good source of ZIP: zinc, iron

and protein. These help keep our body healthy and growing.

We get more than meat from beef cattle. The rest of the steer is used for by-products such as candles, crayons, paint and luggage. Because of these by-products, we are able to use 99% of every steer.



VOCABULARY

BEEF: the meat that comes from beef cattle. Hamburger, steak and brisket are some examples of beef.

BOVINE: cattle.

BULL: a male cow used for breeding.

BRANDING: process used to identify cattle.

BY-PRODUCTS: all products, except for beef, that come from beef cattle.

CALF: cattle less than one year old.

COW: a female cow that has given birth to a calf.

HEIFER: a female cow that has not produced a calf.

HIDE: animal skin treated for human use such as leather from cattle.

IRON: a mineral needed by our bodies to carry oxygen from our lungs throughout our bodies. Beef is a great source of iron.

PROTEIN: supplies energy, builds cells and blood and aids in the growth of healthy muscles, organs, skin and hair.

RUMINANT: animals, such as cattle, that have multiple compartments in their stomach. They first chew their food to soften it, swallow it and then return it to their mouth for continued chewing. This is called chewing the cud.

SILAGE: fermented corn, wheat or hay, with the stalks and leaves, that is chopped and fed to cattle.

STEER: a male cow not used for breeding.

ZINC: a mineral used for growth and fighting off illnesses.

U.S. BEEF COWS BREEDS:

Angus, Hereford, Limousin, Charolais, Simmental, Red Angus, Beefmaster, Shorthorn, Brahman, Maine-Anjou, Salers, Chianina, Texas Longhorn

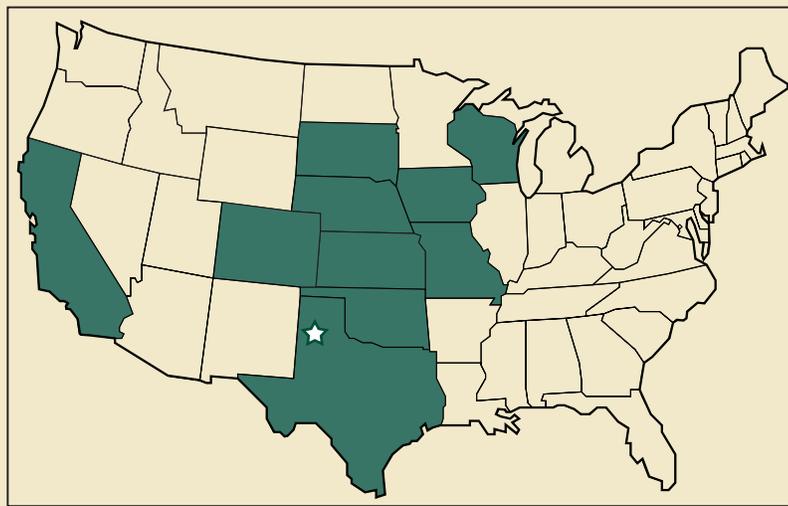
UNITED STATES BEEF PRODUCTION

■ Top Beef Producing States

Texas	Kansas
Nebraska	California
Oklahoma	Missouri
Iowa	South Dakota
Wisconsin	Colorado

☆ Beef Capital of the World

Hereford, Texas



HISTORY OF BEEF CATTLE

6500 B.C. — Cattle were first domesticated.

1493 — Christopher Columbus took cattle to Hispaniola (now Haiti and the Dominican Republic) on his second voyage to the New World.

1519 — Hernando Cortez took offspring of these cattle to Mexico to establish ranches. Many of these cows ran wild and later came to the United States through Texas or California.

1529 — The town council of Mexico City ordered the formation of a cattlemen's association to control theft and preserve their monopoly. Mesta became the first known livestock association in the Americas.

1611 — The English were the first to bring large numbers of cattle to the United States when they founded Jamestown Colony.

1867 — The Colorado Stock Growers (now Colorado Cattlemen's Association) was the first state association to organize.

