# Adding Confusion

## *Consumer Reports* study confuses serious safety issues, potentially misleading consumers about beef safety.

A *Consumer Reports* study released Aug. 24 — just before the Labor Day grilling weekend — included misleading information that could increase consumer confusion about food safety, say beef safety experts.

"I have relied on *Consumer Reports* when purchasing cars and electronics, but unfortunately this report will not help consumers when purchasing safe ground beef. The good news is the bacteria found in the *Consumer Reports* tests are not the type of bacteria commonly associated with foodborne illness in ground beef," says Mandy Carr-Johnson, senior executive director, Science and Product Solutions, National Cattlemen's Beef Association (NCBA), a contractor to the National Beef Checkoff Program.

"As an industry, our No. 1 priority is producing the safest beef possible. Ground beef is the safest it has ever been, with greater than 90% reductions in bacteria such as *E. coli O157:H7* and significant reductions in salmonella in recent years. The beef community continues to invest millions of dollars in developing new safety technologies with the goal of eliminating foodborne illness."

Carr-Johnson says the only helpful takeaway from the report for consumers is that all ground beef should be cooked to an internal temperature of 160° Fahrenheit and confirmed with an instant-read meat thermometer, as recommended by the USDA.

### The issue

Other food safety experts are concerned the *Consumer Reports* article and subsequent media coverage mislead consumers into thinking that organic and/or grass-fed beef is safer. According to the USDA, "organic" and "grass-fed" labels do not imply any additional safety factor.

"Our concern is that leading consumers to believe organic and grass-fed beef are safer could make them think they do not need to cook those products to 160°, creating a food safety concern," says Mindy Brashears, professor of food microbiology and food safety at Texas Tech University. "It is important to note that bacteria was also found in the organic and grass-fed samples. The bottom line is that no matter what the label says, ground beef should be cooked to 160° as a final step to ensure safety."


►"Our concern is that leading consumers to believe organic and grass-fed beef are safer could make them think they do not need to cook those products to 160°, creating a food safety concern," says Mindy Brashears, professor of food microbiology and food safety at Texas Tech University. "It is important to note that bacteria was also found in the organic and grass-fed samples. The bottom line is that no matter what the label says, ground beef should be cooked to 160° as a final step to ensure safety."


The good news is the *Consumer Reports* study did not find pathogenic bacteria like shiga-toxin producing *E. coli* (STECs) in any of the samples, including conventional beef. Controlling pathogenic bacteria is the key in terms of ensuring safety. Unfortunately, the *Consumer Reports* study confuses that issue with the finding of generic *E. coli* and other bacteria that are not commonly associated with illnesses from consuming undercooked ground beef.

"Both *S. aureus* and *C. perfringens* found in the *Consumer Reports* study are toxin-producing bacteria that are typically associated with picnic-type food-poisoning cases where food has been left out for long periods of time at the incorrect temperature, not undercooked ground beef," says Brashears.

Also, use of the term "sustainable" in the *Consumer Reports* article is incorrect and misleading. "Organic" and "grass-fed" are marketing terms that are not an accurate indicator of either sustainability or safety. Research has found that the efficiencies created by conventional methods of raising beef have led to significant reductions in greenhouse gas emissions, water use and resource consumption and energy use.

### Sustainability coming into play

"All beef production models can be sustainable," says Kim Stackhouse-Lawson, executive director of sustainability for NCBA.

"Beef sustainability is defined as producing more product with fewer inputs, which is the

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goal of every beef producer in this country. To cattle farmers and ranchers, sustainability means balancing environmental responsibility, economic opportunity and social diligence while meeting the growing global demand for beef."

It is important to recognize that the sustainability of beef is extremely complex. From an environmental impact perspective, there are tradeoffs between grain- and grass-finished animals. Some of these tradeoffs include grass-finished beef has a significantly higher carbon footprint (ranging from an increase of 15% to 30%) because of the increased methane cattle produce on a grass diet and because they take a much longer time to reach slaughter weight.

"We believe that all beef can be sustainable and that all farmers and ranchers can improve their sustainability, which will be critical if we are to be successful in feeding the growing global population, which will require 70% more food by 2050," says Stackhouse-Lawson.

As a contractor to the beef checkoff, NCBA directed the most comprehensive life-cycle assessment (LCA) ever conducted on the beef value chain. As a result of this assessment, the beef community is better able to understand how management changes over time have improved the sustainability of beef and utilize that knowledge to produce more sustainable beef in the future. The LCA measured 14 different sustainability indicators between 2006 and 2011, and demonstrated that in just six years the beef supply chain improved its overall sustainability by 5% and its environmental and social sustainability by 7%.

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Some individual indicators were highlighted by *Consumer Reports.* Specifically, the beef industry LCA demonstrated an increase in water quality of 10%, greenhouse gas emissions were decreased by 2% and water use declined by 3%. The majority of these improvements were due to more efficient utilization of resources and, specific to water quality, are also a result of better land application of manure instead of synthetic fertilizers to fertilize croplands. Conducting the LCA has allowed beef producers to better understand how sustainability has improved over time and target areas for improvement.

## Antibiotics

Regarding the tenuous link between production method and antibiotic-resistant bacteria in the study, there is no indication *Consumer Reports* verified whether any of the beef samples actually came from animals that received antibiotics or not. This fact alone calls into question the validity of the results. Just because they were labeled grass-fed or natural does not necessarily mean they were not given an antibiotic. Likewise, grass-fed beef can be given antibiotics.

"Antibiotic resistance is a very complex issue being addressed both in human and animal medicine. The FDA has released guidance, which is eliminating the use of antibiotics for growth promotion in animals, but the ability to use antibiotics in animals is important. Just like humans, animals get sick from time to time and to not treat them with antibiotics would be inhumane. It is critically important that we continue our efforts to minimize antimicrobial resistance, including promoting appropriate and judicious use of antimicrobials in both humans and animals," says Carr.

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Additional beef checkoff-funded resources are available at *www.FactsAboutBeef.com.*

- For more information on how beef is raised, watch this short video *http://factsaboutbeef.com/2015/04/16/beef-pasture-to-plate/.*
- Additional information about how to properly handle and store ground beef can be found at *http://factsaboutbeef.com/2014/09/26/ten-tips-for-safely-handling-and-preparing-raw-beef/.*
- More about beef sustainability is at *http://factsaboutbeef.com/2013/09/30/raising-beef-isnt-sustainable-its-more-sustainable-than-you-think/.*
- Information about how antibiotics are used in cattle can be found at *http://factsaboutbeef.com/2014/09/18/antibiotic-use-in-cattle-101/.*

**Editor's Note:** *This article is from Facts About Beef and the National Cattlemen's Beef Association.*