

Love Meat Tender

A benefit of the myostatin gene—and one likely to be popular with consumers—is beef that's more tender. “Previous researchers tested just the rib eye cut. But we found that with the myostatin gene, all cuts of beef have improved tenderness,” says Tommy L. Wheeler, a food technologist at ARS's Roman L. Hruska U.S. Meat Animal Research Center (MARC) in Clay Center, Nebraska.

And it's not just consumers who benefit. “Even if their cattle have just one copy of the myostatin gene, ranchers can experience a 7-percent yield increase in salable carcass,” says Wheeler.

Production of leaner beef is also more energetically efficient. “But most cattle produced in the United States still contain nearly twice the amount of carcass fat considered optimal,” says Michael D. MacNeil, an animal geneticist at ARS's Fort Keogh Livestock and Range Research Laboratory in Miles City, Montana. This is because the current grading system pays top dollar for beef that contains more marbling—and might be more tender—despite consumer preference for lean beef. Thus, production of lean and tender beef could be a big advantage for ranchers.