

U.S. Beef Facts, Jan 2020

- ❖ The U.S. is the largest global beef producer, accounting for one-fifth of global beef production, although the U.S. only has 10% of the global cattle herd. The U.S. is also the largest beef consumer and is a top beef importer.
- ❖ The U.S. is the top global exporter on a value basis, with beef exports estimated at over \$8 billion in 2019 and accounting for around 14% of U.S. beef/beef variety meat production.
- ❖ Top U.S. beef export markets include Japan, Korea, Mexico, Canada, Hong Kong, Taiwan, the EU, Philippines, China, Vietnam, Chile and Indonesia.
- ❖ The U.S. is a leading exporter and importer of beef, evidence that the market works. We import lean manufacturing beef to help meet demand for burgers and we export high-quality cuts, especially from the chuck, rib and short plate, plus variety meats, as those items capture a higher value outside the U.S. Trade allows us to maximize the value of every animal we produce.
- ❖ On July 1, 2019, the total cattle inventory in the U.S. was 103 million head, steady with 2018.
- ❖ In 2017, there were 729,046 beef farms and ranches, 90% of which had less than 100 head of cattle. The average herd size was 44 head.
- ❖ 96% of U.S. farms and ranches are family owned.
- ❖ In 2017 there were over 25,700 feedlot operations with an average herd size of 583 head.
- ❖ In 2019, beef production was 3% higher than 1999, using 7% less cattle.
- ❖ Over the next 10 years, FAS expects that beef production will increase 9%, while the total cattle inventory in the U.S. will only increase by 2%.
- ❖ Commercial beef production was estimated at 27.151 billion pounds (12.316 million metric tons) in 2019, with commercial slaughter at 34 million head.
- ❖ 85% of U.S. beef comes from Beef Quality Assurance (BQA) certified farmers and ranchers
 - *Simply put, BQA helps beef farmers and ranchers raise better beef so consumers can feel even better about buying it. But it's not always that simple, of course. Raising quality beef requires commitment and hard work. Certification is earned, not bought. For beef farmers and ranchers, that means using modern techniques to raise cattle under optimal environmental and economic conditions. For consumers, it means knowing the beef they buy is wholesome and delicious. In fact, more than 85% of U.S. beef comes from BQA-certified farmers and ranchers.*
- ❖ U.S. beef quality continues to improve, with a growing share of production grading Choice or Prime. 3.2% of fed beef production graded Prime and 61.5% graded Choice in 2010 compared to 8.6% Prime and 71.0% Choice in 2019.
- ❖ Grain finished beef cattle provide 19% more human-edible protein than they consume.
- ❖ Whether grass- or grain-finished, most of what cattle eat in their lives is grass, with grain accounting for less than 10% of the lifetime feed of grain-finished cattle.
- ❖ **Greenhouse gas emissions:** Beef production, including the production of animal feed, is responsible for only 3.7% of greenhouse gas emissions in the U.S. This is dramatically lower than the often-misapplied global livestock figure of 14.5%.

SUSTAINABLE FOOD SYSTEM: WOULD LESS BEEF BE BETTER?

Cattle are beneficial in a sustainable food system because of their unique stomach structure, which allows them to eat and digest what we as humans can't. In addition to the grasses they graze on for most of their lives, they can eat numerous other byproducts from plant-based food production, such as brewers grains, pea pulp, beet tops, potato peelings and sunflower hulls, which are all byproducts of human activities or other products, such as [pea-protein](#) burgers and meat crumbles. Instead of going to a landfill, cattle eat these "waste" products and turn them into a high-quality protein edible for human consumption.

Cattle also graze in areas where it's impossible to grow crops, like the sand hills of Nebraska or the arid land of Nevada, taking those grasses and turning them into high quality protein, in places that could otherwise never be used to feed a growing population.

Many plant-based food advocates promote Meatless Mondays and vegan diets to reduce greenhouse gas emissions and lower their carbon footprint. However, research has demonstrated that removing all livestock and poultry from the U.S. food system would only reduce global greenhouse gas emissions by [0.36 percent](#).

Q: Is beef healthy?

A. Yes! Beef is both nourishing and sustainable. Decades of research shows that beef promotes health and helps prevent human nutrient deficiencies.

The nutrients in beef promote health throughout life. Protein, iron, zinc and B-vitamins in beef help ensure young children start life strong, building healthy bodies and brains. Protein is also critical as we age. After 50 years of age, adults are at risk for losing muscle mass, leading to falls and frailty that affect their ability to age independently.

It's also important to keep in mind that plant-based protein products are often highly processed with added fat, sodium and other potentially unhealthy or unsustainable ingredients, which can reinforce unhealthy dietary patterns.

Q: Why not choose other animal protein sources that are perceived to be more sustainable than beef?

A. No other protein source offers the same nutrient mix as beef. A 3-ounce serving of lean beef provides 10 essential nutrients in about 170 calories, including high-quality protein, zinc, iron and B vitamins.

Environmentally, cattle do more than recycle – they upcycle inedible plants into high-quality protein. In the face of a growing global population, we need ruminant animals, like beef cattle, to help make more protein for less. Cattle generate more protein for the human food supply than would exist without them because their unique digestive system allows them to convert human-inedible plants into high-quality protein.

