

The Meat Case of the Future

D. D. Johnson and R. L. West

Department of Animal Sciences
University of Florida, Gainesville

Introduction

Based on the rapid changes we have seen in the last five years in the way we sell beef, the next fifty years will be amazing. We have moved from production driven approaches to consumer driven approaches. We project that this movement will continue as our society changes. In fact, we may not have the traditional retail store in the future but a list of products available for delivery. We will see the continued movement away from family meals to individual meals which will require much product variety.

Our approach for this presentation has been to try to imagine what the beef offering will be, how these products will be prepared and how this merchandising of our product will affect what we as producers will have to do.

Beef Offering

The meat case in fifty years will more likely be called the “entree” section rather than the “meat” case. Our vision is that there will be two sections: the gourmet section and the prepared foods section.

The gourmet section will provide raw product for those adventurous folks who want to cook the product themselves, probably a small group. This will probably involve grilling in a social setting. These portioned sized 4 to 6 oz. steaks will be middle meats, will be single muscles and will have all trimmable fat and bone removed. They will be individually blister packaged and frozen.

For the extremely adventurous customers, a few individual muscles will be available for roasting. The roasts will be packaged frozen in a

tray that can be placed directly into the heating device and cooked. Raw patties may also be available.

The prepared meat section will be built on the concept that beef is a raw material from which many entrees can be made. All will be pre-prepared as a “heat and eat” product, since the consumer will not have time or the expertise to prepare the food. We envision many forms (slices, strips, chips, chunks, crumbles, ground, etc.) and many different flavors with and without sauces, gravies or marinades. Some will be mixed with other ingredients in a total meal concept. All products will be packaged in individual servings and frozen. The package will also serve as a reheating and serving container.

All products will be source verified with each package containing information on how to contact producers and processors. They will all be “natural” indicating no hormones, antibiotics or growth stimulants can be used. All will be treated to destroy any pathogens that might have been present. All packages will contain both reheating instructions and thorough nutritional information.

Processing Steps

Processing to produce beef for the retail case of the future will begin much differently than it does today. After humanely stunning and bleeding the animals, they will be dehaired, then washed and treated to remove all fecal and environmental contaminants. Individual identification will automatically be transferred from the live animal to the carcass. The hide will be mechanically removed with minimal human contact. Carcasses will be electrically stimulated twice in the slaughter sequence, once with low-

voltage after bleeding and second after evisceration with high-voltage to control and speed up pH decline. Carcasses will be allowed to high temperature condition until the muscle pH reaches a point to signal rigor completion. After rigor is achieved, the carcass will be muscle boned removing waste external and seam fat, leaving only the edible muscles for steak, roast and other retail cut fabrication. Retail products that are to be pre-cooked will move directly to thermal processing to produce precooked steaks, roast beef, ground beef crumbles, pizza topping etc. These products will be quick frozen after their appropriate cooking procedure. Retail cuts for fresh (uncooked) sales will be packaged in a skin type film package know as a “blister pack” which also will be quick frozen. Both cooked and uncooked retail products will be shipped directly from the packer to the retailer for merchandising.

Producer Impact

What do these changes in processing, industry expectation and consumer demand mean to the beef producer in the future? The cow-calf producer in the future will select directly from the beef genome seed stock that have the ability to be

tender and of high eating quality directly for both sire and dam that will meet an expected palatability level at an early time postmortem. Identification of the end product market will be determined before cattle matings are selected. Calves will be individually identified at birth and this ID will remain with the animal until final disposal of the finished products. Due to food safety and animal welfare concerns beef will be produced from intact males or young bulls marketed before 16 months of age. These animals will still be fed a concentrate diet in a confinement situation for a minimum of 90 days. Documentation will follow each animal as to health treatment and feeding management that will accompany the animal up until slaughter. This information along with management practices will be scanned in with the individual animal number and recorded in a data base that will follow the animal all the way to the end product. This will allow claims like “all natural”, pathogen free, guaranteed tender etc. to be placed on the label along with the producer information linked to perhaps a ranch web page so a customer can see how and where the animals were produced and give feedback to the owner.

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