1880 — Mechanical refrigeration was first used making a lasting impact on the cattle and beef industry.

1883 — The first national gathering of cattlemen in Chicago.

1884 — The Bureau of Animal Industry was established to conduct scientific investigations, administer rules and regulations to protect the public from infection or disease contaminated meat products, eradicate animal diseases and improve livestock quality. It was eliminated in 1953 and replaced with the Agricultural Research Service.

1884 — The National Cattle Growers Association of America was formed. This was the first known attempt to form a national group of cattle producer organizations.

1890 — The first Meat Inspection Act became effective.

1898 — The National Live Stock Association became the first successful national organization and is known today as the National Cattlemen's Beef Association.

1904 — The first public livestock auction opened in Union, Iowa.

1911 — The first motor truck delivery of livestock occurred in Indianapolis, Indiana.

1916 — The USDA began a campaign to eradicate Bovine Tuberculosis. Agents inspected nearly every cattle farm in the country and condemned roughly 4

million cows to slaughter. By 1941, every county in the United States was officially recognized free of bovine tuberculosis.

1921 — The Packers and Stockyards Act was passed, which we still use today. It regulated national and foreign trade in livestock and livestock products, and prohibited packers from engaging in unfair and deceptive practices, manipulating prices, creating a monopoly or conspiring to aid in unlawful acts. Today, the Act's scope has expanded to regulate the activity of livestock dealers, market agencies, live poultry dealers and swine contractors as well as meatpackers.

1934 — The Agricultural Adjustment Act was the first attempt by government at supply management. It paid farmers to reduce acreage or supplies of basic commodities. Congress approved \$63 million for a purchase-and-slaughter program.

1934 — Cooperative Federal-State Brucellosis Eradication Program begins.

1943 — Cattle tick fever was eradicated from the U.S.

1946 — Invention of the "Gooseneck Trailer" for transporting livestock.

1966 — U.S. declared screwworm free.

1973 — First price freeze, imposed by Nixon, led to market "drought." Lifting of the price freeze led to market "flood." Grain exports to the Soviet Union increased feedyard costs in the U.S. and there was a \$200 per head loss. This is known as "The Wreck of 1973."

1979 — The Meat Import Act of 1979 was signed into law. This meant that as U.S. production increased, foreign imports decreased, and vice versa.

1988 — The third referendum by the American National Cattlemen's Association passed to approve a \$1 per head check-off. Since then, the industry has had almost \$80 million a year for research, education, promotion and producer information.

2011 — Total beef production in the United States is over 26 billion pounds. Each person consumes about 58 pounds of beef each year.

BOVINE

CAREERS: animal nutritionist, marketer, agricultural economist, animal geneticist, food scientist, processor, dietitian, truck driver, food process engineer, animal well-being specialist, toxicologist, food safety specialist

SPOTLIGHT ON CAREERS:

AGRICULTURAL ECONOMIST — Agricultural Economists

use communication and business skills to find success in sales, marketing, management and finance careers. Many agricultural economists start their careers as sales representatives to gain knowledge about a firm's products and customers before moving into management positions. Agricultural economists are hired by food and agribusiness firms, financial institutions, government agencies and a variety of industries. These include food retailers and manufacturers, banks, financial planning firms and agribusiness firms that provide such things as animal health, chemicals, equipment, seed or fertilizer.

FOOD SAFETY SPECIALIST — Food Safety Specialists

preserve our food supply by assuring that it is wholesome, sound and safe. They understand and apply federal, state, and local laws, rules and regulations governing food protection. Food safety specialists work for food services, hotels, resorts, restaurants and government agencies. They conduct inspections and investigations of food products, and of storage and preparation facilities. They consult with the food industry and potential new businesses, and they train local health department food protection personnel.

BEEF PATH

The gestation (pregnancy) period for cows is 9 months. Beef production begins with a cow-calf farmer who maintains a breeding herd of cows that raise calves every year. When a calf is born, it weighs 60-100 pounds.

