Also appearing in ANGUS BEEF BULLETIN "The Commercial Cattleman's Angus Connection"

The Science Behind the Sizzle

BY JENNIFER WHITE

Chances are your local steakhouse is not known for all the tender, juicy steaks it has served, but for the one bad one your best friend got on his birthday. That one tough, dry piece of meat not only hurts the restaurant's reputation, but it hurts the whole beef industry.

Paraphrasing Colorado State University's Gary Smith, as long as people pursue satisfaction or pleasure in consuming food, the three things they'll never get rid of are sugar, chocolate and fat. Fat is a flavor enhancer, notes John Stika, Certified Angus Beef (CAB) Program director of feeder-packer relations.

After the U.S. Department of Agriculture (USDA) lowered the quality grading standards for beef, consumer demand dropped sharply. However, Angus cattle still had the potential to excel in consumer satisfaction.

The CAB Program founders set about establishing meat-quality standards that would take advantage both of what comes naturally to the best Angus cattle and what makes pleasurable beef-eating experiences better and more frequent for consumers. Ohio State University beef scientist Bob VanStavern was called upon in 1978 to draft these now well-proven standards.

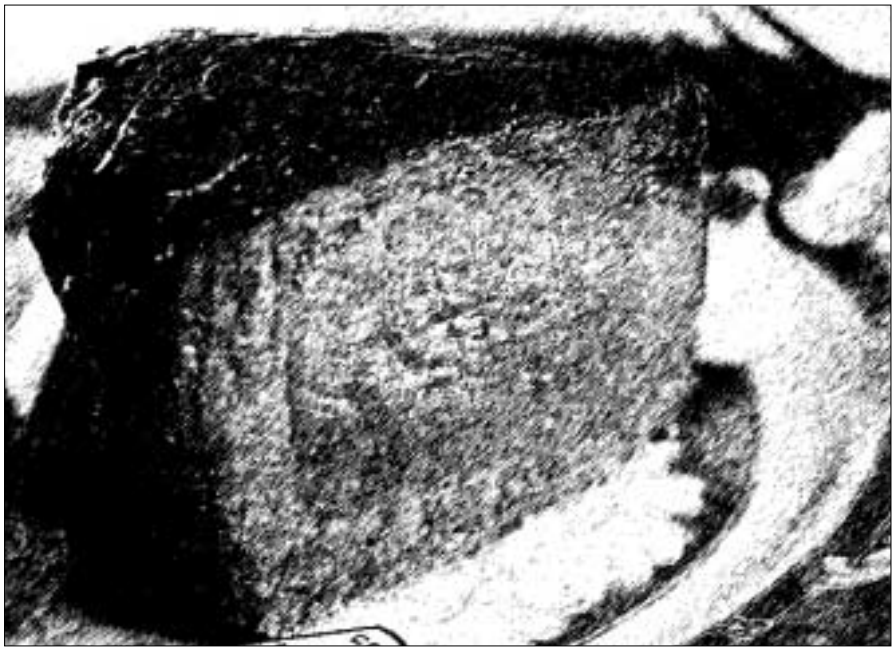
"If you look at the decline in beef consumption, it started when USDA lowered the carcass standards. It didn't start before; it didn't start five years after. It started when they lowered the carcass standards," Stika says. "From that point on *Certified Angus Beef* ™ sales went up."

Program specifications covered some of the quality concerns of consumers, including overall low palatability, inadequate tenderness and inconsistency. Research shows that marbling, or fat within the meat, enhances flavor.

"The flavor components of meat are located in the fat," Stika says. "That's why we refer to product as grain-fed beef; it's got that grain-fed flavor."

Marbling matters

"People ask, 'Does marbling make a difference?' and you can argue it one way or the other," Stika continues. "But the bottom line is, marbling has been one of the most basic components of the carcass specifications upon which the Program has been built — and the Program has done nothing but grow for 21 years."



Certified Angus Beef product is required to have a Modest amount or more of marbling. The more marbling a piece of meat has, the less likely it is to be dry and tough.

"Based on where the meat falls within the grade, you're going to see some differences in palatability in terms of flavor," Stika says. "A Small amount of marbling (lower one-third of Choice) will produce a bad steak one in seven chances, an undesirable steak in terms of overall palatablity."

The CAB Program specifications decrease the chance that you or your friends will have a bad beef-eating experience. The combination of those specifications deliver tenderness, as well as flavor. In fact, a 1998 Oklahoma State University study headed by Glen Dolezal found that 98% of *Certified Angus Beef* ribeye steaks were not even slightly tough.

Science also has determined that the age of an animal, as well as its temperament and type, can affect palatability. That's why the CAB Program specifies that no animal can have a carcass accepted into the program if it is more than 30 months of age.

"When you enhance juiciness, you have a perceived enhancement in tenderness. It's the combination of all those traits that do, in my opinion and the scientific opinion, offer improvements in palatability," Stika says.

Those qualities were what consumers wanted and, through the *Certified Angus Beef* product specifications, VanStavern saw a way to deliver. The Program's licensees have been delivering consumer satisfaction ever since.

"When you look at the majority of the branded beef programs out there," Stika says, "they are programs that evolved out of carcasses that didn't qualify for *Certified Angus Beef* [product]. The Program has been growing for 21 years.

"Yes, marbling makes a difference."

Editor's Note: *This article was freelanced for the Certified Angus Beef Program by Jennifer White.*