- ❖ Please see this article as well, explaining the benefits of grazing cattle and their ability to transform cellulose into high-quality, vitamin-packed protein:
<https://qz.com/1331235/beef-the-original-solar-powered-plant-based-protein/>

The EU market for U.S. beef

- ❖ The EU remains a niche market for U.S. beef, but an incredibly important, high-value, diverse and growing market for which U.S. producers have great optimism. We look forward to helping tell the positive beef story to European customers and consumers. For perspective, the U.S. exports more chilled beef to Taiwan than it does to the EU.
- ❖ EU imports of U.S. beef in 2019 were valued at just over \$170 million. With the agreement, EU imports of U.S. beef could increase to more than \$200 million in 2020 and closer to \$250 million in 2021.
- ❖ Most importantly, the EU-U.S. beef agreement allows for more consistent access, benefiting the whole supply chain and the customers and consumers in Europe as high quality chilled U.S. beef can enter 52 weeks per year rather than in just the first few days of each quarter.
- ❖ U.S. beef accounted for 6.7% of EU chilled/frozen beef import volume in 2019 and in 2020 is estimated to account for close to 8% of EU imports as EU imports of U.S. beef increase with the U.S. specific share of the HQB. EU total imports are not expected to grow but U.S. beef will displace product from other suppliers.

Sources: USDA 2017 Census of Agriculture, USDA/NASS, USDA/FAS, USMEF, NCBA, beefitswhatsfordinner.com

ADDITIONAL RESOURCES

- *Directly below is the full article from which a few points above are taken, followed by links to additional factsheets, videos and papers on U.S. beef production, sustainability and things like antibiotic use.*

NEW USDA BEEF LIFECYCLE ASSESSMENT FINDS ENVIRONMENTAL IMPACTS LOWER THAN PERCEIVED

HILLARY MAKENS | JANUARY 16, 2019

A new study, recently published in the journal *Agricultural Systems*, is the most comprehensive beef cattle lifecycle assessment ever completed. In the report, titled *Environmental Footprints of Beef Cattle Production in the United States*,¹ the researchers found widely accepted measures related to beef cattle's impact in the U.S. are often overestimated.

The comprehensive lifecycle assessment, conducted by the USDA's Agricultural Research Service and The Beef Checkoff, was designed to scientifically quantify the sustainability of U.S. beef production. This was accomplished by collecting and examining feed and cattle production-related data from more than 2,200 cattle producers in seven regional production areas. Conclusions were derived using a simulation model and the regional production data to estimate national impacts in greenhouse gas (GHG) emissions, fossil energy use, blue water consumption and reactive nitrogen loss.

Notable study findings include:

- **Greenhouse gas emissions:** Beef production, including the production of animal feed, is responsible for only 3.7 percent of greenhouse gas emissions in the U.S. This is dramatically lower than the often-misapplied global livestock figure of 14.5 percent.² Furthermore, through continuous improvements in production practices, U.S. beef farmers and ranchers have avoided 2.3 gigatons of carbon emissions since 1975.³
- **Grain feed consumption:** Per pound of beef carcass weight, cattle only consume 2.6 pounds of grain. This is comparable to feed conversion efficiencies of pork and poultry. Additionally, nearly 90 percent of grain-finished cattle feed is inedible to humans, meaning these plants can only provide value to humans when they're upcycled by cattle into high-quality protein.
- **Corn feed consumption:** Corn used to feed beef cattle only represents approximately 9 percent of harvested corn grain in the U.S., or 8 million acres. By comparison, 37.5 percent of corn acreage in the U.S. is used for producing fuel ethanol.⁴

- **Water use:** On average, it takes 308 gallons of water to produce a pound of boneless beef. Previous reports have estimated upwards of 24,000 gallons^s. Additionally, water use by beef is only around 5 percent of U.S. water withdrawals, and this water is recycled.
- **Fossil fuel inputs:** Total fossil energy input to U.S. beef cattle production is equivalent to 0.7% of total national consumption of fossil fuels.

“This lifecycle assessment delivers the most comprehensive and accurate assessment of the environmental impact of beef cattle in the U.S. to date,” said USDA researcher and study co-author Alan Rotz.

The study assessed cattle production in the farm and ranch portion of the beef supply chain, including emissions associated with energy, feed, machinery, seed, pesticide and other resources used in production. Related work is in-progress to assess production further down the supply chain, including processing, packing, distribution, retail, consumption and waste handling. Together, these reports will comprise the most detailed and comprehensive assessment of U.S. beef’s sustainability to-date.

“This work produces baseline data the cattle industry can use to continue to improve the environmental and economic sustainability of U.S. beef,” said Sara Place, Ph.D., study co-author and Senior Director of Sustainable Beef Production Research at the National Cattlemen’s Beef Association, a contractor to the Beef Checkoff. “Investments in this type of research demonstrate a continuous commitment to environmental stewardship by America’s farmers and ranchers.”

About the Beef Checkoff

The Beef Checkoff Program was established as part of the 1985 Farm Bill. The checkoff assesses \$1 per head on the sale of live domestic and imported cattle, in addition to a comparable assessment on imported beef and beef products. States may retain up to 50 cents on the dollar and forward the other 50 cents per head to the Cattlemen’s Beef Promotion and Research Board, which administers the national checkoff program, subject to USDA approval.

About NCBA, a Contractor to the Beef Checkoff

The National Cattlemen’s Beef Association (NCBA) is a contractor to the Beef Checkoff Program. The Beef Checkoff Program is administered by the Cattlemen’s Beef Board, with oversight provided by the U.S. Department of Agriculture.

Link to above article: <https://www.beefitswhatsfordinner.com/newsroom/lifecycle-assessment>

More on the sustainability of beef with charts and graphics: <https://qz.com/1363873/theres-an-answer-to-cattles-carbon-emissions-and-it-isnt-less-beef/>

more on U.S. beef efficiency gains: <https://www.greenbiz.com/article/why-food-nostalgia-wont-make-us-more-sustainable-sponsored>

more on sustainable nutrition: <https://www.greenbiz.com/article/sustainable-nutrition-new-term-old-concern-sponsored>

lots of information can be found here, including more on the beef production story and things like antibiotic use and short producer videos: <https://www.beefitswhatsfordinner.com/raising-beef>