Beef calves are weaned at 6 to 10 months of age when they weigh 450-700 pounds. After the calves are weaned, some are sold at an auction market. A cow-calf farmer may also choose to keep the best females to add to the breeding herd. Younger or lighter weight calves may be sent to a backgrader or stocker who continues to graze them on grass or other forages until they are 12 to 16 months old. They may also go directly from the cow-calf farmer to the feedlot or from the backgrader/stocker to the feedlot.



Most beef cattle spend approximately four to six months in a feedlot, just prior to harvest, where they are fed a grain-based diet. At the feedlot (also called feedyard), cattle are grouped into pens that provide space for socializing and exercise.

They receive feed rations that are balanced by a professional nutritionist. Feedlots are efficient and provide consistent, wholesome and affordable beef using fewer resources. The time cattle spend in a feedlot is often called the "finishing phase." All cattle spend the majority of their lives grazing on grass pasture.



Animal health and well-being are top priorities for livestock farmers across the country. That's why they work hard to use the most recent science-based advancements that keep cattle healthy and the beef supply safe. These advancements mean cattle can be raised much more efficiently than in the past. Feedlot employees, farmers and ranchers work closely with veterinarians to monitor the health and well-being of the animals. Regular check ups are done on the herd to prevent illness. If any of the animals are ill, they are evaluated before deciding what the next step is to take care of the animal. Farmers utilize important tools like vaccines along with good management practices to prevent, control and treat disease. By focusing on good animal care, proper nutrition and disease prevention, livestock farmers and their veterinarians reduce antibiotic use – and save money in the process.



Once cattle reach market weight, (typically 1,200-1,400 pounds and 18-22 months of age) they are taken to the processor by semi trucks. The special trailers have holes along both sides to keep the animals cool and comfortable. Once the meat has been processed, it is inspected to ensure it is safe, wholesome and correctly labeled and packaged. The final beef products are shipped to retail and foodservice establishments for consumers to purchase.



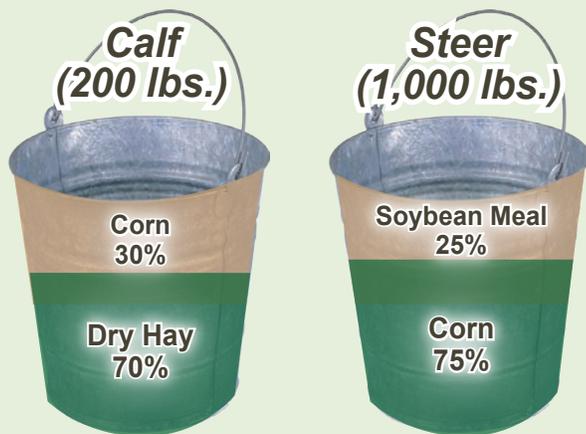
BEEF CATTLE FUN FACTS:

The hide from one cow can be made into **18 pairs of shoes!**

Cattle can detect smells up to **six miles away!**

The largest hamburger patty ever made weighed **6,040 pounds** and was **24 feet** in diameter.

CATTLE AND THEIR DIET



These are approximations based on sample diets. Trace minerals, vitamins and other supplements may also be added. Animals eat to meet their energy (calorie) needs each day—they do not overeat. Young animals that are actively growing have greater requirements for protein than older animals. As the animal gets older, the protein needs (soybean meal) decrease.

2011 TOP 10 DESTINATIONS FOR U.S. BEEF

(1,000 POUNDS)

Canada	500,553
Mexico	487,938
Japan	456,163
South Korea	379,700
Hong Kong	162,920
Russia	147,976
Vietnam	121,387
China (Taiwan)	110,568
Egypt	102,467
Netherlands	45,084

DID YOU KNOW?

The U.S. supplies 25% of the world's beef with 10% of the world's cattle.

A cow spends 6 hours eating and 8 hours chewing its cud each day.

Cattle are herbivores so they only have teeth on the bottom.

Cattle produce 15-20 gallons of saliva per day.

