

Traits to Dollars – What Will the Target Be?

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Branded beef programs are key to leading the beef industry out of the commodity business. Brands must “deliver on a promise” to consumers with specific interests and needs. These promises can include various combinations of attributes for eating quality, leanness, diet/health, or convenience. Historically, branded beef programs have focused on breed strengths (marbling, palatability, leanness). Today, greater emphasis is placed on tenderness, leanness, portion size, and price point for retail, food service, and export markets.

Two primary paths for branding beyond commodity beef exist today (Table 1). One is based on the qualitative (marbling-based) approach with pre- and post-harvest management components such as process verification and postmortem technologies to achieve tenderness. The other is more quantitative and is a carry-over from the pork industry where enhancement technology has become the norm.

Table 1. Paths to branded beef.

Trait	Quality	Quantity
Market	Premium	Commodity
Beef	Upscale	Enhanced
Key Ingredient(s)	Marbling Based	Marinated, Water Added
Food Safety	+++	+++
Injection Sites	+++	+++
Animal Age	+++	+
Control Weight	++	++
Muscling (Ribeye Size)	++	++
Yield Grade	++	+++
Marbling	+++	0
Implant Program	Controlled	Aggressive
Producer Involvement	Critical	Unnecessary
Production Costs	+++	0

+ = emphasis placed on a particular trait.

Several traits are equally important regardless of the path chosen for branded beef. Effective food safety interventions and control of injection sites are critical. Control of carcass (product) weight and ribeye size (steak thickness and price point) are equally important due to the historical portion size and dimension requirements in food service and the increased interest in case-ready packaging at retail.

A primary difference in the Qualitative versus the Quantitative approach is the emphasis placed on marbling deposition. Premium brands depend on adequate

marbling deposition to ensure tenderness, juiciness, and flavor with proper aging. With enhanced beef, the quality is pumped in via postmortem technology.

Qualitative Approach

Producer involvement is critically important to select proper genetics and management strategies to produce quality products with acceptable red meat yield at a youthful age. Vertical coordination is necessary to meet expectations for time-on-feed, diet energy concentration, anabolic implant administration, and slaughter endpoint optimization. Value-based procurement programs have been developed to insure that consistent supplies of high quality beef are harvested to meet customer demands on a weekly basis. High quality products produced in this system must be marketed at a premium because production efficiency is seldom maximized. Postmortem technology may be used on carcasses with “small” and “slight” amounts of marbling to further improve the uniformity and consistency of tenderness for these natural (minimally processed) fresh beef products.

Quantitative Approach

Enhanced beef much like enhanced pork involves pumping muscles with a combination of water (8 to 12%), salt, phosphate, and natural flavorings. Therefore, enhanced beef is considered non-intact as the surface of muscles is penetrated to inject the solution. The enhancement process has a pronounced effect on the tenderness, juiciness and flavor of beef, especially at advanced degrees of doneness (medium well and well done). Leanness is key to maximize yields along with added water; marbling deposition is not necessary.

Production efficiency can be maximized and procurement needs may be satisfied in the open commodity market. Only time and additional research will reveal the extent to which enhancement technology expands in the beef marketplace. I personally feel that enhanced beef has a place for beef carcasses or cuts in need of palatability improvement (low quality grades and less tender locomotive muscles); however, additional consumer research is needed to better understand the level of acceptance by various consumer groups and industry segments.

Beef Improvement Federation Implications

The battle of branded beef strategies will influence the decision-making process for genetics, management, marketing, research, and education as we move to the future. I expect both brand strategies to survive, but only one will expand as the primary path for the beef industry to meet consumer expectations. If history holds true, then those of you designing programs to optimize production efficiency, product quality, and red meat yield should have the flexibility to participate in either brand strategy. If enhanced beef becomes the norm, then U.S. beef producers will have to redesign beef production more in line with models used currently in Europe and South America for beef and in the United States for pork.